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& ASSOCIATES**

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1:30 pm, Oct 01, 2007

Alameda County  
Environmental Health

5900 Hollis Street, Suite A, Emeryville, California 94608  
Telephone: 510-420-0700 Facsimile: 510-420-9170  
www.CRAworld.com

September 26, 2007

Mr. Steven Plunkett  
Hazardous Materials Specialist  
Alameda County Environmental Health Department  
1311 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: **Site Assessment Workplan Addendum 2**  
Former Olympic Service Station  
1436 Grant Avenue  
San Lorenzo, California  
Fuel Leak Case No. RO00000373

Dear Mr. Plunkett:

Conestoga-Rovers & Associates, Inc. (CRA) formerly Cambria Environmental Technology, Inc. (Cambria) has prepared this *Site Assessment Workplan Addendum 2* (Addendum 2) on behalf of Encinal Properties. Addendum 2 is based on the September 6, 2007 Alameda County Environmental Health Department (ACEHD) letter, and a phone conversation and e-mail on September 11, 2007 between CRA and ACEHD's Hazardous Materials Specialist, Mr. Steven Plunkett (Attachment A).

## **RESPONSE TO ACEHD'S TECHNICAL COMMENTS**

The revisions to CRA's May 31, 2007 *Site Assessment Workplan Addendum* (Addendum) are summarized below.

### **Soil Vapor Sampling**

In the May 7, 2007 and September 6, 2007 letters, ACEHD requests that a soil vapor investigation be completed to evaluate the potential vapor intrusion pathway. CRA agrees with ACEHD's request to complete a soil vapor investigation; however, we recommend completing the proposed investigation and preferential pathway study first. By completing the investigation and preferential pathway study first, we will be able to delineate the hydrocarbon bearing soil and groundwater and determine if any preferential pathways cross areas of concern for soil vapor migration. This additional investigation data will allow us to identify areas of concern and propose the best locations to collect soil vapor samples. CRA will include the proposed soil vapor sampling locations in the *Site Assessment Report*. Presented below is the scope of work for soil vapor sampling including pre-field activities.

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## **Health and Safety Plan**

To protect the public and site personnel during the fieldwork, the site-specific Health and Safety Plan (HSP) will be distributed to all members of the project team. The HSP addresses physical health threats posed by drilling and potential health threats posed by the petroleum hydrocarbon-bearing soil and groundwater. The HSP also prescribes appropriate personal protective equipment (PPE) to protect site workers.

## **Utility Clearance**

The proposed soil vapor probe locations will be marked and Underground Service Alert (USA) will be notified of our site activities to identify utilities in the site vicinity. Prior to drilling, a private utility locator will complete a utility survey to identify underground piping onsite. The soil vapor probes will be installed using a hand auger to advance the boring to 5.5 feet below ground surface (ft bgs).

## **Permit**

Based on regulatory requirements of the local agency, a well installation permit will be obtained from Alameda County Public Works Agency.

## **Soil Vapor Point Installation**

CRA proposes to install an undetermined number of soil vapor points, each to a depth of approximately 5 ft bgs. The number of wells and their locations will be determined after site assessment activities are completed and a figure showing the proposed locations will be presented in the *Site Assessment Report*. An idealized diagram of the soil vapor point construction is presented as Figure A. At each location; a hand-auger boring will be advanced to approximately 5.5 fbg. Teflon<sup>®</sup> tubing lines will be placed into each open boring with the tubing bottom at approximately 5 fbg. The tubing will be one-quarter inch inside diameter and will be fitted with a stainless-steel filter at the bottom end. Clean, no. 2 sand will be placed from 5.5 to 4.5 fbg as a filter pack and to create a higher permeability zone, relative to the native soils, where soil vapors can accumulate. A one- to two-inch layer of granular bentonite will be placed on top of the sand pack followed by pre-hydrated bentonite gel to a few inches from the surface. The tubing exiting the bentonite will be capped, and the top of the point will be protected by a traffic-rated street box.



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## **Soil Vapor Sampling**

Soil vapor samples will be collected no sooner than 48-hours after installation of the soil vapor points to allow adequate time for representative soil vapors to accumulate. Soil vapor sample collection will not be scheduled until after a minimum of three consecutive precipitation-free days.

A schematic of the above-ground soil vapor sampling apparatus is shown on Figure B. A measured volume of air will be purged from the tubing using a pump and a tedlar bag. A minimum of three tubing volumes will be purged from each soil vapor point prior to sample collection. Immediately after purging, soil vapor samples will be collected over an approximate 30-minute period using 1-liter Summa canisters and capillary air-flow controllers.

The soil vapor points will be preserved until they are no longer needed for risk evaluation purposes. At that time, they will be destroyed by extracting the tubing, hand augering to remove the sand and bentonite, and backfilling the boring with neat cement. The destroyed vapor probe will be patched with asphalt or concrete, as appropriate.

## **Chemical Analyses**

The soil vapor samples will be kept at ambient temperature and submitted under chain-of-custody to Air Toxics Ltd. for analysis. The samples will be analyzed by Modified United States Environmental Protection Agency (EPA) Methods TO-15 for volatile organic compounds (VOCs) including isopropyl alcohol for leak detection purposes, TO-3 for total petroleum hydrocarbons as gasoline (TPHg), and American Society for Testing and Materials (ASTM) D-1946 for oxygen, carbon dioxide, and methane..

## **Investigation Derived Waste (IDW)**

IDW generated during field activities will be stored onsite in 55-gallon steel drums. Following review of analytical results and disposal profiling, the IDW will be processed for recycling and/or transported to an appropriate facility for disposal.



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## CLOSING

CRA appreciates your assistance and cooperation with this project. Please call Mr. Brandon Wilken at (510) 420-3355 with any questions or comments.

Conestoga-Rovers & Associates, Inc. (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

Sincerely,  
**Conestoga-Rovers & Associates, Inc.**

Christina McClelland  
Staff Geologist



Brandon S. Wilken, P.G.  
Senior Project Geologist

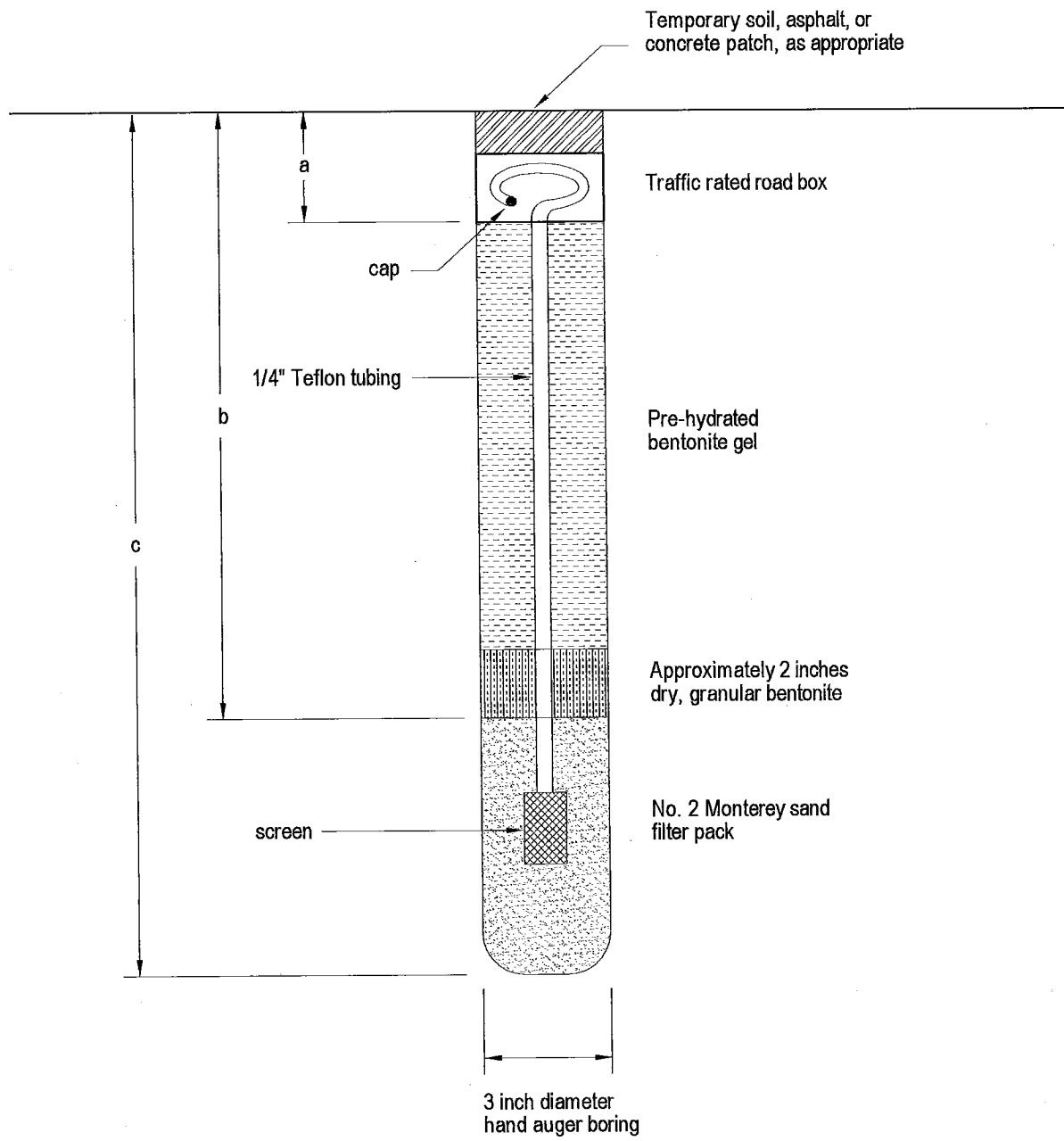
Figures:        A – Vapor Point Construction Diagram  
                  B – Soil Vapor Sampling Apparatus

Attachments:    A - Regulatory Correspondence

Cc:                Mr. George Jaber, Encinal Properties, 2801 Encinal Avenue, Alameda, CA 94501

I:\IR\Encinal Property-San Lorenzo\Workplans\WP Addendum 2.Encinal Properties.doc

ENVIRONMENTAL GROUP INFO:SOIL-VAPOR-POINT.DWG



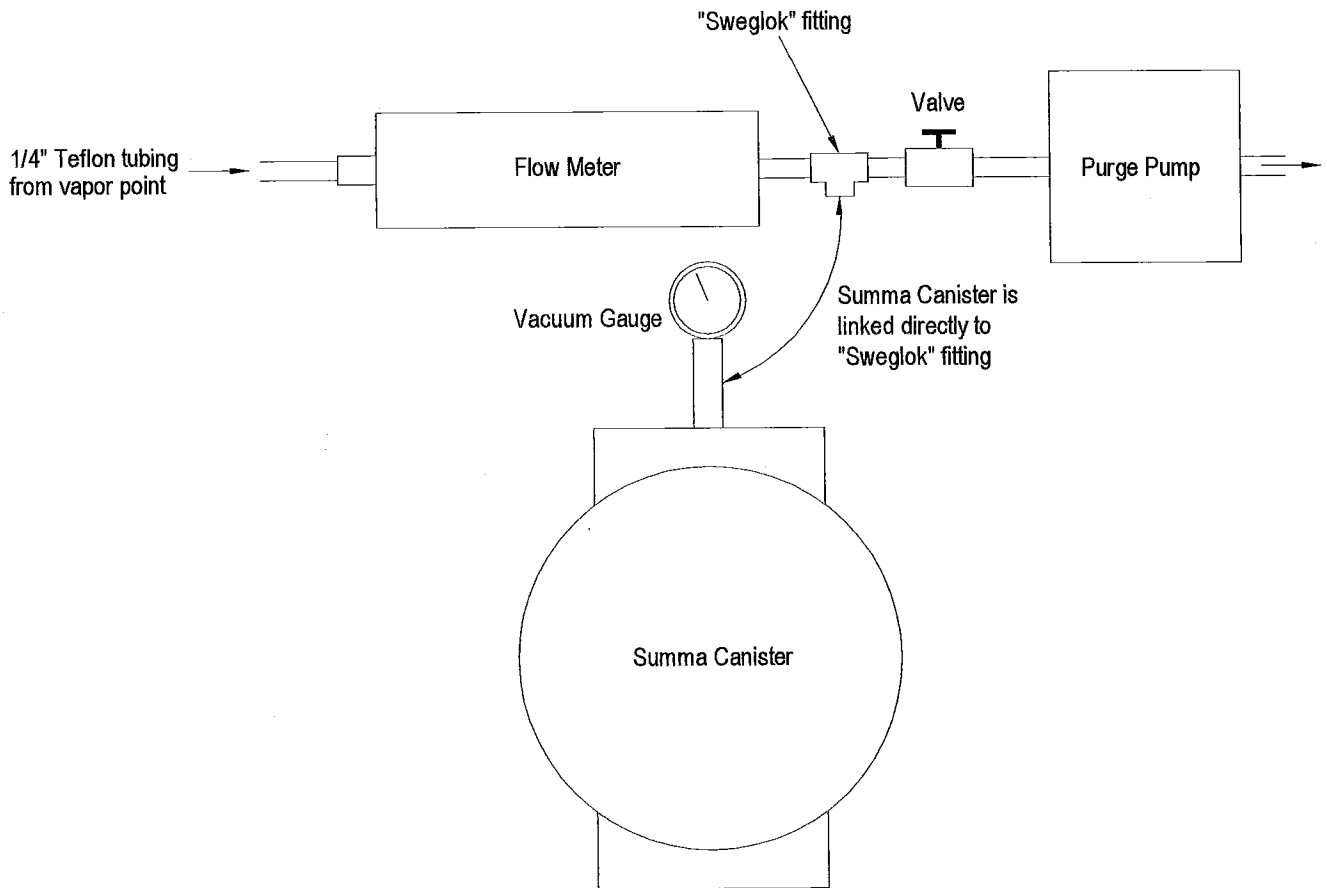
Schematic Not to Scale

FIGURE  
**A**



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**Soil Vapor Point**



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Schematic Not to Scale

FIGURE

**B**



**CONESTOGA-ROVERS  
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**Soil Vapor Sampling  
Apparatus Diagram**



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## **ATTACHMENT A**

### **Regulatory Correspondence**

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

May 7, 2007

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

MAY - 9 2007

Subject: Fuel Leak Case No. RO00000373 Olympic Station, 1436 Grant Avenue, San Lorenzo, CA

Dear Mr. Jaber:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Site Assessment and Preferential Pathway Study," and "First Quarter 2007 Monitoring Report dated March 2, 2007 and April 13, 2007, respectively and prepared by Conestoga Rover and Associates (CRA). The scope of work recommended in the Work Plan proposes a Preferential Pathway Study, including a well survey and utility survey. In addition, the Work Plan proposes eight soil borings advanced to 20 feet bgs., combined with soil and groundwater sampling to evaluate the vertical and horizontal extent of soil and groundwater contamination onsite and immediate downgradient of the site.

ACEH generally agrees with the proposed scope of work as stated in the Work Plan, provided the following technical comments are addressed prior to the implementation of the Work Plan.

We request that you perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

1. **Preferential Pathway Study.** ACEH agrees with the recommendation as described in the Work Plan by CRA for a preferential pathway including a utility corridor survey and well survey. Please present the results of the preferential pathway survey in the report requested below.
2. **Soil Gas Sampling.** Given that the vapor intrusion pathway has not been evaluated, ACEH request soil gas sampling along the southwest property boundary adjoining the residences to evaluate potential vapor intrusion migration pathways for the adjacent residents. Please present a detailed plan to perform a soil gas investigation in conjunction with the offsite soil and groundwater investigation. Please include your proposal for the soil gas investigation in the Revised Work Plan requested below.



3. **Soil Boring locations.** CRA has proposed the installation of eight onsite and offsite soil borings to further define the extent of soil and groundwater contamination. The soil borings located east of MW-1 and northeast of MW-3 not necessary at this time. Furthermore, the linear separation of two offsite soil borings located between the Arroyo Center Building and parcel # 411-39-8/411-39-7 is approximately 45 feet, which may not adequately constrain the orientation of the petroleum hydrocarbon plume. Therefore, ACEH request a soil boring be installed between these two soil boring adjacent to the Arroyo Center Building. Lastly, the soil boring located near the corner of Grant Avenue and Channel Street should be relocated downgradient of MW-3 near the property boundary in the Grant Avenue right of way. Please update Figure 3 to reflect the location of seven soil borings in the Revised Work Plan requested below.
4. **Soil and Groundwater Analysis.** ACEH agrees with the soil and groundwater sample analysis recommended by CRA. Please present the results from the soil and groundwater investigation in the report requested below.

#### **TECHNICAL REPORT REQUEST**

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

- **May 21, 2007** – Revised Work Plan —
- **July 15, 2007** – Soil, Ground Monitoring and Soil Gas Investigation 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.

#### **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

George Jabber  
May 5, 2007  
Page 3

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.

Should you have any questions, do not hesitate to call me at (510) 383-1767.

Sincerely,



Steven Plunkett  
Hazardous Materials Specialist

George Jabber  
May 5, 2007  
Page 4

cc: Brandon Wilken  
Conestoga Rover Associates  
5900 Hollis Street  
Emeryville, Ca 94608

Donna Drogos, ACEH  
Steven Plunkett, ACEH  
File

ALAMEDA COUNTY  
HEALTH CARE SERVICES

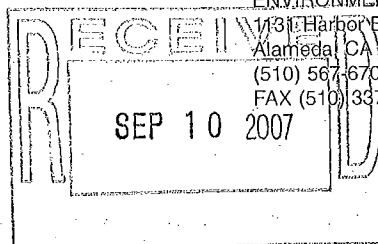
AGENCY  
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION

1311 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

September 6, 2007



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

Subject: Fuel Leak Case No. RO00000373 Olympic Station (Global ID #T0600102256), 1436 Grant Avenue, San Lorenzo, CA

Dear Mr. Jaber:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Site Assessment Work Plan Addendum," dated May 31, 2007 and prepared by Conestoga Rover and Associates (CRA). The scope of work recommended in the Work Plan Addendum proposes a seven soil borings advanced to 20 feet bgs., combined with soil and groundwater sampling to evaluate the vertical and horizontal extent of soil and groundwater contamination onsite and immediate downgradient of the site.

Concentrations of benzene in soil downgradient of the source area indicate that the horizontal extent of soil and groundwater contamination is undefined. ACEH requires a soil vapor survey must be completed prior the installation of soil borings as recommended in the Work Plan.

We request that you perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

1. **Soil Vapor Sampling.** CRA asserts that based on low concentrations of TPH and TPH constituents in groundwater in onsite monitoring wells, soil vapor sampling should be deferred until the downgradient site assessment is completed. ACEH strongly disagrees with the contention that soil gas sampling should be delayed pending the evaluation of the results from the soil and groundwater investigation. Furthermore, soil data collected from soil borings BH-B and BH-C detected benzene at concentrations of 2.2 mg/kg and 1.7 mg/kg, which exceed the ESLs for residential land use.

Prior to the installation of soil boring, ACEH requires a soil vapor survey must be completed. Once the soil vapor investigation has been completed and the data evaluated, additional soil borings will be necessary to determine the downgradient extent of the dissolved petroleum hydrocarbon plume. Please prepare a revised work plan that describes your proposal to evaluate the vapor intrusion pathway in the report requested below.

### TECHNICAL REPORT REQUEST

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

- **October 1, 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

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### PERJURY STATEMENT

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### 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

Mr. George Jaber  
September 4, 2007  
Page 3

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

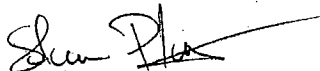
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### 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.

Should you have any questions, do not hesitate to call me at (510) 383-1767.

Sincerely,



Steven Plunkett  
Hazardous Materials Specialist

cc: Brandon Wilken  
Conestoga Rover Associates  
5900 Hollis Street  
Emeryville, Ca 94608

Donna Drogos, ACEH  
Steven Plunkett, ACEH  
File

**Wilken, Brandon**

---

**From:** Wilken, Brandon  
**Sent:** Tuesday, September 11, 2007 5:59 PM  
**To:** 'Steven Plunkett (steven.plunkett@acgov.org)'  
**Cc:** 'George Jaber (versaillesrx@aol.com)'  
**Subject:** Case No. RO373-Work Plan Addendum

Hello Steven,

As we discussed today during our phone conversation, CRA agrees with Alameda County Environmental Health that a soil vapor assessment is needed to evaluate this pathway of concern. However, we propose to complete the soil and groundwater assessment and the preferential pathway study prior to completing the soil vapor assessment. By completing the investigation and preferential pathway study first, we will be able to delineate the hydrocarbon bearing soil and groundwater and determine if any preferential pathways cross areas of concern. Therefore, with this additional investigation data we will be able to identify areas of soil vapor concern and propose good locations to collect soil vapor samples.

CRA will complete the work plan addendum as requested in the ACEH letter dated September 6, 2007. We will further discuss our justification for the phased approach above, we will layout the soil vapor sampling protocols and analyses, and discuss how we will propose the locations for the soil vapor sampling locations. Thanks for discussing this site with me today and please contact me with any questions or concerns. Thanks!

**Brandon S. Wilken, P.G.  
Conestoga-Rovers & Associates (CRA)**

5900 Hollis St, Suite A  
Emeryville, CA 94608  
P. (510) 420-3355  
F. (510) 420-9170  
C. (925) 260-1833

***Conestoga-Rovers & Associates has acquired the former Cambria Environmental Technology***

***Visit us at [www.craworld.com](http://www.craworld.com)***

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