## RECEIVED



2:10 pm, Oct 27, 2008

Alameda County Environmental Health Aaron Costa Project Manager Marketing Business Unit Chevron Environmental Management Company 6111 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 543-2961 Fax (925) 543-2324 acosta@chevron.com

Steven Plunkett Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Chevron Service Station No. 9-0020 5280 Hopyard Road Pleasanton, CA

I have reviewed the attached report dated October 24, 2008.

I agree with the conclusions and recommendations presented in the referenced report. This information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This workplan was prepared by Conestoga Rovers Associates, upon who assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Aaron Costa Project Manager

Attachment: Report



5900 Hollis Street, Suite A Emeryville, California 94608 Telephone: (510) 420-0700 http://www.craworld.com

Fax: (510) 420-9170

October 24, 2008

Reference No. 060057

Mr. Jerry Wickham Alameda County Environmental Health (ACEH) 1131 Harbor Bay Parkway Alameda, California 94502

Dear Mr. Wickham:

Re: Work Plan for Soil Vapor Survey Chevron Service Station 9-0917 5280 Hopyard Road Pleasanton, California ACEH RO #0439

## 1.0 INTRODUCTION

On behalf of Chevron Environmental Management Company (Chevron), Conestoga-Rovers & Associates (CRA) is submitting this Work Plan to perform a Soil Vapor Survey at the site referenced above. ACEH is requiring Chevron to perform a soil vapor survey at this site. Presented below are a brief summary of the correspondence related to the soil vapor survey investigation and our proposed scope of work.

CRA submitted a letter on April 8, 2008 suggesting that a soil vapor survey was not necessary at the site because the ESLs<sup>1</sup> had been updated and screening levels for volatilization from soil to indoor air had been removed. Because the volatilization pathway from soil to indoor air has been removed from the ESLs, the only pathway of concern modeled in the ESLs is volatilization from groundwater to indoor air. Benzene concentrations in groundwater in all site wells have been below the 1,800 µg/L commercial groundwater ESL since the second quarter 2000. In a letter dated July 9, 2008, ACEH rejected CRA's recommendation because although the volitization pathway from soil to indoor air was removed, the potential risk posed by volatilization from soil to indoor air is now assessed using direct soil vapor samples

(Attachment A).

| Equal                  |  |
|------------------------|--|
| Employment Opportunity |  |
| Employer               |  |

<sup>1</sup> California Regional Quality Control Board – San Francisco Bay Region in Screening for Environmental Concerns at Sties with Contaminated Soil and Groundwater, Interim Final - November 2007, updated May 2008.



Reference No. 060057

- 2 -

Previous communications from the ACEH included a letter dated October 3, 2007 in which the ACEH requested a soil vapor survey to determine whether there was a potential risk to onsite workers due to vapor inhalation based on leaving residual hydrocarbons (Attachment A). In response to this letter, CRA submitted a work plan in December 2007 to install two vapor probes next to the station building, in the areas of the former dispenser islands and product piping.

In response to the December 2007 CRA work plan, ACEH submitted a letter dated January 8, 2008 requesting three additional vapor probes to characterize the potential for vapor intrusion for potential future land use (Attachment A). Because the site and area surrounding the site is zoned as commercial and future land use is not expected to change, and because hydrocarbon concentrations are currently below ESLs, three vapor probes in addition to the two previously proposed source area probes is not warranted. Additional probes may be proposed in the future based on the results of this investigation.

CRA is therefore resubmitting the work plan proposed in December 2007 to install two vapor probes to determine whether there is potential vapor intrusion into onsite buildings. Summarized below are the site background and proposed scope of work for the installation of vapor probes onsite.

## 2.0 <u>SITE DESCRIPTION</u>

The site is an active Chevron station located at the southern corner of the intersection of Hopyard Road and Owens Drive in Pleasanton, California (Figure 1). Site facilities include a station building, car wash, four underground storage tanks (USTs) and three dispenser islands under a common canopy (Figure 2). A Shell-branded service station is located across Hopyard Road to the east of the site and has an open case with ACEH. Land use surrounding the site is primarily commercial.

## 2.1 <u>SITE GEOLOGY AND HYDROGEOLOGY</u>

Based on historic and recent boring logs, sediments observed beneath the site consist of interbedded clay, silty clay, clayey silt, sandy silt and silt to the maximum explored depth of 60 feet below grade (fbg).

Groundwater flow is mainly to the south, at a gradient between 0.004 to 0.009. Groundwater depth ranges between approximately 5.5 and 10 fbg.

The Livermore Valley Groundwater Basin is divided into twelve sub-basins based on fault traces and hydrologic discontinuities. The site is located in the Dublin Sub-Basin (DSB). Regionally, the upper, unconfined groundwater in the DSB generally flows south. Aquifers in the DSB are generally flat lying, but there is a drop in groundwater elevation of approximately 50 feet across the Parks Fault (*Evaluation of* 



Reference No. 060057

*Groundwater Resources: Livermore and Sonol Valleys*, Department of the Water Resources Bulletin Number 118-2, June 1974). The Park Fault trends east-northeast approximately 1 mile south of the site (Pacific Environmental Group, Inc., *Soil and Groundwater Investigation*, dated August 11, 1997).

- 3 -

## 3.0 PROPOSED SCOPE OF WORK

The objective of the proposed scope of work is to provide soil vapor data to determine whether vapor inhalation poses a risk to workers within the existing onsite building. To meet this objective, two vapor probes will be installed outside of the onsite building: one in the vicinity of the former dispenser island and one between the building and boring GP1, near the former product piping (Figure 3). In the February 2006 Subsurface Investigation performed by Cambria Environmental Technology, Inc., boring GP1 had the only detections of TPHg at 110 mg/kg at 5 fbg and benzene at 0.09 mg/kg at 10fbg. To accomplish this work, CRA will conduct the following activities.

Underground Utility Location: CRA will contact Underground Services Alert (USA) and use a private utility locator to reconfirm that no utilities exist at and near the probe locations.

*Health and Safety Plan*: CRA will prepare a health and safety plan to protect site workers. The plan will be reviewed and signed by all site workers and visitors. The plan will be kept onsite during all field activities.

*Permits:* CRA will obtain soil boring permits from the Zone 7 Water Agency prior to beginning field operations.

*Soil Borings and Sampling*: CRA will install two probes at 6 fbg. It is estimated that the total depth of borings will not exceed 7 fbg. Soil samples will be collected using a hand-auger and described as disturbed samples. One undisturbed sample will be collected with a slide-hammer above the installation of the probe and be analyzed for physical parameters.

*Vapor Probe Construction:* Vapor probes will be constructed of a permeable porcelain filter with a ¼-inch push-to-connect fitting to ¼-inch Teflon tubing. Each probe will be placed at approximately 6 fbg and surrounded by a 12-inch sand pack. Above the sand pack, 12-inches of dry granulated bentonite will be topped with at least 12-inches of hydrated granular bentonite and will be finished at the surface using a traditional well vault.

Vapor Probes Sampling: Vapor samples will be collected at least 48-hours after the placement of the probes using 1-liter Summa<sup>™</sup> canisters in a manifold system, connected to the sampling tubing at each vapor point. Approximately three purge volumes will be purged from the sampling tubing before



- 4 -

Reference No. 060057

sampling begins, at the same flow rate the sample will be collected at. While sampling, the vacuum of the Summa<sup>™</sup> canister will be used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg is observed on the vacuum gauge. In accordance with the Department of Toxic Substances Control (DTSC) *Advisory-Active Soil Gas Investigations* guidance document, dated January 28, 2003, leak testing will be performed during sampling. After sampling, the Summa<sup>™</sup> canisters will be packaged and sent to the Air Toxics laboratory under chain-of-custody for analysis. Standard Field Procedures for Soil Vapor Probe Installation and Sampling are presented as Attachment B.

Vapor Chemical Analysis: Vapor samples will be analyzed for the following:

- TPHg by EPA Method TO-3,
- BTEX, MTBE and naphthalene by EPA Method TO-15, and
- O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub> and helium by ASTM 1946 (GC/TCD).

Soil Chemical Analysis: Select soil samples will be analyzed for the following:

- TPHg by EPA Method 8015 modified, and
- BTEX and MTBE by EPA Method 8260B
- Physical parameters including moisture content, bulk density, total porosity, air- and water-filled porosity, organic carbon and effective permeability.

*Waste Disposal:* Soil cuttings generated will be placed in drums and labeled appropriately. These wastes will be transported to the appropriate Chevron-approved disposal facility following receipt of profiling analytical results.

*Reporting:* Upon completion of field activities and review of the analytical results, we will prepare an investigation/risk evaluation report that, at a minimum, will contain:

- Descriptions of the installation and sampling methods;
- Boring logs;
- Tabulated soil and soil vapor analytical results;
- Analytical reports and chain-of-custody forms;
- Soil disposal details;
- A comparison of detected vapor concentrations to ESLs; and
- Conclusions and recommendations.



Reference No. 060057

- 5 -

• Conclusions and recommendations.

#### 4.0 <u>CLOSING</u>

We appreciate the opportunity to work with you on this project. Please contact Charlotte Evans of CRA at (510) 420-3351 or Aaron Costa of Chevron at (925) 543-2961 if you have any questions or comments.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

FLAN

Charlotte Evans

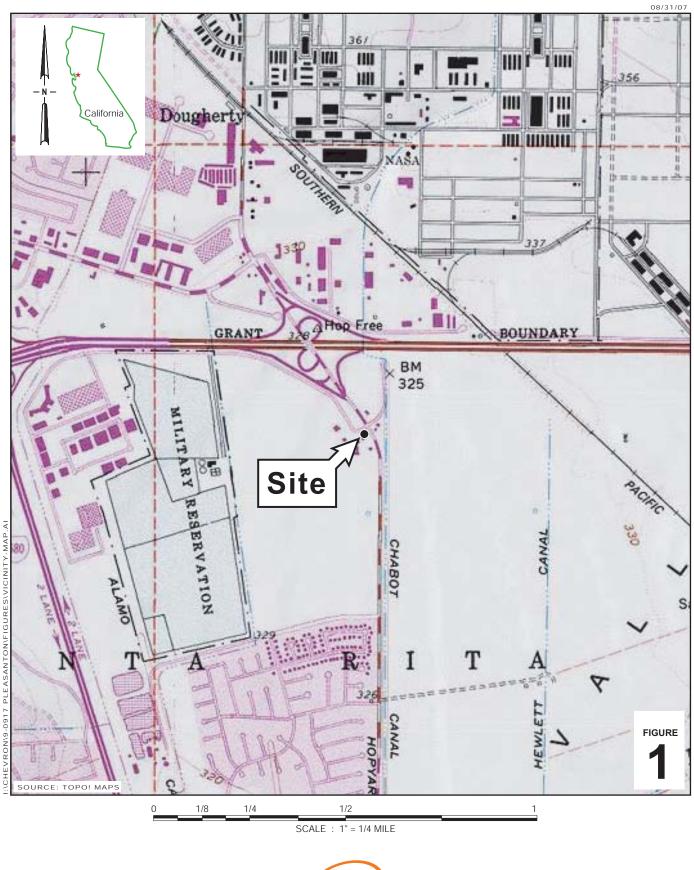
Brander & Wilk

Brandon Wilken, PG# 7564

CE/doh/1 Enc.

cc: Aaron Costa, Chevron Lamorinda Development and Investment C&H Development Company



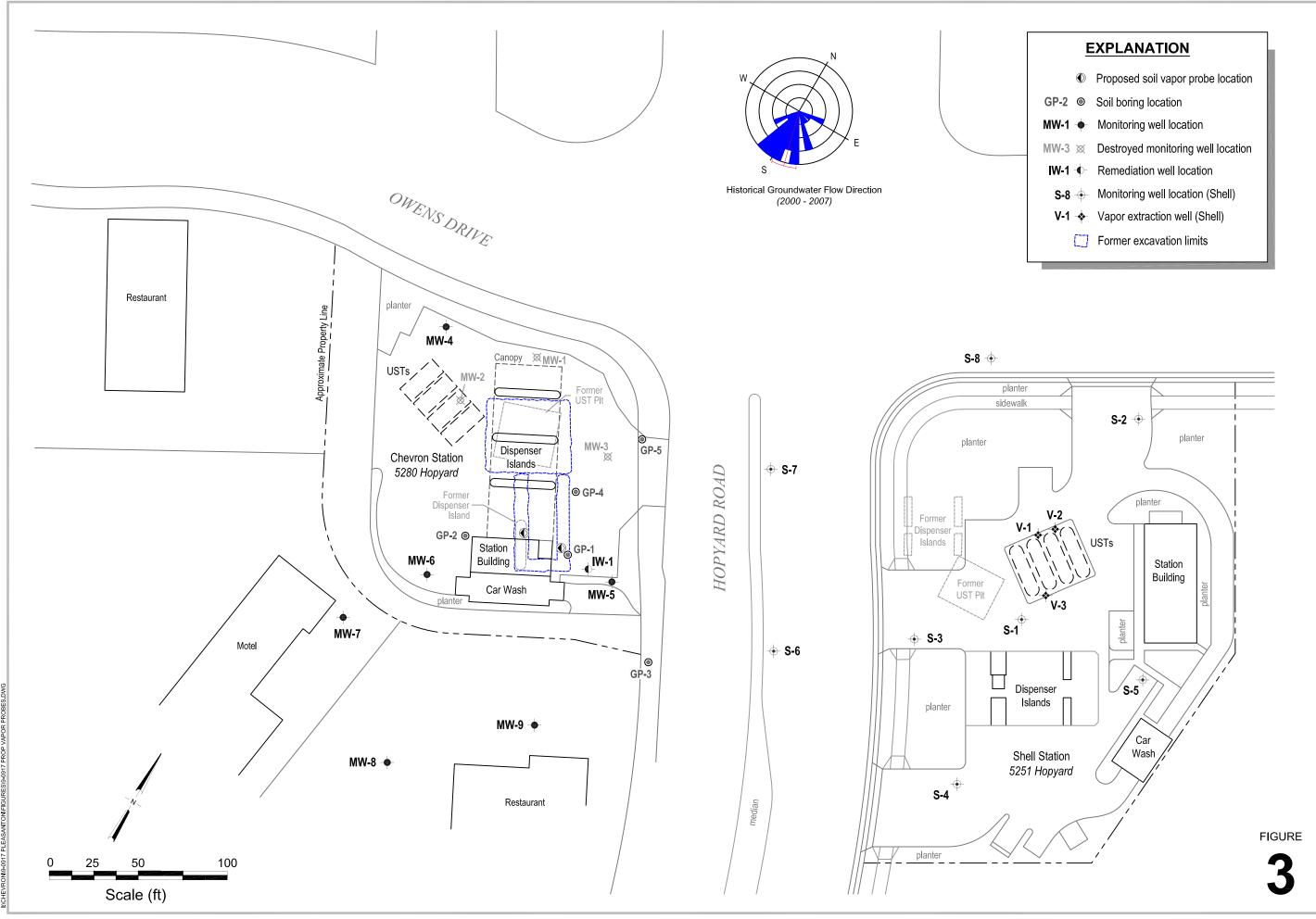


## **Chevron Service Station 9-0917**

5280 Hopyard Road Pleasanton, California



Vicinity Map





## ATTACHMENT A

## REGULATORY CORRESPONDENCE

## recd: 07/14/08

## ALAMEDA COUNTY HEALTH CARE SERVICES



DAVID J. KEARS, Agency Director

AGENCY

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

July 9, 2008

Mr. Aaron Costa Chevron Products Company 6001 Bollinger Canyon Road, K-2256 San Ramon, CA 94583-2324

Lamorinda Development and Investment 89 Davis Road, Suite 160 Orinda, CA 94563 C & H Development Company 43 Panoramic Way Walnut Creek, CA `94595

Subject: Fuel Leak Case No. RO0000439 and Geotracker Global ID T0600100345, Chevron #9-0917, 5280 Hopyard Road, Pleasanton, CA 94566

#### Dear Mr. Costa:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the document entitled, "*Response to Technical Comments*," dated May 20, 2008. The "*Response to Technical Comments*," provides responses to technical comments contained in our January 8, 2008 correspondence and rescinds the scope of work to install and sample two soil vapor probes adjacent to the station building. ACEH also requested the installation and sampling of three additional soil vapor probes. The "*Response to Technical Comments*," indicates that no soil vapor sampling is required based on updated screening levels in the San Francisco Bay Regional Water Quality Control Board guidance document entitled, "*Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (November 2007).*" As discussed in technical comment 1 below, we strongly disagree with this interpretation of the updated screening levels.

An evaluation of potential vapor intrusion is required. Therefore, we request that you implement the proposed installation and sampling of two soil vapor probes and the additional three soil vapor probes requested in our January 8, 2008 correspondence. We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

### TECHNICAL COMMENTS

1. Soil Vapor Probes. The "Response to Technical Comments," indicates that no soil vapor sampling is required based on updated screening levels in the San Francisco Bay Regional Water Quality Control Board guidance document entitled, "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (November 2007)." Screening levels for volatilization from groundwater to indoor air are cited as justification for not evaluating potential vapor intrusion. The "Response to Technical Comments," indicates that screening levels for volatilization of constituents from soil were "removed" from the updated

Mr. Aaron Costa Lamorinda Development and Investment C & H Development Company RO0000439 July 9, 2008 Page 3

### 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.

Mr. Aaron Costa Lamorinda Development and Investment C & H Development Company RO0000439 July 9, 2008 Page 4

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, 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

Bill Hurtido, Accor North America, 4001 International Parkway, Carrollton, TX 75007

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

Donna Drogos, ACEH Jerry Wickham, ACEH File

| Alameda County Environmental Cleanup                      | ISSUE DATE: July 5, 2005                             |
|---|--|
| Oversight Programs  | REVISION DATE: December 16, 2005                     |
| (LOP and SLIC)  | PREVIOUS REVISIONS: October 31, 2005                 |
| SECTION: Miscellaneous Administrative Topics & Procedures | SUBJECT: 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 flp 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 <u>dehloptoxic@acgov.org</u>
      - 0
      - 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 flp 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 <u>dehloptoxic@acgov.org</u> 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)

## ALAMEDA COUNTY HEALTH CARE SERVICES



DAVID J. KEARS, Agency Director

AGENCY

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

January 8, 2008

Ms. Olivia Skance Chevron Environmental Management Company 6001 Bollinger Canyon Road, K-2256 San Ramon, CA 94583-2324

Lamorinda Development and Investment 89 Davis Road, Suite 160 Orinda, CA 94563 C & H Development Company 43 Panoramic Way Walnut Creek, CA 94595

Subject: Fuel Leak Case No. RO0000439 and Geotracker Global ID T0600100345, Chevron #9-0917, 5280 Hopyard Road, Pleasanton, CA 94566

Dear Mr. Sinha:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "Response to Technical Comments and Workplan for Installation of Vapor Probes," dated December 6, 2007. The "Response to Technical Comments and Workplan for Installation of Vapor Probes," dated December 6, 2007. The "Responses to technical comments and Workplan for Installation of Vapor Probes," does not provide the installation of two soil vapor probes adjacent to the station building. As discussed in technical comments below, we request the installation and sampling of three additional soil vapor probes. Installation and sampling of the soil vapor probes may be implemented provided that the technical comments below are addressed and incorporated during the proposed field investigation. Submittal of a revised Work Plan or Work Plan or technical comments below is proposed.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

#### TECHNICAL COMMENTS

1. Soil Vapor Probes. The "Response to Technical Comments and Workplan for Installation of Vapor Probes," proposes the installation of two soil vapor probes adjacent to the existing service station building. Although the two proposed soil vapor probe locations address the potential for indoor vapor intrusion for the existing facility, the potential for indoor vapor intrusion must be evaluated for potential future land use as well. Therefore, we request that three additional soil probes be installed at the locations shown on Attachment 1. Please present results from the soil vapor probe installation and sampling in the Soil Vapor Investigation Report requested below.

2. Well Survey. Thank you for submitting the Well Location Map and table of well information. Unfortunately, the scanned version of the Well Location Map is largely unreadable. We request that you re-submit a colored version of the Well Location Map with higher resolution. Please re-submit the Well Location Map in the Soil Vapor Investigation Report requested below.

3. Hydraulic Gradient. The "Response to Technical Comments and Workplan for Installation of Vapor Probes," presents a rose diagram for groundwater flow using water level elevations from 2000 to 2007. Based on these data, the workplan contends that no additional monitoring wells are needed in the north or northeast portion of the site to monitor natural attenuation. It is not clear that the rose diagram for the period from 2000 to 2007 adequately represents the hydraulic gradient over the time period following fuel releases at the site. Groundwater contamination was initially detected at the site in 1989. Attachment 2 is a table of hydraulic gradient directions and a rose diagram for the period from August 1989 to June 1997. As shown on Attachment 2, the hydraulic gradient direction for the site varied from south to northeast.

Upon further review of the water level elevation data used in previous water level elevation contour maps, it appears there are discrepancies in the top of casing elevations (TOC) used for wells MW-4 and MW-6. On June 17, 1997, Mid Coast Engineer re-surveyed the existing wells at the site. The TOC elevations reported on June 17, 1997 were 0.35 to 0.66 feet lower than the top of casing elevations previously reported for wells MW-4 and MW-6. However, well MW-5 was not re-surveyed because Mid Coast Engineers was not able to locate well MW-5. As a result, the groundwater elevation contour maps and estimates of hydraulic gradient prepared after June 1997 are based on the 1997 revised TOC elevations for wells MW-4 and MW-6 but the original 1989 TOC casing elevation has been retained for well MW-5. Because the TOC elevations measured in June 1997 for wells MW-4 and MW-6 were significantly different than the TOC elevations used from 1989 to 1997; it is likely that the TOC elevation for well MW-5 may be different also. Therefore, we request that you resurvey wells MW-4, MW-5, and MW-6. If the TOC elevations for wells MW-4 and MW-6 are consistent with the June 1997 TOC elevations, re-surveying of wells MW-7 through MW-9 is not required. However, if the TOC elevations for wells MW-4 and MW-6 differ from the TOC elevations currently used by more than 0.05 feet, we request that you re-survey wells MW-7 Please present the results of the re-surveying in the Soil Vapor through MW-9 also. Investigation Report requested below. If the TOC elevations for any well differ by more than 0.05 feet from previous elevations used to estimate hydraulic gradient for the site, please make all necessary revisions/corrections to data tables and prepare a revised rose diagram that accurately shows hydraulic gradient from 1989 to present.

Addition of Oxygen Release Compound to Wells MW-5 and MW-6. We concur that the effects of oxygen release compound (ORC) added to wells MW-5 and MW-6 on March 26, 1999 have diminished over time and that the ORC is not significantly affecting dissolved petroleum hydrocarbons concentrations at this time.

#### TECHNICAL REPORT REQUEST

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

- May 22, 2008 Soil Vapor Investigation Report
- 30 days following the end of each quarter Quarterly Monitoring Reports

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 <u>other</u> 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,

Wildran

Jerry Wickham Hazardous Materials Specialist

Attachment 1: Additional Soil Vapor Probes Attachment 2: Groundwater Flow Direction and Gradient

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

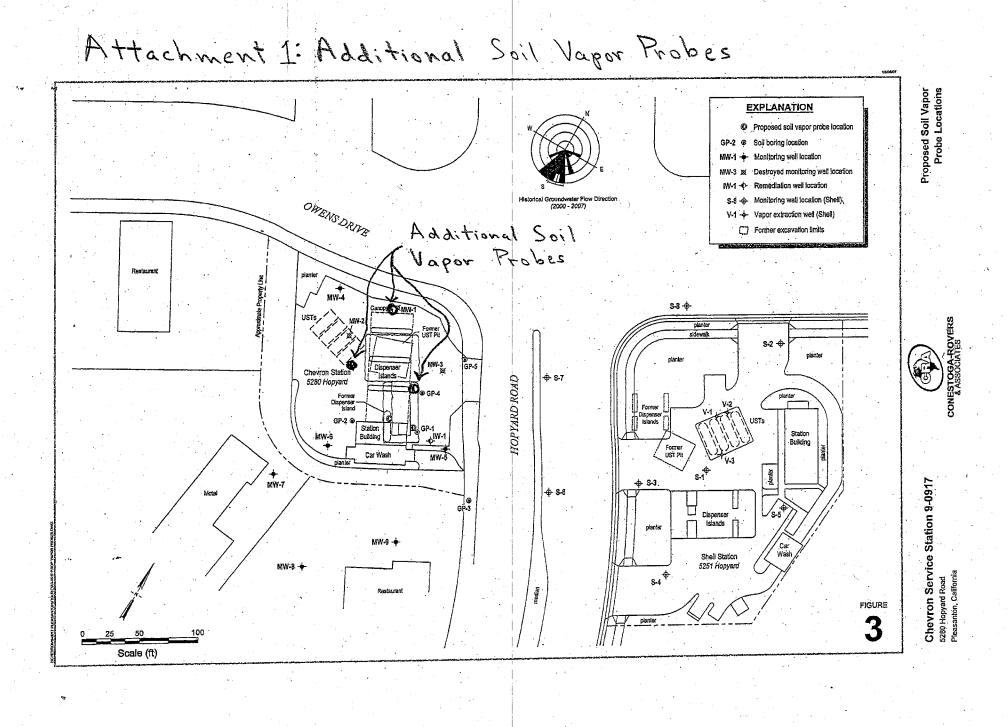
cc: Cheryl Dizon, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway Livermore, CA 94551

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

Bill Hurtido, Accor North America, 4001 International Parkway, Carrollton, TX 75007

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

Donna Drogos, ACEH Jerry Wickham, ACEH File



-

.

.

Attachment 2:

Table 3 Groundwater Flow Direction and Gradient Chevron Service Station 9-0917 5280 Hopyard Road Pleasanton, California

| Date      | Flow Direction (degrees) | Gradient |
|-----------|--------------------------|----------|
|           |                          |          |
| 8/2/89    | 37                       | 0.002    |
| 10/24/89  | 184                      | 0.015    |
| 3/12/90   | 180                      | 0.014    |
| 3/26/90   | 158                      | 0.2      |
| 9/11/90   | 166                      | 0.011    |
| 4/18/91   | 263                      | 0.003    |
| 9/16/91   | 342                      | 0.001    |
| 1/22/92   | 31                       | 0.009    |
| 3/26/92   | 355                      | 0.004    |
| 6/5/92    | 33                       | 0.002    |
| 9/23/92   | 54                       | 0.001    |
| 12/30/92  | 193                      | 0.004    |
| 3/22/93   | 42                       | 0.007    |
| 6/14/93   | 21                       | 0.003    |
| 7/25/93   | 32                       | 0.001    |
| 9/23/93   | 161                      | 0.002    |
| 12/28/93  | 292                      | 0.005    |
| 3/21/94   | 354                      | 0.001    |
| 6/7/94    | 62                       | 0.001    |
| 10/7/94   | 186                      | 0.003    |
| -12/29/94 |                          | 0.003    |
| 3/6/95    | 1                        | 0.009    |
| 6/14/95   | 165                      | 0.001    |
| 9/14/95   | 39                       | 0.009    |
| 12/16/95  | 198                      | 0.003    |
| 3/28/96   | 40                       | 0.01     |
| 6/28/96   | 59                       | 0.003    |
| 9/26/96   | 41                       | 0.01     |
| 12/30/96  | 25                       | 0.006    |
| 3/17/97   | 17                       | 0.005    |
| 6/30/97   | 46                       | 0.006    |

Fron: Pacific Environmental Group report entitled "Soil and Groundwater Invectigation," dated August 11, 1997

3201641B\TABLE2.XLSTABLE3

W-

August 11, 1997

## 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

October 3, 2007

Mr. Satya Sinha Chevron Environmental Management Company 6001 Bollinger Canyon Road, K-2256 San Ramon, CA 94583-2324

Lamorinda Development and Investment 89 Davis Road, Suite 160 Orinda, CA 94563 C & H Development Company 43 Panoramic Way Walnut Creek, CA 94595

Subject: Fuel Leak Case No. RO0000439 and Geotracker Global ID T0600100345, Chevron #9-0917, 5280 Hopyard Road, Pleasanton, CA 94566

Dear Mr. Sinha:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "Feasibility Study," dated August 31, 2007. The Feasibility Study (FS) report presents a limited evaluation of four remedial alternatives including groundwater extraction, dual-phase extraction, air sparging with soil vapor extraction, and monitored natural attenuation. Monitored natural attenuation (MNA) is recommended as the most effective corrective action for reduction of hydrocarbons concentrations in groundwater. In support of the recommendation for MNA, the FS report states that, "there appears to be no risk to human health or the environment based on current or future usage." We do not concur with this statement since risks to human health or environment have not been fully evaluated for the site as discussed in the technical comments below. Therefore, we cannot concur with implementation of MNA as the remedial alternative for the site at this time.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

#### TECHNICAL COMMENTS

- 1. Potential for Indoor Vapor Intrusion. The potential for indoor vapor intrusion must be evaluated for the site in order to assess whether leaving the residual contamination in place without active remediation will present long terms risks to human health. The station building appears to have been built directly over the former dispenser island and product piping. Please propose soil vapor sampling in the Work Plan requested below to assess the potential for indoor vapor intrusion at the site.
- 2. Well Survey. Monitored natural attenuation can only be considered if groundwater contamination from the site will not potentially affect water supply wells in the area. We are not aware of a well survey having been completed for this site. The January 25, 2002 *Site*

1日1 0CT - 2007

Mr. Satya Sinha Lamorinda Development and Investment C & H Development Company RO0000439 October 3, 2007 Page 2

Conceptual Model and Closure Report," states that, "No water-producing wells are located within the plume area." However, no supporting information on water supply wells in the area is provided. Please complete a detailed well survey to locate all water wells (monitoring and production: active, inactive, standby, decommissioned, abandoned, dewatering, and drainage wells) within 2,000 ft of the subject site. We recommend that you obtain well information from the Zone 7 Water Agency. Submittal of maps showing the location of all wells identified in your study, and the use of tables to report the data, including well construction details, collected as part of your survey are required. Well construction details are to include the well ID, well diameter, use, address, owner, total depth, depths of the screened or perforated intervals, year of installation and destruction, and other construction details that may be relevant. The status of the water supply well, whether active, decommissioned, or unknown is to be included where known. Please present your results in the Work Plan requested below.

3. Hydraulic Gradient. Implementation of a monitored natural attenuation alternative requires a network of groundwater monitoring wells that will provide sufficient information to evaluate hydraulic gradient, direction of groundwater flow, and plume migration. As shown on the rose diagram for historical groundwater flow direction at the site, the hydraulic gradient has fluctuated from south to north northeast. However, no monitoring wells are located north or northeast of the site. In the Work Plan requested below, please propose additional groundwater monitoring wells as necessary to complete a groundwater monitoring network based on the variable hydraulic gradient for the site.

4. Addition of Oxygen Release Compound to Wells MW-5 and MW-6. Oxygen release compound (ORC) was added to wells MW-5 and MW-6 on March 26, 1999. These two wells are the primary wells apparently used to monitor changes in concentrations of dissolved phase hydrocarbons in groundwater over time. The addition of ORC to two of the key monitoring wells at the site has likely affected concentrations measured in groundwater from the wells and may distort the trend in groundwater concentrations over time. Please consider these effects and provide recommendations on the suitability of these wells for monitoring natural attenuation of petroleum hydrocarbons.

#### TECHNICAL REPORT REQUEST

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

• December 6, 2007 – Work Plan

30 days following the end of each quarter – Quarterly Monitoring Reports

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.

Mr. Satya Sinha Lamorinda Development and Investment C & H Development Company RO0000439 October 3, 2007 Page 3

#### 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 <u>other</u> 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.

Mr. Satya Sinha Lamorinda Development and Investment C & H Development Company RO0000439 October 3, 2007 Page 4

#### 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,

MALOS (A) ers

Jerry Wickham Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, 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

Bill Hurtido, Accor North America, 4001 International Parkway, Carrollton, TX 75007

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

Donna Drogos, ACEH Jerry Wickham, ACEH File

## ATTACHMENT B

# STANDARD FIELD PROCEDURES FOR SOIL VAPOR PROBE INSTALLATION AND SAMPLING

## Conestoga-Rovers & Associates

## STANDARD FIELD PROCEDURES FOR SOIL VAPOR PROBE INSTALLATION AND SAMPLING

## VAPOR POINT METHODS

This document describes Conestoga-Rovers & Associates' standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

## Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

## Shallow Soil Vapor Point Installation

The shallow soil vapor point method for soil vapor sampling utilizes a hand auger or drill rig to advance a boring for the installation of a soil vapor sampling point. Once the boring is hand augered to the final depth, a probe, connected with Swagelok fittings to nylon or Teflon tubing of ¼-inch outer-diameter, is placed within 12-inches of number 2/16 filter sand. A 12-inch layer of dry granular bentonite is placed on top of the filter pack. Pre-hydrated granular bentonite is then poured to fill the borehole. The tube is coiled and placed within a wellbox finished flush to the surface. 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 precipitationfree days and irrigation onsite has ceased. A measured volume of air will be purged from the tubing using a different Summa purge canister. Immediately after purging, soil vapor samples will be collected using the appropriate size Summa canister with attached flow regulator and sediment filter. 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 boring will be patched with asphalt or concrete, as appropriate.

## Conestoga-Rovers & Associates

Sampling of Soil Vapor Points

Samples will be collected using a SUMMA<sup>™</sup> canister connected to sampling tubing at each vapor point. Prior to collecting soil vapor samples, the initial vacuum of the canisters is measured and recorded on the chain-of-custody. The vacuum of the SUMMA<sup>™</sup> canister is used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg is observed on the vacuum gauge and recorded on the chain-of-custody. The flow controllers should be set to 100-200 ml/minute. Field duplicates should be collected for every day of sampling and/or for every 10 samples collected.

Prior to sample collection, stagnant air in the sampling apparatus should be removed by purging approximately 3 purge volumes. The purge volume is defined as the amount of air within the probe and tubing.

In accordance with the DTSC Advisory-Active Soil Gas Investigations guidance document, dated January 28, 2003, leak testing needs to be performed during sampling. Helium is recommended, although shaving cream is acceptable.

Vapor Sample Storage, Handling, and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.