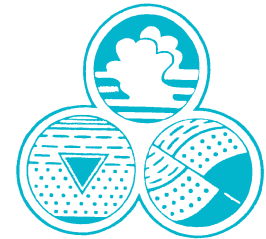


*Advanced*  
GeoEnvironmental, Inc.



11 September 2009  
AGE-NC Project No. 08-1640

**RECEIVED**

10:59 am, Sep 14, 2009

Alameda County  
Environmental Health

Mr. Robert Strong  
500 Bollinger Canyon Way #A4 North California Street  
San Ramon, 94582

**Subject: Interim Soil Vapor Remediation Work Plan  
METRO VALLEY CLEANERS  
224 Rickenbacker Circle, Livermore, California**

Dear Mr. Strong:

At your request, *Advanced* GeoEnvironmental, Inc. has prepared this work plan for interim soil remediation at 224 Rickenbacker Circle, Livermore, California as required by Alameda County Environmental Health Services (ACEHS) letter dated 10 April 2009.

The opportunity to provide you with this service is greatly appreciated. If you have any questions or require further information, please contact our office at (209) 467-1006.

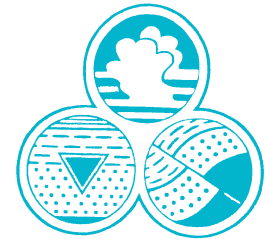
Sincerely,

*Advanced* GeoEnvironmental, Inc.

Daniel J. Villanueva  
Staff Geologist

cc: Mr. Jerry Wickham, ACEHS FTP electronic copy only

# *Advanced* GeoEnvironmental, Inc.



11 September 2009  
AGE-NC Project No. 08-1640

Mr. Jerry Wickham  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway Suite 250  
Alameda, California 94502-6577

**Subject: Interim Soil Remediation Work Plan  
METRO VALLEY CLEANERS  
224 Rickenbacker Circle, Livermore, California**

Dear Mr. Wickham:

On behalf of Mr. Robert Strong, *Advanced* GeoEnvironmental, Inc. has prepared this work plan for interim soil remediation at 224 Rickenbacker Circle, Livermore, California as required by Alameda County Environmental Health Services (ACEHS) letter dated 10 April 2009.

Upon ACEHS approval of this interim remediation work plan, AGE will submit all necessary permits and permit fees to all appropriate regulatory agencies. If you have any questions or require further information, please contact our office at (209) 467-1006.

Sincerely,

***Advanced* GeoEnvironmental, Inc.**

A handwritten signature in black ink that reads "Daniel Villanueva".

Daniel Villanueva  
Staff Geologist

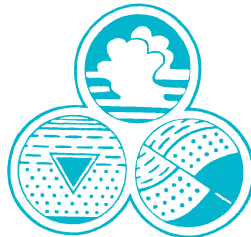
**Interim Soil Remediation Work Plan  
METRO VALLEY CLEANERS  
224 Rickenbacker Circle, Livermore, California**

11 September 2009  
AGE-NC Project No. 08-1640

*PREPARED FOR:*

Mr. Robert Strong  
METRO VALLEY CLEANERS

*PREPARED BY:*

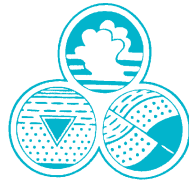


***Advanced GeoEnvironmental, Inc.***

381 Thor Place, Brea, California 92821 • Phone (714) 529-0200 • Fax (714) 529-0203  
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7115 North Division Street, Suite B 130 Spokane, Washington 99208 • Phone (800) 511-9300 • Fax (509) 228-7046

**Interim Soil Remediation Work Plan  
METRO VALLEY CLEANERS  
224 Rickenbacker Circle, Livermore, California**

11 September 2009  
AGE-NC Project No. 08-1640



**Advanced GeoEnvironmental, Inc.  
837 Shaw Road, Stockton, California**

**PREPARED BY:**

A handwritten signature in black ink, appearing to read "Daniel Villanueva".

Daniel J. Villanueva  
Staff Geologist

**PROJECT MANAGER:**

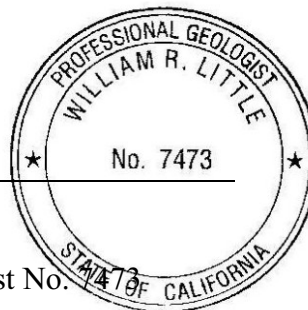
A handwritten signature in black ink, appearing to read "Arthur E. Deicke Jr.".

Arthur E. Deicke Jr.  
Project Scientist

**REVIEWED BY:**

A handwritten signature in black ink, appearing to read "William R. Little".

William R. Little  
Senior Project Geologist  
California Professional Geologist No.



**Interim Soil Remediation Work Plan**  
**METRO VALLEY CLEANERS**  
**224 Rickenbacker Circle, Livermore, California**

**TABLE OF CONTENTS**

<u><b>SECTION</b></u>	<u><b>PAGE</b></u>
<b>1.0. INTRODUCTION.....</b>	<b>1</b>
1.1. BACKGROUND.....	1
1.2. PREVIOUS INVESTIGATIONS.....	1
<b>2.0. SCOPE OF WORK.....</b>	<b>2</b>
2.1. PRE-FIELD WORK ACTIVITIES.....	3
2.2. REMEDIATION WELLS.....	3
2.3. INSTALLATION OF INTERIM REMEDIATION SYSTEM PIPING NETWORK.....	4
2.4. PROPOSED INTERIM SOIL REMEDIATION SYSTEM.....	4
2.5. INTERIM REMEDIATION START-UP PERIOD.....	5
2.6. MONITORING AND MAINTENANCE.....	5
2.7. REPORT PREPARATION.....	5
<b>3.0. FIELD PROCEDURES.....</b>	<b>5</b>
3.1. PILOT BORING ADVANCEMENT.....	6
3.2. SOIL SAMPLE COLLECTION.....	6
3.3. WELL COMPLETION.....	6
3.4. REMEDIATION SYSTEM PIPING NETWORK.....	7
3.5. SOIL VAPOR EXTRACTION SYSTEM DESIGN.....	7
3.6. SOIL VAPOR EXTRACTION MONITORING.....	8

**FIGURES**

Figure 1 - *Location Map*

Figure 2 - *Site Plan with Proposed Remediation System*

Figure 3 - *Proposed Remediation Trenching and Well Box Design*

Figure 4 - *Proposed Soil Vapor Extraction System Design*

Figure 5 - *Proposed Soil Vapor Extraction Well Design*

**Interim Soil Remediation Work Plan**  
**METRO VALLEY CLEANERS**  
**224 Rickenbacker Circle, Livermore, California**

**TABLE OF CONTENTS**

**TABLES**

Table 1 - *Well Construction Details*  
Table 2 - *Ground Water Level Measurements*  
Table 3 - *Ground Water Analytical Data*  
Table 4 - *Soil Analytical Data*  
Table 5 - *Filed Parameters - SVE Pilot Test*  
Table 6 - *Soil Vapor Analytical Data - SVE Pilot Test*  
Table 7 - *Soil Gas Analytical Data*

**APPENDICES**

Appendix A - *Regulatory Correspondence*

**Interim Soil Remediation Work Plan**  
**METRO VALLEY CLEANERS**  
**224 Rickenbacker Circle, Livermore, California**

## 1.0. INTRODUCTION

On behalf of Mr. Robert Strong of Metro Valley Cleaners, *Advanced* GeoEnvironmental has prepared this *Interim Soil Remediation Work Plan* for the property located at 224 Rickenbacker Circle, Livermore, California (site). The scope of work includes installation of two soil vapor extraction wells and the installation, operation and maintenance of a an interim soil vapor extraction remediation system at the site. The location of the site and the surrounding area are illustrated on Figure 1; a plan of the site is illustrated on Figure 2. Table 1 through 7 are provided for reference to well construction details; ground water elevation data; ground water, soil and soil-gas analytical data and pilot study results.

Based on the results of vapor extraction pilot tests performed at the site on 19 and 20 January 2009, AGE had recommended installation of a soil vapor extraction (SVE) system utilizing existing shallow-screened vapor well SVE-1. AGE also recommended converting pilot test observation wells OW-1 and OW-2, which are constructed identical to SVE-1, to soil vapor extraction wells. Additionally AGE recommended the installation of two additional SVE wells near and north of the former drying cleaning system. On 10 April 2009, Alameda County Environmental Health Services (ACEHS) concurred with AGE's above stated recommendations and directed that an interim remediation work plan be submitted to the ACEHS by 15 June 2009 (Appendix A). Due to budget and scheduling constraints AGE requested two separate extensions for the submittal of the interim soil remediation work plan, which were approved by ACEHS in email correspondence dated 09 June and 11 August 2009.

The purpose of this work plan is to detail the design, installation and operation of a carbon-based soil vapor extraction system. This work plan has been prepared in accordance with ACEHS guidelines.

### 1.1. BACKGROUND

The site was formerly used as a dry cleaning facility utilizing a solvent-based dry cleaning machine. Reportedly, the tetrachloroethene (PCE)-based dry cleaning machine was upgraded in the late 1990s to an Exxon DF2000, which is a clean solvent machine, and then later to silicon-based dry cleaning technology. All dry cleaning equipment was reportedly removed from the site in 2005.

### 1.2. PREVIOUS INVESTIGATIONS

In October 2005, JMK Environmental Solutions advanced three soil borings for the collection of soil samples at the site. Soil samples were collected from borings S-1 and S-2 at five-foot intervals from 5 feet to 15 feet below surface grade (bsg) and in ten-foot intervals between 15 feet and 35 feet bsg.

In January 2007, ENGEO Inc. advanced nine soil borings (SG-1 to SG-9) to five feet bsg for the collection of soil-gas samples and two soil borings (P-1 and P-2) to one and five feet bsg for the collection of soil samples. Soil-gas samples were collected in syringes and analyzed by a mobile laboratory in accordance with EPA Method 8260M. PCE and related PCE-daughter products were reported in the soil-gas samples. PCE was also reported in soil sample P-1@5 at five feet bsg.

In March 2007, ENGEO, Inc. advanced five soil borings (S-1 through S-5) for the collection of soil and ground water. Soil samples were collected at various depths ranging from 2 feet to 30 feet bsg. In general, ground water samples were collected from the first water bearing unit at depths ranging from approximately 21 feet to 26 feet bsg. PCE was reported in soil samples collected from S-3, which is located near the former dry cleaning unit. PCE was reported in each grab water samples collected from boring S-2 through S-5.

In November 2007, ENGEO, Inc. advanced one boring (1-B1) near the current trash holding area to define the vertical extent of soil and ground water. Soil samples were collected at ten-foot intervals from 10 feet to 90 feet bsg; grab ground water samples were collected at depths of approximately 35, 70 and 95 feet bsg. PCE was reported in soil samples from collected from 10, 20 and 50 feet bsg. No target chemicals were reported in grab ground water samples.

In December 2007, ENGEO, Inc. performed a soil-gas survey and advanced seven soil borings (SG-10 through SG-16) to five feet bsg and collected eight soil-gas samples in Summa canisters and analyzed by EPA Method TO-15. Results from the survey indicated that all locations were either non-detect or below environmental screening levels for target chemicals.

In December 2007, ENGEO, Inc. installed three ground water monitoring wells (MW-1 through MW-3). Soil samples were collected from MW-1 at 5.5 feet and 10 feet bsg; one soil sample was collected during the advancement of MW-2 and MW-3 at depths of 25.5 feet and 26 feet, respectively. PCE was reported in both soil samples collected during the installation of well MW-1.

ENGEO, Inc. performed one ground water monitoring event at the site in January 2008 utilizing wells MW-1 through MW-3. PCE was reported in monitoring wells MW-1 and MW-2 at concentrations below Maximum Contaminate Level (MCL) of 5 ug/l. Historical analytical soil, ground water, soil-gas and other data is included in Tables 2 through 4 and 7.

## **2.0. SCOPE OF WORK**

Based on the results of the above-referenced SVE pilot tests performed at the site in January 2009, AGE proposes to install, operate and maintain an interim SVE remediation system utilizing existing shallow SVE well SVE-1, observation wells OW-1 and OW-2. AGE also proposes to install two



additional SVE wells in the area of and north of the former dry cleaning machine (SVE-2 and SVE-3).

Interim remediation field activities will consist of the following tasks:

- Pre-field work activities;
- Installation of additional soil vapor extraction wells;
- Installation of a soil vapor extraction system;
- Soil vapor extraction system start-up period;
- Monitoring and maintenance activities; and
- Report preparation.

Each of these tasks is described in greater detail below.

## 2.1. PRE-FIELD WORK ACTIVITIES

Applicable site permits will be obtained from the City of Livermore (i.e., electrical, building, plumbing, etc.) and from the Bay Area Air Quality Management District (BAAQMD). In addition, an update to the health and safety plan presently on-file will be prepared in accordance with *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities* (National Institute for Occupational Safety and Health Administration, U.S. Coast Guard and U.S. Environmental Protection Agency, 1985). Prior to mobilization, all underground trenching areas will be clearly marked and a utility clearance obtained through Underground Service Alert.

## 2.2. REMEDIATION WELLS

Currently, three wells (SVE-1, OW-1, and OW-2) are screened through the shallow vadose zone (5 feet to 20 feet bsg) and are located in areas with reported chlorinated hydrocarbon contamination. Based on the results of the SVE pilot tests conducted at the site in January 2009, a theoretical radius of influence of approximately 35 feet was estimated for SVE utilizing the shallow wells. Utilization of the current vapor extraction well network is adequate for interim remediation of soil in the suspected areas of chlorinated hydrocarbon contamination. Two additional wells are proposed to be installed; one well will be installed in the area of the former dry cleaning machine and one well approximately 20 feet north former machine location near the location of boring SG-6 (Figure 2). Details of the vapor extraction well design and installation are presented in section 3.1.

### 2.3. INSTALLATION OF INTERIM REMEDIATION SYSTEM PIPING NETWORK

The remediation system piping network will be installed underground in a 1-foot wide by 1½-foot deep trench. The proposed underground trenching locations are depicted on Figure 2; a cross sectional view of the trench is depicted on Figure 3. In the trench, 2-inch diameter, schedule 40 PVC piping will be manifolded from the well-heads at SVE-1 through SVE-3 and OW-1 and OW-2, then routed to the proposed soil vapor extraction unit (regenerative blower and related carbon filtration). Following piping placement, the trench will be backfilled with imported road-base sand, compacted, and resurfaced to grade with asphalt.

### 2.4. PROPOSED INTERIM SOIL REMEDIATION SYSTEM

The selected SVE treatment unit will consist of a condensation separator, a vacuum blower, a minimum of two virgin coconut carbon canisters (1,000 pounds each) and control components. The 2-inch diameter piping installed from the well-head at wells SVE-1 through SVE-3 and OW-1 and OW-2 will be connected to the inlet of the condensation separator, which leads into the vacuum blower. The outlet from the vacuum blower will be routed through the two carbon vessels prior to release to the atmospheric air.

Induced vacuum will be measured utilizing a Magnehelic vacuum gauge attached to the inlet of the blower; SVE vapor flow will be monitored using a Dwyer DS-200 flow sensor. Sampling ports will be installed upstream of the vacuum blower inlet to recover SVE influent vapor flow vapor stream samples, and downstream of the second carbon unit to recover effluent SVE vapor flow samples and to monitor the efficiency of hydrocarbon destruction. A schematic diagram of the SVE treatment unit is depicted on Figure 4.

The proposed location of the SVE is on the south side of the property, east of the trash holding area and MW-2 (Figure 2). The selected location will allow future tenants and the property owner to conduct day to day business without interference from the operation of the SVE remediation system. The SVE unit will be secured by a chain-linked, gated enclosure approximately 15 feet wide, 15 feet long and 6 feet high. Electricity is readily available to the site. It will be later determined by the property owner if a dedicated electrical meter will be installed to monitor the electrical use of the system.

## 2.5. INTERIM REMEDIATION START-UP PERIOD

In order to monitor hydrocarbon destruction efficiency during the SVE start-up period (first week of operation), influent and effluent vapor samples will be collected on a daily basis and submitted to a State of California Department of Public Health (CDPH)-certified laboratory for analysis of volatile organic compounds (VOC's) by EPA method 8260B.

SVE operational parameters including soil-vapor concentrations, vapor flow and vacuum will be monitored on a daily basis to gauge the optimal destruction rate of recovered hydrocarbon vapors.

Following the SVE start-up period, soil vapor samples will be collected on a monthly basis and the SVE operational parameters will be monitored on a weekly basis to monitor cleanup progress.

## 2.6. MONITORING AND MAINTENANCE

Following the initial start-up period, influent and effluent vapor samples will be collected on a monthly basis and submitted to a CDPH-certified laboratory for analysis for VOC's. Laboratory report for vapor sample analyses, testing methods, laboratory quality assurance/quality control (QA/QC) reports and sample chain of custody documentation will be presented in quarterly reports.

The SVE interim remediation system will be maintained on a weekly basis according to manufacturer's recommendations (i.e., lubrication, oil changing, system adjustments, etc.).

## 2.7. REPORT PREPARATION

Quarterly reports will be prepared presenting the findings from the interim SVE activities. The quarterly reports will include a description of work performed and the results of the influent and effluent vapor samples. Conclusions and recommendations will also be included in the reports, if applicable. The report will be in a format acceptable to ACEHS guidelines and will be reviewed and signed by a California Professional Geologist.

## 3.0. FIELD PROCEDURES

All field procedures will be overseen by an AGE representative under the supervision of a California Professional Geologist. Procedures for underground piping installation, start-up period and weekly/monthly operation and maintenance procedures are described below.

### 3.1. PILOT BORING ADVANCEMENT

Two pilot soil borings will be advanced at the site to depths of approximately 20 feet bsg. The borings will be advanced utilizing a track-mounted limited-access drill rig equipped with 8.25-inch diameter hollow-stem augers. Soil vapor extraction well SVE-2 will be advanced in the location of the former dry cleaning machine while SVE-3 will be advanced approximately 20 feet north of the proposed location of SVE-2.

The total depth of each boring may vary according to hydrogeologic/geologic conditions encountered during drilling. The locations of the proposed borings are illustrated on Figure 2. Cuttings generated during drilling activities will be containerized in properly labeled Department of Transportation (DOT)-approved 55-gallon drums. Upon characterization, the cuttings will be properly disposed at a licensed landfill facility.

### 3.2. SOIL SAMPLE COLLECTION

Soil samples will be collected from soil borings at five-foot intervals. Relatively undisturbed soil samples will be collected in each of the borings using a California modified split-spoon sampler fitted with 1.5-inch diameter by 6-inch long brass or stainless steel sleeves. Upon removal from the sampler, the sleeves will be separated with a clean knife. The exposed ends of the second sleeve will be covered with Teflon sheets, capped and sealed with tape. The remaining soil will be visually classified by an AGE professional in accordance with the Unified Soil Classification System (USCS). Soil samples will also be field screened for the presence of volatile organic compounds using an organic vapor meter (OVM), equipped with a photo ionization detector (PID). Soil sample descriptions and OVM readings will be recorded on a log for each boring.

Following sample collection, each preserved sample sleeve will be labeled with the boring location, depth, time, date and sampler's initials. Appropriately sealed and labeled samples will be placed in a chilled container with ice and transported under chain of custody procedures to a CDPH-certified laboratory. Any non-disposable equipment used for sample collection is thoroughly rinsed with clean water after being washed with a solution of Alconox.

### 3.3. WELL COMPLETION

Wells will be completed as single-casing soil vapor extraction and observation wells utilizing 2-inch diameter schedule 40 polyvinylchloride (PVC), 0.020-inch slotted well screen and blank well casing. Based on geologic conditions, a 15-foot length of well screen, from 5 to 20 feet bsg, is anticipated for installation of each well. After installing each well casing, a filter pack material consisting of

#3 sand will be added to approximately one foot above the screened interval.

A nominal one-foot bentonite seal (bentonite chips) will be placed above the filter pack to minimize the potential for grout penetration into the screened section of the well. The bentonite seal will be formed by pouring bentonite chips into the annulus and allowing them to settle on the filter pack. The bentonite chips will be hydrated using a few gallons of tap water and allowed to hydrate for a minimum of one-half hour prior to grouting.

The remaining annular space will be filled to the ground surface with a cement grout. The grout mixture will consist of Type I/II Portland neat cement and not more than 6 gallons of water per 94-pound sack of cement. The grout will be placed by pumping through tremmie pipe. A diagram illustrating the proposed construction of the additional SVE well has been included as Figure 5.

#### 3.4. REMEDIATION SYSTEM PIPING NETWORK

A network of 2-inch diameter, schedule 40 PVC piping will be installed from remediation wells SVE-1 through SVE-3, and OW-1 and OW-2 in a series of trenches, approximately 12 inch wide and 18 inches deep. All PVC piping will be routed from each remediation well head to the SVE condensation entrapment tank, located inside the SVE remediation system fenced enclosure. A PVC ball valve will be installed at each SVE well head so that soil vapor can be drawn from each well independently or from a combination of specific wells. Following piping placement, the trench will be backfilled with imported road-base sand, compacted, and resurfaced with asphalt. Cross sectional views of the process piping layout are illustrated on Figure 3.

#### 3.5. SOIL VAPOR EXTRACTION SYSTEM DESIGN

The SVE units, consisting of a condensation separator, a vacuum blower and two 1,000 pound virgin coconut carbon filtration vessels, are proposed for chlorinated hydrocarbon vapor recovery at the site. The SVE unit should be able to extract soil vapor between 150 and 250 cubic feet per minute (cfm). The SVE unit will be connected through a manifold box to vapor recovery wells SVE-1 through SVE-3 and OW-1 and OW-2; chlorinated hydrocarbon vapors extracted from these wells will be sequentially routed through a condensation entrapment chamber and a vacuum blower before entering two vapor phase carbon scrubbers for final destruction. A diagram of a typical system is illustrated on Figure 4.

Induced vacuum measurements will be collected utilizing a Magnehelic vacuum gauge attached near the inlet of the blower; SVE vapor flow will be monitored using a Dwyer DS-200 flow sensor. Following the start-up period, the SVE vapor flow along the influent and effluent lines will be

monitored weekly for the presence of organic vapor using an OVM equipped with a PID. Sampling ports will be installed upstream of the vacuum blower inlet to recover SVE influent soil vapor stream samples and downstream of the two 1,000-pound carbon vessels to sample effluent SVE vapor samples to monitor the efficiency of chlorinated hydrocarbon destruction.

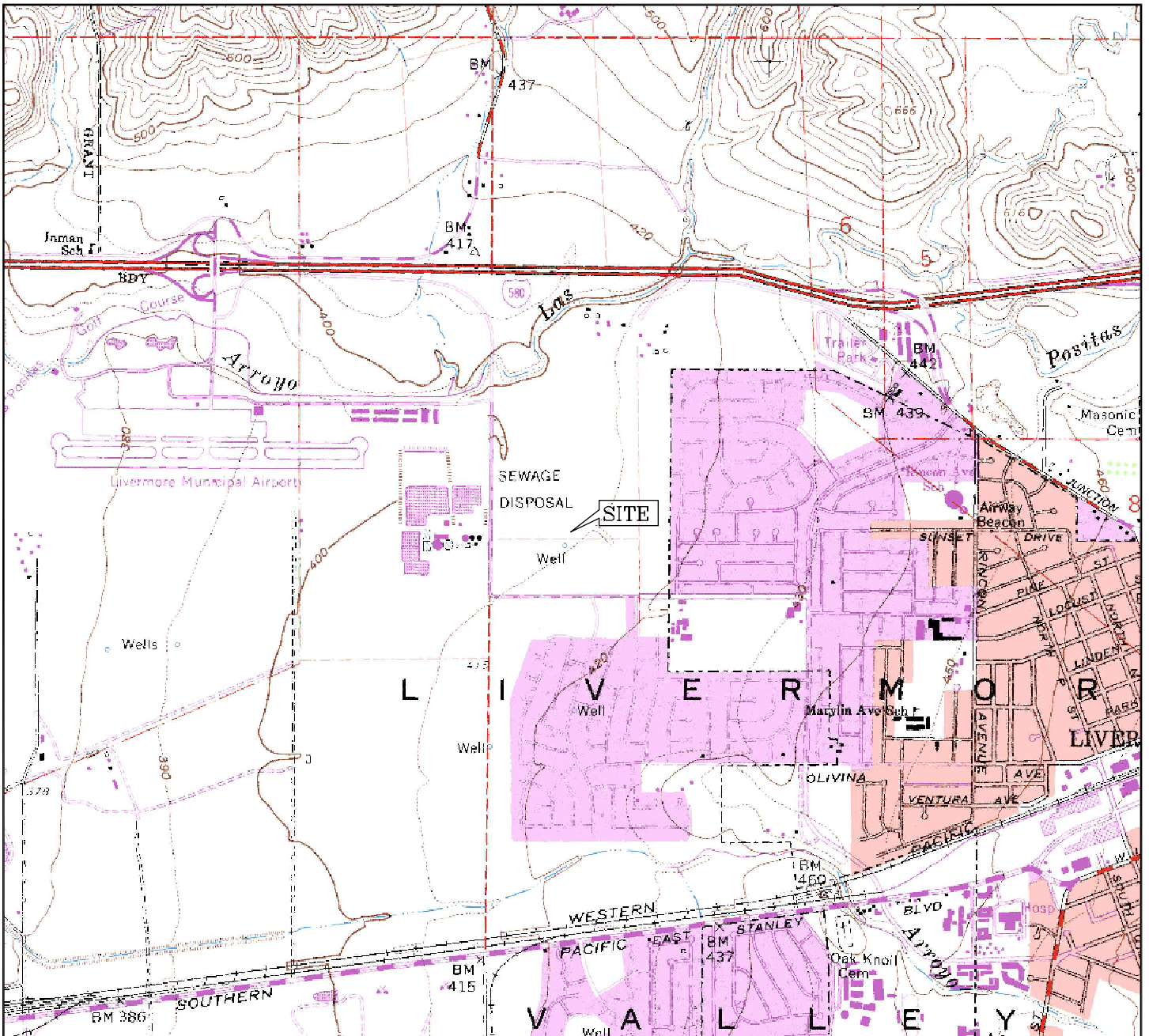
### 3.6. SOIL VAPOR EXTRACTION MONITORING

During the start-up period for the SVE system, soil vapor samples will be collected and operational parameters will be monitored on a daily basis. The anticipated start-up period will be approximately one week.

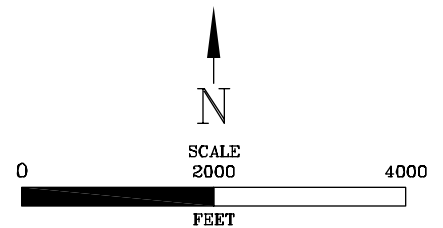
Following the start-up period, the vapor extraction system will be monitored weekly using a PID and Dwyer DS-200 flow sensor to ensure optimal destruction of recovered vapors and to monitor cleanup progress. The PID readings will be taken and recorded from the influent end of the vacuum blower unit and the effluent end of the second 1,000 pound carbon vessel. Operational parameters (air flow, air vacuum and volume of processed vapor) will be measured on a weekly basis to monitor and record soil-vapor volumes extracted and operational efficiency.

Vapor samples will be collected on a monthly basis from the influent and effluent end of the vapor extraction system utilizing an electric vacuum pump. The samples will be collected into Tedlar bags and transported under chain of custody to a CDPH-certified laboratory and analyzed for VOC's.

# FIGURES



LIVERMORE QUADRANGLE, CALIFORNIA  
 7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)



LOCATION MAP  
 METRO VALLEY CLEANERS  
 224 RICKENBACKER CIRCLE  
 LIVERMORE, CALIFORNIA

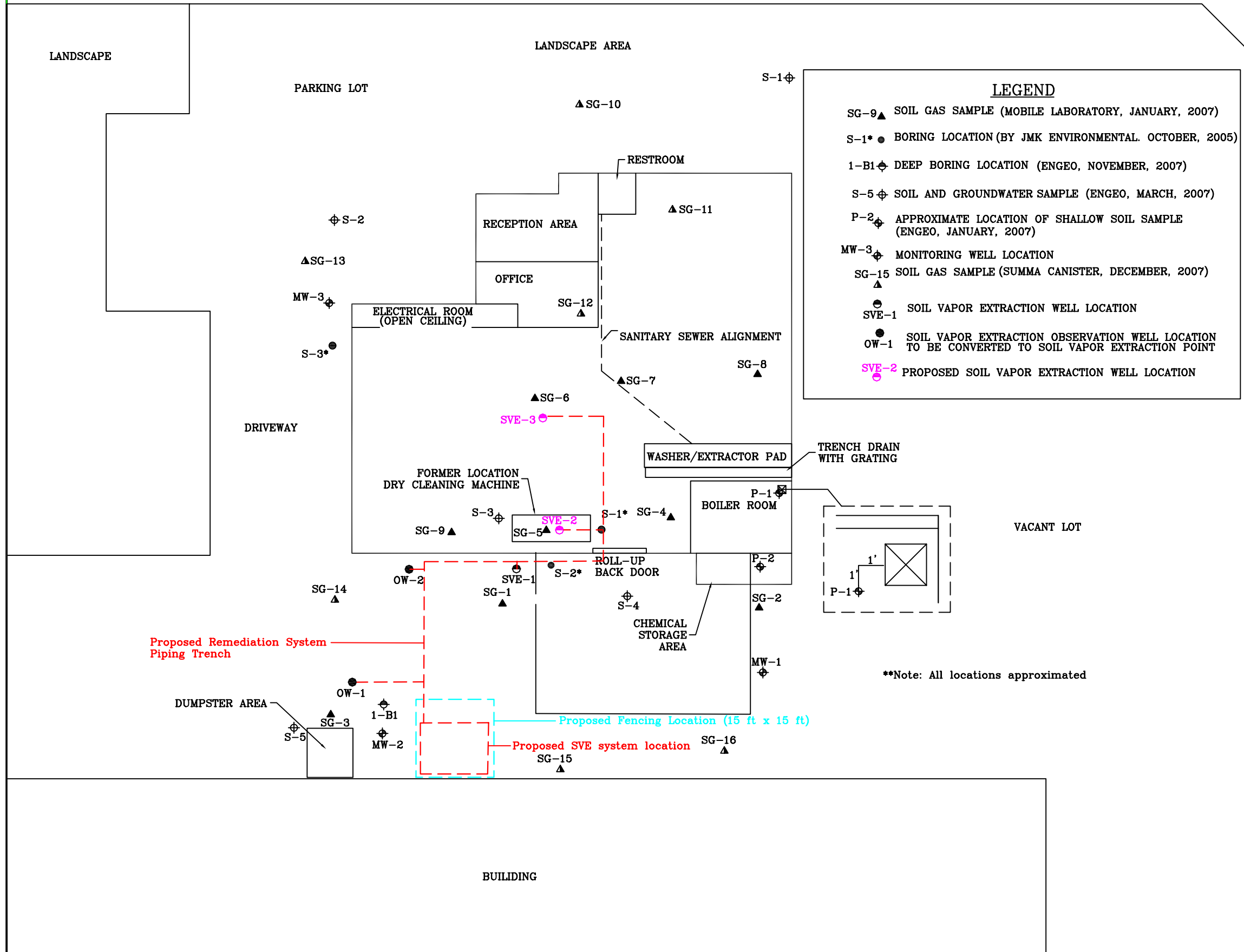


*Advanced*  
**GeoEnvironmental, Inc.**  
*of Northern California*

PROJECT NO. AGE-NC-08-1640	FILE: LOCATION	FIGURE:
DATE: 03 OCTOBER, 2008	DRAWN BY: MAC	1



# RICKENBACKER PLACE



**LEGEND**

- SG-9 ▲ SOIL GAS SAMPLE (MOBILE LABORATORY, JANUARY, 2007)
- S-1\* ● BORING LOCATION (BY JMK ENVIRONMENTAL, OCTOBER, 2005)
- 1-B1 ⊕ DEEP BORING LOCATION (ENGE, NOVEMBER, 2007)
- S-5 ⊕ SOIL AND GROUNDWATER SAMPLE (ENGE, MARCH, 2007)
- P-2 ⊕ APPROXIMATE LOCATION OF SHALLOW SOIL SAMPLE (ENGE, JANUARY, 2007)
- MW-3 ⊕ MONITORING WELL LOCATION
- SG-15 ▲ SOIL GAS SAMPLE (SUMMA CANISTER, DECEMBER, 2007)
- SVE-1 ● SOIL VAPOR EXTRACTION WELL LOCATION
- OW-1 ● SOIL VAPOR EXTRACTION OBSERVATION WELL LOCATION TO BE CONVERTED TO SOIL VAPOR EXTRACTION POINT
- SVE-2 ● PROPOSED SOIL VAPOR EXTRACTION WELL LOCATION

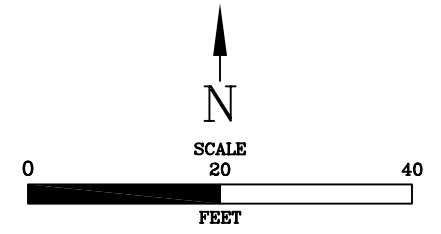
\*\*Note: All locations approximated

RICKENBACKER CIRCLE

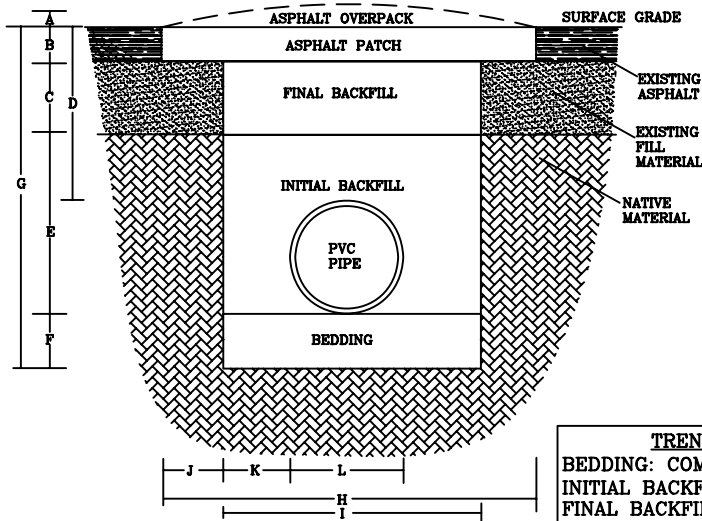
**Advanced  
GeoEnvironmental, Inc.**

SITE PLAN WITH PROPOSED REMEDIATION SYSTEM  
METRO VALLEY CLEANERS  
224 RICKENBACKER CIRCLE  
LIVERMORE, CALIFORNIA

PROJECT NO. AGE-NC-08-1640	FILE: METRO2
DATE: SEPTEMBER 2009	DRAWN BY: MAC
FIGURE: 2	



# TRENCHING CONSTRUCTION

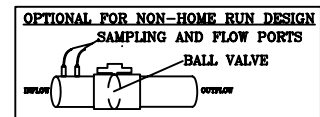
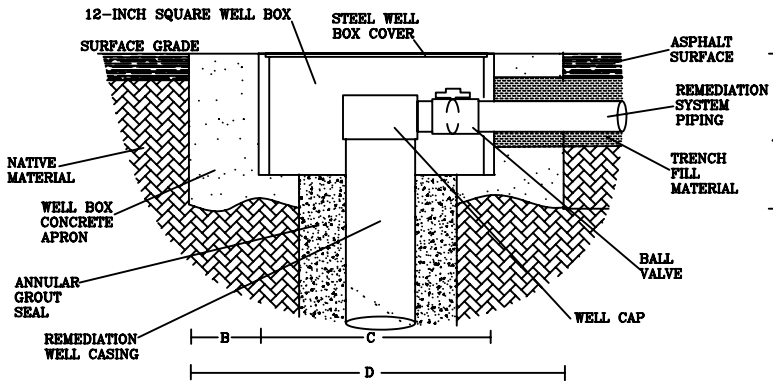


**TRENCHING CONSTRUCTION MATERIALS**  
 BEDDING: COMPACTED CLASS III (SAND/SILT)  
 INITIAL BACKFILL: COMPACTED CLASS II (GRAVELS/SANDS)  
 FINAL BACKFILL: CONCRETE SLURRY  
 ASPHALT: HOT MIX

## TRENCHING CONSTRUCTION DESCRIPTION AND DIMENSIONS

A: HEIGHT OF OVER-SURFACING OF ASPHALT PATCH	A: 0.5 INCH
B: ASPHALT THICKNESS	B: 2 INCHES
C: FINAL BACKFILL THICKNESS	C: 6 INCHES
D: DEPTH FROM SURFACE GRADE TO TOP OF PIPE	D: 4 INCHES
E: INITIAL BACKFILL THICKNESS	E: 8 INCHES
F: BEDDING THICKNESS	F: 2 INCHES
G: TOTAL DEPTH FROM SURFACE GRADE	G: 18 INCHES
H: WIDTH OF ASPHALT PATCH	H: 16 INCHES
I: WIDTH OF TRENCH	I: 12 INCHES
J: WIDTH OF ADDITIONAL ASPHALT FROM TRENCH SIDEWALL	J: 2 INCHES
K: DISTANCE FROM PIPE TO TRENCH SIDEWALL	K: 5 INCHES
L: WIDTH OF PVC PIPE	L: 2 INCHES

# REMEDIATION WELL BOX CONSTRUCTION



## DESCRIPTION AND DIMENSIONS

A: THICKNESS OF CONCRETE APRON	A: 24 INCHES
B: WIDTH CONCRETE APRON	B: 4 INCHES
C: WIDTH OF WELL BOX	C: 12 INCHES
D: WIDTH OF WELL BOX AND APRON	D: 20 INCHES

NOT TO SCALE

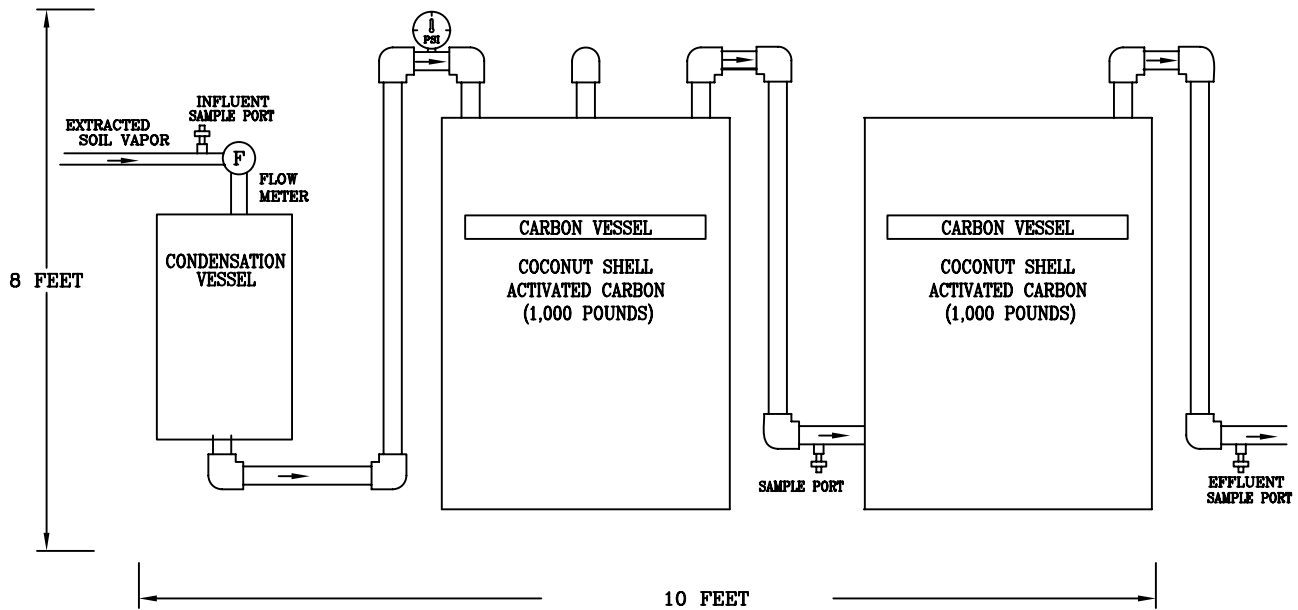
PROPOSED TRENCHING AND WELL BOX CONSTRUCTION  
 METRO VALLEY CLEANERS  
 224 RICKENBACKER CIRCLE  
 LIVERMORE, CALIFORNIA



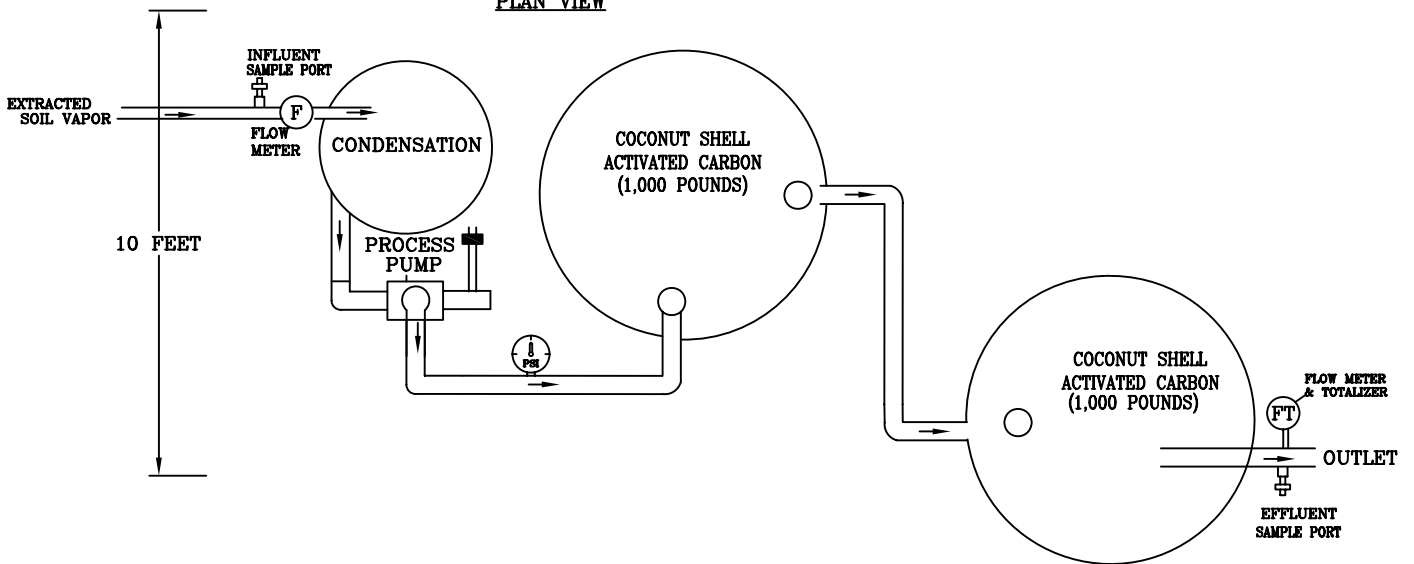
**Advanced**  
 GeoEnvironmental, Inc.  
*of Northern California*

PROJECT NO. AGE-NC-08-1640	FILE: MVCPIPE	FIGURE:
DATE: SEPTEMBER 2009	DRAWN BY: MAC	3

LATERAL VIEW



PLAN VIEW



NOTE: Design is approximate and is subject to change.

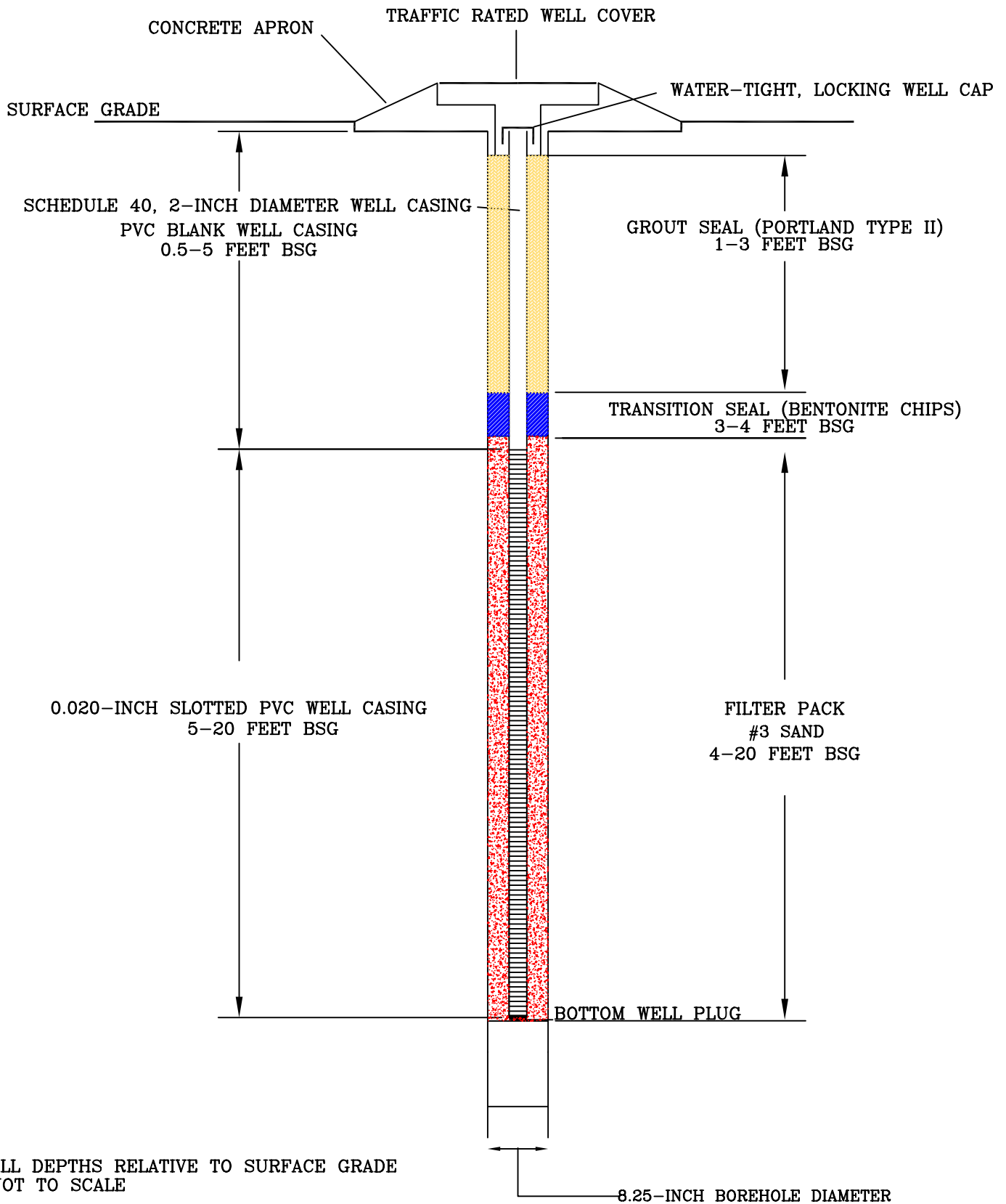
PROPOSED SOIL VAPOR EXTRACTION REMEDIATION SYSTEM DESIGN

METRO VALLEY CLEANERS  
224 RICKENBACKER CIRCLE  
LIVERMORE, CALIFORNIA



**Advanced**  
GeoEnvironmental, Inc.  
*of Northern California*

PROJECT NO. AGE-NC-08-1640	FILE: SVE DESIGN	FIGURE:
DATE: SEPTEMBER 2009	DRAWN BY: MAC	4



PROPOSED SOIL VAPOR EXTRACTION WELL DESIGN  
 METRO VALLEY CLEANERS  
 224 RICKENBACKER CIRCLE  
 LIVERMORE, CALIFORNIA



**Advanced**  
 GeoEnvironmental, Inc.  
*of Northern California*

PROJECT NO. AGE-NC-02-0926

FILE: METRO 5

FIGURE:

DATE: SEPTEMBER 2009

DRAWN BY: KMM

5

# TABLES

**TABLE 1**  
**WELL CONSTRUCTION DETAILS**  
Metro Valley Cleaners  
224 Rickenbacker Circle  
Livermore, CA

Well ID	Installation Date	Borehole Diameter (inches)	Total Depth (ft bsg)	Casing Diameter (inches)	Casing Material	Slot Size (inches)	Casing Elevation (ft MSL) <sup>1</sup>	Screen Interval (ft btoc)	Filterpack Interval (ft btoc)	Bentonite Interval (ft btoc)	Grout Interval (ft btoc)
Ground Water Monitoring Wells											
MW-1	12-18-2007	8	35	2	PVC	0.010	410.00	10 to 35	13 to 35	12 to 13	1 to 12
MW-2	12-18-2007	8	35	2	PVC	0.010	409.98	10 to 35	39 to 65	12 to 13	1 to 12
MW-3	12-18-2008	8	35	2	PVC	0.010	409.48	10 to 35	43 to 65	12 to 13	1 to 12
Remediation Wells											
SVE-1	01-08-2009	8	20	2	PVC	0.030	ns	5 to 15	4 to 20	3 to 4	1 to 3
OW-1	01-08-2009	8	20	2	PVC	0.030	ns	5 to 15	4 to 20	3 to 4	1 to 3
OW-2	01-08-2009	8	20	2	PVC	0.030	ns	5 to 15	4 to 20	3 to 4	1 to 3

*Notes:*

- ft bsg: feet below surface grade
- PVC: polyvinylchloride
- ft MSL: feet mean sea level
- ft btoc: below top of well casing
- ns: not surveyed
- note 1: Survey data not available

**TABLE 2**  
**GROUND WATER LEVEL MEASUREMENTS**  
Metro Valley Cleaners  
224 Rickenbacker Circle  
Livermore, CA

Well ID	Screened Interval (feet bsg)	Well Casing Elevation (ft MSL) <sup>1</sup>	Date	Depth to Ground Water (ft btoc)	Ground Water Elevation (ft MSL)	Ground Water Flow and Gradient	
						Quarter/Year	Direction/ Gradient
MW-1	13-35	410.00	01/28/08	25.25	384.75	1st/2008	NW / 0.00627 ft/ft
			12/18/08	27.90	382.10	4th/2008	W / 0.007 ft/ft
MW-2	13-35	409.98	01/28/08	25.23	384.75		
			12/18/08	28.38	381.60		
MW-3	13-35	409.48	01/28/08	25.25	384.23		
			12/18/08	27.91	381.57		

**TABLE 3**  
**GROUND WATER ANALYTICAL DATA**  
Metro Valley Cleaners  
224 Rickenbacker Circle  
Livermore, California  
(ug/l)

Sample ID	Screen Interval (feet bsg)	Date	EPA Method 8260B					
			PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC
S-1	22 - 26	03-02-2007	<1	<1	<1	<1	<1	<1
S-2	22 - 26	03-02-2007	<b>1.8</b>	<1	<1	<1	<1	<0.5
S-3	24 - 28	03-02-2007	<b>27</b>	<b>2.2</b>	<0.05	<0.05	<b>1.6</b>	<0.05
S-4	26 - 30	03-02-2007	<b>16</b>	<0.05	<0.05	<0.05	<0.05	<0.05
S-5	23 - 27	03-02-2007	<b>36</b>	<b>2.0</b>	<0.05	<0.05	<b>0.054</b>	<0.05
1-B1/DB-1-35	35 - 39	11-28-2007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1-B1/DB-1-70	70 - 74	11-28-2007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1-B1/DB-1-95	95 - 99	11-28-2007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-1	10 to 35	01-28-2008	<b>0.80</b>	<0.5	<0.5	<0.5	<0.5	<0.5
		12-18-2008	<1	<1	<1	<1	<1	<0.5
MW-2	10 to 35	01-28-2008	<b>0.95</b>	<0.5	<0.5	<0.5	<0.5	<0.5
		12-18-2008	<b>7.1</b>	<1	<1	<1	<1	<0.5
MW-3	10 to 35	01-28-2008	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12-18-2008	<1	<1	<1	<1	<1	<0.5

*Notes:*

ug/l: micrograms per liter  
bsg: below surface grade  
<: non-detect above laboratory reporting limit  
DB: deep boring  
PCE: Tetrachloroethene  
TCE: Trichloroethene  
1,1-DCE: 1,1- Dichloroethene  
Trans 1,2-DCE: Trans 1,2-Dichloroethene  
Cis 1,2-DCE: Cis 1,2-Dichloroethene  
VC: Vinyl Chloride



**TABLE 4**  
**SOIL ANALYTICAL DATA**  
Metro Valley Cleaners  
224 Rickenbacker Circle  
Livermore, California  
(mg/kg)

Sample ID	Depth (feet bsg)	Date	EPA Method 8260B					
			PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC
S-1-5*	5	10-25-2005	<b>0.23</b>	<0.012	<0.012	<0.012	<0.012	<0.012
S-1-10*	10	10-25-2005	<b>0.032</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-1-15*	15	10-25-2005	<b>0.031</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-1-25*	25	10-25-2005	<b>0.057</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-1-35*	35	10-25-2005	<b>0.029</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-2-5*	5	10-25-2005	<b>0.45</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-2-10*	10	10-25-2005	<b>0.059</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-2-15*	15	10-25-2005	<b>0.036</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-2-25*	25	10-25-2005	<b>0.048</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-2-35*	35	10-25-2005	<b>0.023</b>	<0.005	<0.005	<0.005	<0.005	<0.005
S-3-25*	25	10-25-2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
S-3-35*	35	10-25-2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-1@1	1	01-22-2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
P-1@5	5	01-22-2007	<b>0.0055</b>	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
P-2@1	1	01-22-2007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
P-2@5	5	01-22-2007	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
S-1@24#	24	03-02-2007	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045
S-2@26#	26	03-02-2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
S-3@2#	2	03-01-2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
S-3@4#	4	03-01-2007	<b>0.012</b>	<b>0.013</b>	<0.0049	<b>0.014</b>	<b>0.061</b>	<0.0049
S-3@8#	8	03-01-2007	<b>0.079</b>	<b>0.0066</b>	<0.0048	<0.0048	<0.0048	<0.0048
S-3@10#	10	03-01-2007	<b>0.023</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S-3@27#	27	03-01-2007	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
S-4@25#	25	03-01-2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
S-5@30#	30	03-01-2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
1-B1/S-10	10	11-27-2007	<b>0.079</b>	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
1-B1/S-20	20	11-27-2007	<b>0.017</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
1-B1/S-30	30	11-27-2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049

**TABLE 4**  
**SOIL ANALYTICAL DATA**  
 Metro Valley Cleaners  
 224 Rickenbacker Circle  
 Livermore, California  
 (mg/kg)

Sample ID	Depth (feet bsg)	Date	EPA Method 8260B					
			PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC
1-B1/S-40	40	11-27-2007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
1-B1/S-50	50	11-27-2007	<b>0.0014</b>	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
1-B1/S-60	60	11-27-2007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
1-B1/S-70	70	11-27-2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
1-B1/S-80	80	11-27-2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
1-B1/S-90	90	11-27-2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
MWB1	5.5	12-18-2007	<b>0.081</b>	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
MWB1	10.5	12-18-2007	<b>0.068</b>	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
MWB2	25.5	12-18-2007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
MW-3	26	12-19-2007	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
SVE-1-5	5	01-08-2009	<b>0.058</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
SVE-1-10	10	01-08-2009	<b>0.011</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
SVE-1-15	15	01-08-2009	<b>0.014</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
OW-1-5	5	01-08-2009	<b>0.040</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
OW-2-5	5	01-08-2009	<b>0.036</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
OW-2-10	10	01-08-2009	<b>0.026</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Notes:

- mg/kg: milligrams per kilogram  
 bsg: below surface grade  
 <: Indicates constituents were not detected at a concentration greater than the reporting limit shown.  
 PCE: Tetrachloroethene  
 TCE: Trichloroethene  
 1,1-DCE: 1,1- Dichloroethene  
 Trans 1,2-DCE: Trans 1,2-Dichloroethene  
 Cis 1,2-DCE: Cis 1,2-Dichloroethene  
 VC: Vinyl Chloride  
 \*: borings advanced by JML Environmental Solutions in 2005  
 #: borings advanced by ENGEO in 2007

**TABLE 5**  
**FIELD PARAMETERS-SVE PILOT TEST**  
 Metro Valley Cleaners  
 224 Rickenbacker Circle, Livermore, CA

Time	Date	Flow (iow/scfm)	Influent PID (ppm)	Effluent PID (ppm)	Vacuum Measurements		
					SVE-1 (scfm)	OW-1 (iow)	OW-2 (iow)
Baseline	1/19/2009	-	-	-	0.00	0.00	0.25
0930	1/19/2009	0.10 / 15	48.4	0	37.00	0.00	0.5
1000	1/19/2009	0.10 / 15	51.2	0	26.00	0.00	3.1
1030	1/19/2009	0.10 / 15	48.9	0	22.00	0.00	2.20
1100	1/19/2009	0.10 / 15	55.2	0	27.00	0.80	1.2
1130	1/19/2009	0.10 / 15	56.1	0	20.00	1.40	0
1200	1/19/2009	0.10 / 15	54.3	0	26.00	1.40	0
1230	1/19/2009	0.10 / 15	49.8	0	26.00	1.25	0.6
1300	1/19/2009	0.10 / 20	44.4	0	20.00	1.35	0.6
1330	1/19/2009	0.16 / 22	45.8	0	52.00	1.45	0.05
Adjustment made to vacuum gauge							
1400	1/19/2009	0.16 / 22	50	0	51.00	0.10	0.05
1430	1/19/2009	0.16 / 22	42	0	52.00	0.10	0.10
1500	1/19/2009	0.16 / 22	43	0	52.00	0.11	0.06
1530	1/19/2009	0.16 / 22	35	0	53.00	0.11	0.08
1600	1/19/2009	0.16 / 22	39	0	53.00	0.11	0.08
1630	1/19/2009	0.16 / 22	38	0	53.00	0.11	0.08
1700	1/19/2009	0.16 / 22	38	0	53.00	0.11	0.08
1730	1/19/2009	0.325 / 31	38	0	80.00	0.15	0.125
1800	1/19/2009	0.325 / 31	37	0	79.00	0.175	0.125
1830	1/19/2009	0.325 / 31	37	0	79.00	0.175	0.13
1900	1/19/2009	0.35 / 32	37	0	78.00	0.19	0.15
1930	1/19/2009	0.36 / 33	37	0	77.00	0.19	0.14
2000	1/19/2009	0.375 / 33	35	0	76.00	0.20	0.15
2030	1/19/2009	0.375 / 33	35	0	78.00	0.20	0.15
2100	1/19/2009	0.375 / 33	35	0	78.00	0.20	0.15
2130	1/19/2009	0.375 / 33	35	0	76.00	0.20	0.15
2200	1/19/2009	0.40 / 35	34	0	74.00	0.20	0.15

**TABLE 5**  
**FIELD PARAMETERS-SVE PILOT TEST**  
 Metro Valley Cleaners  
 224 Rickenbacker Circle, Livermore, CA

Time	Date	Flow (iow/scfm)	Influent PID (ppm)	Effluent PID (ppm)	Vacuum Measurements		
					SVE-1 (scfm)	OW-1 (iow)	OW-2 (iow)
2230	1/19/2009	0.40 / 35	34	0	74.00	0.20	0.15
2300	1/19/2009	0.43 / 36	34	0	72.00	0.20	0.16
2330	1/19/2009	0.43 / 36	35	0	72.00	0.20	0.16
2400	1/19/2009	0.43 / 36	35	0	72.00	0.21	0.16
0000	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0030	1/20/2009	0.42 / 36	34	0	70.00	0.21	0.16
0100	1/20/2009	0.42 / 36	34	0	70.00	0.21	0.16
0130	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0200	1/20/2009	0.42 / 36	32	0	70.00	0.21	0.16
0230	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0300	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0330	1/20/2009	0.43 / 36	33	0	69.00	0.21	0.16
0400	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0430	1/20/2009	0.43 / 36	34	0	70.00	0.21	0.16
0500	1/20/2009	0.43 / 36	33	0	69.00	0.21	0.16
0530	1/20/2009	0.43 / 36	34	0	69.00	0.21	0.16
0600	1/20/2009	0.43 / 36	34	0	69.00	0.21	0.16
0630	1/20/2009	0.43 / 36	33	0	69.00	0.21	0.16
0700	1/20/2009	0.43 / 36	33	0	68.00	0.21	0.16
0730	1/20/2009	0.45 / 38	34	0	68.00	0.25	0.21
0800	1/20/2009	0.45 / 38	33	0	68.00	0.25	0.21
0830	1/20/2009	0.45 / 38	29	0	68.00	0.25	0.21
0900	1/20/2009	0.45 / 38	27	0	68.00	0.25	0.21
0930	1/20/2009	0.45 / 38	26	0	68.00	0.25	0.21
post	1/20/2009	-	-	-	0	0	0

*Notes:*

iow: Inches of Water

ppm: parts per million

scfm: Standard Cubic Feet per Water

PID: Photo Ionization Detector

**TABLE 6**  
**SOIL VAPOR ANALYTICAL DATA - SVE PILOT TEST**  
 Metro Valley Cleaners  
 224 Rickenbacker Circle  
 Livermore, California  
 (ug/l)

Sample ID	Date	EPA Method 8260B					
		PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC
Influent Statrup	01-19-2009	<b>110</b>	<1	<1	<1	<1	<0.5
Influent 1400	01-19-2009	<b>110</b>	<b>3.3</b>	<1	<1	<1	<0.5
SVE-1/1800	01-19-2009	<b>91</b>	<1	<1	<1	<1	<0.5
SVE-1/End	01-20-2009	<b>67</b>	<1	<1	<1	<1	<0.5

Notes:

- ug/L                    micrograms per liter
- <:                      Indicates constituents were not detected at a concentration greater than the laboratory reporting limit shown.
- PCE:                   Tetrachloroethene
- TCE:                   Trichloroethene

**TABLE 7**  
**SOIL GAS ANALYTICAL DATA**  
Metro Valley Cleaners  
224 Rickenbacker Circle  
Livermore, California  
(ug/m<sup>3</sup>)

Sample ID	Date	PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC	Tracer Compound
EPA METHOD 8260 / Mobile Laboratory / Syringe Sampling <sup>2</sup>								
SG-1	01-22-2007	<b>16,000</b>	<b>150</b>	<100	<100	<100	<100	<100
SG-2	01-22-2007	<b>15,000</b>	<b>480</b>	<100	<100	<100	<100	<100
SG-3	01-22-2007	<b>38,000</b>	<b>18,000</b>	<100	<100	<b>17,000</b>	<100	<100
SG-4	01-22-2007	<b>11,000</b>	<b>1,200</b>	<100	<100	<b>450</b>	<100	<100
SG-5	01-22-2007	<b>860,000</b>	<b>4,600,000</b>	<b>4,700</b>	<b>140,000</b>	<b>780,000</b>	<b>1,800</b>	<100
SG-6	01-22-2007	<b>25,000</b>	<b>1,300</b>	<100	<100	<100	<100	<100
SG-7	01-22-2007	<b>5,700</b>	<b>3,000</b>	<100	<100	<b>470</b>	<100	<100
SG-8	01-22-2007	<b>4,300</b>	<b>310</b>	<100	<100	<100	<100	<100
SG-9	01-22-2007	<b>4,100</b>	<b>3,100</b>	<100	<b>500</b>	<b>1,700</b>	<100	<100
EPA METHOD TO-15 / Summa Cannisters <sup>3</sup>								
SG-10	12-17-2007	<2.1	<0.86	<1.3	<0.90	<0.90	<0.40	<2.7
SG-11	12-17-2007	<b>64</b>	<0.83	<1.3	<0.88	<0.88	<0.39	<2.6
SG-12	12-17-2007	<b>10</b>	<0.82	<1.2	<0.86	<0.86	<0.39	<2.6
SG-12 <sup>1</sup>	12-17-2007	<b>8.7</b>	<0.78	<1.2	<0.82	<0.82	<0.37	<2.6
SG-13	12-17-2007	<1.3	<0.55	<0.79	<0.55	<0.55	<0.25	<1.6
SG-14	12-17-2007	<2.0	<0.87	<1.2	<0.87	<0.87	<0.39	<2.6
SG-15	12-17-2007	<1.9	<0.77	<1.2	<0.81	<0.81	<0.37	<2.4
SG-16	12-17-2007	<b>15</b>	<b>22</b>	<1.2	<b>8.2</b>	<b>7.9</b>	<0.37	<2.5

*Notes:*

- Note 1: duplicate sample  
Note 2: Tracer compound: 1,1-diflouroethane  
Note 3: Tracer compound: isopropanol  
ug/m<sup>3</sup> micrograms per cubic meter  
<: Indicates constituents were not detected at a concentration greater than the laboratory reporting limit shown.  
PCE: Tetrachloroethene  
TCE: Trichloroethene

# **APPENDIX A**

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) 337-93

April 10, 2009

Mr. Lawrence Hancock  
Country Club Cleaners  
500 Bollinger Canyon Way #A4  
San Ramon, CA 94582

Mr. Mark Ratto  
Peter J. Ratto Trust  
670 W. Fruit Cive Forest Road  
Jacksonville, FL 32259

Mr. Robert Strong  
Country Club Cleaners  
500 Bollinger Canyon Way #A4  
San Ramon, CA 94582

Subject: SLIC Case RO0002913 and Geotracker Global ID T06019748481, Perciva/Metro Valley Cleaners, 224 Rickenbacker Circle, Livermore, CA 94550

Dear Mr. Hancock, Mr. Strong, and Mr. Ratto:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site including the recently submitted document entitled, "Soil Vapor Extraction Pilot Test Report," dated March 9, 2009 (Report). The Report, which was prepared on your behalf by Advanced GeoEnvironmental, Inc., presents the results of a 24-hour soil vapor extraction (SVE) pilot test conducted on January 19 and 20, 2009. Based on the results of the SVE pilot test, the Report concludes that SVE would be an effective remedial option for treatment of chlorinated solvent-impacted soil at the site. Preparation of a Work Plan for installation, start-up, and operation of a SVE system is recommended. We concur with the recommendation to implement SVE at the site and request that you submit a Work Plan **by June 15, 2009** for installation, operation, and monitoring of an SVE system that includes the installation of additional extraction wells inside the building in the area of and north of the former dry cleaning machine.

We also concur with the proposal to implement annual groundwater monitoring of wells MW-1 through MW-3. Please present plans and a schedule for groundwater monitoring in the Work Plan requested below.

**TECHNICAL REPORT REQUEST**

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

- **June 15, 2009** – 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.



Mr. Lawrence Hancock  
Mr. Mark Ratto  
Mr. Robert Strong  
RO0002913  
April 10, 2009  
Page 2

### 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.swrcb.ca.gov/ust/cleanup/electronic reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic%20reporting)).

### 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.

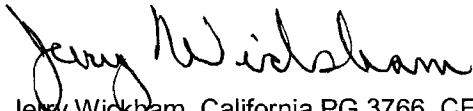
### AGENCY OVERSIGHT

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. Lawrence Hancock  
Mr. Mark Ratto  
Mr. Robert Strong  
RO0002913  
April 10, 2009  
Page 3

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

Paul Smith, Livermore-Pleasanton Fire Department, 3560 Nevada Street,  
Pleasanton, CA 94566

Daniel Villeneuve, Advanced GeoEnvironmental, Inc., 837 Shaw Road, Stockton, CA 95215

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File