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PERJURY STATEMENT

Subject: **1395 MacArthur Boulevard, San Leandro, California**
Remedial Action Work Plan Addendum & Remedial Design Implementation Plan

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Mr. Sayed Hussain, agent for
ESC PARTNERS, L. P. and
Mr. William Matthew Brooks
4725 Thornton Avenue
Fremont, CA, 94536

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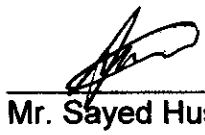

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Remedial Action Work Plan Addendum & Remedial Design Implementation Plan
SWISS VALLEY CLEANERS
1395 MacArthur Boulevard, San Leandro, California

02 February 2016
AGE-Project No. 12-2461

PREPARED FOR:

Mr. William Matthew Brooks
ARDENBROOK, INC.

***PREPARED BY*:**

***Advanced* GeoEnvironmental, Inc.**

Environmental • Industrial Hygiene • Geotechnical • Contracting
(800) 511-9300
www.advgeoenv.com

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Remedial Action Work Plan Addendum & Remedial Design Implementation Plan

SWISS VALLEY CLEANERS

1395 MacArthur Boulevard, San Leandro, California

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SWISS VALLEY CLEANERS
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1.0. INTRODUCTION

Advanced GeoEnvironmental, Inc. (AGE) has prepared this *Remedial Action Work Plan Addendum & Remedial Design Implementation Plan* for the property located at 1395 MacArthur Boulevard, San Leandro, California (site). The addendum and work plan detail the installation, operation and maintenance of a soil vapor extraction (SVE) remediation system at the subject site. The plan also details installation of the remaining infrastructure (piping, trenching and remediation compound) and the performance of baseline indoor air and sub-slab sampling event. The location of the site is illustrated in Figure 1. Plot plans showing soil-vapor and soil sampling locations are included as Figures 2 and 3.

This plan has been prepared in accordance with directives set forth by the Alameda County Health Care Services Agency by letter dating 30 December 2015 (Appendix A).

2.0. SCOPE OF WORK

Based on the results of the pilot study and historical site assessment, AGE proposes to install, operate and maintain a SVE remediation system utilizing existing shallow SVE wells VW-1 through VW-21 (Table 1; Figure 4).

Soil remediation and baseline sampling field activities will consist of the following tasks:

- Pre-field work activities (permitting, power source determination);
- Underground utility mapping and clearances;
- Installation of a soil vapor extraction piping network and SVE system;
- Fenced enclosure installation;
- Baseline indoor air and sub-slab vapor sampling;
- 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 San Leandro (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. INSTALLATION OF REMEDIATION PIPING NETWORK

The remediation system piping network will be installed both underground in 18-inch wide by 18-inch deep trenches and above ground (secured against the building structures; Figures 4 and 5). In the trench, 2-inch diameter, schedule 40 PVC piping will be manifolded from the well-heads at each SVE well location, then routed to the proposed SVE unit (regenerative blower and related carbon filtration). Above ground, in selected locations (described in detailed below), two-inch schedule 40 or 80 PVC pipes were needed, will be secured to either building walls or building structures on the outside of the building and then run to remediation system. In trench locations, following piping placement, each location will be backfilled with imported road-base sand, compacted, and resurfaced to grade with concrete.

2.3. REMEDIATION FENCED ENCLOSURE INSTALLATION AND PLACEMENT

For the proposed remediation system, a fenced enclosure will be installed in the rear of the former cleaners facility (Figure 4). The remediation fence enclosure will be approximately 11 feet in width and 14 feet in length. Fencing will be installed to a minimum height of 6 feet. The tops of all of the fencing will be equipped with security razor wire. The proposed location of the remediation enclosure is presented in Figure 4.

2.4. BASELINE INDOOR AIR AND SUB-SLAB VAPOR SAMPLING

Prior to startup of the proposed remedial system, baseline indoor air samples will be collected from within the subject unit and two adjacent most units (Solthea Beauty Salon and Estudillo Plaza Optometry). Additionally, and concurrently, sub-slab samples will be collected from all wells (SS-1 through SS-4) prior to startup of the remediation system. Detailed sampling procedures are described below.

2.5. PROPOSED SOIL REMEDIATION SYSTEM

The selected SVE treatment unit will consist of a condensation separator, a vacuum blower, a minimum of three virgin coconut carbon canisters (1,000 pounds each) and control components. The 2-inch diameter piping installed from the well-head at the SVE wells 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 three 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 third 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 6.

As mentioned above, the proposed location of the SVE system and fenced enclosure will be in the rear of the strip mall, behind the former dry cleaning suite (Figure 4). The selected location will not interfere with businesses. The SVE unit will be secured by a chain-linked, barbed-wire, gated enclosure approximately 11 feet wide, 14 feet long and at least 6 feet high. Electricity is readily available to the site.

2.6. REMEDIATION START-UP PERIOD

In order to monitor 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 chlorinated 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.

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

2.8. REPORT PREPARATION

Quarterly reports will be prepared presenting the findings from the 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 ACWD 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. REMEDIATION SYSTEM PIPING NETWORK

A network of 2-inch diameter, schedule 40 PVC piping will be installed from each remediation well in a series of trenches or above ground. For below ground installations trenches will be cut approximately 18 inches wide and 18 inches deep. Piping installed above ground will be fixed against either the unit wall or against building pillars. A detailed explanation of remedial piping for each of the installed wells is provided below:

- VW-1, VW-2, VW-3 and VW-4: A single common trench will be run down the center of the unit from the outer wells (VW-2 and VW-4) and then connected to the first inner vapor extraction wells (VW-1and VW-3). On the inside of the unit home-runs from the wells will be strapped to the north and south wells and run to the rear of the facility and to the proposed vapor extraction system location;
- VW-5, VW-6, VW-7 and VW-8 and VW-19 (located in former Jazzercise suite): All four wells have been trenched underground and piped to the proposed location of the remediation system;
- VW-12, VW-13 and VW-17: Small trenches will be run from the well locations and to the nearest pillar. Piping will be brought to the surface and run up the pillars and then to the front of the facility where it will be brought into the

common trench for wells VW-1 through VW-4;

- VW-18: A small trench will be run from the well to the wall then brought to the surface and run along the south wall;
- VW-20: A small trench will be run from well to north wall and then piping will be brought to the surface and run along the north wall;
- VW-21: A trench will be run from the well and then out the back of the facility. All piping will be run underground at this well's location; and
- VW-9, VW-10, VW-11, VW-14, VW-15 and VW-16: All wells in the rear of the facility will be piped underground in trenches to the proposed remediation system location.

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 or independent piping run, so that soil vapor can be drawn and controlled from each well or from a combination of specific wells. All wells that are piped in trenching will be backfilled with imported road-base sand, compacted, and resurfaced with concrete/asphalt.

The proposed location of the piping runs is presented in Figure 4.

3.2. BASELINE INDOOR AIR & SUB-SLAB SAMPLING PROCEDURES

Prior to startup of the proposed SVE system, a baseline indoor air and sub-slab well sampling event will be performed.

3.2.1. Indoor Air Sampling Procedures

For baseline indoor air sampling, AGE proposes to collect indoor air sampling from the site facility and the two adjacent suites (Sothea Salon & Beauty Supply and Estudillo Plaza Optometry) in the Estudillo Shopping Center.

All indoor air samples will be collected in six-liter Summa canisters using passive integrated sampling procedures. Each canister's initial vacuum will be measured and recorded to ensure the initial vacuum is greater than 25 inches of mercury (in hg). The sampling inlet on the canisters will be connected to a mass flow controller containing a particulate filter and calibrated to 3.8 milliliters/minute (ml/min). Air samples will be collected over a period of approximately 24 hours based on the calibrated flow of 3.8 ml/min.

Indoor air samples will be collected near the center of each facility building (or area

lacking public access) and will be placed approximately 3-5 feet above the ground surface in the breathing zone. The Summa canister will then be opened to begin air sample collection.

Following 8-hours of sample time, the containers will be retrieved, closed and sealed. The sample containers will then be labeled with the initial and final vacuum to ensure that the regulator was functioning properly.

Indoor air samples will be analyzed by a State of California Department of Public Health Services (CDPH)-certified laboratory for Volatile organic compounds (VOCs) in accordance with EPA Method TO-15.

Laboratory reports for air sample analyses, testing methods, laboratory quality assurance/quality control (QA/QC) reports and sample chain of custody documentation will be presented in a report with findings and recommendations. The lowest possible method detection limits will be achieved, which will allow comparison with established guidelines.

Analytical data will be evaluated against the commercial Cal-EPA California Human Health Screening Levels (CHHSL) and the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) in all samples collected during the investigation.

3.2.2. Sub-Slab Sampling Procedures

For the baseline sub-slab sampling, each of the four sub-slab wells (SS-1 through SS-4) will be sampled prior to system start-up and concurrent with indoor air sampling.

One-liter Summa sampling canisters and five-liter Summa purge canisters will be used to collect each sub-slab soil-vapor sample. The sampling and purge canisters will be connected together with a dedicated and serialized sampling inlet manifold. The sampling inlet manifold will consist of a vapor-tight valve, a particulate filter, a calibrated flow restrictor calibrated to 200 milliliters per minute (ml/min), a stainless steel tee-fitting, two vacuum gauges at either end of the flow controller, and connections for both purge and sampling canisters (manifold assembly). The manifold assembly will be attached to the tubing from the soil vapor rods. The purge canister will be attached to the end of the sampling manifold while the sample canisters will be attached to the tee-fitting between the PRT and purge container (Figure 7). Teflon® tape will be placed on the threads of each open fitting of the manifold assembly prior to attaching the PRT and sampling and purge canisters.

Each canister's initial vacuum will be measured and recorded in inches of mercury

(in Hg). Leak tests will be performed on each assembly by attaching and securing the sample and purge canisters to the manifold and opening the valves on the purge canister and the manifold. The leak test will be performed for approximately 10 minutes on each assembly.

Each sub-slab soil-vapor location will be isolated from ambient air by enclosing the borehole, tubing and manifold/canister assembly in clear plastic shroud, which will be sealed at the surface. Isopropyl alcohol (IPA) as a liquid will be placed in a stainless steel bowl within the plastic structure and allowed to volatilize into the air enclosed within the shroud surrounding the borehole, tubing and manifold/canister assembly.

The purge volume will be determined by calculating the internal volume of the tubing, vapor point holder and PRT adapter, and the volume of sampling void (created by retracting the boring rod).

Upon achieving a successful leak test the purge canister valve will be opened for a calculated period of time to allow the three calculated volumes of air to be purged. The purge vacuum gauge will be monitored to ensure a proper decrease of vacuum purged.

Upon achieving the targeted purge volume, the purge canister valve will be closed and the sample canister valve will be opened. The initial pressure and time will be recorded. Upon reaching at least -5 in Hg or less, the sample canister valve will be closed and final pressure and time recorded. The sampling port on the sampling canister will be capped with a brass end-cap and sealed with Teflon® tape.

The soil-vapor samples will be transported under chain-of-custody procedures to a California Department of Public Health (CDPH)-certified laboratory and analyzed for Total VOCs and IPA (tracer gas) in accordance with EPA Method TO-15.

3.3. SOIL-VAPOR EXTRACTION SYSTEM DESIGN

The SVE unit, consisting of a condensation separator, a vacuum blower and three 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 100 and 150 cubic feet per minute (cfm). The SVE unit will be connected through via manifold to each well individually; chlorinated hydrocarbon vapors extracted from the site well network will be sequentially routed through a condensation entrapment chamber and a vacuum blower before entering three vapor phase carbon scrubbers for final destruction. A diagram of a typical system is illustrated on Figure 6.

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 three 1,000-pound carbon vessels to sample effluent SVE vapor samples to monitor the efficiency of chlorinated hydrocarbon destruction.

3.4. SOIL-VAPOR EXTRACTION SYSTEM MONITORING AND MAINTANANCE

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 third 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

N

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FEET

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

LOCATION MAP

SWISS VALLEY CLEANERS
1395 MacArthur Boulevard
SAN LEANDRO, CALIFORNIA

Advanced GeoEnvironmental, Inc.
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PROJECT NO. AGE-NC-12-2461	FILE: LOCATION	FIGURE: 1
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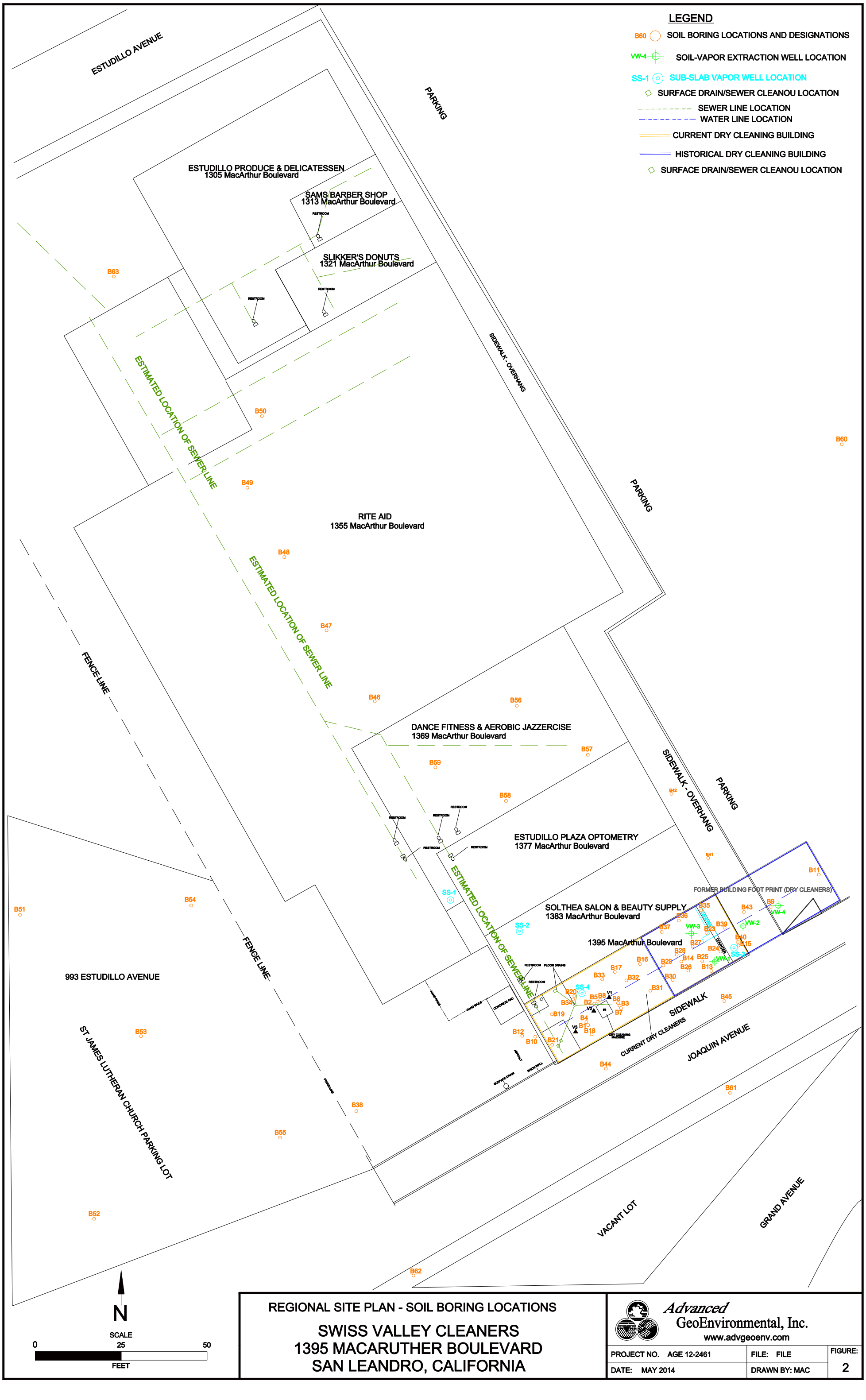

REGIONAL SITE PLAN - SOIL BORING LOCATIONS

SWISS VALLEY CLEANERS
1395 MACARUTHER BOULEVARD
SAN LEANDRO, CALIFORNIA

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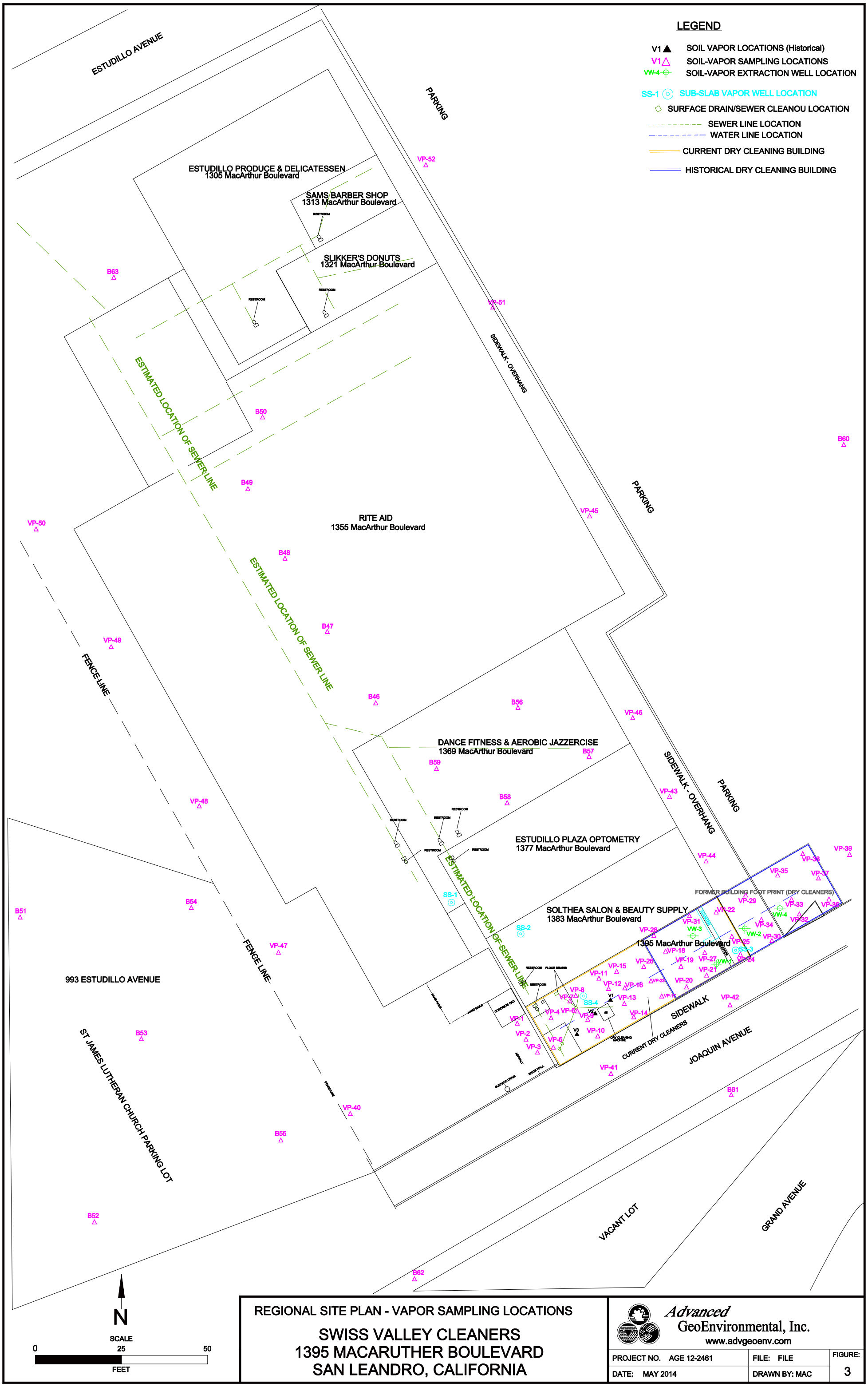
PROJECT NO. AGE 12-2461	FILE: FILE	FIGURE: 2
DATE: MAY 2014	DRAWN BY: MAC	


LEGEND
V1 SOIL VAPOR LOCATIONS (Historical)
V1 SOIL-VAPOR SAMPLING LOCATIONS
VW-4 SOIL-VAPOR EXTRACTION WELL LOCATION
SS-1 SUB-SLAB VAPOR WELL LOCATION
SURFACE DRAIN/SEWER CLEANOU LOCATION
SEWER LINE LOCATION
WATER LINE LOCATION
CURRENT DRY CLEANING BUILDING
HISTORICAL DRY CLEANING BUILDING
ESTUDILLO AVENUE
PARKING
ESTUDILLO PRODUCE & DELICATESSEN
1305 MacArthur Boulevard
SAMS BARBER SHOP
1313 MacArthur Boulevard
SLIKKER'S DONUTS
1321 MacArthur Boulevard
RESTROOM
SIDEWALK - OVERHANG
ESTIMATED LOCATION OF SEWER LINE
RITE AID
1355 MacArthur Boulevard
FENCE LINE
DANCE FITNESS & AEROBIC JAZZERCISE
1369 MacArthur Boulevard
ESTUDILLO PLAZA OPTOMETRY
1377 MacArthur Boulevard
SOLTHEA SALON & BEAUTY SUPPLY
1383 MacArthur Boulevard
1395 MacArthur Boulevard
FORMER BUILDING FOOT PRINT (DRY CLEANERS)
993 ESTUDILLO AVENUE
ST JAMES LUTHERAN CHURCH PARKING LOT
SIDEWALK
CURRENT DRY CLEANERS
JOAQUIN AVENUE
VACANT LOT
GRAND AVENUE
B48 B49 B50 B51 B52 B53 B54 B55 B56 B57 B58 B59 B60 B61 B62 B63
VP-1 VP-2 VP-3 VP-4 VP-5 VP-6 VP-7 VP-8 VP-10 VP-11 VP-12 VP-13 VP-14 VP-15 VP-16 VP-18 VP-19 VP-20 VP-21 VP-22 VP-25 VP-26 VP-27 VP-28 VP-29 VP-30 VP-31 VP-32 VP-33 VP-34 VP-35 VP-36 VP-37 VP-38 VP-39 VP-40 VP-41 VP-42 VP-43 VP-44 VP-45 VP-46 VP-47 VP-48 VP-49 VP-50 VP-51 VP-52
SS-1 SS-2 SS-3 SS-4
VW-1 VW-2 VW-3 VW-4
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REGIONAL SITE PLAN - VAPOR SAMPLING LOCATIONS
SWISS VALLEY CLEANERS
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PROJECT NO. AGE 12-2461
FILE: FILE
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DATE: MAY 2014
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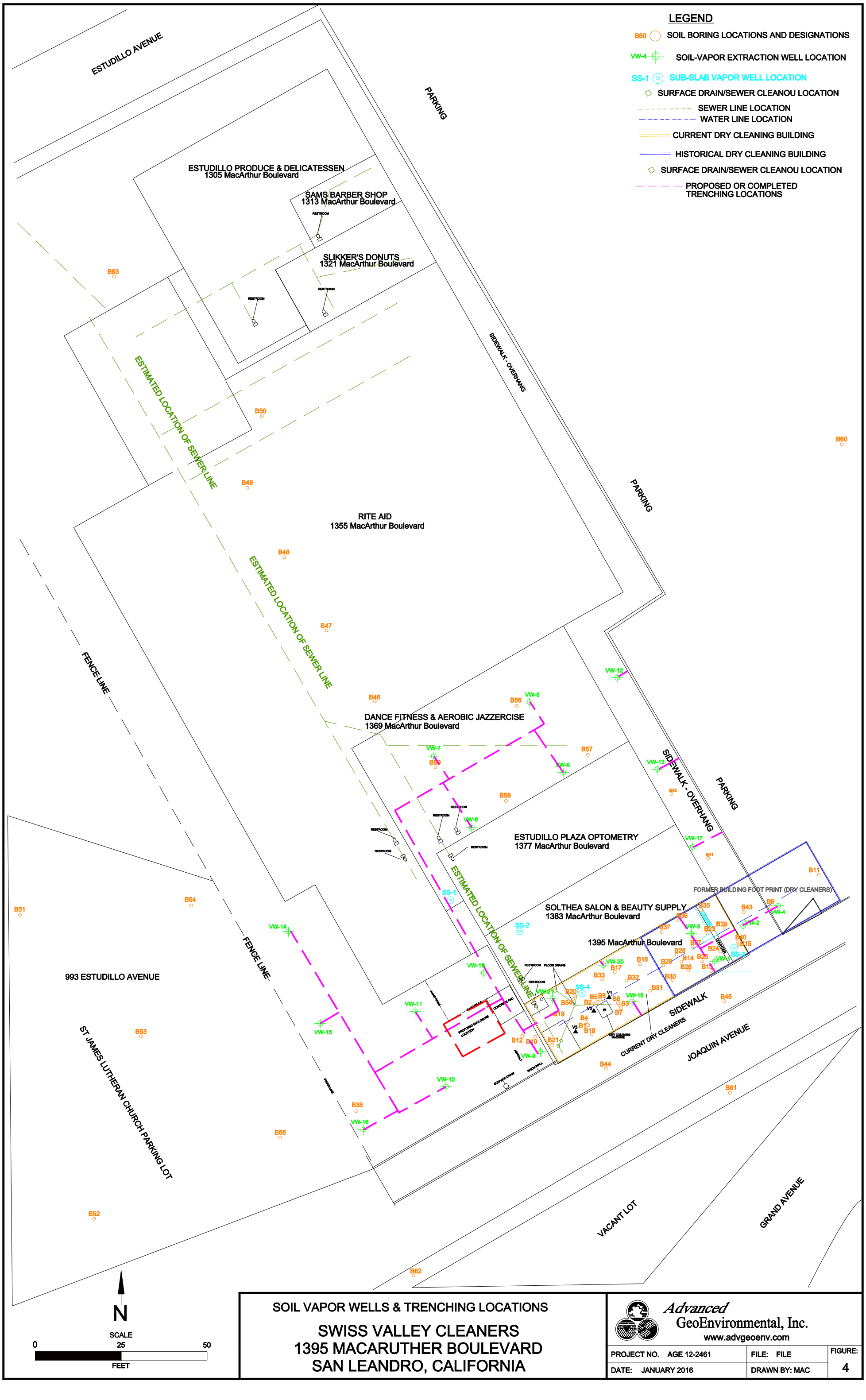

SOIL VAPOR WELLS & TRENCHING LOCATIONS

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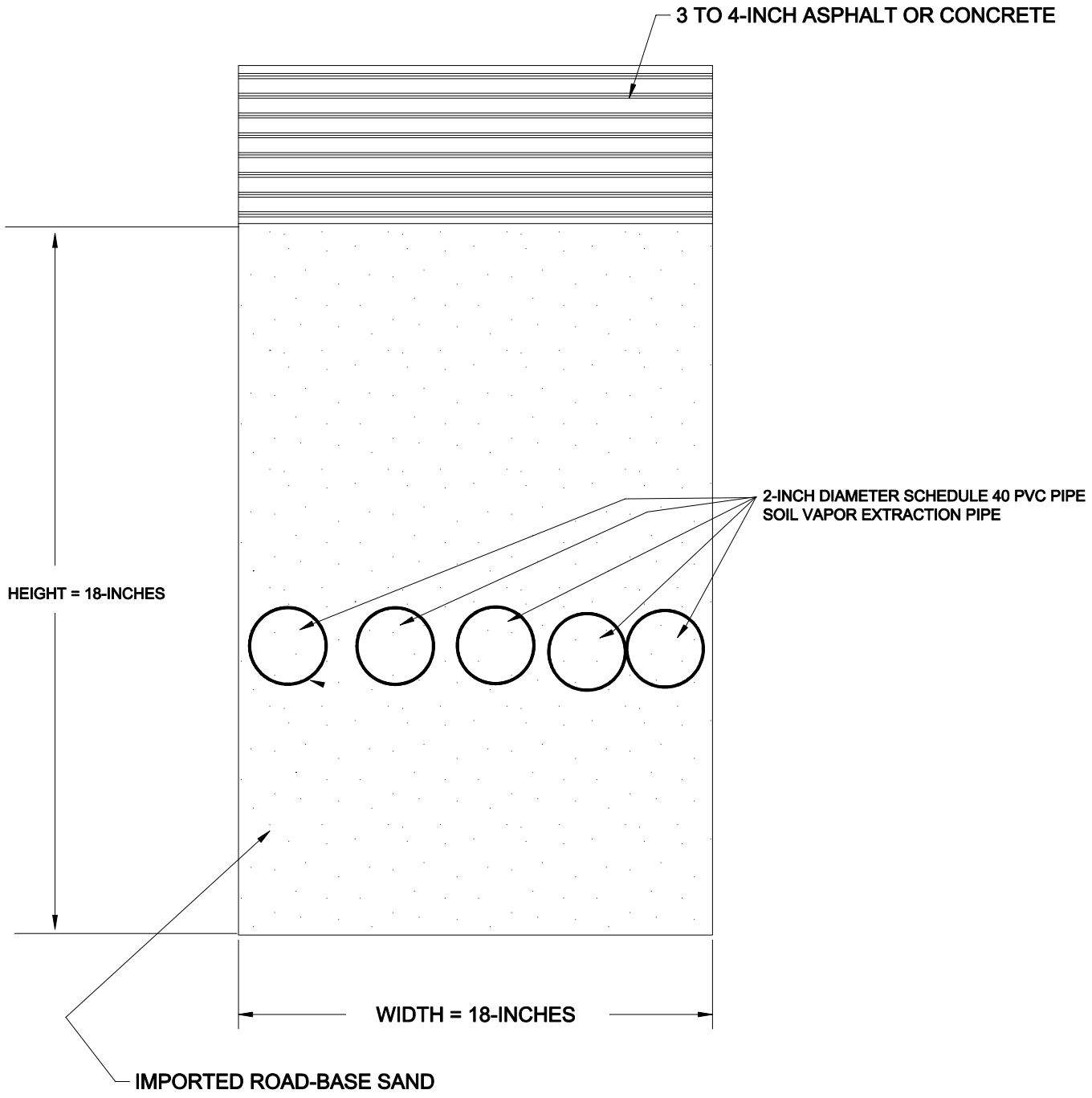
PROJECT NO. AGE 12-2461	FILE: FILE	FIGURE: 4
DATE: JANUARY 2016	DRAWN BY: MAC	



NOT TO SCALE

CUT VIEW OF BELOW-GROUND REMEDIAL PIPING

SWISS VALLEY CLEANERS
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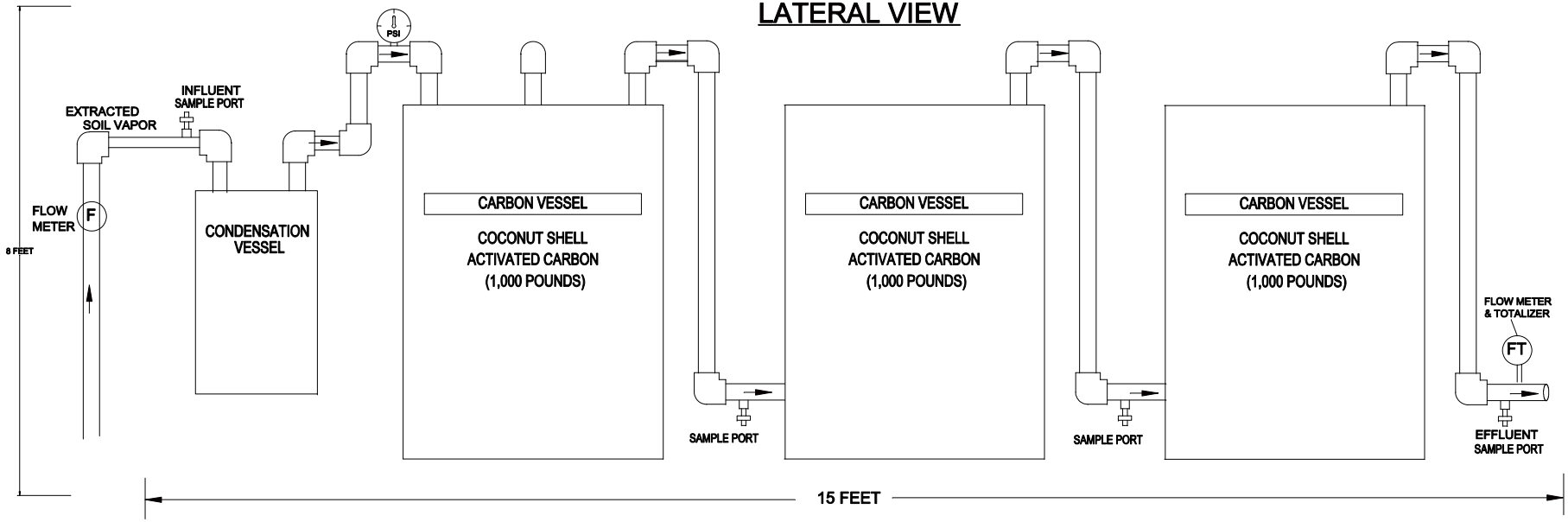
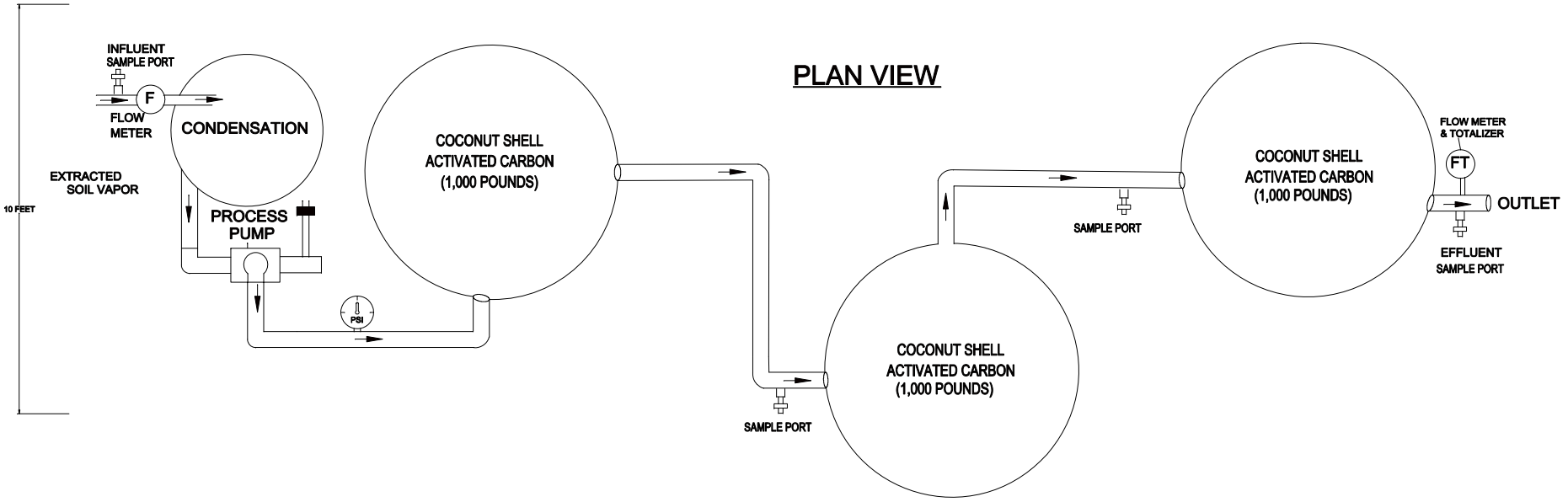
PROJECT NO. AGE-12-2461	FILE: SITE PLAN	FIGURE: 5
DATE: FEBRUARY 2016	DRAWN BY: MAC	

LATERAL VIEW



PLAN VIEW



NOTE: Design is approximate and is subject to change.

SVE SYSTEM SCHEMATIC DIAGRAM

SWISS VALLEY CLEANERS
1395 MACARTHUR BOULEVARD
SAN LEANDRO, CALIFORNIA

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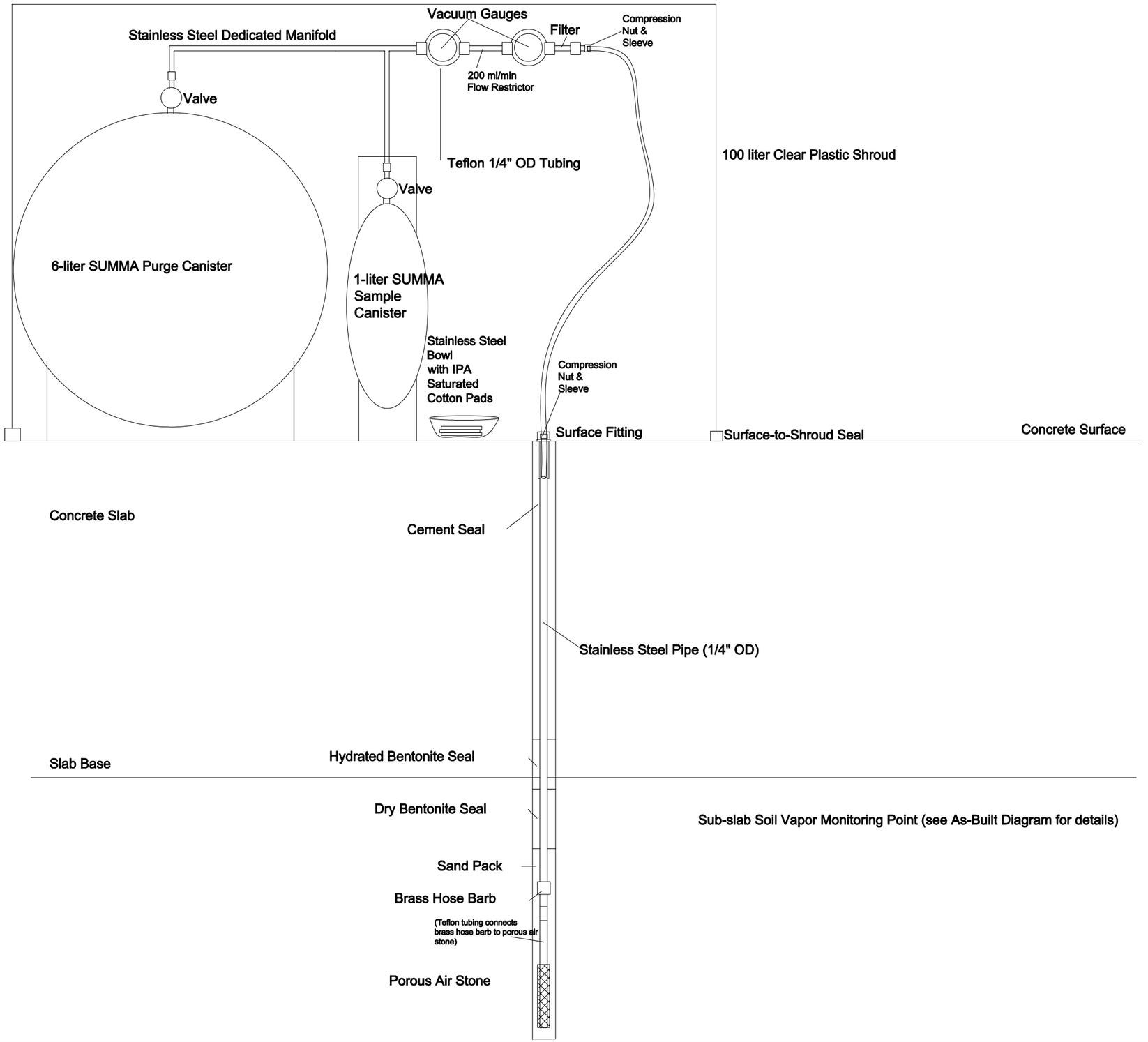
PROJECT NO. AGE 12-2461	FILE:	FIGURE:
DATE: FEBRUARY 2016	DRAWN BY: MAC	6



SUB-SLAB SAMPLING DESIGN

SWISS VALLEY CLEANERS
1395 MacArthur Boulevard
SAN LEANDRO, CALIFORNIA

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PROJECT NO. AGE 12-2461 | FILE: | FIGURE: 7
DATE: FEBRUARY 2016 | DRAWN BY: MAC

TABLES

TABLE 1

WELL CONSTRUCTION DETAILS
Swiss Valley Cleaners
1395 MacArthur Boulevard, San Leandro, California

Well ID	Installation Date	Borehole Diameter (inch)	Total Drilled Depth (feet bsg)	Total Well Depth (feet bsg)	Casing Elevation (ft MSL)	Well Casing Material	Slot Size (inch)	Screen Interval (feet)	Filter Pack Interval (feet bsg)	Bentonite Interval (feet bsg)	Grout Interval (feet bsg)	Well Location
VW-1	08-21-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-2	08-21-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-3	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-4	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-5	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-6	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-7	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-8	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-9	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-10	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-11	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-12	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-13	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-14	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-15	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-16	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-17	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-18	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-19	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-20	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-21	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)

Notes:

bsg: below surface grade
NM: Not measured

APPENDIX A

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

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

December 30, 2015

Mr. William Mathews Brooks
4725 Thornton Avenue
Fremont, CA 94536
(Sent via electronic mail to REWMB@aol.com)

Subject: Contingent Approval of Remedial Action Work Plan, and Offsite Vapor Investigation; Site Cleanup Program (SCP) Case No. RO0003120 and GeoTracker Global ID T10000005063, Swiss Valley Cleaners, 1395 MacArthur Blvd, San Leandro, CA 94577

Dear Mr. Brooks:

Alameda County Environmental Health (ACEH) has reviewed the *Corrective Action Plan,* (CAP) dated October 16, 2015, the *Off-Site Soil-Vapor Assessment Work Plan,* dated October 29, 2015, and the *Indoor Air & Sub-Slab Monitoring Report,* dated December 11, 2015. Each was prepared and submitted on your behalf by Advanced GeoEnvironmental, Inc, (AGE). The CAP also included a *Remedial Action Work Plan* as an appendix to the report. Thank you for submitting the reports.

The CAP proposed soil vapor extraction (SVE), excavation, or natural attenuation as corrective actions, but selected SVE as the preferred corrective action at the site. The *Remedial Action Work Plan,* contained as an appendix in the CAP, recommended the installation of 17 SVE wells at the site, and the installation of a temporary SVE system compound at the rear of the dry cleaner unit. Piping from each SVE well will initially be installed in a shallow trench below the slab floor grade. Per subsequent communications, piping will exit the slab floor and will be fastened to structural supports (columns, walls, etc.) and will be plumbed to the SVE compound with PVC piping.

The *Off-Site Soil-Vapor Assessment Work Plan* proposes the installation of eight shallow, temporary, offsite vapor sampling locations in order to define the extent of offsite tetrachlorethene (PCE) vapor concentrations at a gap in the delineated extent of contamination.

The *Indoor Air & Sub-Slab Monitoring Report* documents the first concurrent collection of indoor air and sub-slab vapor concentrations after modifications to the ventilation system of three adjacent commercial suites at the subject site. Indoor air PCE concentrations were documented to have been reduced to below commercial Environmental Screening Levels (ESLs), promulgated by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in the currently unoccupied dry cleaner suite. Indoor air PCE concentrations in the adjacent two suites were substantially reduced (reduced from a maximum of 19 $\mu g/m^3$ to maximum of 3.5 $\mu g/m^3$); however, remain above the commercial indoor ESL for PCE (2.1 $\mu g/m^3$).

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Contingent Remedial Action Work Plan Approval –** The referenced site assessment work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests several modifications to the approach.

    a. **Interim Mitigation Measure Approval -** As noted in the previous directive letter, final approval of the system cannot be provided until members of the public have been given the opportunity to provide comments to the proposed operation of the SVE system as public comments have, at a minimum, the potential to affect system operations. Due to elevated indoor air concentrations in two commercial suites, this letter provides system approval on an interim basis in order to provide additional mitigation of indoor air concentrations. Please submit a remediation progress (system startup) report by the date specified below.

    b. **Amended Remedial Action Work Plan –** During telephone conversations on December 23, 2015, ACEH requested the submittal of an Amended Remedial Action Work Plan for the intended purpose of providing a single document for public review of proposed site activities. Please submit the amended report by the date identified below.

    c. **Remedial Design Implementation Plan –** In accordance with the December 23, 2015 telephone conversation, please submit a Remedial Design Implementation Plan that in addition to other items, proposes a baseline vapor sampling event prior to system startup for the collection of concurrent indoor air and sub-slab vapor concentrations. Please submit the report by the date identified below.

2. **Conditional Approval of Off-Site Vapor Plume Delineation –** The referenced site assessment work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests several modifications to the approach. Please submit the results of the investigation in a soil vapor investigation report by the date identified below.

    a. **Flexibility in Plume Delineation -** Delineation of the lateral extent of the PCE vapor plume was proposed offsite at the residential properties north of 993 Estudillo Avenue with the installation of eight temporary vapor wells and the use of a mobile laboratory. Existing investigation protocols will be used. While specific bore locations were identified, ACEH requests flexibility in bore placement, potentially including the installation of additional bores, in order to quickly define the vapor plume to appropriate goals. ACEH presumes the use of a mobile laboratory is intended to provide this flexibility.

3. **Public Notification –** The 30-day public comment period is anticipated to start about January 8, 2016. Previously forwarded draft documents have been reviewed and require modifications in the remaining time. ACEH requests that a list of interested parties, including any more recently identified parties, be submitted to ACEH in spreadsheet form in the interim period of time, and by the date identified below.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with Attachment 1 and the specified file naming convention below, according to the following schedule:

- **January 6, 2016 –** Updated Interested Party List (spreadsheet form)
  Email notification of case worker is preferred.

- **January 8, 2016 –** Amended Remedial Action Work Plan
  File to be named: RO3120_CAP_ADEND_R_yyyy-mm-dd

- **January 22, 2016 –** Remedial Design Implementation Plan
  File to be named: RO3120_RDIP_R_yyyy-mm-dd

- **March 11, 2016 –** Offsite Investigation Report
  File to be named: RO3120_SWI_R_yyyy-mm-dd

- **April 8, 2016 –** Remediation Progress Report
  File to be named: RO3120_REM_R_yyyy-mm-dd

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

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

Sincerely,

Mark E. Detterman, P.G., C.E.G.
Senior Hazardous Materials Specialist

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

cc: Daniel Villanueva, Advanced GeoEnvironmental, Inc, 837 Shaw Road, Stockton, CA 95215
(sent via electronic mail to DVillanueva@advgeoenv.com)

William Little, Advanced GeoEnvironmental, Inc, 837 Shaw Road, Stockton, CA 95215
(sent via electronic mail to WLittle@advgeoenv.com)

Dilan Roe (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACEH, (sent via electronic mail to mark.detterman@acgov.org)
Geotracker, Electronic File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

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

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.