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By Alameda County Environmental Health 3:07 pm, Nov 10, 2016

PERJURY STATEMENT

Subject: 223 East 14th Street, San Leandro, California
Indoor Air Sampling Work Plan

I certify, under penalty of law, that I have reviewed the information submitted in this document and all attachments, and that, based on my inquiry of those individuals responsible for obtaining the information, I believe to the best of my knowledge that 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.

Martha Vallejo

Ms. Martha Vallejo
201 East 14th Street
San Leandro, California, 94577

Advanced
GeoEnvironmental, Inc.

02 November 2016
AGE-NC Project No. 16-3802

Mr. Mark Detterman
Alameda County Environmental Health Department
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Indoor Air Sampling Work Plan
Sunshine Cleaners
223 East 14th Street, San Leandro, California

Dear Mr. Detterman:

At the request of Ms. Martha Vallejo and Mr. Valentin Reynoso, *Advanced* GeoEnvironmental, Inc. (AGE) has prepared this, *Indoor Air Sampling Work Plan* for the site located at 223 East 14th Street, San Leandro, California (site). The work plan details procedures for collection of indoor and ambient air samples at the property located to the north of and adjacent to the Sunshine Cleaners. A total of two (2) indoor air samples and one (1) ambient air sample are proposed for collection during this phase of the investigation to determine the immediate threat to human health as a result of previous dry cleaning operations at the site. The location of the site is illustrated in Figure 1. A plan of the site is illustrated in Figure 2. Historical soil-vapor analytical results are summarized in Tables 1.

SCOPE OF WORK & FIELD PROCEDURES

Based on historical soil-vapor samples collected at the site (Tables 1), AGE proposes to collect a total of two (2) indoor air samples; both samples will be collected from *San Gaspar Mexican Restaurant* located to the north of the site at 201 East 14th Street. Additionally, AGE proposes placing one ambient air sampling container outside of the facility to obtain background conditions at the site.

At the time of indoor air sampling and prior to the start of sample collection, all areas of the buildings proposed for sampling will be inspected and commercial and household products will be inventoried. Products that contain volatile chemicals or other chemicals that can potentially bias the results of the sampling will be listed on a Building Screening Form. The Building Screening Form presented in Appendix M of the DTSC-prepared, *Guidance For The Evaluation And Mitigation Of Subsurface Vapor Intrusion To Indoor Air - Final* (Vapor Intrusion Guidance) dated October 2011 will be utilized; a copy of the Building Screening Form is presented in Appendix A. Indoor contaminants sources and

products that can potentially bias the sampling results will be located using an organic vapor meter (OVM) equipped with a photo-ionization detector (PID) calibrated to detection limit of parts per billion by volume (ppb MiniRae 3000). Any identified sources of indoor contamination will be removed from the building or sealed and the areas will be re-monitored with the PID.

Additionally, at the time of indoor air sampling a Building Survey Form will be completed. The Building Survey Form presented in Appendix L of the DTSC-prepared, *Guidance For The Evaluation And Mitigation Of Subsurface Vapor Intrusion To Indoor Air - Final* (Vapor Intrusion Guidance) dated October 2011 will be utilized; a copy of the Building Survey Form is presented in Appendix A.

All field procedures will be overseen by an AGE representative under the supervision of a California Professional Geologist.

COLLECTION AND ANALYSIS OF INDOOR AND AMBIENT AIR SAMPLES

AGE proposes one initial indoor air sampling event by collecting air samples from *San Gaspar Mexican Restaurant* (201 E 14th St.), located to the north of the site. Additionally, one ambient air sample will be collected outside of the building to establish background concentrations. Indoor air samples will be collected near the center of the dining area and kitchen or in an area lacking public access. Detailed sampling procedures for the proposed indoor air sampling are outlined below.

REPORT PREPARATION

Following performance of the indoor air sampling event, a report will be prepared presenting the findings. The report will include a description of work performed and the results of the indoor air samples. Conclusions and recommendations will also be included in the reports, if applicable. The report will be in a format acceptable to regulating agencies and will be reviewed and signed by a California Professional Geologist.

FIELD PROCEDURES

All field procedures will be overseen by an AGE representative under the supervision of a California Registered Professional Geologist. Procedures for indoor air sampling are detailed below.

INDOOR AND AMBIENT AIR MONITORING AND SAMPLING

AGE proposes to perform one initial indoor air sampling event from the northern adjacent suite.

All indoor and ambient 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 3.5 milliliters/minute (ml/min) in order to collect air samples over an approximately 24-hour period.

Indoor air samples will be collected near the center of the dining area and kitchen (or in an area lacking public access) and will be placed approximately 3-5 feet above the ground surface in the breathing zone; the ambient air sample will also be collected from approximately 3-5 feet above the ground surface in the breathing zone. Once the air sampling canisters are placed and positioned properly, the Summa canister valves will be opened to begin air sample collection.

Following 24-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.

REPORT PREPARATION

An initial report of findings will be prepared, summarizing the findings of the indoor and ambient air sampling. The report will include a description of work performed and the results of the sampling analysis. Conclusions and recommendations will also be included in the report, if applicable. A Tier II human health risk assessment may be required based on the initial report of findings. Reports will be in a format acceptable to

regulatory guidelines, and will be reviewed and signed by a California Professional Geologist.

If you have any questions or require further information, please contact our office at (800) 511-9300.

Sincerely,

***Advanced* GeoEnvironmental, Inc.**

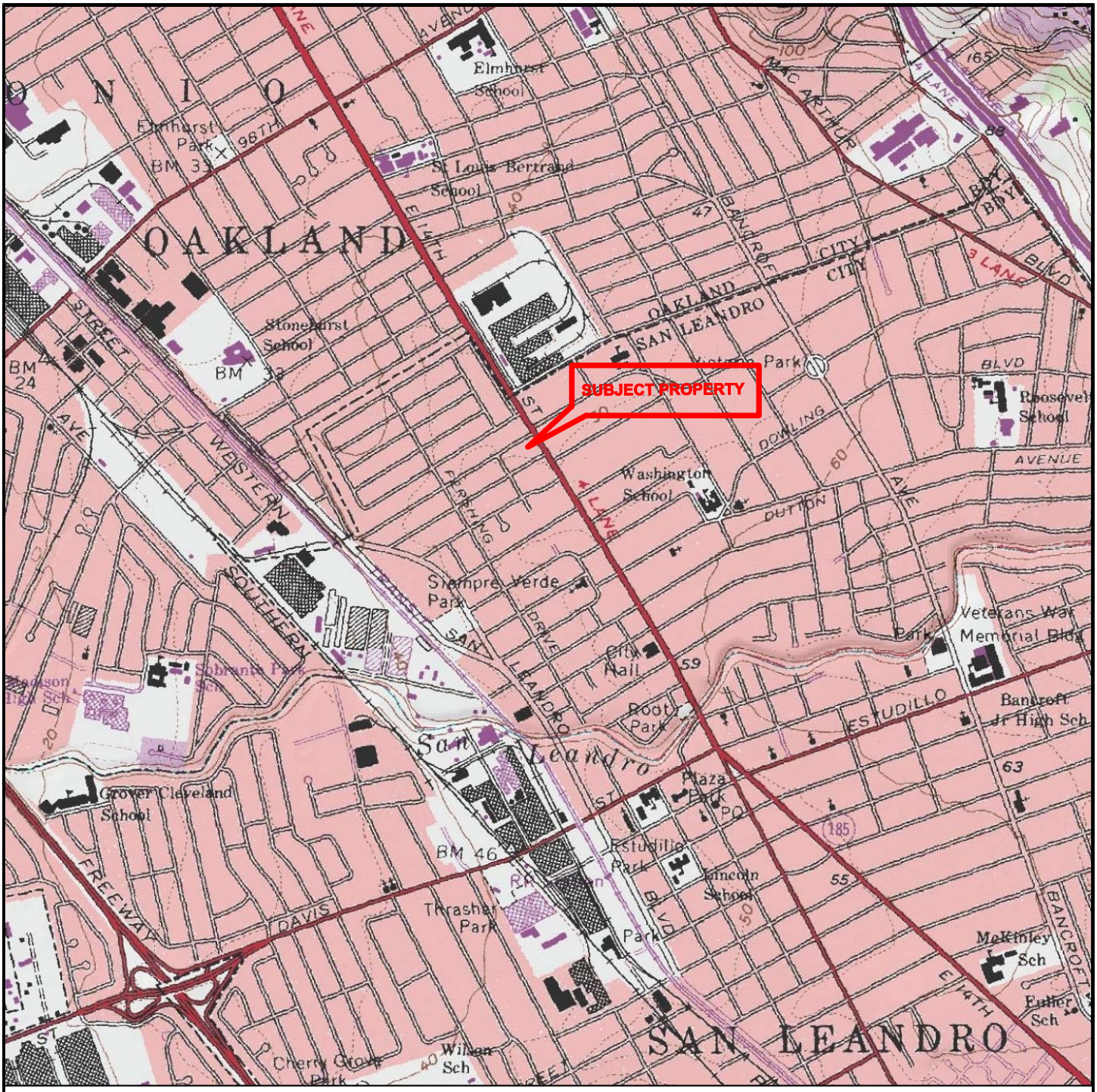
Rene M. Toth
Staff Geologist

Brian W. Millman
Senior Project Geologist
California Professional Geologist No. 8574

PROFESSIONAL GEOLOGIST
BRIAN W. MILLMAN
No. 8574
STATE OF CALIFORNIA

Attachments

FIGURES



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

N

SCALE
0 2000 4000
FEET

LOCATION MAP

SUNSHINE CLEANERS
223 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

Advanced GeoEnvironmental, Inc.
www.advgeoenv.com

PROJECT NO. AGE-NC-16-3802	FILE: LOCATION	FIGURE: 1
DATE: NOVEMBER 2016	DRAWN BY: MAC	

LEGEND

- MW-11 — SUNSHINE CLEANERS GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION (approximated)
- MW-1 — GERMAN AUTOCRAFT GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION (approximated)
- DOMESTIC WELL LOCATION (approximated)
- B1 — SOIL BORING LOCATIONS AND DESIGNATIONS (approximated)
- VP-1 — SOIL-VAPOR SAMPLING LOCATION
- CONTINGENT SOIL-VAPOR SAMPLING LOCATION

SITE PLAN

SUNSHINE CLEANERS
223 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

Advanced GeoEnvironmental, Inc.
www.advgeoenv.com

PROJECT NO.	AGE-NC-16-3802
DATE:	NOVEMBER 2016
FILE:	
DRAWN BY:	MAC
FIGURE:	2

TABLE

TABLE 1

ANALYTICAL RESULTS OF SOIL-VAPOR SAMPLES
SUNSHINE CLEANERS
223 East 14th Street, San Leandro, California
(micrograms per cubic meter)

Sample ID	Date	Depth (feet bsg)	EPA Method 8260B												
			PCE	TCE	1,1-DCE	Trans 1,2-DCE	Cis 1,2-DCE	VC	Chloroform	Benzene	Toluene	Ethylbenzene	m,p-xylene	o-xylene	1,1-DFA
VP-1	09-23-2016	5	**290**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-2	09-23-2016	5	**5,600**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-3	09-23-2016	5	**80,000**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-4	09-23-2016	5	**37,000**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-5	09-23-2016	5	**3,100**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-6	09-23-2016	5	**3,100**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-7	09-23-2016	5	**3,800**	<100	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
VP-8	09-23-2016	5	**100,000**	**250**	<100	<100	<100	<100	<100	<80	<200	<100	<200	<100	<10,000
CHHSLs (Commercial)			1,600	4,400	-	240,000	120,000	95	-	280	89,000	3,600	2,400,000	240,000	-
SFBRWCB ESL Shallow Soil Gas (Commercial)			2,100	3,000	310,000	260,000	35,000	160	530	420	1,300,000	4,900	440,000	440,000	-
SFBRWCB ESL Shallow Soil Gas (Residential)			210	340	37,000	31,000	4,200	18	61	48	160,000	560	52,000	52,000	-

Notes:
SFBRWCB ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for shallow soil gas
<: Indicates constituents were not detected at a concentration greater than the reporting limit shown.
CHHSLs: California Human Health Screening Levels
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
1,1-DFA:1,1-difuoroethane
bsg: below surface grade
* : notation for estimated value; detection above the liner range of calibration

APPENDIX A

APPENDIX M – BUILDING SCREENING FORM

Occupant of Building _____

Address _____

City _____

Field Investigator _____ Date _____

Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients

Comments:

_____

_____

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: _____ Date/Time Prepared: _____
Affiliation: _____ Phone Number: _____

Occupant Information

Occupant Name: _____ Interviewed: ☐ Yes ☐ No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Owner/Landlord Information (Check if same as occupant ☐)

Occupant Name: _____ Interviewed: ☐ Yes ☐ No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Building Type (Check appropriate boxes)

☐ Residential ☐ Residential Duplex ☐ Apartment Building ☐ Mobile Home ☐ Commercial (office)
☐ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ Split Level ☐ Church ☐ School

Building Characteristics

Approximate Building Age (years): _____ Number of Stories: _____
Approximate Building Area (square feet): _____ Number of Elevators: _____

Foundation Type (Check appropriate boxes)

☐ Slab-on-Grade ☐ Crawl Space ☐ Basement

Basement Characteristics (Check appropriate boxes)

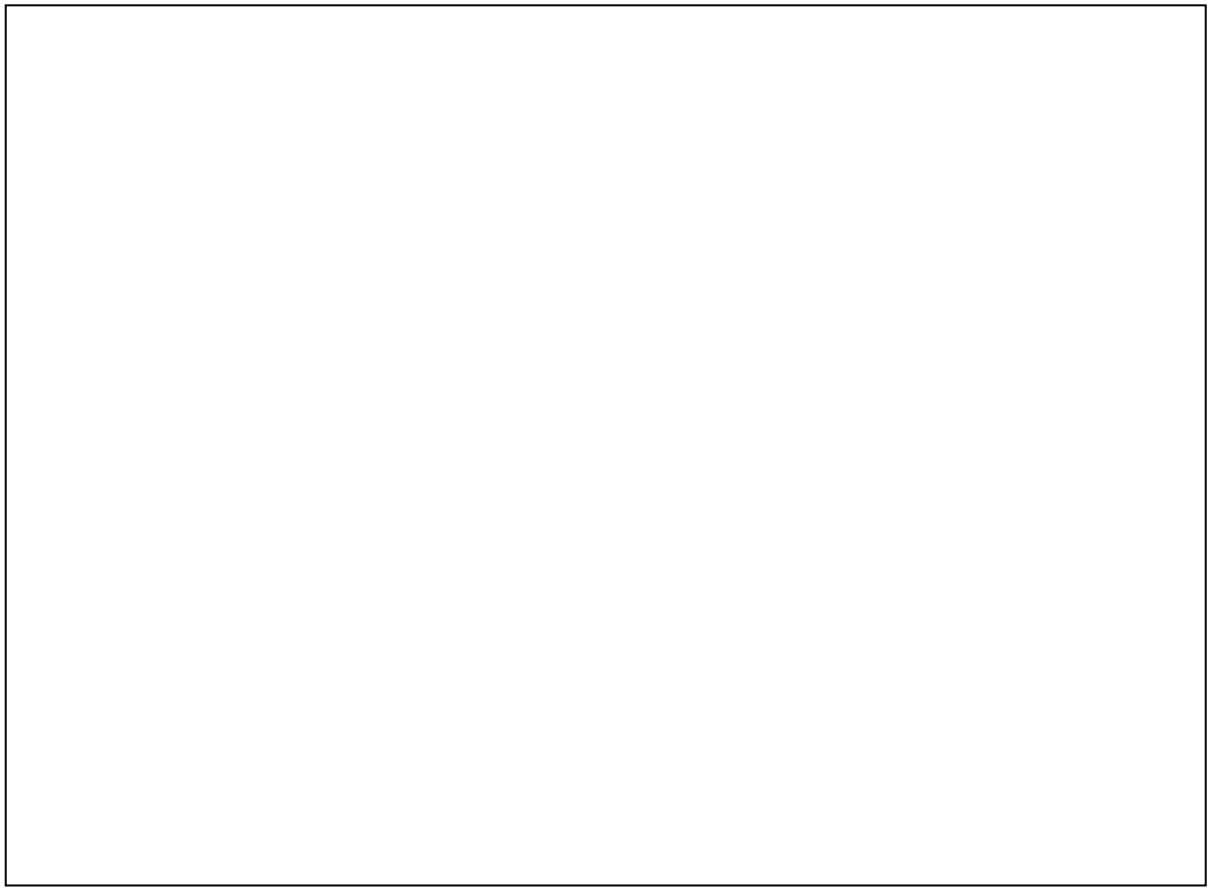
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐ Concrete Cracks ☐ Floor Drains

Factors Influencing Indoor Air Quality

Is there an attached garage?	☐ Yes ☐ No	
Is there smoking in the building?	☐ Yes ☐ No	
Is there new carpet or furniture?	☐ Yes ☐ No	Describe: _____
Have clothes or drapes been recently dry cleaned?	☐ Yes ☐ No	Describe: _____
Has painting or staining been done with the last six months?	☐ Yes ☐ No	Describe: _____
Has the building been recently remodeled?	☐ Yes ☐ No	Describe: _____
Has the building ever had a fire?	☐ Yes ☐ No	
Is there a hobby or craft area in the building?	☐ Yes ☐ No	Describe: _____
Is gun cleaner stored in the building?	☐ Yes ☐ No	
Is there a fuel oil tank on the property?	☐ Yes ☐ No	
Is there a septic tank on the property?	☐ Yes ☐ No	
Has the building been fumigated or sprayed for pests recently?	☐ Yes ☐ No	Describe: _____
Do any building occupants use solvents at work?	☐ Yes ☐ No	Describe: _____

Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.



Primary Type of Energy Used (Check appropriate boxes)

☐ Natural Gas ☐ Fuel Oil ☐ Propane ☐ Electricity ☐ Wood ☐ Kerosene

Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.

_____

General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.

_____
_____
_____
_____
_____