## RECEIVED

March 23, 2011

9:08 am, Apr 08, 2011 Alameda County Environmental Health

Ms. Barbara Jakub Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Technical Comments

Dear Ms. Jakub:

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.

Sincerely,

immy Koo

Enclosure: Responses to Technical Comments

March 22, 2011

**ICES 7016** 

Ms. Barbara Jakub Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Technical Comments Sunny Piedmont Cleaners 4364 Piedmont Avenue Oakland, California

Dear Barbara:

Enclosed please find our responses to your comments dated March 2, 2011.

If you have any questions or concerns, please feel free to contact Derek Wong or me.

Sincerely, ng Leong ipal Engineer STATE OF CALIF

cc: Mr. Jimmy Koo, Sunny Piedmont Cleaners Harvey J. and Donna J. Clar Trust



#### Technical Comment 1

Groundwater was not encountered in boring B-1 and a transect was not advanced as requested in the May 21, 2010 AECH work plan approval letter.

#### Response

The letter from Alameda County Environmental Health dated May 21, 2010 stated that "if groundwater is not encountered in boring B-1 (located adjacent to the dry cleaning machine), please advance borings along transects on the perimeter of the southern and western sides of the building rather than just at B-3 and B-4."

Due to the sampler refusal at a depth of approximately 16 feet below the existing ground surface (bgs) at boring B-1, ICES was unable to collect a grab groundwater sample on June 16, 2010.

Based on our discussions with you regarding the sampling activities that were conducted on June 16, 2010, you stated that collection of at least one sample was still required from the underlying groundwater beneath the dry cleaning machine or from borings transecting the southern and western perimeter of the existing building.

In your email dated July 13, 2010 (Attachment A), you stated that "an angled boring is another possible way to get a groundwater sample from beneath the dry cleaning machine." We informed you on July 15, 2010 that RSI Drilling would be able to do an angle boring from outside the building to collect the grab groundwater sample from beneath the dry cleaning machine.

An angled boring was drilled at boring B-3 to gain access to the groundwater beneath the dry cleaning machine on July 23, 2010. The results of the groundwater sample collected from angeled boring B-3 indicated non-detectable concentrations of PCE. The remaining VOCs contained in the groundwater sample were below their respective ESLs.

Considering the results of soil samples collected, a significant source in soil capable of impacting groundwater has not been detected. This, combined with the results of the groundwater sampled from angeled boring B-3, leads us to conclude that groundwater has not been impacted by releases at the Site and further investigation is not warranted.

#### Technical Comment 2

No depths for the utility lines are depicted on the map or on a cross section. Please conduct a preferential pathway study to locate potential migration pathways and conduits and determine the probability of the DNAPL and/or plume or vapor encountering preferential pathways and conduits that could spread contamination.

#### Response

A subsurface utility survey conducted by Cruz Brothers of Scotts Valley, California on April 1, 2010 identified a sewer line within the eastern portion of the existing building at a depth of approximately 2 to 4 feet bgs (Figures 1, 2A, and 2B). Water, gas, and electrical lines were aboveground and overhead within the building. The flow direction of the sewer line was towards Piedmont Avenue (in the northerly direction).

PCE encountered in boring B-2 (0.045 mg/kg) at a depth of approximately 5 feet bgs was significantly below the residential and commercial/industrial ESL of 0.37 mg/kg and 0.70 mg/kg. The deeper sample collected from B-2 at a depth of approximately 15 feet bgs indicated non-detectable concentrations of PCE. Boring B-2 was located adjacent to the sanitary sewer line where wastewater flows away from the Sunny Piedmont Cleaners facility. The grab groundwater sample collected from boring B-3 indicated a non-detectable concentration of PCE.

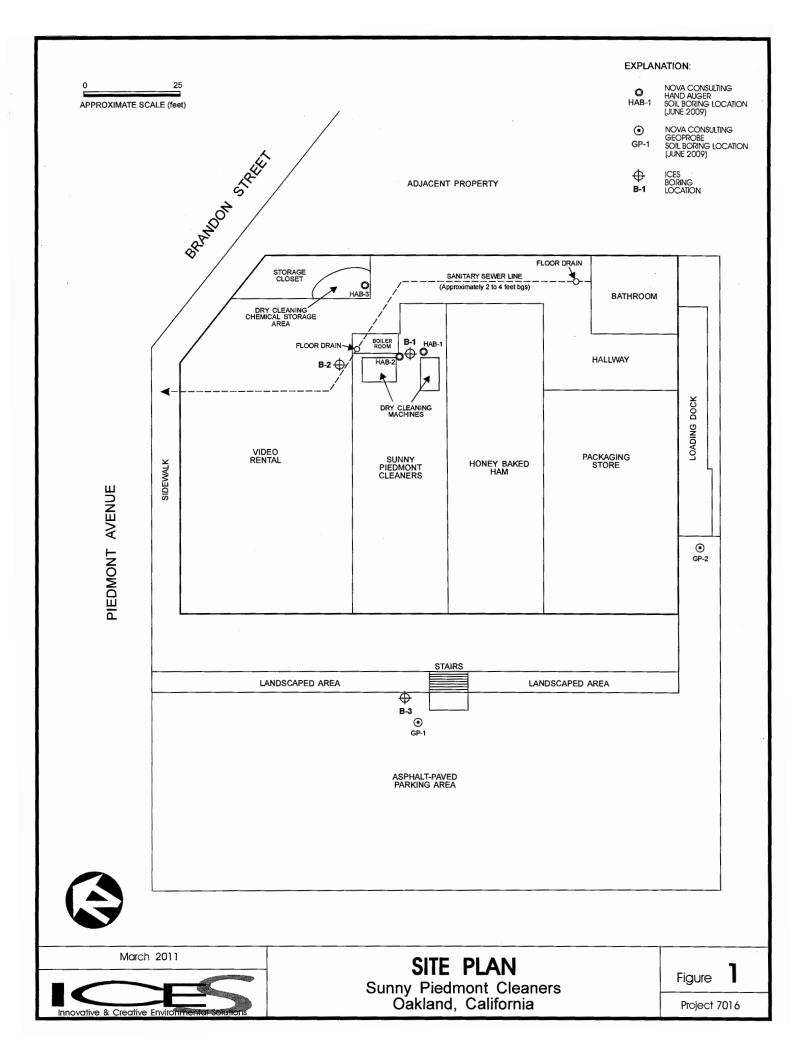
Based on the results of samples collected from boring B-2 and angled boring B-3, both of which were located within the building footprint, it appears that the underlying soil and groundwater beneath the sewer line within the building are not impacted by significant releases of PCE. This being the case, we find that no further investigation is warranted.

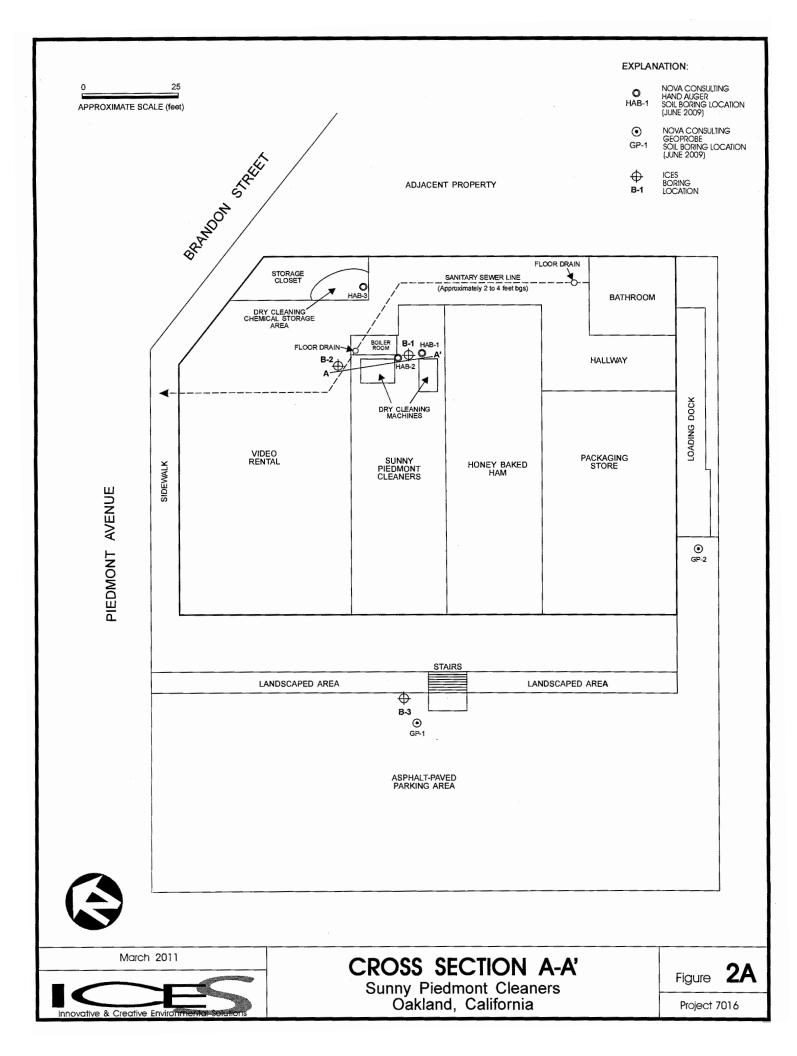
#### Technical Comment 2

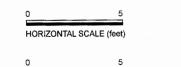
Perform a well survey within <sup>1</sup>/<sub>4</sub>-mile radius of the Site.

#### Response

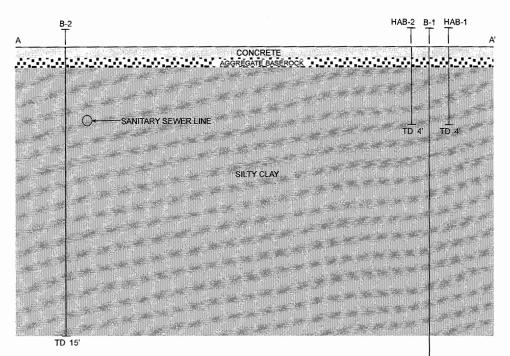
A well survey was performed on Feb 8, 2011. The findings of the survey indicated that there are no wells located within  $\frac{1}{4}$  mile of the Site (Attachment B).







VERTICAL SCALE (feet)



TD 16'

March 2011



# **CROSS SECTION A-A'**

Sunny Piedmont Cleaners Oakland, California Figure 2B

Project 7016

# ATTACHMENT A



#### **RE: RO3013 Sunny Piedmont Cleaners**

Tuesday, July 13, 2010 11:47 AM

From: "Jakub, Barbara, Env. Health" <barbara.jakub@acgov.org> Tc: "'Jakun Koo'" <jimmykoo9@yahoo.com> Cc: "'Derek Wong'" <derek\_ices@yahoo.com>

#### Dear Mr. Koo,

I appreciate that you are in compliance with all of the CUPA regulations for the site. While secondary containment for dry cleaning machines may be a new requirement, polluting groundwater has not been allowed from before you began operating the dry cleaning facility. Unfortunately, there was a release at the site as evidenced by the contamination discovered in the soil. Ultimately we are tasked with this work in order to protect your neighbors from the released contaminants from the site. Due to the nature of the contaminant, groundwater must be sampled and analyzed. In addition, the vapor intrusion pathway will need to be evaluated. I requested that your consultant advance to groundwater in the area of the dry cleaning machine but he said the rig was unable to get to groundwater at that location. The fall back plan was to collect groundwater along a transect because we do not know the exact direction of the groundwater flow in this area. An angle boring is another possible way to get a groundwater sample from beneath the dry cleaning machine. I am waiting for this information to be submitted to me as I discussed with your consultant. Regards,

Barbara Jakub, P.G. Alameda County Environmental Health (510) 639-1287 (direct) (510) 337-9335 (fax) <u>barbara.jakub@acgov.org</u>

Online case files are available at the website below http://www.acgov.org/aceh/lop/resources.htm

From: Jakun Koo [mailto:jimmykoo9@yahoo.com] Sent: Tuesday, July 13, 2010 9:51 AM To: Jakub, Barbara, Env. Health Subject: Jimmy Koo

Dear Ms. Barbara Jakub,

My name is Jimmy Koo, the owner of Sunny Piedmont Cleaner in Oakland. I am very sorry to trouble you with this e-mail in your busy schedule of so much work.

While I respect and praise your business ethics to take care of individual case professionally, I would like to ask you to spare a few minutes to read my e-mail because both my family and my business are going through a very difficult time now due to a situation with underground soil contamination at our facility and time to take corrective actions.

I am a very hard-working and law-abiding, respectable citizen that has been spending more than 10 hours every day for the last 20 years in order to run and grow this business.

In 2001, the landlord applied to have the property refinanced and it required extensive testing of underground soil for possible contamination. To my great surprise and disappointment, the first round of tests revealed slight contamination in one of five samples to the depth of 5 feet. I must attribute the previous owner to the contamination because when I took over the the business in 1990, there was no requirement of secondary containment by laws and regulations.

After I took over the business, the government put into effects lots of requirements including secondary containment, records of PERC purchasing, implementation of hazardous waste control, and etc. I did my best to keep up with all the requirements and have never been cited for any kind of violation by now. I have kept all the related documents to prove this and can present them to you if necessary. I am prepared to take necessary actions on this matter to keep my record clean and will follow your recommendation.

The second round of tests for underground soil contamination to the depths of 5 feet, 10 feet, and 15 feet revealed no contamination at all. But it took 1 year and 3 months for this great news to finally relieve my family from continuous worries and subsequent stresses. During the time, both my wife and I could not sleep well because of potential disastrous results that would have affected the business negatively. My wife started to develop unstable conditions, both physically and mentally, and had to seek medical treatment. I am still required by you to submit test results for underground water and trying to get this job coordinated with contractors.

I immigrated to the USA with a dream to be successful, to enjoy freedom and to pursue my happyness. My hard-working paid with a very stable business thanks to good relationship with the landlord, the clients, and the local governments and communities.

When things were terribly bad for the people and the country some 200 years ago, our ancestors in difficult times were comforted by the Declaration of Independence that guarantees the citizens the rights of Life, Liberty, and Pursuit of happyness.

Just like them, I am going through the difficult times in this unprecedented harsh economy and the contamination issue has devastated my family and we lost smiles on our face because of constant worries. I truly hope for the opportunity to pursue our happiness again and bring smiles back on our faces. I think you can help my family keep the dream alive by taking another look at this matter.

Thanks for your time.

Sincerely yours,

Jimmy Koo, Owner Sunny Piedmont Cleaner

ICES

## ATTACHMENT B

## **Sunny Piedmont Cleaners**

4364 Piedmont Avenue Oakland, CA 94611

Inquiry Number: 3004533.1s March 02, 2011

# The EDR GeoCheck® Report



440 Wheelers Farms Road Milford, CT 06461 Toll Free: 800.352.0050 www.edrnet.com

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*Thank you for your business.* Please contact EDR at 1-800-352-0050 with any questions or comments.

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE REPORT**

#### TARGET PROPERTY ADDRESS

SUNNY PIEDMONT CLEANERS 4364 PIEDMONT AVENUE OAKLAND, CA 94611

#### TARGET PROPERTY COORDINATES

| Latitude (North):             | 37.82970 - 37° 49' 46.9" |
|-------------------------------|--------------------------|
| Longitude (West):             | 122.248 - 122° 14' 52.8" |
| Universal Tranverse Mercator: | Zone 10                  |
| UTM X (Meters):               | 566178.1                 |
| UTM Y (Meters):               | 4186981.2                |
| Elevation:                    | 146 ft. above sea level  |

#### USGS TOPOGRAPHIC MAP

| Target Property Map:  | 37122-G2 OAKLAND EAST, CA |
|-----------------------|---------------------------|
| Most Recent Revision: | 1980                      |
| West Map:             | 37122-G3 OAKLAND WEST, CA |
| Most Recent Revision: | 1980                      |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

#### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

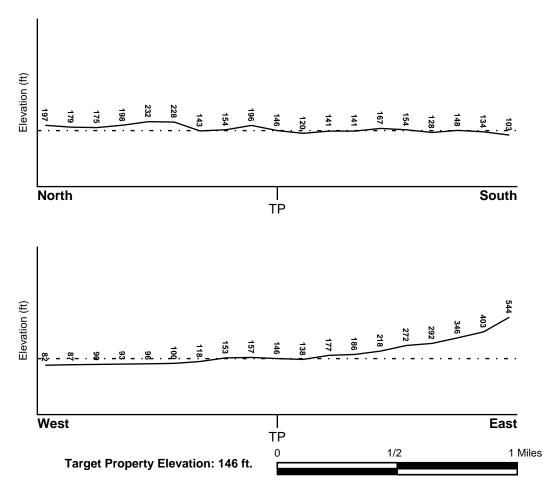
#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

#### FEMA FLOOD ZONE

Ν

| Target Property County<br>ALAMEDA, CA       | FEMA Flood<br><u>Electronic Data</u><br>YES - refer to the Overview Map and Detail Map |
|---|--|
| Flood Plain Panel at Target Property:       | 06001C - FEMA DFIRM Flood data   |
| Additional Panels in search area:           | Not Reported   |
| NATIONAL WETLAND INVENTORY                  | NWI Electronic   |
| NWI Quad at Target Property<br>OAKLAND EAST | <u>Data Coverage</u><br>YES - refer to the Overview Map and Detail Map                 |

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data\*:

| Search Radius: | • | 1.25 miles |
|----------------|---|------------|
| Status:        |   | Not found  |

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

|        | LOCATION           | GENERAL DIRECTION |
|--------|--------------------|-------------------|
| MAP ID | FROM TP            | GROUNDWATER FLOW  |
| 1      | 0 - 1/8 Mile NNW   | NW                |
| 2      | 0 - 1/8 Mile WSW   | NE                |
| 3      | 1/4 - 1/2 Mile WSW | NNW               |
| 4      | 1/2 - 1 Mile NNW   | SW                |
| 5      | 1/2 - 1 Mile WSW   | NW                |
| A6     | 1/2 - 1 Mile WSW   | W                 |
| A7     | 1/2 - 1 Mile WSW   | NW                |
| 8      | 1/2 - 1 Mile SW    | SW                |
| 9      | 1/2 - 1 Mile WSW   | NE                |
|        |                    |                   |

\*©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

|        | LOCATION           | GENERAL DIRECTION |
|--------|--------------------|-------------------|
| MAP ID | FROM TP            | GROUNDWATER FLOW  |
| 10     | 1/2 - 1 Mile SSW   | Varies            |
| 11     | 1/2 - 1 Mile NNE   | W                 |
| 13     | 1/2 - 1 Mile North | S                 |

For additional site information, refer to Physical Setting Source Map Findings.

#### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

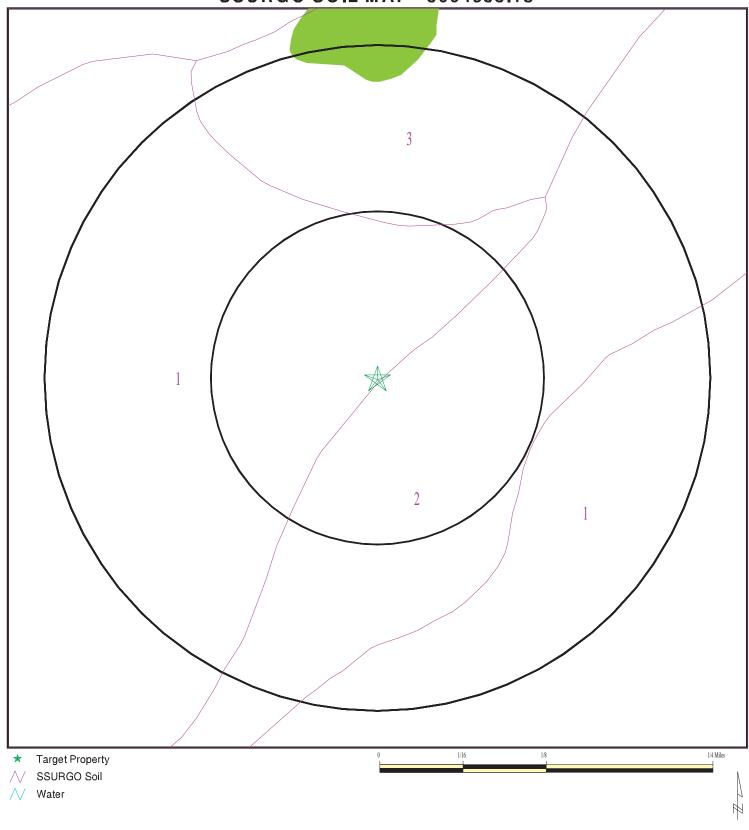
#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

| Era:    | Mesozoic                               | Category: | Eugeosynclinal Deposits |
|---------|--|-----------|-------------------------|
| System: | Cretaceous                             |           |                         |
| Series: | Upper Mesozoic                         |           |                         |
| Code:   | uMze(decoded above as Era, System & Se | eries)    |                         |

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).





| SITE NAME:<br>ADDRESS: | Sunny Piedmont Cleaners<br>4364 Piedmont Avenue |
|------------------------|---|
|                        | Oakland CA 94611                                |
| LAT/LONG:              | 37.8297 / 122.2480                              |

| CLIENT:<br>CONTACT:<br>INQUIRY #:<br>DATE: | ICES<br>Derek Wong<br>3004533.1s<br>March 02, 2011 6:15 pm |  |
|--|--|--|
| Copyrigh                                   | t © 2011 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.         |  |

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

| Soil Map ID: 1                        |   |
|---------------------------------------|---|
| Soil Component Name:                  | Tierra  |
| Soil Surface Texture:                 | loam  |
| Hydrologic Group:                     | Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer. |
| Soil Drainage Class:                  | Moderately well drained   |
| Hydric Status: Not hydric             |   |
| Corrosion Potential - Uncoated Steel: | High  |
| Depth to Bedrock Min:                 | > 0 inches  |
| Depth to Watertable Min:              | > 0 inches  |

|       | Soil Layer Information |           |                 |   |   |                        |                             |                       |
|-------|------------------------|-----------|-----------------|---|---|------------------------|-----------------------------|-----------------------|
|       | Boundary               |           |                 | Classification  |   | Saturated<br>hydraulic |                             |                       |
| Layer | Layer                  | Upper     | Lower           | Soil Texture Class  | AASHTO Group  | Unified Soil           | conductivity<br>micro m/sec | Soil Reaction<br>(pH) |
| 1     | 0 inches               | 11 inches | loam            | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay | Max: 1.4<br>Min: 0.42  | Max: 8.4<br>Min: 5.6        |                       |
| 2     | 11 inches              | 31 inches | clay            | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay | Max: 1.4<br>Min: 0.42  | Max: 8.4<br>Min: 5.6        |                       |
| 3     | 31 inches              | 59 inches | sandy clay loam | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay | Max: 1.4<br>Min: 0.42  | Max: 8.4<br>Min: 5.6        |                       |

### Soil Map ID: 2

| Soil Component Name:                                    | Urban land  |
|---|---|
| Soil Surface Texture:                                   | loam  |
| Hydrologic Group:                                       | Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer. |
| Soil Drainage Class:<br>Hydric Status: Partially hydric |   |
| Corrosion Potential - Uncoated Steel:                   | Not Reported  |
| Depth to Bedrock Min:                                   | > 0 inches  |
| Depth to Watertable Min:                                | > 0 inches  |
| No Layer Information available.                         |   |

| Soil | Мар | ID: 3 |
|------|-----|-------|
|------|-----|-------|

| Soil Component Name:                              | Xerorthents   |
|---|---|
| Soil Surface Texture:                             | silt loam   |
| Hydrologic Group:                                 | Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer. |
| Soil Drainage Class:<br>Hydric Status: Not hydric |   |
| Corrosion Potential - Uncoated Steel:             | Not Reported  |
| Depth to Bedrock Min:                             | > 51 inches   |
| Depth to Watertable Min:                          | > 0 inches  |

|       |          |           | Soil Layer         | r Information  |   |                             |                      |                        |  |
|-------|----------|-----------|--------------------|--|---|-----------------------------|----------------------|------------------------|--|
|       | Boundary |           | Bou                |  |   | Classi                      | fication             | Saturated<br>hydraulic |  |
| Layer | Upper    | Lower     | Soil Texture Class | AASHTO Group   | Unified Soil  | conductivity<br>micro m/sec |                      |                        |  |
| 1     | 0 inches | 59 inches | silt loam          | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Silty<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay.<br>FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), silt. | Max: 14<br>Min: 4           | Max: 7.8<br>Min: 5.6 |                        |  |

#### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

| DATABASE         | SEARCH DISTANCE (miles) |
|------------------|-------------------------|
| Federal USGS     | 1.000                   |
| Federal FRDS PWS | 1.000                   |
| State Database   | 1.000                   |

#### FEDERAL USGS WELL INFORMATION

|                |         | LOCATION |
|----------------|---------|----------|
| MAP ID         | WELL ID | FROM TP  |
| No Wells Found |         |          |

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

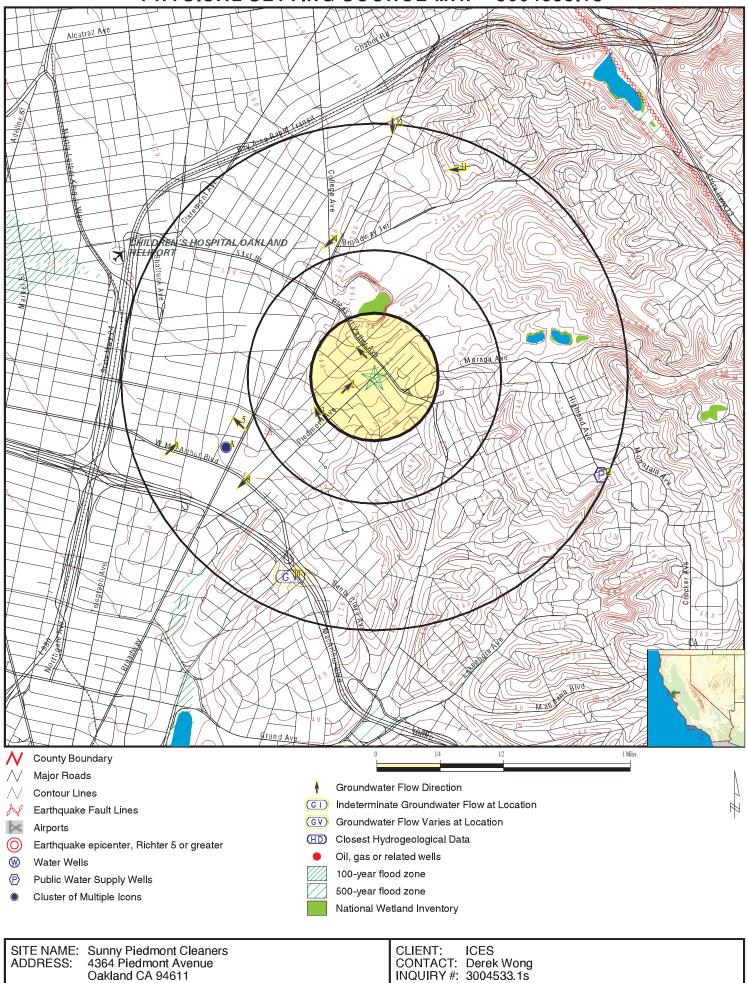
|        |           | LOCATION         |
|--------|-----------|------------------|
| MAP ID | WELL ID   | FROM TP          |
| 12     | CA3900820 | 1/2 - 1 Mile ESE |

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

|                |         | LOCATION |
|----------------|---------|----------|
| MAP ID         | WELL ID | FROM TP  |
| No Wells Found |         |          |

## **PHYSICAL SETTING SOURCE MAP - 3004533.1s**



LAT/LONG:

37.8297 / 122.2480

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March 02, 2011 6:15 pm

DATE:

## **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

| Map ID<br>Direction<br>Distance<br>Elevation |   |  | Database | EDR ID Number |
|--|---|--|----------|---------------|
| 1<br>NNW<br>0 - 1/8 Mile<br>Higher           | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-2150<br>NW<br>Not Reported<br>Not Reported<br>5<br>08/21/1992   | AQUIFLOW | 67891         |
| 2<br>WSW<br>0 - 1/8 Mile<br>Lower            | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-0872<br>NE<br>11<br>21<br>Not Reported<br>10/06/1986            | AQUIFLOW | 67897         |
| 3<br>WSW<br>1/4 - 1/2 Mile<br>Lower          | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-1690<br>NNW<br>Not Reported<br>Not Reported<br>18<br>10/11/1994 | AQUIFLOW | 63786         |
| 4<br>NNW<br>1/2 - 1 Mile<br>Higher           | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-1606<br>SW<br>2.5<br>3.5<br>Not Reported<br>01/07/1987          | AQUIFLOW | 67905         |
| 5<br>WSW<br>1/2 - 1 Mile<br>Lower            | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-1596<br>NW<br>Not Reported<br>Not Reported<br>15<br>09/06/1995  | AQUIFLOW | 63753         |
| A6<br>WSW<br>1/2 - 1 Mile<br>Lower           | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-2279<br>W<br>Not Reported<br>Not Reported<br>20<br>09/29/1997   | AQUIFLOW | 63727         |
| A7<br>WSW<br>1/2 - 1 Mile<br>Lower           | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-0638<br>NW<br>Not Reported<br>Not Reported<br>21<br>11/17/1988  | AQUIFLOW | 63720         |

## **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

| Map ID<br>Direction  |   |   |  |                                    |                                      |              |
|--|---|---|--|------------------------------------|--------------------------------------|--------------|
| Distance<br>Elevation  |   |   |  |                                    | Database                             | EDR ID Numbe |
| 8<br>SW<br>1/2 - 1 Mile<br>Lower   | Deep Wate   | ater Depth:   | 01-1345<br>SW<br>13.82<br>14.30<br>Not Reported<br>01/19/1995            |                                    | AQUIFLOW                             | 63931        |
| 9<br>WSW<br>1/2 - 1 Mile<br>Lower  | Site ID:<br>Groundwat<br>Shallow W<br>Deep Wate<br>Average W<br>Date: | ater Depth:   | 01-1597<br>NE<br>Not Reported<br>Not Reported<br>15<br>08/05/1995        |                                    | AQUIFLOW                             | 63784        |
| 10<br>SSW<br>1/2 - 1 Mile<br>Lower   | Deep Wate   | ater Depth:   | 01-1618<br>Varies<br>Not Reported<br>Not Reported<br>80 ft<br>11/26/1997 |                                    | AQUIFLOW                             | 66613        |
| 11<br>NNE<br>1/2 - 1 Mile<br>Higher  | Deep Wate   | ater Depth:   | 01-0735<br>W<br>Not Reported<br>Not Reported<br>10<br>01/17/1992         |                                    | AQUIFLOW                             | 66320        |
| 12<br>ESE<br>1/2 - 1 Mile<br>Higher  |   |   |  |                                    | FRDS PWS                             | CA3900820    |
| PWS ID:<br>Date Initiate<br>PWS Name:  |   | CA3900820<br>Not Reported<br>SOUTHLAND<br>SAN JOSE, C | Date Deactivated:<br>MOBILE HOME PARK<br>XA 95159                        | Not Reported                       |                                      |              |
| Addressee /  | Facility:   |   | r/Responsible Party<br>BINSON & KATZ<br>CA 95159                         |                                    |                                      |              |
| Facility Latite<br>City Served:<br>Treatment C   |   | 37 49 27<br>Not Reported<br>Untreated                 |  | Facility Longitude:<br>Population: | 122 13 50<br>240                     |              |
| Violations in  | formation not   | t reported.   |  | -                                  |                                      |              |
| ENFORCEMEN   |   |   |  |                                    |                                      |              |
| System Nam<br>Violation Typ<br>Contaminan<br>Compliance<br>Violation ID:<br>Enforcemen | be:<br>t:<br>Period:  |   |  | Enf. Action:                       | State Compliance Ach<br>TC3004533.1s |              |

## **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

#### **ENFORCEMENT INFORMATION:**

| System Name:<br>Violation Type:<br>Contaminant:<br>Compliance Period:<br>Violation ID:<br>Enforcement Date: | SOUTHLAND MOBILE HOME PARK<br>Initial Tap Sampling for Pb and Cu<br>LEAD & COPPER RULE<br>1993-07-01 - 2000-04-04<br>95V0001<br>2000-04-04 | Enf. Action: | State Compliance Achieved |
|---|--|--------------|---------------------------|
| System Name:  | SOUTHLAND MOBILE HOME PARK   |              |                           |
| Violation Type:   | Initial Tap Sampling for Pb and Cu   |              |                           |
| Contaminant:  | LEAD & COPPER RULE   |              |                           |
| Compliance Period:  | 1993-07-01 - 2015-12-31  |              |                           |
| Violation ID:   | 95V0001  |              |                           |
| Enforcement Date:   | Not Reported   | Enf. Action: | Not Reported              |

| 13<br>North<br>1/2 - 1 Mile<br>Higher | Site ID:<br>Groundwater Flow:<br>Shallow Water Depth:<br>Deep Water Depth:<br>Average Water Depth:<br>Date: | 01-1375<br>S<br>Not Reported<br>Not Reported<br>5<br>07/10/1992 | AQUIFLOW | 66326 |
|---------------------------------------|---|---|----------|-------|
|---------------------------------------|---|---|----------|-------|

## GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

#### AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---------|-----------|-----------|
|         |           |           |
| 94611   | 57        | 3         |

Federal EPA Radon Zone for ALAMEDA County: 2

Note: Zone 1 indoor average level > 4 pCi/L. : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L. : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94611

Number of sites tested: 2

| Area                    | Average Activity | % <4 pCi/L   | % 4-20 pCi/L | % >20 pCi/L  |
|-------------------------|------------------|--------------|--------------|--------------|
| Living Area - 1st Floor | Not Reported     | Not Reported | Not Reported | Not Reported |
| Living Area - 2nd Floor | Not Reported     | Not Reported | Not Reported | Not Reported |
| Basement                | 1.550 pCi/L      | 100%         | 0%           | 0%           |

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

#### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

#### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

#### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

#### LOCAL / REGIONAL WATER AGENCY RECORDS

#### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

Water Well Database Source: Department of Water Resources Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

#### OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations Source: Department of Conservation Telephone: 916-323-1779 Oil and Gas well locations in the state.

#### RADON

State Database: CA Radon Source: Department of Health Services Telephone: 916-324-2208 Radon Database for California

Area Radon Information

Source: USGS Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones Source: EPA Telephone: 703-356-4020 Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

#### OTHER

Airport Landing Facilities: Private and public use landing facilities Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### STREET AND ADDRESS INFORMATION

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