

Jones Development Company LLC

Commercial Property Development
Consulting, Management & Investments

Jones Development Company

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Donald L. Jones Company
Jones Partners LLC
640 Hegenberger-Heinz
2101 Williams Associates
American Metal Properties
American Standard Properties
ASP/RWM Properties
ByPass 93 Properties
Cottonmill Properties
Dow-Pac Properties
Durkee Properties
Grand/Grove Partnership
Jones Group I
Normal Court Properties
Papermill Properties
PlyProperties
Prudential Properties
Williams Properties
White Oak Investor

September 4, 2014

Mr. Mark Detterman
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SUB-SLAB SOIL GAS INVESTIGATION WORK PLAN CERTIFICATION
County Case # RO 2468
James River Corporation
2101 Williams Street
San Leandro, CA



Dear Mr. Detterman:

You will find enclosed one copy of the following document prepared by P&D Environmental, Inc. for the subject site.

- Sub-Slab Soil Gas Investigation Work Plan dated September 4, 2014.

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-mentioned work plan for the subject site is true and correct to the best of my knowledge.

Please don't hesitate to call me if you have any questions.

Sincerely,

Carey Andre
2101 Williams Associates LLC

0660.L2

P&D ENVIRONMENTAL, INC.

55 Santa Clara Avenue, Suite 240

Oakland, CA 94610

(510) 658-6916

September 4, 2014

Work Plan 0660.W1

Mr. Mark Detterman

Alameda County Department of Environmental Health

1131 Harbor Parkway, Suite 250

Alameda, CA 94502

**SUBJECT: SUB-SLAB SOIL GAS INVESTIGATION WORK PLAN
(VP1 THROUGH VP9)
County Case # RO 2468
James River Corporation
2101 Williams Street
San Leandro, California**

Dear Mr. Detterman:

P&D Environmental, Inc. (P&D) has prepared this work plan to evaluate the presence of tetrachloroethene (PCE) beneath the subject site building. This work plan has been requested by the Alameda County Department of Environmental Health (ACDEH) to answer data gaps that need to be addressed for the non-fuel release case associated with the site to be considered for closure.

A Site Location Map is attached with this work plan as Figure 1, and a Site Vicinity Aerial Photograph showing the site, nearby sites, historical shallow groundwater sample collection locations, and proposed vapor pin sub-slab soil gas sample collection locations is attached as Figure 2. All work will be performed under the direct supervision of an appropriately licensed California professional.

BACKGROUND

PCE that originates from offsite and upgradient of the subject site has been detected in groundwater on the upgradient and downgradient sides of the subject site building. The presence of the PCE groundwater plume has been well-documented on the upgradient property and is recognized by the San Francisco Bay Regional Water Quality Control Board to originate from some unknown upgradient location.

SCOPE OF WORK

To evaluate the presence of PCE in sub-slab soil gas at the subject site, P&D proposes to perform the following activities.

- Prepare a health and safety plan and mark drilling locations for Underground Service Alert.
- Oversee installation and sampling of vapor pins at 6 locations designated as VP1 through VP6.
- Arrange for sample analysis.
- Prepare a subsurface investigation report.

Each of these is discussed below.

Prepare a Health and Safety Plan

A health and safety plan will be prepared for the scope of work identified in this work plan. In addition, the drilling locations will be marked with white paint and Underground Service Alert will be notified for underground utility location.

Vapor Pin Installation and Sample Collection

Flush-mounted vapor pins VP1 through VP6 will be installed through the building floor slabs at the approximate locations shown in Figure 2 in accordance with vapor pin manufacturer recommendations by IMX, Inc. of Oakland, California, to evaluate the presence of PCE soil vapor concentrations beneath the building floor slab. The soil gas samples will be collected in accordance with procedures recommended in the December 2013 San Francisco Bay Regional Water Quality Control Board User's Guide: Derivation and Application of Environmental Screening Levels, and the following Department of Toxic Substances Control (DTSC) documents:

- March 2013 – FAQ for the 2012 Advisory,
- April 2012 Advisory - Active Soil Gas Investigations,
- October 2011 – Vapor Intrusion Guidance,
- October 2011 – Vapor Intrusion Mitigation Advisory.

Each drilling location will be evaluated to verify that the concrete slab has been fully penetrated. No soil will be removed from the ground at any of the drilling locations, and for this reason no boring logs will be prepared. Following soil gas sample collection the vapor pins will be left in place and capped pending review of the results by the ACDEH.

Following construction, the soil gas wells will not be sampled for a minimum of 2 hours. Soil gas samples will not be collected if more than ½ inch of precipitation has occurred during the five days prior to the scheduled sampling date.

A soil gas sampling manifold with a 1-liter Summa canister as the sampling canister for each location (see Figure 3) will be assembled in a shroud consisting of a 35-gallon Rubbermaid bin that has been modified by cutting viewing ports into the sides of the shroud and covering the viewing ports with transparent polycarbonate sheets. A hole measuring approximately two inches square in the bottom of the shroud allows the

shroud to cover the vapor pin while still allowing access to the vapor pin through the bottom of the bin. At the time that the sampling manifold is assembled, the vacuum for the sample canister will be verified with a vacuum gauge and recorded.

Prior to sampling the vapor pin, a 10 minute shut-in test of the sampling manifold will be performed by closing the valve located between the filter and the pressure gauge, opening the purge canister valve, and recording the manifold system vacuum (see Figure 3). No purge testing for purge volume determination will be performed because the samples will be collected using 1-liter Summa canisters, and the volume of the canisters is substantially larger than the purge volumes used for purge volume testing. Following successful verification of the manifold shut-in test, a default of three purge volumes will be extracted prior to sample collection. The purge volume will be calculated based on the void space below the vapor pin plus the volume of the tube that extends through the vapor pin and the volume of the tubing that connects the vapor pin to the sample media. The purge time will be calculated using a nominal flow rate provided by the flow controller of 150 cubic centimeters per minute.

Following completion of the purging of three volumes, a lid will be placed onto the shroud and a tracer gas 1,1-Difluoroethane (DFA) will be sprayed into the shroud interior for one second through a tube connected to a hole in the side of the shroud. Gloves in the lid of the shroud will be used to open the sample canister valve. After verifying that low flow conditions are not present associated with the soil gas sample, an air sample will be collected from the shroud atmosphere to quantify the shroud tracer gas concentration while the soil gas sample is being collected. The shroud atmosphere sample will be collected into a Tedlar bag that is placed into a vacuum chamber with the Tedlar bag inlet connected to a new piece of Teflon or polyethylene tubing that is inserted into the shroud atmosphere through a hole in the side of the shroud.

Once the vacuum for the sample canister valve has decreased to 5 inches of mercury, the gloves in the lid of the bin will be used to close the sample canister valve. The pressure gage on the inlet side of the flow controller (see Figure 3) will be monitored during sample collection to ensure that the vacuum applied to the soil gas well does not exceed 100 inches of water.

One duplicate soil gas sample will be collected into a Summa canister from one of the vapor pins using a stainless steel sampling tee for the Summa canisters using methods described above. Following soil gas sample collection, a PID will be connected to the vapor pin to obtain a preliminary field value for the sample collection location. The soil gas Summa canisters will be stored in a box and promptly shipped to the laboratory for extraction and analysis.

Chain of custody procedures will be observed for all sample handling. Measurements of vacuums, purging and equilibration time intervals, and PID readings will be recorded on Soil Gas Sampling Data Sheets.

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All vapor pin construction equipment will be cleaned with an Alconox solution wash followed by a clean water rinse prior to use at each location. New or cleaned vapor pins with new silicone sleeves will be used at each sample collection location. Clean, unused vacuum gages and stainless steel sampling manifolds will be used at each sample collection location. The vapor pins will be left in the floor slab pending review of the sample results with the ACDEH.

Sample Analysis

All of the Summa canister soil gas samples will be analyzed at Air Toxics Limited of Folsom California for Volatile Organic Compounds (VOCs) including PCE and for DFA (the tracer gas) using EPA Method TO-15. The analyses will be performed with detection limits that equal or are less than SFRWQCB December 2013 Table E-2 soil gas commercial/industrial Environmental Screening Levels (ESLs).

All of the Tedlar bags will be analyzed using EPA Method TO-15 for the tracer gas DFA.

Report Preparation

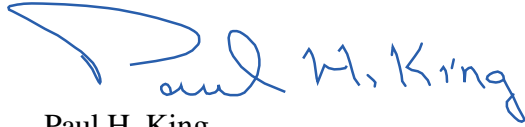
Upon receipt of the laboratory analytical results, a report will be prepared. The report will document the results of the soil gas sample collection procedures and sample results. The report will include maps showing the sample collection locations, tables summarizing the sample results, recommendations based on the results, and the stamp of an appropriately registered professional. A copy of the report and associated laboratory information will be uploaded to the County ftp site and to GeoTracker.

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Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.



Paul H. King
Professional Geologist #5901
Expires: 12/31/15



Attachments:

Figure 1 - Site Location Map

Figure 2 - Site Vicinity Aerial Photograph Showing Proposed Soil Gas Sample Collection Locations

Figure 3 - Typical Soil Gas Sample Collection Manifold

Cc: Ms. Carey Andre, 2101 Williams Associates LLC

PHK/sjc
0660.W1

FIGURES

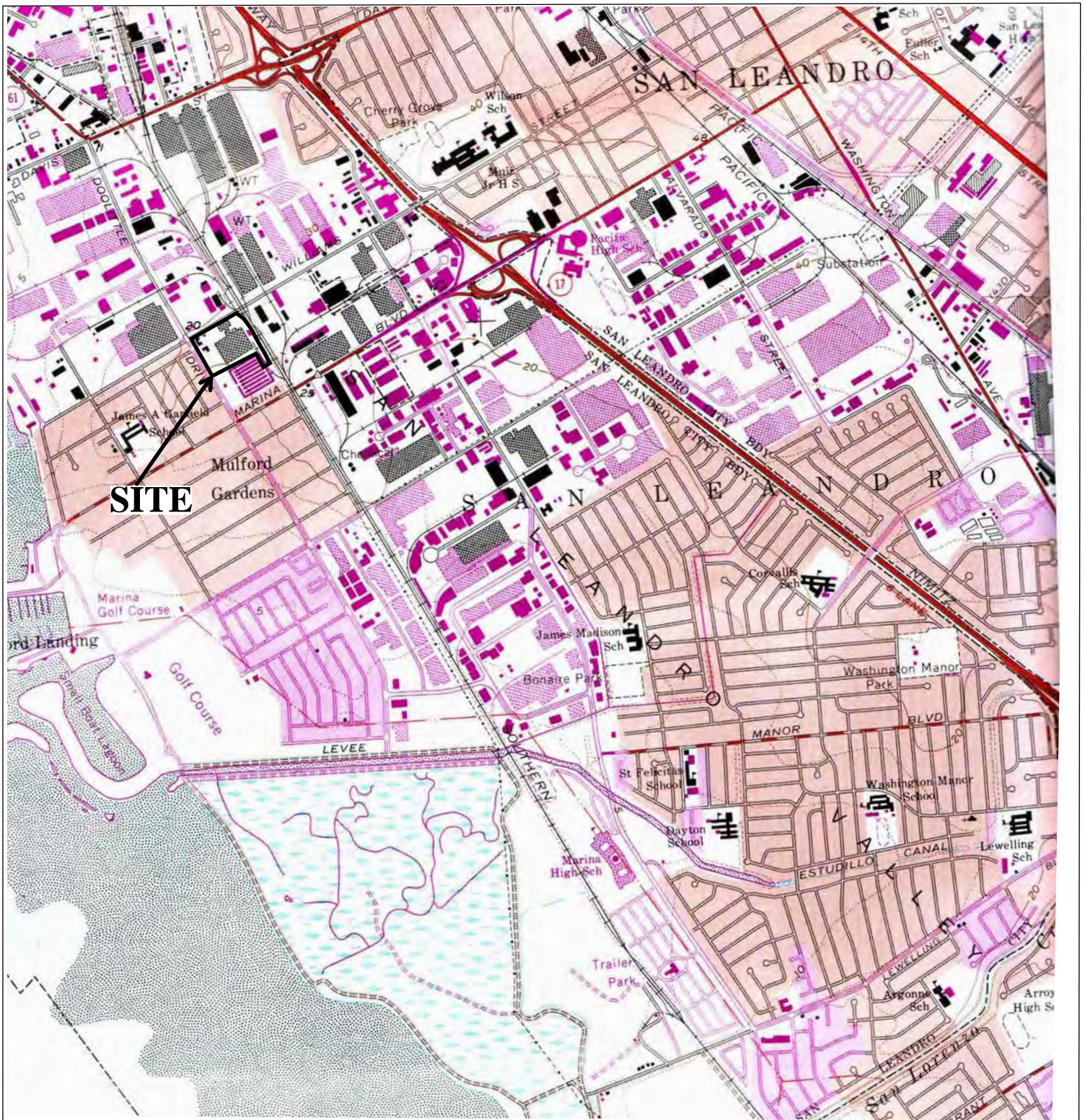


Figure 1
 Site Location Map
 2101 Williams Street
 San Leandro, California

Base Map From:
 US Geological Survey San Leandro,
 California, 7.5-Minute Quadrangles
 Map Edited 1980

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610

0 1000 2000
 Approximate Scale in Feet



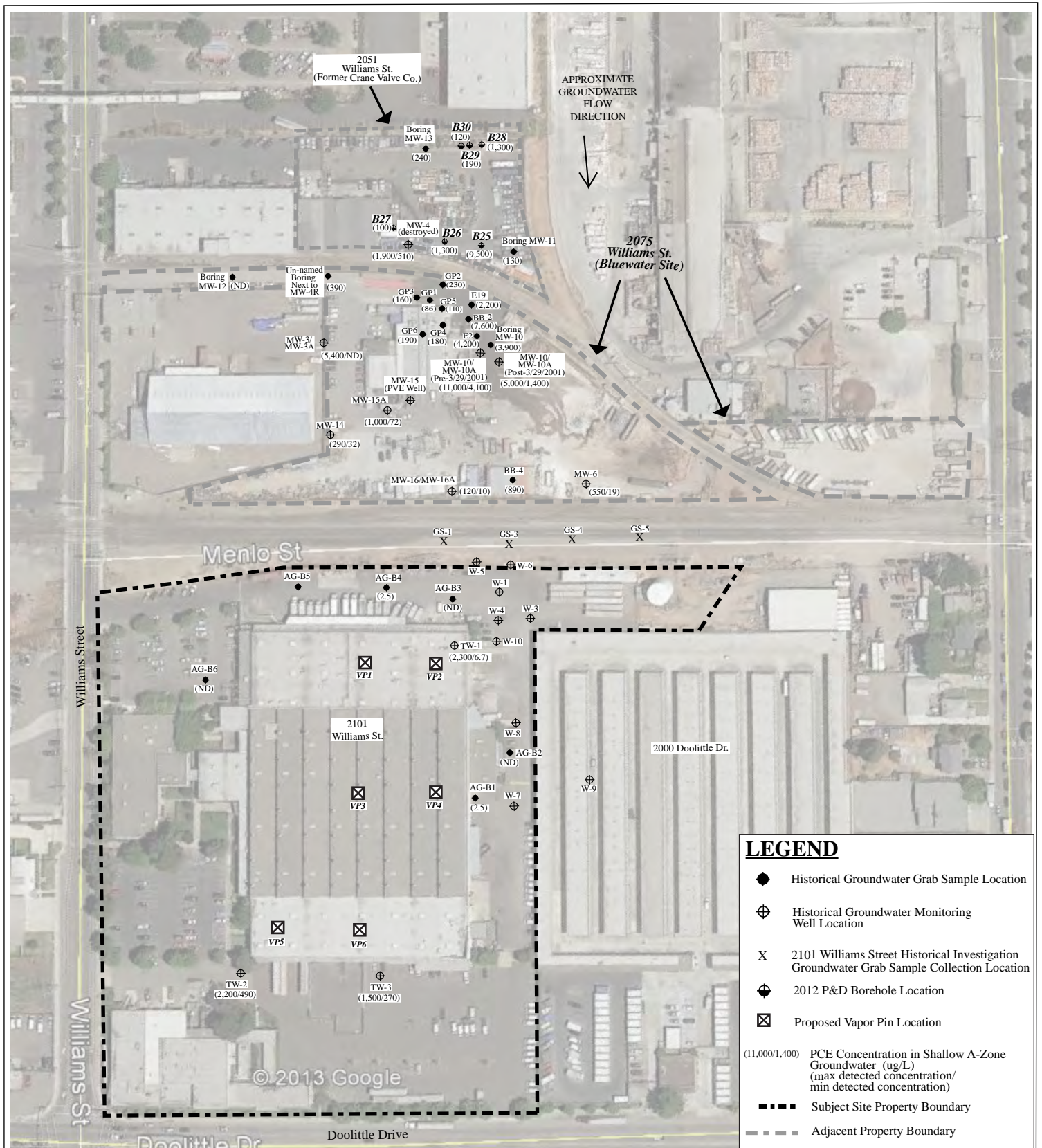


Figure 2
Site Vicinity Aerial Photograph Showing Proposed Vapor Pin Locations and
PCE Concentrations in Shallow A-Zone Groundwater
2101 Williams Street
San Leandro, California

Base Map from:
Google Earth, image dated August 28, 2012

P&D Environmental, Inc.
55 Santa Clara Avenue
Oakland, CA 94610

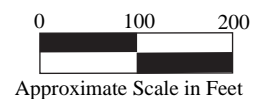




Figure 3
Typical Soil Gas Sampling Manifold
2101 Williams Street
San Leandro, California

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610