

June 24, 2016

Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577**RECEIVED**

By Alameda County Environmental Health 9:52 am, Jun 27, 2016

Attention: Mr. Mark Detterman, PG, CEG, Senior Hazardous Materials Specialist

**TRANSMITTAL LETTER  
WORK PLAN FOR SUPPLEMENTAL SUBSURFACE INVESTIGATION  
NORTHERN EXTANT ONSITE BUILDING  
6701, 6705, and 6707 SHELLMOUND STREET  
EMERYVILLE, CALIFORNIA  
Fuel Leak Case No. RO0000548  
Geotracker Global ID T0600100894**

Dear Mr. Detterman:

Submitted herewith for your review is the *Work Plan for Supplemental Subsurface Investigation, Northern Extant Onsite Building, 6701, 6705, and 6707 Shellmound Street, Emeryville, California* dated June 24, 2016, prepared by PES Environmental, Inc.

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-referenced document for the subject property are true and correct to the best of my knowledge.

Very truly yours,

**ANTON EMERYVILLE, LLC**Rachel Green  
Development Manager



June 23, 2016

**1448.001.01.034**

Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Attention: Mr. Mark Detterman, P.G., C.E.G.

**WORK PLAN FOR SUPPLEMENTAL SUBSURFACE INVESTIGATION  
NORTHERN EXTANT ONSITE BUILDING  
6701, 6705, AND 6707 SHELLMOUND STREET  
EMERYVILLE, CALIFORNIA  
FUEL LEAK CASE NO. RO0000548  
GEOTRACKER GLOBAL ID T0600100894**

Dear Mr. Detterman:

On behalf of Anton Emeryville, LLC (Anton), PES Environmental, Inc. (PES) has prepared this Work Plan for Supplemental Subsurface Investigation, Northern Extant Onsite Building (Supplemental Investigation Work Plan) for the property located at 6701, 6705, and 6707 Shellmound Street, Emeryville, California (collectively, the subject property or site; Plate 1). PES recently performed pre-construction subsurface investigation activities in accordance with Work Plans dated August 28, 2015 and January 31, 2016 (collectively, Pre-Construction Work Plans<sup>1</sup>), with the objective of characterizing soil, soil gas and groundwater which may remain in-place beneath future landscaped areas, future residential and multi-use areas of the future development, or be disturbed by future intrusive earthwork activities conducted during proposed redevelopment activities at the site. The results of the pre-construction subsurface investigation activities were documented in a report prepared by PES entitled *Pre-Construction Subsurface Investigation Report* dated April 8, 2016<sup>2</sup>.

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<sup>1</sup> PES, 2015. *Revised Work Plan for Pre-Construction Subsurface Investigation, 6701, 6705, and 6707 Shellmound Street, Emeryville, California, Fuel Leak Case No. RO0000548, GeoTracker Global ID T0600100894.* August 28.

PES, 2016. *Work Plan for Supplemental Pre-Construction Subsurface Investigation, 6701, 6705, and 6707 Shellmound Street, Emeryville, California, Fuel Leak Case No. RO0000548, GeoTracker Global ID T0600100894.* January 21.

<sup>2</sup> PES, 2016. *Pre-Construction Subsurface Investigation Report, 6701, 6705, and 6707 Shellmound Street, Emeryville, California, Fuel Leak Case No. RO0000548, GeoTracker Global ID T0600100894.* April 8.

**Mr. Mark Detterman**  
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Following its review of the Pre-Construction Subsurface Investigation Report, the Alameda County Environmental Health Department (ACEH) issued a letter to Anton dated April 26, 2016 (ACEH 2016 Letter) which included a request (Technical Comment No. 3) for additional site characterization beneath and in the immediate vicinity of the northern extant onsite building. This Supplemental Investigation Work Plan has been prepared in response to ACEH's request.

## **BACKGROUND INFORMATION**

The subject property is currently listed as an open Spills, Leaks, Investigation and Cleanup (SLIC) case with ACEH as the lead environmental regulatory agency. The case is listed under Mike Roberts Color Production (6707 Bay Street), and the database lists other solvents and non-petroleum hydrocarbons as the potential contaminants of concern.

Based on the results of investigations performed on the subject property and in the vicinity, the site is underlain by fill material overlying deposits of native silts and clays known locally as Old Bay Mud. The fill material ranges in thickness from approximately 10 to 19 feet and consists primarily of coarse-grained sands and gravels that contain varying amounts of fines, and fine-grained silts and clays. The fill material has been encountered throughout the site and is generally most abundant on the western half of the site and at depths below approximately 8 to 10 feet below ground surface (bgs). The fill material often contains abundant debris (e.g., brick, concrete, metal, asphalt, glass, wood, fabric, and rubber). Fine-grained soils are present directly below the fill material. These soils generally consisted of dark-colored clays and occasional silts with organic material that represent Old Bay Mud deposits.

Previous investigations have shown that the fill materials at the site and other similarly filled properties in the vicinity contain residual contamination with related impacts to shallow groundwater. Contamination found and attributed to the non-native fill materials originally used to create the land along the bay-shore area of Emeryville including the site and immediate vicinity includes impacts related to volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals.

The objective of this Supplemental Investigation Work Plan is to present a scope of work for evaluating conditions related to the presence of VOCs in soil and soil gas beneath and in the immediate vicinity of the northern extant onsite building.

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## **SCOPE OF WORK**

The scope of work to be conducted is presented below. As shown on Plate 2, the scope of work includes collection and analysis of discrete, multi-depth soil gas and soil matrix samples from six locations beneath and in the vicinity of the northern onsite building.

### **Field Planning Activities**

Prior to initiating field activities at the site, PES will update our site-specific Health and Safety Plan (HASP). The HASP will comply with applicable federal and California Occupational Safety and Health Administration (OSHA) guidelines. A drilling permit will be obtained from the Alameda County Public Works Agency, Water Resources Section (ACPWA).

Underground Service Alert will be contacted to schedule visits by public and private utility companies to locate their underground utilities. In addition, a private underground utility locating service will be contracted to conduct a subsurface electromagnetic survey to screen the proposed sampling locations for the presence of subsurface utilities.

### **Soil Vapor and Soil Sampling Activities**

Soil vapor and soil sampling will be conducted using a direct-push drill rig at six locations at the site, as shown on Plate 2, including:

- Two soil boring locations within the northern extant onsite building. Soil vapor probes will be installed at 5 and 10 feet bgs, and companion soil samples will be collected at approximately 5 and 10 feet bgs;
- Two soil locations immediately south of the northern extant onsite building. Soil vapor probes will be installed at 5 and 10 feet bgs, and companion soil samples will be collected at approximately 5 and 10 feet bgs; and
- Two soil borings to be advanced immediately west of the northern extant onsite building. Soil vapor probes will be installed at 5 and 10 feet bgs, and companion soil samples will be collected at approximately 5 and 10 feet bgs.

### **Soil Vapor Sampling Methodology**

Soil vapor probe installation and sampling will be conducted in accordance with: (1) the procedures outlined in the *Advisory – Active Soil Gas Investigations* published by the Department of Toxic Substances Control, the Regional Water Quality Control Board, Los Angeles Region and the RWQCB dated July 2015; and (2) soil vapor sampling procedures presented in the approved Pre-Construction Work Plans.

**Mr. Mark Detterman**  
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### Soil Sampling Methodology

At each soil sampling location, the boring will be advanced to approximately 10 feet bgs. Soil cores will be collected continuously from each location and soil samples will be collected for lithologic description, field screening for VOCs, and possible chemical analysis. Soil samples will be collected for analysis at approximately 5 and 10 feet bgs.

The soil samples will be placed in a chilled, insulated cooler and transported to TestAmerica Laboratories, Inc. (TestAmerica) under chain-of-custody protocol. PES anticipates submitting a total of 12 soil samples for analysis for VOCs (including MEK, MIBK, and naphthalene) by U.S. Environmental Protection Agency (U.S. EPA) Test Method 8260B, and collected in accordance with U.S. EPA Method 5035 using Terracore™ samplers.

Upon completion of soil sampling, each borehole will be filled from the terminus of the borehole to the ground surface with neat cement grout (using a tremie pipe for borings containing more than six inches of water) in accordance with ACPWA requirements, and the ground surface will be restored to match existing conditions. Reusable downhole drilling and sampling equipment will be decontaminated using a high-pressure, hot water wash or Alconox™ wash and triple rinse prior to collecting each soil sample.

### Handling, Storage, and Disposal of Investigation-Derived Waste

Investigation-derived waste (IDW) generated during the supplemental pre-construction subsurface investigation will be temporarily stored on the site. The IDW will be stored in secured, labeled 55-gallon steel drums until proper offsite management in accordance with applicable State and Federal laws can be arranged. The IDW will be disposed or recycled based on the results of laboratory analyses. Waste disposal is anticipated to be conducted within approximately four weeks following receipt of the IDW sampling laboratory results.

### Reporting and Schedule

A description of the methods and procedures of the above-referenced scope of work will be presented in a report. The report will also provide tabulated data, illustrations showing select contaminant concentrations, laboratory analytical reports, findings of the completed scope of work, and recommendations, as appropriate.

The soil gas and soil sampling results will be submitted electronically to the State Water Resources Control Board Geotracker database and ACEH file transfer protocol (ftp) site within four to six weeks of receipt of final laboratory analytical reports.

**Mr. Mark Detterman**

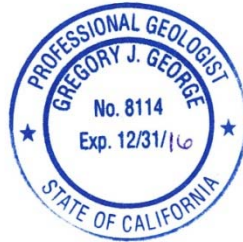
**June 23, 2016**

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Please call Kyle Flory at (415) 899-1600 if you have any questions or comments regarding this document.

Very truly yours,

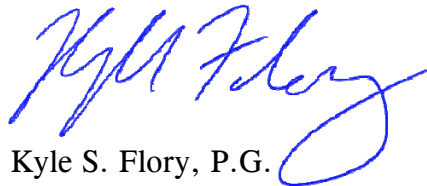
**PES ENVIRONMENTAL, INC.**



Gregory George, P.G., C.E.G.  
Project Geologist



Christopher J. Baldassari, P.G.  
Senior Geologist

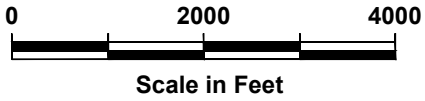


Kyle S. Flory, P.G.  
Principal Geologist

Attachments: Plate 1 – Site Location Map  
Plate 2 – Site Plan and Sample Locations

cc: Rachel Green – Anton Emeryville, LLC

**PLATES**



U.S.G.S. Topo Map - Oakland West, California, 7.5-minute quadrangle. 1997



**Site Location Map**  
 Supplemental Sub-Surface Investigation Work Plan  
 6701, 6705, and 6707 Shellmound Street  
 Emeryville, California

PLATE  
**1**



