

Mark E. Detterman, PG, CEG Senior Hazardous Materials Specialist Environmental Health Department Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

### **RECEIVED**

2:01 pm, Jul 11, 2012

Alameda County
Environmental Health

Dear Mr. Detterman,

This letter presents revisions to the January 13, 2012 Remedial Investigation Workplan (RI Workplan) prepared on behalf of PCC Flow Technologies (PCC) by The Source Group (SGI) for the former PACO Pumps facility located at 9201 San Leandro Street in Oakland, California (the Site, Figure 1).

On May 10, 2012, the Alameda County Environmental Health (ACEH) Department issued a letter to PCC requesting additional tasks and revisions to the RI Workplan. Accordingly, SGI reviewed ACEH's requests, previous data, current site conditions, and prepared this set of revisions to the RI Workplan. Figure 2 illustrates the revised locations of previous and proposed investigation points. Exact locations may vary slightly based on accessibility and feasibility.

#### **Sub Slab Sampling**

In early 2012, the eastern and southern edges of Building 3 were modified by the building operator, and the eastern and southern parts of Building 3 are now no longer covered (See Figure 2). The previous sub-slab sampling in that area has therefore been removed from the sub-slab investigation scope.

The proposed sub-slab investigation includes 4 locations in the southern part of building 3. During the proposed installation of locations SS-1 / SS-2 and HA-1, (near locations E-3 / E-5 noted by ACEH), hand augering to 8-9 feet below grade will also be conducted and 2 to 3 soil samples per location will be collected for analysis for TPHd and TPHMo and VOCs. The hand augered holes will be backfilled with neat cement to the depth equivalent to the other sub slab probes.

Additionally, as requested by ACEH, 3 sub slab soil gas locations will also be installed and tested in Area 5, east of MW-4.

All sub slab probes will be installed in small man-hole protection boxes for future sampling if necessary. The sub-slab sampling will include testing of the soil gas for oxygen and methane to evaluate the presence and effectiveness of a bio-attenuation zone under the buildings.

#### Additional Investigation.

Per ACEH request, additional soil sampling will be conducted at one hand-auger location (HA-1) near existing shallow wells E-9, for soil sampling, with sampling and analysis (for TPHd, TPHMo

and VOCs) at 2 to 3 depths based on field PID readings, discoloration of odors, and encountered groundwater depth.

# Additional Monitoring Wells

In addition to the proposed monitoring well MW-9, one additional well (MW-10) is proposed. Drilling of both wells will include continuous coring from a depth of 5 feet below grade to groundwater (after 5 feet of hand-augering), and at each location a monitoring well will be constructed to intersect the upper surface of ground with a maximum 5 ft. long screen interval. Two to three soil samples will be collected for analysis during the well installation. The monitoring wells will be surveyed, and added to the site-wide groundwater monitoring program and associated Geotracker filing.

## Reporting

The results of the sub-slab soil gas sampling, hand auger soil sampling and groundwater monitoring wells installation will be evaluated following DTSC guidelines for estimation of potential human health risks from vapor intrusion. The sampling, data interpretation and recommendations following the sub-slab soil gas sampling will be reported in a remedial investigation report that will combine the additional tasks described in the following sections.

Following investigation activities, a report will be prepared and will document the methodologies and results from the sub-slab soil vapor survey, hand augering, and additional groundwater well installation. Analytical data will be presented in tabular format and annotated on the appropriate figures. Figures will include a site location map, site map showing the sub-slab soil vapor sampling locations, and a site map showing annotated VOC and TPH concentrations. The potential risk associated with the subslab vapors will be quantified and documented. The report will contain all pertinent documentation such as boring logs, laboratory reports and chain-of-custody forms, Johnson-Ettinger model spreadsheets and recommendations.

Implementation of this Workplan will commence within two weeks of approval from the ACEH.

If you have any questions, please call me at 562/597-1055, ext. 106. Please note the attached TERED GEOLOG

> Paul Parmentier No. 3915

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signed perjury statement.

Sincerely,

Paul Parmentier, PG 3915 The Source Group, Inc.

Attachment: Figures 1 and 2

Mr. Peter Serrurier, Stoel Rives LLP Cc:

Mr. Mark Zeppetello, Barg Coffin Lewis & Trapp, LLP

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Dave Murray

PCC Flow Technologies, Inc.



