September 22, 2009

Paresh C. Khatri
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: **Data Gap Workplan for Updated Site Conceptual Model – Addendum No. 1**
Fuel Leak Cases - AlcoPark Garage
165 13th Street, Oakland, California
PSI Report No. 575-8G008-02

References:
1. Professional Service Industries, Inc., March 10, 2009, "Data Gap Workplan for Updated Site Conceptual Model, Fuel Leak Cases - AlcoPark Garage, 165 13th Street, Oakland, California," Project No 575-8G009.

2. Alameda County Environmental Health (ACEH), July 10, 2008, "Fuel Leak Case No. RO0000401 and GeoTracker Global ID T0600100049, ALCO Park Garage, 165 13th Street, Oakland, CA 94612.

Mr. Khatri:

Professional Service Industries, Inc. (PSI) has prepared this Addendum to the referenced Data Gap Workplan (PSI, 2009) for the three former and current underground storage tank (UST) systems at the AlcoPark Garage, located at 165 13th Street in Oakland, California. This addendum has been prepared in response to your referenced letter (ACEH, 2009) which provides a review of the referenced workplan and requests a response to three technical comments;

1. Vertical extent of soil contamination at Site No. 1
2. Groundwater monitoring frequency
3. GeoTracker compliance

This addendum is intended to address the comments raised in the ACEH letter.

1. Vertical Extent of Soil Contamination at Site No. 1

Task 3 in the referenced workplan deals with the evaluation of contamination at Site No. 1 and recommends 2 borings downgradient of the closed-in-place USTs. The ACEH letter agrees that this addresses lateral delineation of contamination but notes previous (1992) soil analysis showing increasing benzene contamination with depth at SB-1 and requests additional vertical delineation of soil contamination to and below the level of groundwater.

Four soil borings (SB-1 through SB-4) were drilled in 1992 around the USTs at Site No. 1, with three additional borings (SB-5 through SB-7) drilled in 1999 to further assess the site. Boring SB-1 was drilled adjacent to and on the upgradient side of the remote fill fuel pipelines that transported fuel from the fill ports at the Jackson Street sidewalk to the USTs. Soil analysis indicates increasing concentrations of benzene with depth in SB-1. While soil contamination was also encountered in SB-2 and SB-6 (downgradient of the fuel pipelines and USTs, respectively) the concentrations were lower than at SB-1 and did not exhibit increasing concentrations with depth.

The locations available for drilling are limited by the two closed USTs that are still present at the site and by large mature trees present in this area. In consideration of the access limitations to the drill rig, and with the intent of providing data in the area where the ACEH has requested vertical delineation of soil contamination, we propose advancing a boring at the approximate location of previous boring SB-1 (shown on the attached Figure 2).

Review of the historic data for this site indicates significantly decreasing levels of groundwater contamination with distance away from SB-1 to below levels of detection at SB-8, downgradient of Site No. 1. Based on this data, the lateral extent of groundwater contamination in the downgradient direction appears to have already been addressed. In response to your request for lateral delineation of contamination at this site, we propose advancing a single boring downgradient of Site No. 1, along the fuel dispenser pipeline, about halfway between SB-1 and SB-8 (shown on the attached Figure 2).

Our proposed revision to Task 3 of the workplan is presented below in ***bold italics.***

Revised Task 3 *– Evaluate Extent of Contamination at Site No. 1 (Closed-in-Place Tanks)*

- Choose locations for 2 Geoprobe sampling points (See Figure 2) to obtain additional soil and groundwater data ***both in and*** downgradient of Site No. 1. ***To avoid spreading contamination downward with drilling, a dual-tube sampling system will be used.***
- ***For the source area location (near SB-1), collect soil samples (minimum of 5-foot intervals) and a sample of first encountered groundwater. The boring will be advanced to at least 5 feet beyond first encountered groundwater, until field-screening of soil samples for VOCs using a Photo-Ionization Detector indicates no VOCs detected. In order to avoid spreading contamination between discrete water bearing zones, drilling will not advance beyond a 5-foot thick layer of silt or clay that is below groundwater. Chemical analysis of groundwater and select soil samples (selected based on field-screening) will be performed for TPH-G and VOCs.***
- ***For the downgradient location***, collect soil (at groundwater interface) and groundwater samples and perform chemical analysis for TPH-G and VOCs.

- Evaluate residual contamination in soil / groundwater at Site No. 1 (review historic lab results).

2. Groundwater Monitoring Frequency

Task 6 in the referenced workplan addresses the groundwater monitoring frequency at the site and recommends a change from annual to quarterly monitoring frequency for a year, with re-evaluation of the monitoring frequency at that time. The ACEH letter states that justification for the change to quarterly was not presented in the workplan and suggests that a semi-annual sampling frequency appears to be more appropriate.

In our meeting at your office on November 5, 2008, you suggested increasing the frequency to quarterly for the groundwater monitoring program at the subject site and it was agreed to incorporate this into our workplan. Since that time, State Resolution No. 2009-042 was passed, requiring that quarterly groundwater monitoring programs reduce sampling to semi-annual (or less) frequency unless site specific needs warrant otherwise. In recognition of the significant amount (nearly 20 years) of historic groundwater analytical data for the site, the recent State Resolution, and the recent change in suggestion from you, PSI proposes that semi-annual frequency for the groundwater monitoring program at the subject site is appropriate. Our proposed revision to Task 6 of the workplan is presented below in ***bold italics.***

3. GeoTracker Compliance

Task 6 in the referenced workplan also addresses the issue of GeoTracker compliance and states that new survey data with figures will be uploaded to the State GeoTracker system. The ACEH letter notes the absence of the referenced workplan and of some electronic lab data files (EDF) from GeoTracker and states that the site is in non-compliance with the State Water Resources Control Board (SWRCB) requirements. The letter requested the upload of missing files by August 25, 2009.

Upload of the files noted as missing in the ACEH letter were performed on or before August 21, 2008. At this point, all monitoring reports from the year 2000 to present and their associated EDF and groundwater elevation files have been uploaded. In addition to the files noted, the boring log files for all 5 monitoring points have also been uploaded. The only thing not uploaded to GeoTracker is the survey data for the monitoring points, because a GeoTracker-level survey has not been done yet (a survey is proposed in Task 6 of the workplan). As such, the site appears to be in full compliance with the GeoTracker upload requirements. Notification of compliance with SWRCB GeoTracker requirements was sent to you via e-mail on August 21, 2009. PSI is familiar with the GeoTracker requirements and has proposed a revision to Task 6 of the workplan in recognition of these requirements, presented below in ***bold italics.***

Revised Task 6 *- Revise the Groundwater Monitoring Program*

- Change the groundwater monitoring frequency from annual to ***semi-annual with the frequency to be re-evaluated at the end of the year***.
- Survey site and all monitoring points in accordance with State GeoTracker requirements. Prepare and upload new figures and survey data to the State GeoTracker system. ***Continue to upload all documents and laboratory electronic data files to GeoTracker in a timely manner.***
- Update groundwater monitoring methodology to include well purging and purge data sheets from the sampled wells and water level data from all wells.
- Provide updated historic groundwater data tables for all monitoring points.
- Produce improved charts of contaminants vs. time.

The revised Task numbers 3 and 6 presented above, in conjunction with the revised Figure 2 (attached) are intended to address the technical comments noted in the ACEH review letter and will replace those in the referenced workplan.

Based on my conversation with you this afternoon, we understand that the ACEH is no longer handling the oversight of the fuel leak cases at the subject site, which are in the process of being transferred to the Regional Water Quality Control Board. Please inform us when the transfer occurs and transmit the contact information of the case worker in charge of the oversight so that we may contact them to discuss the revisions to, and implementation of the proposed workplan.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

REGISTERED GEOLOGIST
BRAND W. BURFIELD
NO. 6986
STATE OF CALIFORNIA

Brand Burfield, P.G. 6986
Project Geologist

Frank R. Poss
Department Manager

cc: Rod Freitag – County of Alameda General Services Agency

Attachments: Figure 2

N

JACKSON STREET

13th STREET

MADISON STREET

12th STREET

SIDEWALK

10,000 GALLON USTs

B-1

MW-1

MW-3

MW-4

MW-5

MW-6

MW-7

PRODUCT PIPING

PUMP ISLAND

SITE NO. 2

REMOTE FILL FUEL PIPELINES (CLOSED)

PLANTER

SB-7

SITE NO. 1

SB-2

SB-1

SB-1A

SB-6

SB-3

SB-5

SB-4

10,000 GAL. USTs (CLOSED IN PLACE)

FUEL DISPENSER PIPING

ALCOPARK PARKING STRUCTURE

FORMER FUEL DISPENSERS

SB-8

OFFICE

SITE NO. 3

MW-6 (OIL TANK)

FORMER 550 GAL. WASTE OIL UST (PIT)

HISTORIC GROUNDWATER FLOW DIRECTION ROSE DIAGRAM

0 40 80ft

APPROXIMATE SCALE

LEGEND:

- PROPOSED BORING LOCATION (5)
- MW-7 – MONITORING WELL LOCATION
- MW-3 – VADOSE MONITORING WELL LOCATION
- SB-8 – SOIL BORING

NOTE: – SITE PLAN IS A COMPOSITE FROM SEVERAL DIFFERENT SOURCES AND IS APPROXIMATE IN NATURE – IT IS NOT A SURVEY.

psi Information To Build On
Engineering • Consulting • Testing

4703 Tidewater Avenue, Suite B
Oakland, California 94601
(510) 434-9200

Project Name: ALCOPARK PARKING FACILITY 165 13th STREET, OAKLAND, CALIFORNIA	Drawn By: B.B.	Date: 9/09	File No.: 8G009-03
Title: DATA GAP WORKPLAN; PROPOSED BORING LOCATIONS	Approved By: F.P.	Project No.: 575-8G009	Figure No.: 2