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April 27, 2006

RECEIVED By lopprojectop at 8:36 am, Apr 28, 2006

Mr. Jerry Wickham Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

RE: Addendum to Work Plan for Additional Site Characterization and Report of Well Survey SLIC Case RO0002567, Chung Property, 2942 San Pablo Avenue Oakland, CA

Dear Mr. Wickham:

PIERS Environmental Services, Inc (PIERS) previously submitted our "Work Plan for Additional Site Characterization and Report for Well Survey" dated March 27, 2006, to the Alameda County Environmental Health (ACEH) Department for approval. We received your letter of your Technical Comments, dated April 7, 2006, addressed to our Client, Mr. James Chung. This addendum to PIERS' previously submitted Work Plan and Well Survey was prepared and submitted in response to your letter dated April 7, 2006.

Your technical comments required us to submit the following items in this addendum:

- 1) Map of proposed soil vapor sampling locations in the area of boring B10B
- 2) Description of soil vapor sampling methods
- 3) Map of proposed soil sampling locations for metals and cyanide.

The two maps are presented as the attached Figure 2 – Proposed Wells and Borings and Contamination Concentrations (7-04) and Figure 4 – Proposed Surficial Sample Points – Metals. The description of soil vapor sampling methods is presented in PIERS Response to Comment No. 2 below.

ACEH TECHNICAL COMMENT NO. 1:

Source Area Remediation and Soil Vapor Sampling. The Work Plan suggests that further delineation using soil vapor sampling is not warranted in the source area since excavation of the source area is proposed, and that soil vapor sampling to assess the risk of vapor intrusion should be completed during and after the excavation work. Based on the assumption that excavation will be conducted in the source area, we concur that soil vapor sampling to assess risk is not required until excavation is completed.

PIERS Response to Comment No. 1:

PIERS acknowledges that soil vapor sampling to assess risk is not required until excavation is completed.

ACEH TECHNICAL COMMENT NO. 2:

Potential Source Area near Boring B10B. The Work Plan proposes two soil borings located approximately 25 and 50 feet, respectively from previous boring B10B and one groundwater monitoring well adjacent to boring B10B to further delineate groundwater conditions and determine whether boring B10B represents a separate source. The proposed scope of work is not sufficient to assess whether a separate source exists in this area of the site. The Work Plan seems to argue that the soil results in boring B10B did not indicate a contaminant source in soil but also argues that the detection of 2,400 ppb of trichloroethene (TCE) in groundwater is not representative of groundwater flow conditions. These arguments seem to indicate that the TCE detected in boring B10B got there with no local source or a groundwater migration pathway. We request that you submit plans to collect soil vapor samples in the area of boring B10B to evaluate whether a local source of VOCs exists in this area.

PIERS Response to Comment No. 2:

With regards to your Technical Comment No. 2, four soil vapor borings are proposed in the vicinity of previous boring B10B. The locations of the borings are shown on the attached Figure 2.

The soil vapor samples will be collected using a Geoprobe direct push rig. An expendable drive point will be advanced ahead of the drilling rods at each location to an approximate depth of five feet below grade. A Teflon tubing sampling line will be installed into the drilling rods. The tubing will be fitted with a threaded fitting that will attach to a "point holder" with an O-ring to create a seal. The sampling line will be capped with a vapor-tight valve. The drilling rods will then be raised six inches to create a void. Sampling will take place after a 30-minute interval to allow conditions to equilibrate.

The soil vapor samples will be collected using Summa canisters and a manifold system that allows purging to a separate canister. After checking for air leaks, the tubing will be purged of approximately three casing volumes of air and then a vapor sample will be collected using a vacuum pump.

Hydrated bentonite will be used around the drill rods prior to sampling to halt air migration. The purging and the vapor sample collection will be performed at a purge rate of between 100 and 200 milliliters per minute, using a regulator.

The samples will be analyzed for trichloroethylene (TCE).

The two previously proposed borings to be located approximately 25 and 50 feet from B10B would not be installed until data from the soil vapor sampling, and sampling of the existing and newly installed wells, can be reviewed and evaluated.

ACEH TECHNICAL COMMENT NO. 3:

Hydraulic Gradient and Monitoring Well Installation. ACEH has no objection to the proposed installation of two additional monitoring wells at the proposed locations. Please present the results in the Corrective Action Plan requested below.

PIERS Response to Comment No. 3:

PIERS will present the sampling results of the additional monitoring wells in the Corrective Action Plan.

ACEH TECHNICAL COMMENT NO. 4:

Well Survey Results. ACEH concurs with the proposal to review the file for a site at 958 East 28th Street and obtain additional information if available, regarding abandoned wells. Please present the results in the Corrective Action Plan requested below.

PIERS Response to Comment No. 4:

PIERS will present the results of the file review for 958 East 28th Street in the Corrective Action Plan.

ACEH TECHNICAL COMMENT NO. 5:

Metals and Cyanide. The proposal to collect composite soil samples to characterize the extent of metals and cyanide at the site may be acceptable. However, in order to valuate whether the proposed soil sampling will adequately characterize the extent of metals and cyanide, we request that you submit a map showing the planned soil sampling locations, the areas covered by concrete, and any features within the concrete that could be conduits to the soil. Please submit the map in the Work Plan Addendum or revised Work Plan requested below.

PIERS Response to Comment No. 5:

In response to your Technical Comment No. 5, a map showing the location of the concrete at the former plating works, and the proposed twelve surficial sampling points, is included as the attached Figure 4. No specific targets that would represent conduits to the subsurface were identified during a recent reconnaissance to map the areas of concrete, soil, and degraded asphalt.

ACEH TECHNICAL COMMENT NO. 6:

Groundwater Monitoring. We concur with the proposed groundwater analyses for VOCs by EPA Method 8260 and analyses for metals, hexavalent chromium, and cyanide. However, we do no (sic) concur with discontinuation of sampling for total petroleum hydrocarbons as gasoline (TPHg). TPHg has been detected in all wells and has been detected at increasing concentrations in well MW-2. The most recent groundwater sample collected from well MW-2 on May 12, 2005 contained 7,610 ug/L of TPHg. We concur that analysis for BTEX using EPA Method 8020 is not required since these samples will be analyzed for VOCs including BTEX using EPA Method 8260. Please present the results in the Groundwater Monitoring Reports request below.

PIERS Response to Comment No. 6:

In response to your Technical Comment No. 6, Total Petroleum Hydrocarbons (TPH) as gasoline analyses will be included in water analyses. However, it should be noted that in the past the laboratory has stated that the reported TPH concentration appears to be due to a single peak of TCE.

If you have any questions regarding this work plan addendum, please do not hesitate to contact our office.

PERJURY STATEMENT

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true ad correct to the best of my knowledge.

Sincerely, PIERS Environmental Services, Inc.



Joel G. Greger Senior Project Manager CEG # EG1633, REA # 07079

Kay Pannell Chief Operations Officer REP #5800, REA-II #20236

Attachments

cc: Mr. James Chung, owner

FIGURES



