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December 19, 2008
File: 73943

Ms. Barbara Jacub, P.G.
Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Parkway, Suite 250
Alameda, California 94502-6577

Subject: Response to comments on the review of the *Post Remediation Evaluation Work Plan – Former Ambassador Laundry*, Emeryville, California (Fuel Leak Case No. RO0002973)

Dear Ms. Jacub:

Thank you for reviewing and commenting on the *Post Remediation Evaluation Work Plan – Former Ambassador Laundry*, Emeryville, California (Fuel Leak Case No. RO0002973), submitted to your attention on September 12, 2008.

Kleinfelder reviewed and addressed each of the comments in the Alameda County Health Care Services (ACHCS) letter dated December 5, 2008. As requested, attached with this letter is a table that summarizes and responds to each of ACHCS' comments.

If you have any questions or additional comments, please do not hesitate to contact Álvaro Domínguez at (510) 628-9000.

Sincerely,

KLEINFELDER WEST, INC.

Alvaro Domínguez
Environmental Project Professional

Charles Almestad, P.G., C.HG.
Environmental Group Manager

Response to Comments	
Comment 1: Well Installation It appears that you are proposing to install the source area wells in the same borings that you propose to advance to a maximum depth of 35 feet below ground surface (bgs) in your attempt to encounter another water bearing zone. It is unclear whether you propose to grout the Geoprobes borings then move to a spot immediately adjacent to the borings or if you plan on installing the well above a grouted interval. Please ensure that you comply with all Alameda Public Works Agency standards when installing the wells in these boreholes to ensure that your wells are not constructed over multiple water bearing zones. In addition, no research was provided to determine the underlying geology at the site to determine if deeper aquifers or aquitards exist in the area. Your proposal to install the well screens from 20 to 30 feet bgs is not supported with data to show that you will not penetrate or screen through an aquitard. ACEH requests that you perform the borings in advance of the well installation so you may use the data that is collected to determine appropriate screen lengths and intervals. This was discussed in a phone conversation with Kleinfelder on September 5, 2008 where CPT borings were considered.	Kleinfelder will comply with the Alameda Public Works Agency standards when advancing the boreholes and installing the monitoring wells to ensure that these are not constructed over multiple water bearing zones (WBZ). A CPT exploration will be performed before the wells are installed. The information from the CPT exploration will serve to assess the depth to water and thickness of the first WBZ. This information will be used to determine the appropriate screen length of the six wells screened in the first WBZ. In the area of concern the CPT probes will be advanced into the low permeability layer for approximately 10 feet. If a second WBZ is encountered, its thickness will be assessed.

Response to Comments (*Continued*)	
Comment 2: Regional Geologic and Hydrogeologic Setting ACEH requested that Site specific detail such as the depth of groundwater encountered in your borings and the depth of static groundwater be presented on a cross-section. The cross-section that was provided does not include depth specific details nor does it include soils encountered; rather it's a generalized cross section that does not provide information on any specific soil types that may be present at the Site. Please provide an updated cross-section in the addendum requested below.	Adequate information on the depth to water is not currently available. The proposed CPT investigation will provide adequate information on the Site's static groundwater depth, and will be used to create cross section diagrams describing the site's stratigraphy and iso-contour maps describing the hydraulic gradient of groundwater in the WBZ. This information will be included in the report summarizing field activities and analytical results of the proposed investigation.
Comment 3: Vertical Delineation of Groundwater Contaminant Plume Kleinfelder proposes borings to a deeper water bearing zone at a depth of 35 feet bgs. If groundwater is not encountered at this depth, additional mobilizations may be necessary to investigate the vertical extent of the contaminant plume at the site. As suggested above, CPT borings could be used to continuously log the boring and collect a discrete grab groundwater sample in a lower groundwater bearing zone. CPT can also be advanced beneath the reach of typical Geoprobe borings, thus ensuring that a groundwater sample could be obtained to determine the vertical extent of groundwater contamination. Please provide a revised scope of work that addresses these concerns in the addendum requested below.	To assess depth to water and thickness of the 1st water bearing zone (WBZ) Kleinfelder will perform a CPT exploration at the Site. Two probes will be advanced within the area of concern and the thickness of the low permeability layer below the first WBZ will be assessed. If the constraining layer is less than 10 feet, the thickness of the 2nd WBZ will be assessed. These two probes are not expected to reach depths greater than 50 feet. The information obtained from the CPT exploration will be used to create boring logs describing the soil stratigraphy, and for designing the six monitoring wells screened in the 1st WBZ. If a 2nd WBZ is encountered in the area of concern, a grab groundwater sample will be collected and sent for chemical analysis to assess the presence of chemicals of concern (COC). Kleinfelder will request the laboratory to perform the analysis within a 24-hour turn around time. As described in the Post Remediation Evaluation Work Plan, up to three additional wells screened in the 2nd WBZ will be installed in the area of concern if COC are reported in the 2nd WBZ. The screen lengths will be determined based on the CPT exploration.

Response to Comments (*Continued*)	
Comment 4: Environmental Screening Levels for Stoddard Solvent In your work plan you state that there in no ESL for Stoddard solvent. Page 2-7 of the ESLs (revised version May 2008) states that Stoddard Solvent is a middle distillate. Please use these ESLs for your comparison in future reports.	As indicated in Section 2.3.5, page 6 of the Work Plan. "An ESL for Total petroleum hydrocarbons as Stoddard Solvent (TPH-ss) has not been established; however, because the carbon chain of TPH-ss is similar to TPH-d (a middle distillate), the ESL for TPH-d has been used for comparison (5 mg/L). Thus, the documented TPH-ss concentration is below the surrogate ESL."
Comment 5: Soil Samples When collecting soil samples, ACEH recommends that they be collected not only where PID detections occur but also in areas with observed odor, staining or elevated PID readings, at changes in lithology and at soil/groundwater interface or at a minimum of every five feet.	To assess the presence of petroleum hydrocarbons in the subsurface, the CPT probe will be equipped with a Ultra-Violet Optical Screening Tool (UVOST), or a Membrane Interface Probe (MIP). The CPT boreholes will be grouted and a boring will be advanced to collect soil samples. Soil samples for chemical analysis will be collected to confirm the presence and approximate distribution of petroleum hydrocarbon in the subsurface, as indicated by the UVOST or MIP readings in the area of concern, and the capillary fringe