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April 23, 2008

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

RECEIVED

2:39 pm, Apr 28, 2008

Alameda County
Environmental Health

Subject: Response to Comments - Confirmation Investigation Work Plan
796 66th Avenue, Oakland, California
AEI Project No. 110566
Fuel Leak Case RO0002449

Dear Mr. Wickham:

Thank you for your recent review of the March 27, 2007 workplan for the above referenced property. Below are responses to comments and the additional information requested in the February 15, 2008 letter from your office. The numbered responses below correspond to the numbered comments in the letter.

Requested Information

The following documents are attached with this submittal, the majority of which are on file with the City of Oakland. Based on prior requests for public records, neither the RWQCB nor the ACHCSA maintained records for this property, although several of the documents were submitted to one or both agencies. In chronological order:

- Aqua Terra Technologies (ATT), 1988. *Plan of Correction, Petroleum Hydrocarbon Contaminated Soil, McGuire and Hester Facility*, December 6, 1988.
- Aqua Terra Technologies, 1989. *Groundwater Investigation Report*, January 9, 1989
- Kaldveer Associates, 1989. *Soil Sampling and Testing*, October 17, 1989 letter to CSB Construction
- McGuire & Hester Contractors 1989, letter to Alameda County Health Care Services Agency, October 27, 1989.
- Aqua Terra Technologies, 1990. *Request to Irrigate with Recovered Groundwater*, January 5, 1990.
- *Certificate of Compliance for Underground Storage Tank Installation, Form C* dated March 2, 1993.

The 1988 ATT *Plan of Correction* document contains the following documents as Appendices (listed here in chronological order):

- Applied Geosystems, 1987. *Environmental Investigation Related to Underground Tank Removal*, February 13, 1987.
- Applied Geosystems, 1987. *Subsurface Investigation Report*, March 24, 1987.
- Purcell, Rhoades, and Associates. 1988. *Preliminary Investigation (Diesel Pad)*, August 16, 1988.
- Purcell, Rhoades, and Associates. 1988. *Supplemental Investigation (Diesel Pad)*, August 16, 1988.
- Subsurface Consultants, 1988. Report, November 10, 1988

AEI was unable to locate any document from CSB Construction, Inc, however the October 1988 Kaldveer and McGuire & Hester letters appear to relate to the CSB memo.

Responses to Technical Comments

1. The McGuire-Hester (MH) gasoline UST area consisted of two tanks, a 1,000-gallon UST and a 5,000-gallon UST. These two USTs, as well as the MH diesel UST, were removed in January of 1987 under the supervision of the Applied Geosystems (AG). Based on confirmation sample analytical data following the removal of the gasoline and diesel USTs, AG's recommendation was to not over-excavate soil from the MH gasoline UST area but to install groundwater wells to investigate impact to groundwater. Later investigation was performed in this area (See ATT *Plan of Correction* and its attached documents) which did not discuss remedial excavation or significant impact in this area. Based on this, over-excavation does not appear to have been warranted or performed in this former MH gasoline UST hold area. The recommendation for well installation was in the AG *Environmental Investigation Related to Underground Tank Removal*, dated February 13, 1987.

The MH diesel UST area consisted of one tank, an 8,000-gallon diesel UST. This UST was removed in January of 1987, along with the MH gasoline USTs. As with the MH gasoline USTs, based on confirmation sample analytical data following the removal of the USTs, AG's recommendation was to not over-excavate soil from the MH diesel UST area but to install a well adjacent to the former diesel UST. However, elevated concentrations of hydrocarbons were discovered in a soil during well install activities in February of 1987 and over-excavation of the former diesel tank hold was recommended by Purcell, Rhoades, and Associates (PRA). In July of 1988, excavation of the former diesel tank hold area was initiated. Soil was removed from the tank pit to a depth of 15 feet bgs. Based on elevated confirmation samples, the excavation was continued on August 1, 1988. Over-excavation was subsequently considered complete, as little or no diesel was detected in the confirmation samples. This information is based on the following documents: AG's *Environmental Investigation Related to Underground Tank Removal* report, dated February 13, 1987, AG's *Subsurface Environmental Investigation, Soil Boring and Monitoring Well Installation*, dated March 24, 1987, and PRA's *Supplemental Investigation of Diesel Fuel Pad*, dated August 16, 1988.

Groundwater monitoring performed in December 12, 1988 indicated that diesel in groundwater had significantly decreased. Refer to Table 4 of the January 9, 1989

Groundwater Investigation Report for further information on the groundwater monitoring. This was the last known investigation conducted associated with the former MH diesel USTs until the 2001 AEI investigation.

In July 2001, AEI was retained to investigate these two former UST areas and resolve these questions as to whether significant impact remained. Following review of the above referenced documents, three borings were drilled in the MH gasoline UST area (SB-1 to SB-3) and three in the MH diesel UST area (SB-4 to SB-6). No significant soil or groundwater impact was discovered in either of these areas, except the MTBE impact which was traced to the 10,000 gallon gasoline UST removed in 2001. Refer to Section 2.1 and Tables 5 and 6 of the September 26, 2006 *Site Summary Report* for details of this investigation.

It is hoped that the additional information in the attachments will assist ACHCSA understand the history of the site. However, the exact history of these areas or prior investigation details may never be known. The more recent 2001 investigation should clarify any concern relating to possible significant contamination in these areas. Based on the 2001 data, no further investigation or remediation of these two areas is warranted.

2. Based on the *Certificate of Compliance for Underground Storage Tank Installation, Form C*, dated March 2, 1993, the 500-gallon waste oil tank (which currently exists onsite) was installed in November of 1989.

It is noted that the PRA *Phase I Environmental Site Assessment, Cruise America Property*, dated April 4, 2001 states that it is unclear whether the waste oil tank was removed and if over-excavation was performed. Based on AEI's review of the available documents, there was not a waste oil UST prior to the installation of the currently existing waste oil UST that was installed in November 1989. References to a "waste oil" UST excavation in documents prior to the PRA Phase I are believed to refer to conditions encountered during the installation of the current waste oil UST rather than removal of a prior generation of waste oil UST. The Kalveer and McGuire & Hester memos (both October 1989) suggest that possible oil impact was discovered at the time the existing waste-oil UST was installed. However, details are limited on the nature or size of what was discovered.

ACHCSA requested "investigation as necessary to characterize the extent of contamination". Boring SB-21 will be moved to the west toward the area of the existing waste oil UST to investigate possible impact in that area but will remain along the storm drain line (as was its original intent). The analyses of samples from SB-21 will include those discussed in Comment 5 below.


3. As suggested by ACHCSA, boring SB-22 originally proposed near the sanitary sewer trench will be eliminated. This boring will be relocated adjacent to the former release area to investigate groundwater conditions at a depth of approximately 30 feet (See relocated boring SB-22 on the attached Figure). This boring will be cored to a the

target depth of approximately 30 feet to identify potential deeper water bearing sediments. When identified, a groundwater sample will be collected from a separate (twin) borehole using a discrete hydropunch sampling system drilling adjacent to SB-22. Soil and groundwater sampling, analyses, borehole logging, and grouting will be performed in accordance with the prior workplan documents and standard practices for these activities.

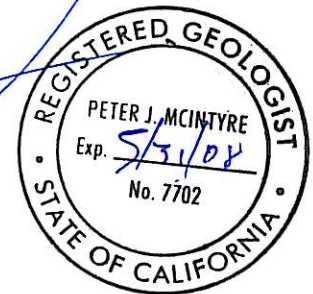
4. The groundwater sampling was conducted already; results will be reported with the findings of these additional borings.
5. Total lead (TTLC extraction) analyses (EPA method 6010) will be performed on soil samples from the three borings SB-18 to SB-20 around the former UST hold and treatment area. The analysis of the soil and groundwater sample from boring SB-21 will include TPH-diesel (EPA method 8015), PCBs (EPA method 8082), chlorinated hydrocarbons (EPA method 8260) and LUFT 5 metals (Cd, Cr, Pb, Ni, Zn) (EPA method 6010C).

We look forward to your review and concurrence with these technical comment responses and appreciate your time on this matter. I can be reached at 408/559-7600, extension 132 or at aangel@aeiconsultants.com, if you have questions or need any additional information.

Sincerely,
AEI Consultants


Adrian M. Angel
Project Geologist


Peter McIntyre, PG, REA
Senior Project Manager



Attachments:

Figure 2 Revised
Historical Documents (12)

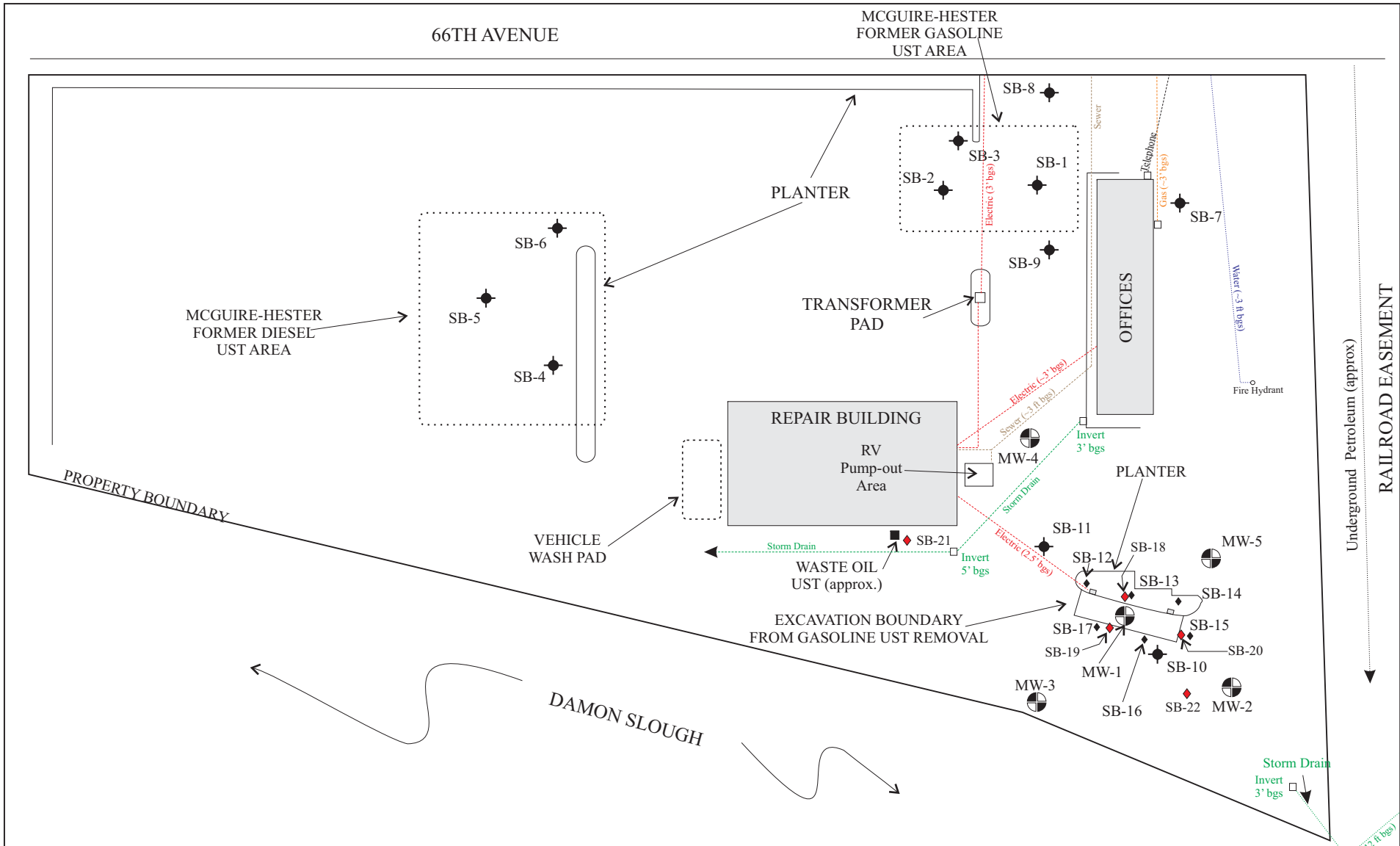
Additional Prior Documents (not attached):

ACHSA, Letter, February 15, 2008
ACHSA, Letter, January 28, 2007
AEI Consultants, *Confirmation Investigation Workplan*, March 27, 2007
AEI Consultants, *Site Summary Report*, September 26, 2006
Purcell, Rhoades, and Associates, *Phase I Environmental Site Assessment*, April 4, 2001

Distribution:

Mr. Jerry Wickham, ACHCSA (submitted via email and to ACHCSA FTP site)
Mr. Cory Kaufmann, Cruise America, 11 West Hampton Ave., Mesa, AZ 85210

Revised Figure 2

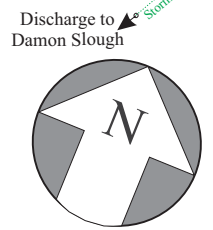
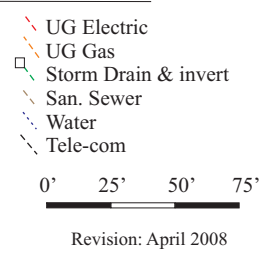


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Utility Locations & Proposed Borings

796 66th AVENUE OAKLAND, CALIFORNIA	FIGURE 2 AEI PROJECT NO 110566
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- LEGEND**
- SB-X ◆ LOCATION OF BORINGS ADVANCED 7-9/2001
 - MW-1 ◉ LOCATION OF MONITORING WELLS INSTALLED 9/2002
 - SB-X ◆ LOCATION OF BORINGS ADVANCED 9/2002
 - ◆ Proposed Boring (see text for discussion)



Discharge to Damon Slough