

ENVIRONMENTAL & ENGINEERING SERVICES

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February 4, 2009

RECEIVED

2:32 pm, Feb 05, 2009

Alameda County Environmental Health

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

Subject: Soil Excavation Workplan 796 66th Avenue Oakland, California AEI Project # 278361 ACHCSA Fuel Leak No. RO0002449

Dear Mr. Wickham:

The following work plan has been prepared on behalf of Cruise America, Inc. for the property located at 796 66th Avenue, City of Oakland, Alameda County, California. AEI Consultants (AEI) has been retained to provide environmental engineering and consulting services associated with the release of gasoline from a former underground storage tank (UST) on the property. The release is been investigated under the regulatory oversight of Alameda County Environmental Health (ACEH) under Fuel leak Case # RO0002449.

This plan has been prepared to address the technical comments presented in a letter dated November 20, 2008 from ACEH which was in response to the *Confirmation Sampling Report*, prepared by AEI dated September 25, 2008. This letter requested a scope of work for excavation and disposal of hydrocarbon impacted soil in the area of soil boring SB-18. For reference, a copy of the September 25, 2008, letter is provided as Attachment A.

Analysis of soil samples from boring SB-18 reported total petroleum hydrocarbons as gasoline (TPH-g) in the sample from a depth of 3 feet below the ground surface (bgs) at a concentration of 1,500 milligrams per kilogram (mg/kg). Analysis of the soil sample from a depth of 5 feet bgs reported TPH-g at a concentration of 21 mg/kg.

PROPOSED SCOPE OF WORK

Excavation and Sampling

The purpose of the excavation is to remove hydrocarbon impacted soil in the immediate vicinity of soil borings SB-13 and SB-18 and sample excavation bottom and sidewalls to confirm that the hydrocarbon impacted soil has been removed. The excavation is expected to cover an area approximately 15 feet by 15 feet to a depth of approximately 5 feet bgs. Excavated soil will be stockpiled and covered on a asphalt paved area of the site. At least 2 working days prior to

initiation of excavation activities, AEI will mark the excavation area with white paint and notify USA North.

One soil sample will be collected from the bottom of the excavation and four sidewall samples at a depth of approximately 3 feet bgs. The samples will be field screened to determine if the impacted soil has been removed. When field screening in the judgment of the onsite AEI Professional Geologist indicates sufficient soil has been removed, confirmation samples will be collected from the excavation base and side walls. Confirmation soil samples will be sent the McCampbell Analytical in Pittsburg, California for analysis. The soil samples will be analyzed for TPH-g methyl tertiary butyl ether, benzene, toluene, ethylbenzene, and xylenes (MBTEX) by EPA Methods 8015/8021B.

During excavation any groundwater seeping into the excavation will be pumped into a Baker Tank for storage, pending analysis and appropriate disposal. The excavation is expected to extend to a depth approximately 1 to 1.5 feet below where standing water was observed in boring SB-18. The excavation will be dewatered until the water in the excavation appears clean, then a grab groundwater sample will be collected and analyzed for TPH-g and MBTEX.

If the bottom sample and all four sidewall samples report TPH-g below 83 mg/kg and the water in the excavation is clean, the excavation will be dewatered, backfilled and restored to match the surrounding area.

If any bottom or sidewall samples exceed 83 mg/kg, the excavation will be expanded to remove the impacted soil and re-sampled as described above. If the excavation is expanded beyond 20 feet by 20 feet, additional samples will be collected so that one sidewall sample will be collected for every 20 linear feet or additional part thereof and one bottom sample for every 400 square feet or additional part thereof.

Soil and Water Characterization and Disposal

A composite soil sample will be collected from the stockpiled soil and analyzed for TPH-g, MBTEX and Total Lead to characterize the soil for appropriate disposal. Following characterization, the stockpiled soil will be transported with a manifest/bill of lading to an appropriate disposal facility.

A groundwater sample will be collected from the water pumped from the excavation and stored onsite in a Baker Tank. The water will be analyzed for TPH-g, MBTEX and additional analytes as required for characterization by the selected disposal facility.

Soil and Water Characterization and Disposal

Once the AEI professional Geologist had judged that sufficient soil has been removed, the excavation will be backfilled and the site restored to match the surrounding areas. If groundwater

inflow is sufficient to make complete dewatering of the excavation impractical, the excavation may be backfilled with permeable fill to the level of groundwater.

Site Safety

A site specific health and safety plan will be prepared for field activities conducted at the site. Prior to commencement of field activities, a site safety meeting will be held at a designated command post near the working area. The health and safety plan will be reviewed by all personnel and emergency procedures will be outlined at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest. All site personnel will be in Level D personal protection equipment, which is the anticipated maximum amount of protection needed. A working area will be established with barricades and warning tape to delineate the zone where hard hats and steel-toed shoes must be worn, and where unauthorized personnel will not be allowed. A site safety plan conforming to Part 1910.120 (i) (2) of 29 CFR will be on site at all times during the project.

Reporting

Following completion of the project and the receipt of all manifests and analytical results, a summary report will be prepared. The report will include a summary of onsite activities analytical results, disposal manifests, and a site map showing extent of excavation and locations of soil and groundwater samples.

ESTIMATED SCHEDULE

The excavation will proceed immediately upon verbal approval of this work plan.

We look forward to comment and concurrence with the scope of work outlined herein. Should you have any questions or need additional information, please contact us at 925/746-6000

Sincerely, **AEI Consultants**

Robert F. Flory, PG Senior Geologist

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Distribution:

Alameda County Environmental Health Services (ACEHS) (FTP electronic upload) Attn: Mr. Jerry Wickham 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

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