



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 29, 2008

Ms. Steffi Zimmerman
Ronald S. Zimmerman Estate
6330 Swainland Road
Oakland, CA 94611

Subject: Fuel Leak Case No. RO0002936 (Global ID #T0600183099), Zimmerman Property, 3442 Adeline Street, Oakland, CA 94608

Dear Ms. Zimmerman:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file and the report entitled, "Soil and Groundwater Investigation and Work Plan," received July 9, 2008 and prepared by AEI Consultants (AEI). The recent investigation completed in July 2008 detected elevated levels of TPHg and benzene in soil at concentrations up to 310 mg/kg and 1.3 mg/kg, respectively. In addition, elevated levels of dissolved phase TPHg and benzene were detected in "grab" groundwater samples at concentrations of up to 46,000 µg/L and 9,000 µg/L, respectively. MtBE was not detected above laboratory reporting limits in either soil or groundwater.

The scope of work in the Work Plan proposes the removal of residual contamination in the source area by excavation, combined with the installation of seven groundwater monitoring wells to evaluate the flow direction, hydraulic gradient and monitor the dissolved phase hydrocarbon plume.

We request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Soil Contamination Characterization.** Results from the subsurface investigation completed in May 2008 detected elevated levels of petroleum hydrocarbon contamination in soil boring SB-23 at concentrations of up to 310 mg/kg TPHg and 1.3 mg/kg benzene. The lack of soil data below 12 feet bgs in soil boring SB-23 indicates that the vertical extent of contamination is undefined beneath your site. In order to evaluate the vertical extent of contamination in soil we request that the proposed monitoring wells be completed and sampled to a depth of at least 25 feet bgs. Furthermore, the presence of sorbed phase contamination in soil boring SB-23 is unlikely to be from the source area, which is over 100 feet away. Please present a plausible explanation as to the possible source soil contamination in boring SB-23 and present your conclusions in the soil and groundwater report requested below.

During monitoring well installation, soil samples should be screened with a PID and examined for visible staining and hydrocarbon odor. Any interval where staining, odor, or elevated PID readings occur a soil sample is to be collected and submitted for laboratory analysis. If no staining, odor, or elevated PID readings are observed, soil samples are to be collected from each boring at the capillary fringe, where groundwater is first encountered, changes in lithology, and at five foot intervals to the total depth of the boring of at least 25 feet

bgs. Soil samples collected during the well installation are to be submitted for the following laboratory analysis; TPHg and TPHd by EPA Method 8015M and EPA method 8260B for BTEX, EDB and EDC. Please present results from the soil sampling in the report requested below.

2. **Monitoring Well Installation.** AEI has proposed the installation of a monitoring well network to evaluate the groundwater flow direction, hydraulic gradient and assess the dissolved phase hydrocarbon plume. Seven groundwater monitoring wells will be installed at locations based on previously collected soil boring data. Please complete your monitoring wells to a depth of at least 25 feet bgs, to assess the vertical extent of contamination beneath your site. ACEH generally concurs with the proposed monitoring well locations and well construction. Please present results from the monitoring well installation in the soil and groundwater investigation report requested below.
3. **Source Area Excavation.** AEI has proposed that contaminated soil from the source area be excavated and disposed of offsite, and approximately 1000 yd³ of contaminated soil will be removed during the excavation. ACEH generally agrees with the proposed interim remediation by excavation to remove contaminated soil from the source area. AEI has proposed confirmation soil sampling every 20 linear feet on the excavation sidewall. In addition, ACEH request that you collect confirmation soil samples from the excavation bottom every 20 linear feet and that confirmation soil sample be analyzed for TPHg and TPHd by EPA Method 8015M and EPA method 8260B for BTEX, EDB and EDC. We request that a total of at least six sidewall soil samples and three bottom soil samples be collected after the extent of excavation has been reached. Should the excavation expand beyond the proposed limits, collection of additional sidewall and bottom soil samples will be required. Please present results from the interim remediation in the report requested below.
4. **Quarterly Groundwater Monitoring.** After the monitoring well network has been installed and the wells have been developed, AEI proposes groundwater monitoring and sampling on a quarterly basis. ACEH generally agrees with the proposed groundwater sample analyses; however, we request that you also include the analytes EDB and EDC for at least two monitoring events. If EDB and EDC are not present in groundwater, then discontinue analysis. Please present the results from groundwater sampling in the quarterly groundwater monitoring report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Steven Plunkett), according to the following schedule:

- **April 15, 2009** – Soil and Groundwater Investigation Report with Soil Excavation Report
- **May 15, 2009** – 2nd Quarter 2009 Quarterly Groundwater Monitoring Report
- **August 15, 2009** – 3rd Quarter 2009 Quarterly Groundwater Monitoring Report
- **November 15, 2009** – 4th Quarter 2009 Quarterly Groundwater Monitoring Report
- **February 15, 2010** – 1st Quarter 2010 Quarterly Groundwater Monitoring Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy

replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

LANDOWNER NOTIFICATION REQUIREMENTS

Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee title holders to the site.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please be aware that you may be eligible for reimbursement of the costs of investigation from the California Underground Storage Tank Cleanup Fund (Fund). In some cases, a deductible amount may apply. If you believe you meet the eligibility requirements, we strongly encourage you to call the Fund for an application.

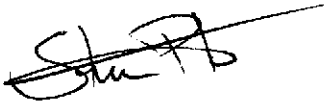
Ms. Steffi Zimmerman
December 24, 2008
RO0002936
Page 4

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 383-1767.

Sincerely,



Steven Plunkett
Hazardous Materials Specialist



Donna L. Drogos, PE
Supervising Hazardous Materials Specialist

cc: Peter McIntyre
AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597

Leroy Griffin
Oakland Fire Department, Hazardous Materials Unit
150 Frank Ogawa Plaza, Suite 3354
Oakland, CA 94612

Donna Drogos, Steven Plunkett, File