ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Acting Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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October 27, 2009

Mr. Seung Lee
German Autocraft
350 Cherrywood Avenue
San Leandro, CA 94577

William Andrade II
PO Box 2786
Dublin, CA 94588

Sephen & Elizabeth Wilhelm
12770 Skyline Blvd
Oakland, CA 94619-3125

Subject: Request for Soil and Groundwater Investigation; Fuel Leak Case No. RO0000302 and Geotracker Global ID T0600100639, German Autocraft, 301 East 14th Street, San Leandro, CA 94577-1713

Dear Mr. Lee:

I have been recently been assigned to your case. It would be greatly appreciated if you would send all future correspondences or inquiries to my attention. First, thank you for submitting the *Soil Vapor Investigation Report,* dated February 27, 2009 (received March 13, 2009), the *DPE / AS Feasibility Study*, dated March 31, 2009 (received April 13, 2009), and the *Revised Soil Vapor Investigation Report,* dated April 30, 2009 (received May 12, 2009), the latter to principally revise and correct soil vapor laboratory analytical results. All reports were generated by Groundwater Cleaners, Inc (GCI). These reports are a step in moving the site forward. Please note for future reference that all reports are required to have a signed perjury statement; only one of these reports did.

Based on Alameda County Environmental Health (ACEH) review of these reports and the case file 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 – mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Soil Vapor Assessment** – Characterization of petroleum hydrocarbon soil vapor plume at the site is not complete as the lateral extent of vapor-phase contamination has not been determined towards the west of the subject site. With the proviso that preferential pathways do not exist to negate the findings, the data collected at downgradient vapor sampling points appear to indicate that a soil barrier exists between groundwater and sensitive receptors to adequately attenuate hydrocarbon vapors.

   As reported by GCI, soil vapor collected at two depths at the majority of soil vapor sampling locations are below residential ESL goals in the mixed residential and commercial district that is downgradient of the subject site. The highest benzene in soil vapor sample (270 micrograms per meter [µg/L] at 5 feet below grade surface [bgs]) is above the residential ESL goal but was collected in proximity to predominately un-remediated soil in the former underground storage tank (UST) basin (SV-2), while all other sampling locations at both depth intervals contained benzene below residential ESL goals. The highest Total Petroleum Hydrocarbons (TPH) as gasoline concentrations however, were also collected onsite at SV-7 and SV-8 (up to 660,000 µg/L), were located along the western and southwestern perimeter of the site, and are above ESL goals for residential and / or commercial settings. Consequently, the data indicates that soil vapor concentrations at these locations warrant further vapor investigation at the adjacent apartment complex to the west of the subject site. Please discuss in detail your proposal to perform this work in the Work Plan requested below.

2. **Feasibility Study** – The planned DPE / AS feasibility study does not appear to have been successful due to limitations imposed by existing well construction (diameter), and positions (spacing). The existing 2-inch well diameter is reported to have limited the size of the groundwater extraction pump used to lower groundwater to adequately access DPE / AS methods, and the existing well spacing (currently a minimum of approximately 30 to 40 feet) appears to have limited evaluation of the radius of influence. At this time it would be premature to proceed to installation of a horizontal well at a depth of 24 to 28 feet below grade surface (bgs), as proposed until the methodology is further evaluated. The collection of geotechnical parameters (permeability, hydraulic conductivity, soil moisture, and other appropriate parameters) is warranted and may assist in further justifying a remedial option. The installation of wells designed for extraction and the installation of vapor sampling points to determine the radius of methodology influence is warranted. Please discuss in detail your proposal to perform this work in the Work Plan requested below. Please present your rational for vapor point and extraction well design, and vapor point and extraction well locations in the Work Plan requested below.

3. **Incomplete Data Submittals** – A review of historic reports appears to indicate that bore logs for a number of soil bores and wells were not included in an earlier report (*Continued Soil and Water and Offsite Investigation at German Autocraft,* dated July 12, 1996). Because this was the most extensive subsurface investigation at the site and site vicinity ACEH requests submittal of the following data:

   - Bore logs for wells MW-4 and MW-7,
   - Bore logs for soil bores ETM-3, ETM-4, ETM-8, ETM-9, ETM-12 to MTM-16, ETM 18, & ETM-20, and ETM-23 to ETM-40, and
   - Map location for soil bores ETM-6 and ETM-16

4. **Groundwater Well Construction Details** – Four of eight groundwater wells (MW-1, MW-4, MW-5, and MW-8) have significant discrepancies between construction and operation. Well MW-1 is approximately 13 feet shorter than reported as constructed, construction details for well MW-4 are unknown (see above), well MW-5 is approximately 9 feet shorter than reported as constructed and a conflict is also reported by CGI to exist in the screened interval, and well MW-8 is approximately four feet longer than reported as constructed. Remaining wells are one to two feet shorter than reported as constructed and it is surmised by CGI that this represents sedimentation since well installation. Please investigate the construction details for all wells associated with the site, report those details, and any proposed remedies including redevelopment, or abandonment and reconstruction in the Work Plan requested below.

5. **Monitoring Well Construction** – Should wells be reconstructed, ACEH recommends the use of monitoring wells designed with sand pack intervals of 5 feet or less, as these wells will likely be representative of depth discrete groundwater conditions. Upon completion of monitoring or extraction well installation ACEH requests that you submit all monitoring or extraction well construction details, technical specifications, and well lithologic logs in the report requested below. In addition, we request that a licensed professional surveyor survey all monitoring well locations to Geotracker horizontal and vertical standards.

6. **Pump Island –** Review of site bore logs and data did not locate data to suggest that the pump island has been previously investigated for leakage. While not always the case, pump islands can be the source of substantial releases. As a consequence, ACEH requests the installation of a minimum of one soil bore at the location of the former fuel pump island to investigate the potential of a release at this location to help fill this data gap. Please include the soil sample collection and analysis scheme in the Work Plan requested below.

7. **Preferential Pathway Study -** The purpose of the preferential pathway study is to locate potential migration pathways and conduits, and determine the probability of the plume encountering preferential pathways or conduits that could spread contamination. Included in this area of concern is

the identification of abandoned wells and improperly destroyed wells that can act as vertical conduits to deeper water gearing zones, pumping wells in the vicinity of your site and manmade conduits for shallow migration (including vapor migration).

ACEH requests that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, utility laterals, pipelines, etc.) for horizontal and vertical migration that may be present in the vicinity of the site. We request that you submit a preferential pathway study in conjunction with the Work Plan requested below. As appropriate, please include maps, cross-sections and data tables to support your analysis. The results of your study shall contain all information required by California Code of Regulations, Title 23, Division 3, Chapter 16, §2654(b).

i. Utility Survey

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please include maps and cross-sections illustrating the location and depth of all utility lines and trenches within and near the site and plume areas(s) as part of your study. Please present the results of the preferential pathway study in the report requested below.

ii. Well Survey

The preferential pathway study shall include a well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a ¼ mile radius of the subject site. Please present the results for the preferential pathway study in the report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH, according to the following schedule:

- **January 15, 2010** – Work Plan and Preferential Pathway Study
- **Four Months after Work Plan Approval** – Soil & Water Investigation 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

The 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.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

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) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, c=US
Reason: I am the author of this document
Date: 2009.10.27 12:00:00 -07'00'

Mark E. Detterman, P.G., C.E.G.
Hazardous Materials Specialist
Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Groundwater Cleaners Inc., Glenn Reierstad, 347 Frederick Street, San Francisco, CA 94117
Donna Drogos, ACEH (sent via electronic mail to donna.drogos@acgov.org),
Mark Detterman, ACEH (sent via electronic mail to mark.detterman@acgov.org),
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The 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.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.