





ENVIRONMENTAL HEALTH SERVICES

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

April 19, 2007

Mr. Lawrence Hancock Country Club Cleaners 500 Bollinger Canyon Way #A4 San Ramon, CA 94582

Mr. Robert Strong Country Club Cleaners 500 Bollinger Canyon Way #A4 San Ramon, CA 94582 Mr. Mark Ratto Peter J. Ratto Trust 670 W. Fruit Cive Forest Road Jacksonville, FL 32259

Subject: SLIC Case RO0002913 and Geotracker Global ID T06019748481, Perciva/Metro Valley Cleaners, 224 Rickenbacker Circle, Livermore, CA 94550

Dear Mr. Hancock, Mr. Strong, and Mr. Ratto:

Alameda County Environmental Health (ACEH) staff has reviewed the Spills, Leaks, Investigations, and Cleanups (SLIC) case file for the above referenced site including the recently submitted reports entitled, "Interim Site Characterization Report," dated February 15, 2007 and "Soil and Groundwater Sampling Results," dated March 15, 2007 and received by ACEH on April 6, 2007. Both reports were prepared by Engeo, Incorporated. The Interim Site Characterization Report presents the results of soil vapor and shallow soil sampling conducted at the site in January 2007. The Soil and Groundwater Sampling Results report presents the results of soil and groundwater sampling from five soil borings advanced at the site in March 2007. Tetrachloroethene (PCE) was detected in each of the nine soil vapor samples collected at concentrations ranging from 4,100 to 860,000 micrograms per cubic meter ( $\mu$ g/m³). Due to the elevated concentrations of volatile organic compounds detected in all soil vapor samples collected both inside and outside the building, the potential for vapor intrusion must be further evaluated. Please see the technical comments below regarding additional items that are to be addressed in a Work Plan for additional site characterization.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

### **TECHNICAL COMMENTS**

1. Soil Vapor Sampling Results. PCE was detected in each of the nine soil vapor samples collected at the site at concentrations ranging from 4,100 to 860,000 micrograms per cubic meter (μg/m³). The Environmental Screening Level (ESL [San Francisco Regional Water Quality Control Board, February 2005]) for PCE for vapor intrusion to indoor air under commercial land use is 1,400 μg/m³. The presence of a chemical at concentrations exceeding ESLs generally requires additional evaluation to assess whether a significant threat to human health or the environment exists. The ESL for PCE for vapor intrusion to indoor air was exceeded at all soil vapor sampling locations both inside and outside the building. In addition to PCE, the concentrations of trichloroethene, cis-1,2-dichloroethene,

trans-1,2-dichloroethene, and vinyl chloride in soil vapor also exceed the ESL for vapor intrusion to indoor air at one or more sampling locations. In our previous correspondence dated January 17, 2007, we requested that you review analytical data from the on-site mobile laboratory to propose step out soil vapor sampling locations as necessary to define the potential extent of elevated concentrations of volatile organic compounds (VOCs) in soil vapor. Step out sampling does not appear to have been implemented. Therefore, the extent and source of the elevated concentrations of VOCs in soil vapor have not been determined. We request that you critically review all data and propose further investigation to evaluate potential indoor air vapor intrusion. Please refer to the December 15, 2004 DTSC Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air to help evaluate the results of the soil vapor sampling and present recommendations regarding additional sampling requirements in the Work Plan requested below.

- Table 2. Subsurface Soil Data. Table 2 presents analytical data from only six soil samples.
   Analytical data from an additional four soil samples collected from boring S-3 are included in Appendix B. Please correct the table of soil analytical data to include all results in future reports.
- 3. Well Survey Results. An abandoned water supply well and a destroyed water supply well were identified on the Zone 7 Water Agency Well Map approximately 360 feet southeast of the site. Please obtain additional information on these wells to identify the historic use of the wells, construction details, and whether the wells may have affected historic groundwater levels and flow directions in the vicinity of the site. Although the abandoned well (3S/2E 7D1) is not currently active, please provide information on the potential for this well to be used in the future. This information is to be presented in the Work Plan requested below.
- 4. Vertical Extent of Contamination. Five soil borings were advanced at the site to depths ranging from 24 to 35 feet bgs. Grab groundwater samples were collected from first encountered groundwater in each boring. Please review historic water levels and the information requested in technical comment 3 above regarding effects from the nearby supply wells to evaluate the need for further investigation of the vertical extent of contamination. Please propose one or more deeper soil borings as necessary in the Work Plan requested below.
- 5. Groundwater Flow Direction. Due to the uncertain direction of groundwater flow and the detection of VOCs in groundwater at the site, the installation of a minimum of three monitoring wells is required for the site. Please propose monitoring well locations and procedures for well installation, development, and sampling in the Work Plan requested below.
- 6. Report Conclusions. We do not concur with the Conclusions stated in the Soil and Groundwater Sampling Results report dated March 15, 2007. In particular, the last statement in the Conclusions indicating that, "the historic use of the site as a dry cleaner does not appear to pose a risk to use the building for commercial use," appears to be unsupported by the results of soil vapor sampling at the site. Soil vapor sampling results indicate a potential for indoor air vapor intrusion. In addition, the last sentence in the first paragraph of the

Conclusions states that, "Soil impacts are generally limited to the area in the vicinity of the former dry cleaning machine and to a depth of 10 feet." It is unclear how this conclusion could be reached since only two soil borings were advanced inside the building. Both borings were advanced adjacent to the dry cleaning machine with VOCs detected in soil in both borings. With the exception of a shallow soil sample collected next to a drain, no soil borings were advanced in other portions of the building to assess whether the lateral extent of contamination is limited to the area of the dry cleaning machine. Therefore, the stated conclusion with regard to the lateral extent of soil contamination appears speculative without supporting data.

Future reports must include more rigorous, technically defensible, and comprehensive evaluations of results. A comparison of analytical results to screening criteria without further evaluation of other factors pertaining to the contaminant release and site conditions is inadequate. In order to expand your evaluation beyond a comparison of analytical results to screening criteria, we recommend that you develop a site conceptual model to provide a framework for understanding the site conditions affecting the fate and transport of contaminants in the subsurface. A SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely magnitude of potential impacts to receptors. The SCM is used to identify data gaps that are subsequently filled as the investigation proceeds. As the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened. Subsurface investigations continue until the SCM no longer changes as new data are collected. At this point, the SCM is said to be "validated." The validated SCM then forms the foundation for developing the most cost-effective corrective action plan to protect existing and potential receptors.

When performed properly, the process of developing, refining and ultimately validating the SCM effectively guides the scope of the entire site investigation. We have identified, based on our review of existing data, some key data gaps in this letter and have described several tasks that we believe will provide important new data to refine the SCM. We request that your consultant develop a SCM for this site, identify data gaps, and propose specific supplemental tasks for future investigations. There may need to be additional phases of investigations, each building on the results of the prior work, to validate the SCM. Characterizing the site in this way will improve the efficiency of the work and limit its overall cost.

The SCM approach is endorsed by both industry and the regulatory community. Technical guidance for developing SCMs is presented in API's Publication No. 4699 and EPA's Publication No. EPA 510-B-97-001 both referenced above; and "Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Appendix C," prepared by the State Water Resources Control Board, dated March 27, 2000.

#### TECHNICAL REPORT REQUEST

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

June 27, 2007 – Work Plan

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.

## **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) 567-6791.

Sincerely.

Jerry Wickham, P.G.

Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Colleen Winey, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway, Livermore, CA 94551

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street, Pleasanton, CA 94566

Paul Smith, Livermore-Pleasanton Fire Department, 3560 Nevada Street, Pleasanton, CA 94566

Kelly Krohn, Engeo, Incorporated, 2010 Crow Canyon Place, Suite 250, San Ramon, CA 94583-4634

Shawn Munger, Engeo, Incorporated, 2010 Crow Canyon Place, Suite 250, San Ramon, CA 94583-4634

Donna Drogos, ACEH Jerry Wickham, ACEH File