AGENCY

DAVID J. KEARS, Agency Director



Ser 7-05

ENVIRONMENTAL HEALTH SERVICES

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

September 1, 2005

Thomas L. Robinson Robinson Oil Corporation 4250 Williams Road San Jose, CA 95129

Edwin Coats
East Avenue Services
1727 Dolphin Place
Discovery Bay, Ca 94514

Subject: Fuel Leak Case No. RO0002881, East Avenue Services, 4186 East Avenue, Livermore, CA – Request for Work Plan

Dear Mr. Robinson and Mr. Coats:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the report entitled, "Report of Phase II Environmental Assessment," dated May 13, 2005, prepared on your behalf by RM Associates. This site is located within the Livermore Basin where groundwater is extracted for drinking water use. Within the area of the former underground storage tanks (USTs) at the site, methyl tert-butyl ether (MTBE) has been detected in groundwater at concentrations up to 1,900 micrograms per liter (μ g/L) and total petroleum hydrocarbons as gasoline have been detected at concentrations up to 19,000 μ g/L. Based on the evidence of an unauthorized release and the presence of MTBE, we request that you perform an investigation to define the lateral and vertical extent of contamination.

ACEH requests that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. Characterization of Lateral and Vertical Extent of Contamination. The three-dimensional extent of soil and groundwater contamination at your site has not been defined. We request that you perform a detailed, expedited site assessment using depth-discrete sampling techniques in borings installed along transects, to the extent practicable, to define and quantify the full three-dimensional extent of fuel contamination in soil and groundwater. The chemical and physical properties of MTBE should be considered in planning the on-site and off-site subsurface investigation. MTBE is highly soluble, very mobile in groundwater, and is not readily biodegradable. Conventional monitoring wells typically installed at fuel leak sites may be insufficient to fully define the extent of MTBE plumes. MTBE plumes can be long, narrow, and erratic (meandering). Thus, the positioning of typical monitoring well networks for UST releases can miss the MTBE plume

core, which could result in an incorrect interpretation of plume extent and the magnitude of the release. Please consider the use of depth-discrete groundwater samples collected along transects to characterize the site prior to installation of monitoring wells. We request that you use detailed hydrogeologic cross sections to determine the appropriate locations and designs for monitoring wells/well clusters and piezometers that are needed to appropriately characterize and monitor the three-dimensional extent of soil and groundwater contamination at the site. To appropriately evaluate your site, your monitoring wells/well clusters will need to be screened in the permeable zones with screen lengths that match the stratigraphic sequence. Please submit a detailed Work Plan presenting your proposal to fully characterize the lateral and vertical extent of soil and groundwater contamination. The Work Plan should be prepared by a qualified professional and must fully describe the proposed scope and methods for the soil and groundwater investigation.

- 2. Well Survey. ACEH requests that you locate all wells (monitoring and production wells: active, inactive, standby, decommissioned, abandoned and dewatering, drainage and cathodic protection wells) within ½ mile of the subject site. As part of your detailed well survey, please perform a background study of the historical land uses of the site and properties in the vicinity of the site. Use the results of your background study to determine the existence of unrecorded/unknown (abandoned) wells, which can act as pathways for migration of contamination at and/or from your site. Please review historical sources such as Sanborn maps, aerial photos, etc., when performing the background study. Include appropriate photographic prints, in stereo pairs, of historic aerial photos used as part of your study. We also request that you list by date all aerial photographs available for the site from the aerial survey company or library you use during your study. Please refer to the Regional Board's guidance for identification, location, and evaluation of potential deep well conduits when conducting your preferential pathway study. Please include the Well Survey in the Work Plan requested below.
- 3. Site Conceptual Model. The development of a Site Conceptual Model (SCM) for this site is encouraged in order 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 encourage your consultant to 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.

The SCM for this project shall incorporate, but not be limited to, the following:

- a) A concise narrative discussion of the regional geologic and hydrogeologic setting obtained from your background study. Include a list of technical references you reviewed, and copies (photocopies are sufficient) of regional geologic maps, groundwater contours, cross-sections, etc.
- b) A concise discussion of the on-site and off-site geology, hydrogeology, release history, source zone, plume development and migration, attenuation mechanisms, preferential pathways, and potential threat to downgradient and above-ground receptors. Be sure to include the vapor pathway in your analysis. Maximize the use of large-scale graphics (e.g., maps, cross-sections, contour maps, etc.) and conceptual diagrams to illustrate key points. Include structural contour maps (top of unit) and isopach maps to describe the geology at your site.
- c) Identification and listing of specific data gaps that require further investigation during subsequent phases of work.
- d) Proposed activities to investigate and fill data gaps identified above.
- e) The SCM shall include an analysis of the hydraulic flow system at and downgradient from the site. Include rose diagrams for groundwater gradients. The rose diagram shall be plotted on groundwater contour maps and updated in all future reports submitted for your site. Include an analysis of vertical hydraulic gradients. Note that these likely change due to seasonal precipitation and pumping.
- f) Temporal changes in the plume location and concentrations are also a key element of the SCM. In addition to providing a measure of the magnitude of the problem, these data are often useful to confirm details of the flow system inferred from the hydraulic head measurements. Include plots of the contaminant plumes on your maps, cross-sections, and diagrams.
- g) Other contaminant release sites exist in the vicinity of your site. Hydrogeologic and contaminant data from those sites may prove helpful in testing certain hypotheses for your SCM. Include a summary of work and technical findings from nearby release sites and incorporate the findings from nearby site investigations into your SCM.

Report the information discussed above in your initial SCM and include it in the Work Plan requested below. Include updates to your SCM in the Soil and Groundwater Investigation Report requested below.

TECHNICAL REPORT REQUEST

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

- November 1, 2005 Work Plan for Soil and Water Investigation
- 120 days after ACEH approval of Work Plan Soil and Groundwater 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

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to 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 Instructions." 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. 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 monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board 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) 567-6791.

Sincerely,

Jerry Wickham .

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

Ronald Michelson RM Associates 16401 Meadow Vista Drive, Suite102 Pioneer, CA 95666

Donna Drogos, ACEH Jerry Wickham, ACEH File

Alameda County Vironmental Cleanup Oversight Program OP and SLIC

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. This e-government initiative is aimed at making our programs more effective and efficient. The electronic copy is intended to replace the need for a paper copy and is expected to be relied upon for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted as a single portable document format (PDF) with no
 password protection. (If you cannot submit in PDF format, please check with us to see if we can accommodate
 your report format).
- 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 should be included and must have either original or electronic signature. Alternatively, the paper copy of the signature page and perjury statement can be mailed separately.
- 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. If you cannot comply with this you may continue
 to submit paper documents.
- 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

- Obtain User Name and Password:
 - Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - a) Send an e-mail to dehloptoxic@acgov.org

OI

- Send a fax on company letterhead to (510) 337-9335, to the attention of Alicía Lam-Finneke.
- 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.
- Note: Both the User Name and Password are Case Sensitive.
- Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+) or equivalent browser, go to ftp://alcoftp1.acgov.org
 - 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 at acgov.org

(e.g., firstname.lastname@acgov.org)

The subject line of the e-mail must start with the RO# followed by Report Upload.
 (e.g., Subject: RO1234 Report Upload)

RAFAT A. SHAHID, Assistant Agency Director

Certified Mailer# P 386 338 168 November 15, 1993

Regal Station #102 3875 Telegraph Ave., Oakland, CA 94608

DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

Re:

FIVE-YEAR PERMITS FOR OPERATION OF THREE UNDERGROUND STORAGE TANKS (UST'S) AT 3875 Telegraph Ave., Oakland, 94608

According to our records the above mentioned facility has not received a five-year permit to operate UST's. Please complete the following items marked below and return them to me within 30 days. The example plans enclosed should be used only as quidelines and may not meet your requirements under Title 23.

1. Complete UST PERMIT FORM A - one per facility. (enclosed)

2. Complete UST PERMIT FORM B - one per tank.

3. Complete UST PERMIT FORM C - one per tank if information is available. (enclosed)

avaliable.
-/4. A written tank monitoring plan. (enclosed)

5. Results of precision tank test(s) (initial and annual).

6. Results of precision pipeline leak detector tests (initial and annual).

7. An accurate and complete plot plan.

(enclosed)

- 8. A written spill response plan.

(enclosed)

Title 23 of the California Code of Regulation prohibits the operation of ANY UST without a permit. Please feel free to contact Brian P. Oliva at 510/271-4320 if you have any questions which may arise in completing the mandatory five year permit process.

Sincerely,

Brian P. Oliva, REHS, REA

(Suw P. Oler

Hazardous Materials Specialist

files cc:

enclosures: see checklist