



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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April 24, 2009

Paul Supple
Atlantic Richfield Company
(A BP Affiliated Company)
P.O. Box 1257
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000494 and GeoTracker Global ID T0600101764, ARCO
#2111, 1156 Davis Street, San Leandro, CA 94577

Dear Mr. Supple:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the recently submitted document entitled, "Fourth Quarter 2008 Ground-Water Monitoring and Remediation System Status Report," dated January 28, 2009, which was prepared by Broadbent & Associates, Inc. (BAI) for the subject site. In January 2007, a soil vapor extraction system and groundwater extraction system began operating at the site to abate elevated concentrations of hydrocarbons in soil and groundwater. The system has been periodically operating due to a high-water level alarm.

At this juncture, ACEH request that you address the following technical comments, and send us the technical work plan and reports requested below.

TECHNICAL COMMENTS

1. **Remediation Effectiveness** – In the above-mentioned remediation report, BAI includes system performance data including the quantity of contaminants removed from soil and groundwater. However, BAI does not discuss whether the system is effectively reducing hydrocarbon contamination from soil and groundwater nor does BAI include any recommendations and conclusions. Without recommendations and conclusions or an adequate evaluation of the system, ACEH is concerned that although the system may be operating, the system may not be effectively removing contaminants in a cost-effective manner. Typically, the treatment system should be evaluated followed by modifications and or adjustments so that the system continues to optimally operate and remove contaminants in a cost-effective manner. In future remediation summary reports, please include an evaluation of the treatment system as well as recommendations and conclusions.
2. **Regional Geologic and Hydrogeologic Setting** – Elevated concentrations of TPH-g and MTBE have been detected in groundwater monitoring well MW-5. In March 2004, a transect of borings was installed west of the site between the Cedar Grove Apartments and the First Christian Church. In boring H-2, a sand unit was identified between 15 to 20 ft bgs. Although monitoring well MW-5 is located in approximately 30 feet south of H-2, the sand unit was absent at this location, based on a review of the boring logs. The concentrations of

hydrocarbons detected in a "grab" groundwater sample collected from H-2 were significantly elevated. Specifically, TPH-g and MTBE were detected a concentration of 260,000 µg/L and 7,600 µg/L, respectively. During that same timeframe, groundwater samples collected from monitoring well MW-5 detected TPH-g and MTBE at concentrations of 8,000 µg/L and 2,000 µg/L, respectively, and the highest concentrations of TPH-g and MTBE on-site were detected in well MW-7 at concentrations of 62,000 µg/L and 37,000 µg/L, respectively. A permeable unit was also identified in MW-7 from approximately 20 feet bgs to its total installed depth of 35 feet bgs. Data suggests that the permeable unit (i.e. identified as clayey sand at MW-7) may extend to H-2, as evidenced by the elevated concentrations of contaminants detected in the "grab" groundwater sample. Therefore, this permeable unit identified in MW-7 and boring H-2 may be a preferential pathway for contaminant migration, and hence a data gap that requires further evaluation and/or investigation. Please propose a scope of work to address the above-mentioned concerns and submit a work plan due by the date specified below.

3. **Soil and Groundwater Characterization** – In URS' May 6, 2004 "Additional Subsurface Investigation Report," URS recommended two additional down-gradient wells, MW-9 & MW-10, to be located in the vicinity of H-2 and H-4. Based on a review of the above-mentioned remediation report, a work plan does not appear to have been submitted and the proposed two monitoring wells do not appear to have been installed. At this time, please evaluate and justify whether the groundwater contaminant plume is adequately characterized or submit a scope of work to address the above-mentioned concerns and submit a work plan due by the date specified below.

4. **Site Conceptual Model** – At this juncture, it may be advantageous to develop a site conceptual model (SCM), which synthesizes all the analytical data and evaluates all potential exposure pathways and potential receptors that may exist at the site, including identifying or developing site cleanup objectives and goals. At a minimum, the SCM should include:
 - (1) Local and regional plan view maps that illustrate the location of sources (former facilities, piping, tanks, etc.) extent of contamination, direction and rate of groundwater flow, potential preferential pathways, and locations of receptors;
 - (2) Geologic cross section maps that illustrate subsurface features, man-made conduits, and lateral and vertical extent of contamination;
 - (3) Plots of chemical concentrations versus time;
 - (4) Plots of chemical concentrations versus distance from the source;
 - (5) Summary tables of chemical concentrations in different media (i.e. soil, groundwater, and soil vapor); and
 - (6) Well logs, boring logs, and well survey maps;
 - (7) Discussion of likely contaminant fate and transport.

If data gaps (i.e. potential contaminant volatilization to indoor air or contaminant migration along preferential pathways, etc.) are identified in the SCM, please include a proposed scope of work to address those data gaps in the work plan due by the date specified below. Please

note that the work plan must address all technical comments presented in this correspondence as well as all data gaps identified in the SCM.

5. **Groundwater Sampling Frequency** – Several years of quarterly groundwater data has been collected at the site. Currently, MW-6 is sampled annually and all other monitoring wells are samples quarterly. At this time, please continue to sample MW-6 annually during the 3rd quarter of the year and sample monitoring wells MW-1 through MW-5, MW-7, and MW-8 semi-annually, during the 1st and 3rd quarters of the year. However, please continue to submit the remediation reports quarterly. Should an alternate groundwater monitoring schedule be desired, please submit a proposal for review. You may include the proposal in the upcoming Remediation Report, as specified below.

REQUEST FOR INFORMATION

ACEH's case file for the subject site contains the following electronic reports as listed on our website (<http://www.acgov.org/aceh/lop/ust.htm>). You are requested to submit copies of all other reports related to environmental investigations for this property (including the "Soil and Groundwater Assessment Report," dated September 19, 1996 by EMCON) by **May 25, 2009**.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork, including routine groundwater sampling.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **June 23, 2009** – SCM & Soil and Water Investigation Work Plan
- **Due within 30 Days of Sampling** – Remediation Summary Report (2nd Quarter 2009)
- **Due within 30 Days of Sampling** – Semi-annual Monitoring & Remediation Summary Report (3rd Quarter 2009)
- **Due within 30 Days of Sampling** – Remediation Summary Report (4th Quarter 2009)
- **Due within 30 Days of Sampling** – Semi-annual Monitoring & Remediation Summary Report (1st Quarter 2010)

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) require submission of reports in electronic form. The electronic copy replaces paper copies 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 all 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, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

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.

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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.

Thank you for your cooperation. If you have any questions, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,



Paresh C. Khatri
Hazardous Materials Specialist



Donna L. Drogos, PE
Supervising Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Tom Venus, Broadbent & Associates, 1324 Mangrove Avenue, Suite 212, Chico, CA 95926
Donna Drogos, ACEH
Paresh Khatri, ACEH
GeoTracker
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.