

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

F

June 18, 2008

William Borgh
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76 Broadway
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Carole Quick and Lorraine Mudgett
P.O. Box 2165
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ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Subject: Fuel Leak Case No. RO0000409 and Geotracker Global ID T0600102279, Unocal #1156, 4276 MacArthur Boulevard, Oakland, CA 94619

Dear Mr. Borgh, Ms. Quick, and Ms. Mudgett:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the recently submitted document entitled, "*Draft Corrective Action Plan*," dated April 24, 2008. The "*Draft Corrective Action Plan*," (Draft CAP) does not include sufficient evaluation of remedial alternatives to meet the minimum requirements for a corrective action plan. Therefore, we request that you address the technical comments below and submit a revised Draft CAP.

TECHNICAL COMMENTS

1. **Proposed Cleanup Levels.** The Draft CAP indicates that cleanup goals will be established using a risk-based approach that will be submitted to ACEH under separate cover. The revised Draft CAP requested below should include target cleanup levels for soil, soil vapor, and groundwater. We concur with the recommendation to conduct an evaluation of potential vapor intrusion.
2. **Proposed Remedial Alternatives.** The Draft CAP discusses three remedial alternatives: risk-based closure, monitored natural attenuation, and ozone/oxygen injection. Risk-based closure of the case cannot be considered a remedial alternative. Ozone/oxygen injection is the only active remedial alternative considered. The revised Draft CAP must include an evaluation of a minimum of three active remedial alternatives in addition to monitored natural attenuation. A discussion of the feasibility of the proposed remedial alternatives to achieve target cleanup goals and cost effectiveness must be included for the site-specific conditions. The rationale for selection of a remedial alternative is to be discussed in detail.
3. **Confined or Partially Confined Groundwater Conditions.** The Draft CAP presents an interpretation that groundwater at the site is under confined conditions. Groundwater was typically first encountered in soil borings at depths of 13 to 24 feet bgs. Static water levels in the borings were higher, typically ranging from approximately 2 to 10 feet bgs. Although the soil boring data suggest that groundwater is under confined or partially confined conditions,

we note that groundwater was measured at approximately 7.5 feet bgs in the former fuel tank pit during tank removal in 1998 and that tank backfill well TP1 was used to extract 41,000 gallons of hydrocarbon-impacted groundwater in 2001. We also note that the Site Conceptual Model for the site (Environmental Resolutions, Inc., January 7, 2002) described groundwater conditions at the site as unconfined. The revised Draft CAP must include more detailed discussion of the confined or unconfined groundwater conditions and the potential effects of these conditions on the proposed ozone/oxygen injection.

4. **Ozone/Oxygen Injection.** In situ oxidation and injection technologies require detailed site characterization in order to target zones for ozone or oxygen delivery. Existing monitoring wells at the site, with the exception of tank pit backfill well TP-1, have long screen intervals from approximately 5 to 25 feet bgs. Therefore, they do not provide information on the vertical distribution of groundwater contamination. Limited vertical delineation of soil and groundwater contamination has been conducted. In the revised Draft CAP requested below, please describe the vertical intervals or stratigraphic units that will be targeted for ozone/oxygen injection and the basis for targeting these intervals. In addition, the revised Draft CAP is to include some estimate of the mass of petroleum hydrocarbons in the vadose zone and within vertical intervals of the saturated zone.
5. **Groundwater Concentration Trends.** The Draft CAP cites apparent decreasing trends on time versus concentration graphs as evidence that natural attenuation is occurring at the site. In reviewing the time versus concentration graphs included in the appendix to the Draft CAP, we observed abrupt changes in concentration trends that occurred during 2003. An example of these changes can be observed on the TPHg time concentration graph for monitoring well MW-3. Between 07/07/2003 and 10/09/2003, the concentration of TPHg in groundwater from well MW-3 decreased from 33,000 micrograms per liter ($\mu\text{g/L}$) to 3,800 $\mu\text{g/L}$ and the trend line changed significantly. In reviewing these data, we note that the abrupt variation in trend that occurred between 07/07/2003 and 10/09/2003 correlates to a change in firms conducting the sampling and analyses. Abrupt changes in trend during this time period are also apparent in wells MW-4, MW-5, and MW-7. Future discussions of decreasing concentration trends must include an evaluation of data quality and potential effects of sampling and analytical methods on apparent concentration trends. Please also revise the graph of benzene concentration versus time for well MW-3 in future documents as the data shown on the graph are actually TPHg data rather than benzene data.
6. **Public Participation.** Public participation is a requirement for the Corrective Action Plan process. Therefore, we request that you submit a Draft CAP for ACEH review. Upon ACEH approval of a Draft CAP, ACEH will notify potentially affected members of the public who live or own property in the surrounding area of the proposed remediation described in the Draft CAP. Public comments on the proposed remediation will be accepted for a 30-day period.
7. **Quarterly Groundwater Monitoring.** Please continue quarterly groundwater monitoring and present the results in the Quarterly Reports requested below.

TECHNICAL REPORT REQUEST

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

- **July 30, 2008** – Revised Draft Corrective Action Plan
- **30 days following end of each quarter** – Quarterly Groundwater Monitoring Report (To include summary report, quarterly monitoring report, and remedial performance report if remediation is ongoing)

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/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.

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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 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,



Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

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cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA
94612-2032

Dennis Dettloff, Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Rajan Goswamy, 4276 MacArthur Boulevard, Oakland, CA 94619

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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

Effective **January 31, 2006**, 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 Alicia Lam-Finneke.
 - 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 at 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)