

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

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

December 12, 2008

Terry Grayson
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Thomas and Celine Vadakkekunnel
4481 Peacock Court
Dublin, CA 94568

Subject: Fuel Leak Case No. RO0000436 and Geotracker Global ID T0600101777, Unocal #4186, 1771 First Street, Livermore, CA 94550

Dear Mr. Grayson and Mr. and Ms. Vadakkekunnel:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "*Site Investigation Report*," dated November 11, 2008. The Site Investigation Report presents the results from installation of four monitoring wells in the middle water-bearing zone and four monitoring wells in the lower water-bearing zone. Soil samples were collected for chemical analysis from the borings for the middle zone wells but no soil samples were collected from the deep zone wells. No groundwater samples had been collected from the monitoring wells at the time the November 11, 2008 report was issued.

Abandonment and installation of replacement or additional ozone sparge wells was proposed in a "*Work Plan Addendum*," dated October 30, 2007 and "*Work Plan – Second Addendum*," dated February 12, 2008. Based upon a request by Delta Consultants, abandonment and installation of replacement or additional ozone sparge wells was deferred until groundwater monitoring data from the new wells is reviewed. The Site Investigation Report recommends installing additional ozone injection wells after sampling of the new and existing groundwater monitoring wells for two quarters. This proposal is generally acceptable provided that the technical comments below are addressed. We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Ozone Sparging System.** Following review of groundwater monitoring data from new and existing wells during the First Quarter 2009, we request that you submit plans for improvement and upgrade of the ozone sparging system. The plans must include abandonment of sparge wells as previously proposed and installation of additional or replacement of existing sparge wells. In addition, we request that you review historical groundwater monitoring data, system operation data, and results from the oxygen injection testing conducted in 2007 and incorporate these results as necessary in the Work Plan for Ozone Sparging System Upgrade requested below.

2. **Remediation of TBA.** In the Work Plan for Ozone Sparging System Upgrade requested below, please include a discussion of the effectiveness of proposed improvements to the ozone sparging system on remediation of TBA. A review of historical groundwater monitoring data indicates that although some decreases in concentrations have been observed for TPHg, BTEX, and MTBE during the operation of the ozone sparging system, TBA concentrations have remained elevated. Please evaluate recalcitrance of the TBA to ozone sparging and discuss whether the proposed improved sparging system will be effective in treating dissolved TBA.
3. **Well Construction Details and Cross Sections.** The Work Plan for Ozone Sparging System Upgrade must include a table of well construction details for all new and existing wells that lists the depth, diameter, filter pack and screen intervals, and date of installation. We also request that you include one downgradient and one cross gradient cross section in the Work Plan for Ozone Sparging System Upgrade. Please update cross section A-A' which was previously presented in the "*Additional Subsurface Assessment and Oxygen Injection Test Report*," dated April 26, 2007 for use as the cross gradient cross section. Please construct a downgradient cross section similar to A-A' that extends approximately through SP-8, U-3, U-8, and U-4. Proposed sparge wells are to be included on the cross sections.
4. **Quarterly Groundwater Monitoring.** Please continue quarterly groundwater monitoring and present the results in the Quarterly Reports requested below. Analysis of groundwater samples for metals, total dissolved solids, major anions, and major cations is to be discontinued until the ozone sparging system becomes operational. Following future start-up of the ozone sparging system, we request that you analyze groundwater samples from existing and new monitoring wells for metals, total dissolved solids, major anions, and major cations during one quarterly sampling event in order to evaluate whether chemical oxidation is oxidizing some metals to a more soluble form, thereby increasing their migration potential.
5. **Remediation Status.** The most recent groundwater monitoring report for the site entitled, "*Quarterly Summary Report – Third Quarter 2008 and Sensitive Receptor Survey*," dated October 20, 2008 discusses shutdown of the ozone sparging system in the Second Quarter 2007 to evaluate whether dissolved phase concentrations would rebound. It is not clear whether this evaluation of rebound occurred. Please include this evaluation in the Work Plan for Ozone Sparging System Upgrade requested below. The Remediation Status section of future groundwater monitoring reports must be clearer about current operational status of the system. More specifically, the Remediation Status section must state whether the system is currently active, the dates of operation, and reasons for the system being not active.

TECHNICAL REPORT REQUEST

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

- **January 15, 2009** – Quarterly Monitoring Report – Fourth Quarter 2008 (To include summary report, remedial performance summary, and quarterly monitoring report in one document)
- **April 10, 2009** – Quarterly Monitoring Report – First Quarter 2009 (To include summary report, remedial performance summary, and quarterly monitoring report in one document)
- **May 11, 2009** – Work Plan for Ozone Sparging System Upgrade
- **July 10, 2009** – Quarterly Monitoring Report – Second Quarter 2009 (To include summary report, remedial performance summary, and quarterly monitoring report in one document)
- **October 10, 2009** – Quarterly Monitoring Report – Third Quarter 2009 (To include summary report, remedial performance summary, and quarterly monitoring report in one document)

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).

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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

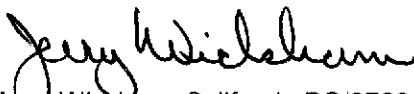
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

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 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

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Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, 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

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

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)