



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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October 4, 2016

Caltrans
111 Grand Avenue
Oakland, CA 94612
Attn: Mr. Ray Boyer
(Sent via electronic mail to: ray.boyer@dot.ca.gov)

Subject: Interim Remedial Action Work Plan Review, Fuel Leak Case No. RO0000225 and GeoTracker Global ID T0600101696, Caltrans Oakland Maintenance Station, 555 Hegenberger Road, Oakland, CA 94621

Dear Mr. Boyer:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the recently submitted document entitled *Interim Remedial Action Work Plan* (IRAWP) dated August 5, 2016 and prepared by Geocon Consultants, Inc. (Geocon) for the subject site. The IRAWP was prepared at the request of ACDEH in our letter dated June 13, 2016. The review was performed in conjunction with the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP).

Geocon proposes to perform an interim remedial action entailing soil excavation to remove petroleum hydrocarbon (PH) contamination. As presented in the IRAWP, three areas are proposed for excavation, with an estimated 2,000 cubic yards of soil removed for off-site disposal. As presented, Geocon believes the PH contamination resides in relatively porous preferential pathways emanating from the former underground storage tank (UST) pit. Prior to excavation activities, groundwater monitoring wells at the site will be abandoned. Upon completion of the soil removal activities, approximately 50,000 gallons of excavation infiltration water will be extracted and transported off-site for treatment/disposal. Geocon indicates the bulk of the contaminant mass resides in groundwater.

Geocon states confirmation soil samples will be collected at select locations to determine the excavation limits, with no less than five soil samples collected per excavation area. Upon completion of the excavation and infiltration water removal, water remaining in the excavation will be treated with an oxidizing agent before the excavation is backfilled. Both soil and pre- and post-oxidation grab-water samples will be collected and analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), and benzene, toluene, ethylbenzene, and xylenes (collectively BTEX).

Following excavation backfill and surface restoration, Geocon proposes to install up to five groundwater monitoring wells within the boundaries of the former excavation areas to monitor post-remediation groundwater quality trends. The number, location, and design of the wells will be discussed with ACDEH after the remediation project has been completed.

The scope of work presented in the work plan has not been adequately defined and cannot be approved at this time. ACDEH requests that you address the following technical comments and send us a work plan addendum as requested below. Additional data may be available that ACDEH

is not aware of, or may not have been submitted, and therefore has not been incorporated in to ACDEH's file review. If additional data is made available, the data can be incorporated in future reviews.

TECHNICAL COMMENTS

1. Groundwater Monitoring Well Abandonment – IRAWP Section 2.1- *Mobilization* states wells MW-1, MW-3, and MW-4 will be abandoned. Section 2.2- *Monitoring Well Destruction* says monitoring wells MW-1 to MW-5 will be abandoned. It is unclear to ACDEH which wells are proposed to be abandoned. Additionally, if well MW-5 is to be abandoned, please include the rationale for its destruction in the work plan addendum requested below, as MW-5 does not appear to be located within any of the three proposed excavation areas.

2. Excavation –

A. Depth – The IRAWP does not indicate the depth of the proposed excavations. ACDEH requests a discussion elaborating on the excavation depths in the work plan addendum requested below.

B. Backfill – Geocon proposes to backfill the excavation with drain rock or pea gravel to a level which exceeds the depth to groundwater in the excavation; that filter fabric will be placed over the drain rock; and the excavation will be backfilled to ground surface with Class II aggregate base rock.

Excavation backfill typically consist of pea gravel or similar material to no more than one foot above water level, filter fabric placed over the drain rock, and the backfill brought up the surface using like (native) material or aggregate base. However, ACDEH requests the on-site excavations be backfilled in accordance with Caltrans engineering specifications and specifications for any off-site excavations be reviewed with the property owner. ACDEH requests contacting the property owners regarding the backfill specifications and surface restoration requirements.

3. Confirmation Soil Sample Collection – As noted above, Geocon states confirmation soil samples will be collected at select locations to determine the excavation limits, with no fewer than five soil samples per excavation area. The IRAWP does not address sample collection density, depth, or if excavation bottom samples will be collected.

ACDEH is in general agreement that no fewer than five confirmation soil samples be collected from an excavation. For excavations of the size proposed, it has been our experience that a sampling frequency of one sample per every 20-linear feet of sidewall is typically performed. Additionally, with regard to the LTCP, ACDEH recommends soil samples be collected and analyzed from within the 0- to 5-foot and 5- to 10-foot intervals as measured from the ground surface. Please expand Section 2.3 – *Soil Remediation* to address this information in the work plan addendum requested below.

4. Soil Scope of Analysis – In order to evaluate the case against the LTCP, please include naphthalene as an analyte in the scope of soil sample analysis. Naphthalene can be reported as an analyte along with BTEX compounds using EPA Test Method 8260.

5. **Excavation Infiltration Water Extraction** – Geocon states the bulk of the contaminant mass resides in groundwater and that approximately 50,000 gallons of water will be removed from the excavations and transported off-site for treatment/disposal. ACDEH requests clarification on how the 50,000-gallon quantity was arrived at for removing the bulk of the contaminant mass. Please present your determination in Section 2.4- *Groundwater Remediation* in the work plan addendum requested below.
6. **Water Sample Collection** – As indicated above, Geocon proposes collecting pre- and post-oxidation water samples for TPHg, TPHd, and BTEX analysis. It is unclear to ACDEH if the pre-oxidation application grab water sample, in part, represents a baseline water sample to be used in evaluating the effectiveness of the remediation.

Therefore, in addition to the pre-oxidation pit water sample analysis, ACDEH recommends sampling the existing monitoring well network prior to its destruction. The event will document pre-remediation baseline contaminant concentrations. The monitoring well data can be compared with the analytical results from the post-remediation replacement well network.

7. **Water Sample Scope of Analysis** – ACDEH requests the baseline water sampling of groundwater recovered from the existing well network include analyses for TPHg, TPHd, and volatile organic compound (VOC) analysis using the full suite of VOCs by EPA Test Method 8260.
8. **Monitoring Well Installation** – As indicated above, Geocon proposes to install up to five groundwater monitoring wells within the boundaries of the former excavation areas to monitor post-remediation groundwater quality trends. The number, location, and design of the wells will be discussed with ACDEH after the remediation project has been completed.

It is unclear to ACDEH what “after the remediation project” refers as the IRAWP proposes to install the monitoring wells. In order to clarify the schedule of events, ACDEH requests a Well Installation Work Plan (WIWP) be prepared under separate cover following the issuance of the Interim Remedial Action Report (IRAR) documenting soil and groundwater removal activities. A discussion with ACDEH regarding the well installation can occur following our review of the IRAR.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH ftp site (Attention: Keith Nowell), and to the SWRCB’s Geotracker website, in accordance with the following specified file naming convention and schedule:

- **November 21, 2016** – Work Plan Addendum (file name: RO0000225_WP_ADEND_R_yyyy-mm-dd)

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.

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Online case files are available for review at the following website:

<http://www.acgov.org/aceh/index.htm>.

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Respectfully,

Keith Nowell
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACDEH Electronic Report Upload (ftp) Instructions

cc: Bahram Sazegar, Caltrans, 111 Grand Avenue, Oakland, CA 94612
(Sent via electronic mail to: bahram.sazegar@dot.ca.gov)

John Love, Geocon Consultants, Inc., 6671 Brisa Street, Livermore, CA 94550-2505
(Sent via electronic mail to: love@geoconinc.com)

Dilan Roe, ACDEH (Sent via electronic mail to: dilan.roe@acgov.org)
Keith Nowell, ACDEH (Sent via electronic mail to: keith.nowelli@acgov.org)
GeoTracker
File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

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.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
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

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- 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)

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 deh.loptoxic@acgov.org
 - 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, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - 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 deh.loptoxic@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.