

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director



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March 8, 2016

Mr. Farrokh Hosseinvoun
(Sent via E-mail to: farok@fhone.net)

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, CA 94533

Mr. Hamid Khatirine
c/o Mr. Michael D. Liberty
3713 Century Drive
Campbell, CA 95008-3832

Subject: Conditional Work Plan Approval, Request for System Evaluation, and Work Plan; Fuel Leak Case No. RO0000473 and GeoTracker Global ID T0600191157, ARCO, 15101 Freedom Avenue, San Leandro, CA 94578

Dear Messrs. Hosseinvoun, Pazdel, and Khatirine:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Workplan for Further Investigation*, dated January 12, 2016, and the *Fourth Quarter 2015 Groundwater Monitoring and Remediation Progress Report*, dated January 14, 2016. The reports were prepared and submitted on your behalf by SOMA Environmental Engineering, Inc. Thank you for submitting the reports.

The referenced groundwater monitoring report documented the quarterly sampling and analysis of groundwater. Contaminant concentrations in downgradient well MW-10 remain elevated (up to 22,000 micrograms per liter ($\mu\text{g/l}$) Total Petroleum Hydrocarbons as gasoline (TPHg), $<10 \mu\text{g/l}$ benzene, 930 $\mu\text{g/l}$ ethylbenzene, and $<10 \mu\text{g/l}$ methyl tert butyl ether (MTBE)). Concentrations of TPHg were 28,000 $\mu\text{g/l}$ during the previous sampling event in September 2015 in this well. The *Technical Justification for Vapor Intrusion - Media Specific Criteria*, (March 2012), for the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP), indicates that concentrations of TPHg in groundwater over 20,000 $\mu\text{g/l}$ is indirect evidence of the presence of Liquid Non-Aqueous Phased Liquids (LNAPL) in groundwater. These concentrations at a location approximately 355 feet downgradient of the release indicate the presence of mobile LNAPL.

Figures in the referenced report also appear to indicate a detaching of the TPH plume, and potentially a mobile LNAPL plume, from contamination located beneath the site due to the apparent success of previous Multi-Phase Extraction (MPE) events on and offsite.

The groundwater monitoring report also documented the second residential crawl space vapor sampling event with a concurrent ambient air vapor sample. Both events documented similar ambient air and crawl space concentrations for benzene that were above residential indoor air Environmental Screening Levels (ESLs). Naphthalene also was present in both ambient air samples at higher concentrations or higher non-detectable concentrations than the crawl space samples, and both sets were over the indoor air ESL. Concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg), toluene, ethylbenzene, and total xylenes were below residential indoor air ESLs for both the crawl space and ambient air samples. Documentation of benzene and naphthalene concentrations in ambient air and crawl space air can indicate that residual contamination at the site in shallow soil (upper 10 feet below grade surface or bgs) may represent a vapor source of concern for the offsite residential structure. Review of available site data indicates very limited shallow soil samples have been collected either onsite or offsite at representative locations.

The referenced work plan proposes the installation of three direct push soil bores and subsequent conversion to three 4-inch diameter Multi-Phase Extraction (MPE) wells, as well as the conversion of well MW-10 to a 4-inch diameter well, in an effort to delineate the extent of the groundwater plume

downgradient of well MW-10, and to also allow MPE extraction of contaminant concentrations in groundwater that are indicative of mobile LNAPL offsite.

Based on ACEH staff review of the referenced documents and of the case file we generally concur with the recently proposed scope of work, provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or technical comments below is proposed. We request that you address the following technical comments, submit the requested document, and upon ACEH approval, perform the proposed work, and send us the technical reports requested below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The referenced work plan proposes a series of actions with which ACEH is in general agreement of undertaking as associated costs appear to be relatively limited; however, ACEH requests several modifications to the approach. Please submit a report by the date specified below.
 - a. **Naphthalene Analysis** – In general the analytical suite proposed in the referenced work plan appears appropriate; however, in conformance with the LTCP, please additionally incorporate naphthalene in the analytical suite for all media (soil, groundwater, or soil vapor).
 - b. **MPS Signage** – Warning signage for drivers on Fairmont Avenue is appropriate even if the event that Alameda County Public Works Agency does not require the signage.
2. **Groundwater Extraction System Effectiveness Evaluation** – It appears appropriate to initiate an evaluation of the effectiveness or success of groundwater extraction system at the site. Towards this end, the cycling of system operations should be undertaken to determine the potential for contaminant rebound at the site. Due to the potential for rebound to affect sensitive receptors (residential house to southwest) please propose a monitoring schedule and environmental media (groundwater and / or vapor) to monitor sensitive receptors. ACEH anticipates that the monitoring interval will be at closer intervals initially. Please submit a Remediation Monitoring Work Plan by the date identified below, in conjunction with the following Technical Comment.
3. **Case Review Under the LTCP and Request for a Work Plan** – ACEH has evaluated the data and recommendations presented in the above-mentioned reports, in conjunction with the case files, to determine if the site is eligible for closure as a low risk site under the LTCP. Based on ACEH staff review, we have determined that the site fails to meet the LTCP General Criteria d (Free Product), the Media-Specific Criteria for Groundwater, the Media-Specific Criteria for Vapor Intrusion to Indoor Air, and the Media-Specific Criteria for Direct Contact (see Geotracker).

As discussed above, failure to meet General Criteria d is based on the presence of concentrations of TPHg in well MW-10 that are suggestive of the presence of mobile LNAPL at a location approximately 355 feet downgradient of the releases. Failure to meet the Media-Specific Criteria for Groundwater is based on the detection of LNAPL indicative dissolved-phase concentrations in well MW-10, and detectable hydrocarbon concentrations in the privately owned water supply well at an approximate distance of 960 feet downgradient of the release. At this distance, the plume exceeds the "Maximum Plume Length" (855 feet) for TPHg as reported in the LTCP technical justification paper entitled *Technical Justification for Groundwater Media-Specific Criteria*, dated April 24, 2012. The approval of additional work in Technical Comment 1 is intended to help address and mitigate the length of this groundwater dissolved phase plume.

While two rounds of crawl space and ambient air vapor samples have been collected for the offsite residential home, the failure to meet the Media-Specific Criteria for Vapor Intrusion to Indoor Air is due to the ambiguity of the crawl space data (selected chemicals are over residential ESLs for both ambient air and crawl space air) and the lack of appropriately collected shallow soil samples beneath the offsite residence, or onsite in close proximity to the property boundary between the two parcels. Such soil samples would characterize a potential source of these concentrations, vapor diffusion from a residual soil source, as opposed to fuel dispensing air releases from the active service station (see

next). Alternative methods to characterize this offsite residential concern include the collection of soil vapor in accordance with LTCP guidance (at a depth of 5 feet below the depth of the foundation).

The failure of the site to meet the Media-Specific Criteria for Direct Contact is based on the very limited soil analytical data collected at appropriate locations (at the site or the offsite residential house) in the 0 to 5 and the 5 to 10 foot depth intervals in accordance with the LTCP. The majority of this limited data is from offsite locations or onsite locations distant to known releases, and is thus not representative of residual contaminant concentrations that may or may represent a direct contact or outdoor air vapor concern under this Criterion. In ACEH's review of site data, included in this concern is the poorly documented quality of excavation backfill which is reported to have utilized onsite soil materials.

Therefore, as the site moves towards closure, and in conjunction with the groundwater extraction system evaluation work plan requested in Technical Comment 2 above, please submit a work plan to undertake the collection of data to resolve outstanding issues and concerns at the site under the LTCP.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **May 2, 2016** – First Quarter 2015 Groundwater Monitoring and Remedial Progress Report
File to be named: RO473_GWM_REM_R_yyyy-mm-dd
- **May 13, 2016** – Offsite Investigation
File to be named RO473_SWI_R_yyyy-mm-dd
- **May 27, 2016** – Work Plan
File to be named RO473_WP_R_yyyy-mm-dd
- **60 Days After Work Plan Approval** – Soil and Water Investigation Report
File to be named RO473_SWI_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.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations and Electronic Report Upload (ftp) Instructions

cc: Mansour Sepehr, SOMA Environmental Engineering, 6620 Owens Dr., Ste A, Pleasanton, CA 94588 (Sent via E-mail to: msepehr@somaenv.com)

Dilan Roe, ACEH (Sent via E-mail to: dilan.roe@acgov.org)
Electronic File; GeoTracker

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.