



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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July 7, 2014

Ms. Carryl MacLeod
Chevron Environmental Management
6101 Bollinger Canyon Road
San Ramon, CA 94583
(sent via electronic mail to:
CMacleod@chevron.com)

Mr. Scott Bohannon
Bohannon Organization
60 31st Avenue
San Mateo, CA 94403
(sent via electronic mail to:
Scott.Bohannon@ddb.com)

Mr. Bob Webster
Bohannon Organization
60 31st Avenue
San Mateo, CA 94403
(sent via electronic mail to:
Robert.Webster@ddb.com)

Subject: Request for Work Plan; Fuel Leak Case No. RO0000007 (Global ID # T0600100302),
Chevron #9-0504, 15900 Hesperian Blvd., San Lorenzo, CA 94580

Dear Ms. MacLeod, and Messrs. Bohannon and Webster:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site, including the *First Quarter 2014 Groundwater Monitoring Special Event and LNAPL Recovery Status Report*, dated April 8, 2014 and the *Site Conceptual Model*, dated April 28, 2014. Both reports were prepared by Stantec Consulting Services, Inc. (Stantec) of Los Gatos, California. Thank you for submitting the reports. Stantec identified five Low-Threat Closure Policy (LTCP) data gaps in the SCM, and recommended that a work plan be generated. ACEH is in general agreement with the conclusions and recommendations contained in the SCM; however, discusses differences in the sections below.

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 State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). Based on ACEH staff review, we have determined that the site fails to meet the LTCP General Criteria f (Secondary Source Removal), and the Media-Specific Criteria for Groundwater, and the Media-Specific Criteria for Direct Contact.

Based on the review of the case file ACEH requests that you address the following technical comments and send us the documents requested below.

TECHNICAL COMMENTS

- 1. General Criteria f – Secondary Source Has Been Removed to the Extent Practicable –**
“Secondary source” is defined as petroleum-impacted soil or groundwater located at or immediately beneath the point of release from the primary source. Unless site attributes prevent secondary source removal (e.g. physical or infrastructural constraints exist whose removal or relocation would be technically or economically infeasible), petroleum-release sites are required to undergo secondary source removal to the extent practicable as described in the policy. “To the extent practicable” means implementing a cost-effective corrective action which removes or destroys-in-place the most readily recoverable fraction of source-area mass. It is expected that most secondary mass removal efforts will be completed in one year or less. Following removal or destruction of the secondary source, additional removal or active remedial actions shall not be required by regulatory agencies unless (1) necessary to abate a demonstrated threat to human health or (2) the groundwater plume does not meet the definition of low threat as described in this policy.

As stated in the July 13, 2012 directive letter, and further noted in the SCM, the diesel release location is not currently known, thus it is unknown if the secondary source has been removed to the extent practicable. In discussions with the UST inspector for the County Certified Unified Program Agency (CUPA) Program, it is understood that troubles with the diesel turbine pump were

encountered at the site. Therefore, please detail a strategy, as outlined in the SCM, in the Data Gap Work Plan (described in Technical Comment 4 below) to address this issue.

2. **LTCP Media Specific Criteria for Groundwater** – To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed in the policy.

Our review of the case files indicates that insufficient data collection and analysis has been presented to support the requisite characteristics of plume stability or plume classification as follows:

- a. **Downgradient Extent of Groundwater Plume** – As identified in the January 23, 2014 directive letter, downgradient wells C-9, C-10, and C-11 are consistently submerged, and are widely spaced such that a contaminant plume may by-pass the submerged well network. The SCM stated that although the wells are submerged there is no evidence that the groundwater samples collected from the wells are not representative of downgradient groundwater concentrations, and proposed the installation of one soil bore to collect a downgradient grab groundwater sample in order to define the downgradient extent of the plume.

ACEH notes that the dissolved-phase plume extent can be defined through additional investigation or by delineating the maximum extent of a likely plume by using the LTCP technical justification papers and rose diagram of flow directions, and locating sensitive receptors including basements, water supply wells (including unregistered wells requiring a neighborhood door to door canvas), and other dewatering infrastructures within that area. The intent is to verify that the separation distance between contaminated groundwater and a receptor is maintained, as required by the LTCP.

- b. **Groundwater Plume Stability** – In March 2012 mobile diesel free-phase (FP) appeared in well C-2. Since shortly thereafter, Total Petroleum Hydrocarbons as diesel (TPHd) concentrations have been analyzed at the site. Concentrations have fluctuated up to 20,000 µg/l TPHd (with silica gel cleanup), and down to 7,100 µg/l TPHd. Thus groundwater plume concentration stability does not appear to be present beneath the site.
- c. **Five Years of Declining Groundwater Concentrations** – Concentrations of TPH as gasoline (TPHg) in well C-2 have been increasing since the March 2010 sampling event. Additionally, since approximately March 2007 concentrations of TPHg have been increasing in offsite downgradient well C-8. The source of this contamination is uncertain; however, the documented presence of the onsite utility corridor (sanitary sewer and water) immediately north of the UST complex may allow the contamination to by-pass well C-2.
- d. **Distance to Nearest Well** – A well survey of known well locations has recently been undertaken; however, the data has not been tabulated or depicted in a succinct manner, such as on a site vicinity map. In order to quickly assess the location of vicinity wells, ACEH requests that the data be tabulated and depicted on a vicinity map. ACEH is aware that well construction details are confidential; however, well locations are not.

Additionally as noted above, an additional concern for this area of San Lorenzo is unregistered residential water supply wells. The area has a significantly higher incidence of unregistered residential wells that standard well surveys will not locate. It is appropriate to verify that well owners will not be exposed to residual downgradient groundwater contamination.

- e. **Neighborhood Sensitive Receptors** – The lack of downgradient delineation of the groundwater plume may leave the downgradient residential neighborhood at risk. The lack of a neighborhood sensitive receptor survey (basements, foundation depths, or other subsurface constructions and dewatering activities) eliminates the ability to determine if a sufficient factor of safety is present for these residents. Should basements be present, the separation distance between impacted groundwater and residents may be insufficient.

Please present a strategy in the Revised Data Gap Work Plan (described in Technical Comment 4 below) to address the items discussed above.

- 3. LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria** – The LTCP describes conditions where direct contact with contaminated soil or inhalation of contaminants volatilized to outdoor air poses a low threat to human health. According to the policy, release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if the maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 for the specified depth bgs. Alternatively, the policy allows for a site specific risk assessment that demonstrates that maximum concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health, or controlling exposure through the use of mitigation measures, or institutional or engineering controls.

As noted in the SCM, diesel, benzene, ethylbenzene, naphthalene and Poly-Aromatic Hydrocarbons (PAHs), concentrations in soil are likely to have changed since the release of diesel fuel product before March 2012. The SCM proposes to define the extent of the soil source from the release, and to collect representative samples.

Therefore, please present the strategy in the Data Gap Work Plan described in Technical Comment 4 below to collect sufficient data to satisfy the direct contact and outdoor air exposure criteria in the areas of likely dispenser locations. Please also collect a groundwater sample from borings and propose the requisite analysis including naphthalene and polycyclic aromatic hydrocarbons (PAH) analysis.

- 4. Data Gap Investigation Work Plan** – Please prepare Data Gap Investigation Work Plan to address the technical comments listed above. Please support the scope of work in the Data Gap Investigation Work Plan with Data Quality Objectives (DQOs) that relate the data collection to each LTCP criteria. For example please clarify which scenario within each Media-Specific Criteria a sampling strategy is intended to apply to. Please sequence activities in the proposed revised data gap investigation scope of work to enable efficient data collection in the fewest mobilizations possible.

TECHNICAL REPORT REQUEST

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

- **September 12, 2014** – Data Gap Investigation Work Plan
(File to be named: WP_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.

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

Thank you for your cooperation. If you have any questions, please call 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
Electronic Report Upload (ftp) Instructions

Ms. MacLeod, and Messrs. Bohannon and Webster
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cc: Ms. Alexis Fischer, Chevron Environmental Management Company, 6101 Bollinger Canyon Road, San Ramon, CA 94583; (sent via email to AFischer@chevron.com)

Travis Flora, Stantec Consulting Services, Inc., 15575 Los Gatos Blvd, Los Gatos, CA 95032;
(sent via email to travis.flora@stantec.com)

Dilan Roe, ACEH (sent via email to dilan.roe@acgov.org)

Mark Detterman, ACEH (sent via electronic mail to mark.detterman@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.