

ALAMEDA COUNTY
**HEALTH CARE SERVICES
AGENCY**

REBECCA GEBHART, Interim Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
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July 18, 2017

Ms. Carryl MacLeod
Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
(Sent via electronic mail to: CMacleod@chevron.com)

Subject: Feasibility Study / Corrective Action Plan; Fuel Leak Case No. RO0000284 and Geotracker
Global ID T0600100328, Chevron #9-0121; 3026 Lakeshore Avenue, Oakland, CA 94610

Dear Ms. MacLeod:

Subsequent to our recent directive letter (June 7, 2017), Alameda County Department of Environmental Health (ACDEH) staff have reviewed the status of the site within the context of the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy Low Threat Closure Policy (LTCP), specifically applied to the condition of the former Chevron property as it currently exists; as a parking lot without the presence of a building with an indoor air space, and to the downgradient properties.

ACDEH has evaluated the data and recommendations presented in case files to determine if the site is eligible for closure as a low risk site under the LTCP. In the site investigation report GHD, Inc, recommended quarterly groundwater monitoring for one year. Based on ACDEH staff review, we have determined that the site fails to meet the LTCP General Criteria b (Consists of Petroleum Only), f (Secondary Source Removal), the Media-Specific Criteria for Groundwater (discussed in the previous directive letter), and the Media-Specific Criteria for Vapor Intrusion to Indoor Air. (See Geotracker).

Based on ACDEH staff review of the case file, in addition to the eco-toxicity report, we request that you address the following technical comments and send us the reports described below.

TECHNICAL COMMENTS

- 1. LTCP General Criteria b (Unauthorized Release Consists Only of Petroleum)** – For purposes of this policy, petroleum is defined as crude oil, or any fraction thereof, which is liquid at standard conditions and temperature and pressure, which means 60 degrees Fahrenheit and 14.7 pounds per square inch absolute including the following substances: motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents and used oils, including any additives and blending agents such as oxygenates contained in the formulation of the substances.

Appendix B of the *Data Gap Investigation Work Plan and Focused Site Conceptual Model*, dated February 6, 2015, reports that two 500 – 1,000 gallon underground storage tanks (USTs) were abandoned in-place beneath the sidewalk during a station remodel in 1984. The location of the USTs have not been incorporated into site figures. Please locate the USTs on all future site figures.

Appendix B also indicates that this information was reported in the Pacific Environmental Group (PEG) report dated October 4, 1993, and entitled *Remedial Feasibility Study*. Review of the case file indicates that this report has not been previously submitted. Please submit the report electronically by the date identified below to the ACDEH ftp site and to Geotracker.

Due to their size the USTs would appear to be potentially first generation USTs. Due to the undocumented contents of these USTs it is appropriate to characterize residual contamination for all

constituents, including those for waste oil. ACDEH has not located either soil or groundwater analytical results for chlorinated volatile organic solvents (CVOCs) as a waste oil UST can be expected at an older facility. If site-wide groundwater analytical monitoring for CVOCs has been conducted, please include the analytical data as a table in all future groundwater monitoring reports. If CVOC analysis has not been conducted, please include analysis for CVOCs (full scan) in the next groundwater sampling event at the site. Please include the tabulated results in all future groundwater monitoring reports. The need for additional CVOC sampling can be assessed thereafter.

Please present a strategy in the Data Gap Work Plan (described in Technical Comment 5 below) to address the data gaps identified above. Please identify any additional data gaps, such as the need for analysis of wear metals that are typically associated with waste oil contamination. Alternatively, please provide justification of why the site satisfies this general criterion in the focused SCM described in Technical Comment 5 below.

- 2. 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.

The presence of secondary source in the vicinity of the two USTs abandoned in-place beneath the sidewalk is not known to have been assessed previously. Additionally, the identification of the location of all previous generations of USTs have not been depicted on site figures. Please include the location of all former UST generations on future site figures. Please determine the need to assess the removal of secondary source associated with each UST generation.

Please present a strategy in the Data Gap Work Plan (described in Technical Comment 5 below) to address the items discussed above. Alternatively, please provide justification of why the site satisfies this general criterion in the focused SCM described in Technical Comment 5 below.

- 3. LTCP Media Specific Criteria for Vapor Intrusion to Indoor Air** – The LTCP describes conditions, including bioattenuation zones, which if met will assure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to human occupants of existing or future site buildings, and adjacent parcels. Appendices 1 through 4 of the LTCP criteria illustrate four potential exposure scenarios and describe characteristics and criteria associated with each scenario.

Our review of the case files indicates that the site data collection and analysis fail to support the requisite characteristics of one of the four scenarios. Specifically, review of existing indoor air and crawl space data (collected at the adjacent site due to the shallowness of groundwater) indicates potential vapor intrusion due to naphthalene vapors. Naphthalene vapor concentrations, detected by TO-17 methodology, in all indoor air vapor samples were above, up to nearly twice as high, as outdoor air concentrations. ACDEH notes that the detection limit for naphthalene vapor analysis by TO-15 were higher than indoor air Environmental Screening Levels (ESLs), promulgated by the San Francisco Bay Regional Water Quality Control Board (RWQCB), or was not conducted for crawl space vapor samples.

Review of existing site analytical soil data indicates substantial residual soil contamination is located in proximity to the downgradient property line with the adjacent site owned by the Diocese of Oakland. Onsite analytical concentrations up to 1,300 milligrams per kilogram (mg/kg) Total Petroleum

Hydrocarbons as gasoline (TPHg) and 920 mg/kg TPH as diesel (TPHd; using Silica Gel Cleanup or SGC analysis) were documented at soil bore B-3 in the 0 to 5 foot depth interval on site. At offsite soil bore B-4, concentrations up to 330 mg/kg TPHd (with SGC analysis) were documented at 3 feet below grade surface (bgs), and 190 mg/kg at 6 feet bgs. At present no offsite soil bores have been installed offsite in proximity to the offsite buildings and basement.

Please present a strategy in the Data Gap Investigation Work Plan described in Technical Comment 5 below to collect additional offsite soil analytical data to determine if an offsite bioattenuation zone is present beneath the adjacent site to fit Scenarios 1 to 3 of the LTCP, or to collect additional soil gas (indoor air and crawl space) data as a proxy for Scenario 4. Consistent with Department of Toxic Substances Control's (DTSC) guidance to assess seasonality of vapor concentrations, please present a strategy in the Data Gap Investigation Work Plan requested in Technical Comment 5 below, to assess seasonal vapor variations.

Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Vapor Intrusion to Indoor Air in a SCM that assures that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to occupants of adjacent buildings.

- 4. Feasibility Study / Corrective Action Plan (FS/CAP)** – As noted above based on the apparent naphthalene vapor intrusion documented at the adjacent site(s), sufficient residual TPH concentrations are documented in soil in the 0 to 5 foot depth interval, and potentially the 5 to 10 foot depth interval, beneath the subject and the adjacent site, to warrant Corrective Actions. The residual soil and groundwater contamination appears to be additionally contaminating groundwater infiltrating into the basement sump at the adjacent building. The relatively consistent presence of concentrations of TPHg and benzene, toluene, ethylbenzene, and total xylenes, and methyl tert butyl ether (MTBE) in sump grab groundwater over a period of years remains a concern.

It is also the understanding of ACDEH that sump infiltrated groundwater is discharged to the curb on Lakeshore, and is thus in potential violation of non-point source discharges.

Therefore at this time, an FS/CAP prepared in accordance with Title 23, California Code of Regulations, Section 2725, appears warranted to mitigate contaminated sump groundwater infiltration and the indoor air vapor intrusion. The FS/CAP must include a concise background of soil and groundwater investigations and remedial actions performed in connection with this case and an assessment of the residual impacts of the chemicals of concern (COCs) for the site and the surrounding area where the unauthorized release has migrated or may migrate. The FS/CAP should also include, but is not limited to, a detailed description of site lithology, including soil permeability, and most importantly, contamination cleanup levels and cleanup goals, in accordance with LTCP goals, appropriate ESL guidance, or the RWQCB Basin Plan, for all COCs and for the appropriate groundwater designation. Please specify appropriate cleanup levels and cleanup goals in accordance with the LTCP, ESLs, or 23 CCR Section 2725, 2726, and 2727 in the FS/CAP.

As a part of the FS/CAP, please include a Data Gap Investigation Work Plan (see following Technical Comment), for the collection of all necessary additional data which may be required for the FS/CAP. The FS/CAP must evaluate at least three viable alternatives for remedying or mitigating the actual or potential adverse effects of the unauthorized release(s) besides the 'no action' and 'monitored natural attenuation' remedial alternatives. Each alternative shall be evaluated not only for cost-effectiveness but also its timeframe to reach cleanup levels and cleanup goals, and ultimately the Responsible Party must propose the most cost-effective corrective action.

- 5. Data Gap Investigation Work Plan and Focused Site Conceptual Model** – As a part of the FS/CAP, please prepare a 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 a focused SCM and 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.

In order to expedite review, ACDEH requests the focused SCM be presented in a tabular format that highlights the major SCM elements and associated data gaps, which need to be addressed to progress the site to case closure under the LTCP. Please see Attachment A "Site Conceptual Model Requisite Elements". Please sequence activities in the proposed revised data gap investigation scope of work to enable efficient data collection in the fewest mobilizations possible.

6. **Data Support Request: Cross-Sections, Soil Contours, and Tables** - As partly requested previously, in order to help illuminate site and vicinity conditions, such as the depth of utilities relative to first water in the site vicinity, ACDEH requests inclusion of a minimum of two cross-sections across the site, both parallel and approximately perpendicular to the predominate groundwater flow direction that illustrate residual contamination and source areas. In order to expedite review of the site, please additionally submit tables documenting remaining residual soil contamination and contamination which is documented to have been removed (strikeout but legible, grayed out, or other). In order to document the known extent of soil contamination at the site and vicinity, please include figures illustrating the extent of soil contamination. In order to document the construction and installation elevation of the groundwater monitoring wells, please include a table in future groundwater monitoring reports of the construction details for each well.
7. **Groundwater Monitoring Interval** – Based on a review of site data ACDEH requests quarterly groundwater monitoring of wells MW-6 and MW-10. ACDEH notes that contaminant concentrations in well MW-6 appear to have been recently increasing, and that some concentrations may not meet fresh or salt water Ecotoxicity values as defined by ESLs. This is of concern due to the presence of very shallow groundwater, the presence of a large storm drain corridor, installed at an unspecified depth, and the closeness of Lake Merritt. Please submit quarterly groundwater monitoring and sampling reports by the dates identified below.
8. **Groundwater Monitoring Analytical** – Due to the presence of gasoline and diesel contamination at the site, and due to standard LCTP data evaluations, please include analysis for naphthalene in all future groundwater monitoring reports, until otherwise requested.
9. **Groundwater Well TOC Elevation Discrepancies** – Review of the *First Semi-Annual 2017 Groundwater Monitoring and Sampling Report*, dated March 15, 2017, documents either an error in data input at all existing wells, or an undocumented resurvey of the well casings. In Table 1, the Top of Casing in all wells is stated to have increased approximately five to six feet. Please review the report and correct the TOC elevation and resubmit the report, or please document the reason for the change in casing elevations.

SUBMITTAL ACKNOWLEDGEMENT STATEMENT

Please note that ACDEH has updated Attachment 1 with regard to report submittals to ACDEH. ACDEH will now be requiring a Submittal Acknowledgement Statement, replacing the Perjury Statement, as a cover letter signed by the Responsible Party (RP). The language for the Submittal Acknowledgement Statement is as follows:

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's Geotracker Website.

Please make this change to your submittals to ACDEH.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH 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:

- **August 18, 2017** – Submittal of 1993 Report
File to be named: RO284_SWI_R_yyyy-mm-dd
- **August 25, 2017** – TPHd Ecotoxicity Report
File to be named: RO284_SWI_R_yyyy-mm-dd
- **September 8, 2017** – Second Quarter 2017 Groundwater Monitoring Report
File to be named: RO284_GWM_R_yyyy-mm-dd
- **September 22, 2017** – Feasibility Study / Corrective Action Plan / Data Gap Work Plan
File to be named: RO284_FEASSTUD_WP_R_yyyy-mm-dd
- **December 1, 2017** – Third Quarter 2017 Groundwater Monitoring Report
File to be named: RO284_GWM_R_yyyy-mm-dd
- **March 2, 2018** – Fourth Quarter 2017 Groundwater Monitoring Report
File to be named: RO284_GWM_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>.

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, P.G., C.E.G.
Senior Hazardous Materials Specialist

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

cc: Kiersten Hoey, GHD, 5900 Hollis Street, Suite A, Emeryville, CA 94608; (Sent via electronic mail to: Kiersten.hoey@ghd.com)

Dilan Roe, ACDEH, (Sent via electronic mail to: dilan.roe@acgov.org)
Paresh Khatri, ACDEH; (Sent via electronic mail to: paresh.khatri@acgov.org)
Mark Detterman, ACDEH, (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

Alameda County Department of Environmental Health's (ACDEH) Environmental Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) 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 File Transfer Protocol (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 SCP 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 (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/) for more information on these requirements.

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website." 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 6731, 6735, and 7835) 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 licensed 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 case meet this requirement. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: <http://www.bpelsg.ca.gov/laws/index.shtml>.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late 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 SCP)	REVISION DATE: December 1, 2016
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010; May 15, 2014, November 29, 2016
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SCP) 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) Open File Explorer using the Windows  key + E keyboard shortcut.
 - i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) On the address bar, type in ftp://alcoftp1.acgov.org.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive)
 - d) Click Log On.
 - e) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - f) 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.