

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
(510) 567-6700
FAX (510) 337-9335

January 5, 2017

City of Emeryville
Successor to Emeryville Redevelopment Agency
c/o Nancy Humphrey
1333 Park Ave.
Emeryville, CA 94608
(Sent via electronic mail to: nhumphrey@ci.emeryville.ca.us)

Park Emery Assoc. LTD Partnership
Address Unknown

Longs Drug Stores California, Inc.
c/o CVS #9553-01
One CVS Drive, Mail Code 2340
Woonsocket, RI 02895
(Sent via electronic mail to: Nadine.King@CVSCaremark.com)

Subject: Request for Work Plan; Fuel Leak Case No. RO0000068 and GeoTracker Global ID T0600101848, City of Emeryville Fire Station, 4331 San Pablo Avenue, Emeryville, CA 94608

Dear Responsible Parties:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the *Data Gap Investigation Report*, dated November 11, 2016. The report was submitted on your behalf by OTC Enviroengineering Solutions, Inc. (OTC). Thank you for submitting the report. The report documented the installation of soil bores SB-1 and SB-2, the collection of soil samples, and the lack of groundwater beneath the site, in contrast with the collection of groundwater in former well MW-1 for four quarterly groundwater monitoring events in 1995. In the fourth quarterly event in December 1995, groundwater concentrations increased substantially and reported 98,000 micrograms per liter ($\mu\text{g/l}$) Total Petroleum Hydrocarbons as diesel (TPHd), 8,700 $\mu\text{g/l}$ TPH as gasoline (TPHg), 230 $\mu\text{g/l}$ benzene, and 42 $\mu\text{g/l}$ ethylbenzene in groundwater.

The concentration of TPHd in the last groundwater sampling in 1995 is substantially above concentrations cited in the *Technical Justification for Vapor Intrusion Media-Specific Criteria* as indirect evidence of Light Non-Aqueous Phase Liquids (LNAPL; >5,000 $\mu\text{g/l}$ TPH as diesel in groundwater). While ACDEH recognizes the potential influence of the drought and urban redevelopment on groundwater levels in Emeryville, alternate reasons for the lack of groundwater beneath the site are likely, including drilling technique or processes, which can also explain the lack of groundwater. Many vicinity sites retain groundwater beneath them.

Because ACDEH is required to evaluate the site against the State Water Board's (SWBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP), ACDEH has recently reevaluated case files and documents with respect to the LTCP. Based on ACDEH staff review, we have determined that the site potentially fails to meet the LTCP General Criteria b (unauthorized release consists only of petroleum), d (Free Product), f (secondary source removed to extent practicable), and the Media-Specific Criteria for Groundwater, Petroleum Vapor Intrusion to Indoor Air, and Direct Contact and Outdoor Air Exposure. It appears to ACDEH that the majority of this information can be obtained in a single mobilization to the site.

Therefore, at this juncture, it appears appropriate to request that you prepare a Data Gap Investigation Work Plan that is supported by a focused Site Conceptual Model (SCM) to address the Technical Comments provided below. In general, the comments evaluate the site against the LTCP.

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.

A waste oil sump was noted to have been present with liquid waste oil in available reports for the site, and chlorinated solvents were identified as Chemicals of Concern for the site. The recent analysis for chlorinated solvents in soil bores SB-1 and SB-2 appear to indicate limited impacts in soil; however, at present there is a lack of groundwater analysis for chlorinated solvents.

Please present a strategy in the Data Gap Work Plan (described in Item 7 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 Item 7 below.

- 2. LTCP General Criteria d (Free Product)** – The LTCP requires free product to be removed to the extent practicable at release sites where investigations indicate the presence of Light Non-Aqueous Phase Liquids (LNAPL) by removing in a manner that minimizes the spread of the unauthorized release into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges, or disposes of recovery byproducts in compliance with applicable laws. Additionally, the LTCP requires that abatement of free product migration be used as a minimum objective for the design of any free product removal system.

ACDEH's review of the case files indicates that insufficient data collection and analysis has been presented to assess the potential for LNAPL at the site. Specifically, as mentioned above, a concentration of 98,000 µg/l TPHd and 8,700 µg/l TPHg was detected in groundwater at the time of the last known groundwater monitoring event. This concentration is substantially above concentrations cited in the *Technical Justification for Vapor Intrusion Media-Specific Criteria*, as indirect evidence of LNAPL in groundwater.

Please present a strategy in the Data Gap Work Plan (described in Item 7 below) to address the items discussed above. Alternatively, please provide justification of why the site satisfies General Criteria d in the focused SCM described in Item 7 below.

- 3. 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.

ACDEH's review of the case files indicates that insufficient data collection and analysis has been presented to assess the extent of secondary source removal at the site. Specifically, removal of the waste oil sump with liquid phase petroleum and transmission fluid is not documented in the case file and the extent of the removal of any associated secondary source is thus unknown. Please note that

this location cannot be considered an UST, so costs associated with this area may not be reimbursable, but concurrent investigation may provide some cost savings.

Please present a strategy in the Data Gap Work Plan (described in Item 7 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 Item 7 below.

4. **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. **Plume Length and Lateral Extent** – The length and lateral extent of a groundwater plume from the subject site has not been defined. Should the installation of one or more groundwater monitoring wells confirm a lack of groundwater beneath the site, an alternative path, such as soils only case, forward should be evaluated.
- b. **LNAPL Plume Length** – The length of a potential LNAPL is undefined. Please be aware that the LTCP considers Free Product to be migrating LNAPL, rather than residual, immobile, or mobile LNAPL. Please see the *Technical Justification for Groundwater Media-Specific Criteria* (SWB, April 24, 2012) for further details for your evaluation.
- c. **Plume Stability** – Plume stability does not appear to have been determined.
- d. **Distance to Closest Water Supply Well or Surface Water** – The closest known water supply well and surface water has not been undetermined. These were proposed in the previous work plan and subsequently approved by ACDEH. To clarify, ACDEH requires utilization of both the Alameda County Public Works Agency (ACPWA) and the Geotracker Ambient Monitoring and Assessment Program (GAMA) databases. The databases are sufficient different to yield results of interest.

In order to enable a rapid assessment of the results, ACDEH requests that all deep wells and cathodic protection wells that are found be plotted on a vicinity map, and the data be tabulated. Please be aware that shallow, typically environmental case related wells, do not need to be included on the map or table; ACDEH is typically concerned with the protection of deep water bearing zones.

Please present a strategy in the Data Gap Work Plan (described in Item 7 below) to address the items discussed above. Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Groundwater in the focused SCM described in Item 7 below.

5. **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, the lack of delineation of soil and groundwater contamination to the west, the lack of definition of potential LNAPL at the site, and the lack of shallow soil samples in the vicinity of the former sources, the documentation of soil contamination above 100 mg/kg at a depth of seven feet below surface grade (bgs) in the vicinity of the former UST, and the lack of documentation of the subsequent removal of the residual contamination, precludes analysis of site residual contamination and the potential for vapor intrusion at the site.

Conversely, ACDEH acknowledges that there is not an existing building on the former property which comprised the former fire station, and thus there is not a risk of vapor intrusion to that building. Provided a land use restriction to the existing use (a parking lot) is acceptable to all parties, and this is communicated in writing by all parties, it may be possible to satisfy this Media Specific Criteria.

Alternatively, the collection of limited additional data as discussed above, may allow this Media Specific Criteria to be satisfied and may ensure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to occupants of adjacent buildings. Otherwise, please note, that if direct measurement of soil gas is proposed, ensure that your strategy is consistent with the field sampling protocols described in the Department of Toxic Substances Control's Final Vapor Intrusion Guidance (October 2011). Consistent with the guidance, ACDEH requires installation of permanent vapor wells to assess temporal and seasonal variations in soil gas concentrations.

6. **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.

Our review of the case files indicates that insufficient data collection and analysis has been presented to satisfy the media-specific criteria for direct contact and outdoor air exposure. Specifically, very limited shallow soil samples appear to have been collected or submitted in proximity to contamination sources, and thus an evaluation of the criterion is not possible for the site.

The collection of limited additional data may allow this site to meet this Media Specific Criteria. Therefore, please present a strategy in the Data Gap Work Plan described in Item 7 below to collect sufficient data to satisfy the direct contact and outdoor air exposure criteria in the areas of likely dispenser locations. Please include the sampling and analysis of soil between the 0 to 5 and the 5 to 10 foot intervals, at the groundwater interface, lithologic changes, and at areas of obvious impact. Also, collect a groundwater sample from each boring and propose the requisite analysis including naphthalene, and including polycyclic aromatic hydrocarbons (PAH) analysis in proximity to the waste oil sump.

Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Direct Contact and Outdoor Air Exposure in the focused SCM described in Item 7 below that assures that exposure to petroleum constituents in soil will have no significant risk of adversely affecting human health.

7. **Data Gap Investigation Work Plan and Focused Site Conceptual Model** – 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 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 the previously sent 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.

8. **Electronic Report and Data Upload Compliance** – A review of the case file and the State's Geotracker database indicates that the site is not in compliance with previous directive letters. Compliance is a State requirement for reimbursement. Pursuant to California Code of Regulations,

Title 23, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the UST or LUST program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs, including SLIC programs. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites was required in GeoTracker. At present missing data and documents include, but may not be limited to EDF submittals, GEO BORES, GEO MAPS, and older reports. Please see Attachment 1 for limited additional details, and the state GeoTracker website for full details. ACEH requests notification of, and a list of, the documents uploaded to Geotracker. Please upload all submittals to GeoTracker by the date specified below.

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 following specified file naming convention and schedule:

- **March 10, 2017** – Data Gap Work Plan
File to be named: RO68_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>. If your email address is not listed on the first page of this letter, or in the list of cc's listed below, ACEH is requesting your email address to help expedite communications and to help lower overall costs.

Thank you for your cooperation. 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

Responsible Parties
RO0000068
February 9, 2015, Page 6

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

cc: Xinggang Tong, OTG Engineering, Solutions, Inc, 770 Edgewater Drive, Suite 260, Oakland, CA
94621; (Sent via electronic mail to: xtong@otgenv.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.