

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

COLLEEN CHAWA, Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY
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(510) 567-6700
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May 1, 2018

Mr. Jadwinder Singh
AK Services, Inc.
821 Corporate Way
Fremont, CA 94539

Subject: Focused Site Conceptual Model and Data Gap Investigation Work Plan; Fuel Leak Case No. RO0003260 and GeoTracker Global ID T10000010821, Chevron Gas Station (AK Services), 4707 First Street, Livermore, CA 94551

Dear Mr. Singh:

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file, including the *Data Gaps Investigation Report*, dated March 7, 2018 prepared and submitted on your behalf by PIERS Environmental Services (PIERS). Thank you for submitting the report.

The referenced report documents the installation of five soil bores to groundwater, the collection of soil and grab groundwater, and the submittal of these samples to an analytical laboratory for analysis. Concentrations up to 2,500 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 300 mg/kg TPH as diesel (TPHd), 20.0 mg/kg ethylbenzene, 14 mg/kg naphthalene, and 110 mg/kg total xylenes were documented at a depth of 2.5 feet below surface grade (bgs). This concentration is above concentrations in soil that the *Technical Justification for Vapor Intrusion Media-Specific Criteria* (March 2012, State Water Resource Control Board) of the Low-Threat Closure Policy (LTCP) considers to be representative of Light Non Aqueous Phased Liquids (LNAPL). However substantially lower concentrations were documented at 5 feet bgs in the same bore hole (SB-5 d5; 22 mg/kg TPHg, 7.7 mg/kg TPHd, 0.066 mg/kg ethylbenzene, 0.89 mg/kg naphthalene, and 0.11 mg/kg total xylenes), and at 7.5 feet. The resulting data appear to indicate a near-surface release from product piping that is defined vertically.

Based on grab groundwater samples, the release does not appear to significantly impact groundwater beneath the site (grab groundwater SB-5 documented 75 micrograms per liter (μ /l) TPHg, <50 μ /l TPHd, and less than 0.50 μ /l benzene, toluene, ethylbenzene, total xylenes, and MTBE).

The complicating factor at the site however, is the presence of a culvert directly below the fuel dispenser canopy and associated dispensing islands, and the presence of an unlined open water body, Seco Arroyo Cannel, at the southern property line for the site.

Based on a review of the data, ACDEH has evaluated data and recommendations presented in the above-mentioned report, 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 ACDEH staff review, we have determined that the site fails to meet the LTCP Media-Specific Criteria for Groundwater (see Geotracker).

TECHNICAL COMMENTS

- 1. 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. **Distance to Open Surface Body of Water** – The distance to the Seco Arroyo Cannel on the southern property boundary from the point of release is approximately 75 to 80 feet. The distance between the soil contamination and the culvert beneath the dispensers is less than approximately 10 feet to the west. The culvert services a large drainage swale to the north of the site. A review of existing maps, and of the site on Google Earth, indicate the culvert discharges into Seco Arroyo. Therefore, depending on the burial depth, size, and condition of the culvert beneath the dispensing canopy, relative to the position of the residual LNAPL contamination, a potential for LNAPL to migrate through soil only into the culvert and discharge to Seco Arroyo Cannel is present depending on the lateral extent of LNAPL migration towards the culvert.

Please present a focused Site Conceptual Model (SCM) and a Data Gap Work Plan (described in Technical Comment 2 below) to address the items discussed above. At a minimum, ACDEH requests the generation of two cross-sections oriented perpendicular to each potential conduit (cannel and culvert) to illustrate the depths of each structure relative to the residual LNAPL and geologic media. Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Groundwater in the focused SCM described in Technical Comment 2 below.

2. **Focused Site Conceptual Model and Data Gap Investigation Work Plan** – Please prepare a Focused SCM and a Data Gap Investigation Work Plan, if needed, 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", previously forwarded. Please sequence activities in the proposed revised data gap investigation scope of work to enable efficient data collection in the fewest mobilizations possible.

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 submit the following technical reports and deliverables to the State Water Board's Geotracker website and notify your case worker by electronic mail (mark.detterman@acgov.org), in accordance with the following specified file naming convention and schedule, as provided below, and in the Responsible Party(ies) Legal Requirements/Obligations which is included as Attachment 1. Please note ACDEH no longer accepts reports on the ftp site.

- **July 2, 2018** – Data Gap Investigation Plan and Focused Site Conceptual Model
(File to be named: RO3260_WP_SCM_R_yyyy-mm-dd)

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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 4799, CEG 1788
Senior Hazardous Materials Specialist

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

cc: Tina Hariu, PIERS Environmental Services, Inc, 1038 Redwood Highway, Suite 100A, Mill Valley, CA 94941, (Sent via electronic mail to: tina@pierses.com)

Donal Manning, PIERS Environmental Services, Inc, 1038 Redwood Highway, Suite 100A, Mill Valley, CA 94941, (Sent via electronic mail to: donal@pierses.com)

Kay Pannell, PIERS Environmental Services, Inc, 1038 Redwood Highway, Suite 100A, Mill Valley, CA 94941, (Sent via electronic mail to: kayppers@gmail.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

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: December 14, 2017
	ISSUE DATE: July 25, 2012
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Chapter 30, Division 3, Title 23 and Division 3, Title 27.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are 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 (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format™ (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_MAPS	Sample ID	Matrix	GEO_Z	GEO_XY	GEO_BORE	GEO_WELL	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
2012 Site Assessment Work Plan	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				SB-10-6	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

¹ GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: NA
	ISSUE DATE: December 14, 2017
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

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 the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

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 and include the professional registration stamp, signature, and statement of professional certification. 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

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water 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.