ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
COLLEEN CHAWLA, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
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March 28, 2018

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

Ms. Leslie Riasanovsky
Unknown Address

Neil & Diane Goodhue
300 Hillside Avenue
Piedmont, CA 94611

Subject: Case Review and Low Threat Closure Policy Evaluation; Fuel Leak Case No. RO0000138; Global ID # T0600102248; Chevron #9-0517 / Homestead Federal Savings, 3900 Piedmont Avenue, Oakland CA 94610

Dear Mesdames MacLeod and Riasanovsky, and Mr. & Mrs. Goodhue:

Alameda County Department of Environmental Health (ACDEH) staff has undertaken a case review of the existing case file, and has evaluated site data, 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 based on existing data the site meets all General Criteria, the Vapor Intrusion Media-Specific Criteria, and the Direct Contact and Outdoor Air Criteria, but fails to meet the Media-Specific Criteria for Groundwater (see Geotracker for an updated list). However, based on this review, and the collection of limited additional data, the case appears to be closable.

Therefore, based on the review of the case file ACDEH requests that you address the following technical comments and send us the documents requested below.

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 classification as follows:

   a. **Length of Groundwater Plume –** The length of the groundwater plume appears to be adequately defined downgradient of the site. Soil bore SB-2, installed downgradient of one direction of groundwater flow at the site in July 2008 documented the presence of 540 micrograms per liter (µg/l) Total Petroleum Hydrocarbons as gasoline (TPHg), 1 µg/l methyl tert butyl either (MTBE), and less than 0.5 µg/l benzene, toluene, ethylbenzene, and total xylenes (BTEX) in groundwater at the location. This location is approximately 130 feet downgradient of well MW-4 and indicates a marked decrease in groundwater concentrations over that distance. In part, this concentration decease may be caused to the presence of underground utilities in Piedmont Avenue that may intercept groundwater contamination and act as a preferential pathway for the migration of contamination to areas that would not otherwise be exposed to the release from this site.

   b. **Preferential Pathways -** The confirmed presence of a sewer main in Piedmont Avenue that is reported to have been installed at a depth of 12 to 13 feet below grade surface (bgs), within the groundwater bearing zone, appears to be the main identified potential preferential pathway

beneath Piedmont Avenue. However, a storm drain main has not been reported in the vicinity of the site, and may represent an additional preferential pathway for the transmittal of groundwater contamination to surface waters downgradient, or perhaps cross-gradient, of the site.

Review of surface water locations on Google Street View and the *Creek & Watershed Map of Oakland & Berkeley* (Oakland Museum of California, 2000) indicates that the closest downgradient surface water body is Glen Echo Creek at an approximate distance of 1,250 feet. ACDEH also notes that Glen Echo Creek is also approximately 480 feet to the east, or cross-gradient. The LTCP *Technical Justification for Groundwater Media-Specific Criteria* (SWB, April 2012), states that studies of TPHg contamination plumes indicate that the maximum plume length can be up to 855 feet. Therefore, provided there are no preferential pathways that intercept the hydrocarbon plume, surface water bodies do not appear to be at risk of intercepting the contamination.

A preliminary Google Street View review of Piedmont Avenue and Montell Street does not appear to indicate drop inlets to a separate storm drain underground utility line, and may suggest that in this area of Oakland storm and sewer lines may be combined. Therefore, in order to eliminate the potential for a preferential pathway to exist beneath Piedmont Avenue and Montell Street for a direct conduit to surface waters by a separate storm drain system that has not been reported, ACDEH requests a determination and report of the nature of storm water and sewer utilities in this area of Oakland. Please submit a report with the findings by the date identified below.

2. **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.

   ACDEH has re-evaluated our review of case data since the October 10, 2017 directive letter. As noted in that directive letter, sub-slab vapor data for the site indicates that the data meet the Environmental Screening Levels (ESLs) of the San Francisco Bay Regional Water Quality Control Board (RWQCB) for the initial sampling round. As also noted in that directive letter, due to the recent remodel of the building, the indoor air vapor data is suspect. In discussions with the State Water Resource Control Board (State Water Board), one round of vapor sampling is sufficient to meet the LTCP. Therefore, in order to meet policy requirements, ACDEH is in agreement that the site meets the vapor intrusion criteria of the LTCP base on one round of sub slab vapor sampling.

   For the offsite crawl space vapor data, review of site data indicates that there appears to be a minimum of a five foot bioattenuation zone beneath the foundation of buildings across Piedmont Avenue. Using soil analytical data from well MW-4, there does not appear to be a concentration greater than 100 milligrams per kilogram (mg/kg) TPHg in soil within this bioattenuation zone. Therefore, ACDEH is in agreement that downgradient offsite areas appear to meet Scenario 3 of this Media-Specific Criteria.

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 volatized 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 data indicates that based on existing data the site meets the Direct Contact and Outdoor Air Media-Specific Criteria; however, the limited soil data that has been collected due to the

presence of the current building above the location of the former USTs indicates the presence of substantial residual soil contamination beneath the site, as discussed below.

The site had been the location of a service station from at last April 1955 to October 1978, when a permit to demolish the station was issued. Based on the date of the permit it appears the underground storage tanks (USTs) were removed in October 1978. A report on the removal has apparently not been found or submitted. Soil and groundwater characterization in the vicinity of former UST locations has been undertaken, however, as noted very limited data has been collected in close proximity to the former tank holds due to the presence of the building that was constructed subsequently at the site, generally over the majority of these former UST locations.

Residual contamination was documented to be present immediately adjacent to the building at concentrations up to 3,400 mg/kg TPHg, 1.0 mg/kg benzene, and 19.0 mg/kg ethylbenzene (FNBO-5 and FBNO-7, October 1993). These bores were placed in narrow onsite landscaped areas between existing sidewalks and the building in proximity to a former UST and a dispenser island. Additional documentation of residual contamination immediately adjacent to another, first generation, UST was provided by soil bore B-4 in April 2017. This bore documented concentrations up to 1,500 mg/kg TPHg, 790 mg/kg TPH as diesel (TPHd), and 700 mg/kg TPH as motor oil (TPHmo), and a concentration of 0.15 mg/kg ethylbenzene. The presence of additional residual contamination beneath the building has not been fully investigated; however, based on one time sub-slab vapor data, do not appear to represent a vapor intrusion risk as discussed above in Technical Comment 2.

Therefore, due to the likelihood that residual soil contamination, at potentially substantial concentrations, will be encountered by contractors at the time of undertaking underground site improvements, or repairs, such as utilities, and potentially by landscaping crews during plant replacement, ACDEH requests the generation of a Site Soil and Groundwater Management Plan (SMP) prior to case closure, and by the date identified below. To implement the SMP, ACDEH will require the use of a Land Use Covenant (LUC) for the site. A Word version of the County's standard SMP and LUC, will be forwarded under separate cover. Please return a draft version of the SMP and LUC, in Word, by the date identified below.

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:

- **June 15, 2018** – Preferential Pathway Evaluation
  File to be named: SWI_R_yyyy-mm-dd

- **June 15, 2018 –** Soil and Groundwater Management Plan
  File to be named: RO138_SMP_R_yyyy-mm-dd

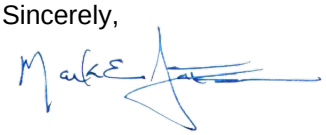
- **June 15, 2018 –** Draft LUC (in Word)

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.

If your email address does not appear on the cover page of this notification, ACDEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

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
Electronic Report Upload (ftp) Instructions

cc: Eva Hey, Stantec Consulting Services, Inc., 1340 Treat Blvd, Suite 525, Walnut Creek, CA 94597; (Sent via electronic mail to: eva.hey@stantec.com)

Galvin Kauffman, State Water Resource Control Board, (Sent via electronic mail to: Galvin.Kauffman@WaterBoards.ca.gov)

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, Division3, 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 values[1] 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	☐	☐	☐	☐	✓
2012 Site Assessment Work Plan	2012	✓	✓			☐	☐	☐	☐	☐
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	☐	☐	☐	✓
				SB-10-6	SO	☐	☐	☐	☐	✓
				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.