

ALAMEDA COUNTY  
**HEALTH CARE SERVICES  
AGENCY**

COLLEEN CHAWLA, Agency Director



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

Equilon Enterprises LLC dba Shell Oil Products US  
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Roland C Malone, Jr., Trust  
Attn.: Erik Parrish  
3167 Riverbend Ave.  
Eugene, OR 97408

Phua Hoi L & Lee LinLi Trust  
Attn.: Hoi (Bill) Phua & LinLi Lee, Trustees  
141 Woodland Way  
Piedmont, CA 94611  
*Sent Via E-Mail to: [billphua@yahoo.com](mailto:billphua@yahoo.com)*

**Subject: Request for Technical Reports**  
**Case No. RO0000486**  
**GeoTracker Global ID T0600101261**  
**Shell #13-5701**  
**4255 MacArthur Blvd.**

Dear Responsible Parties:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file for the above-referenced site, including the following technical reports:

- First Semi-Annual 2018 Groundwater Monitoring Report (SAMR) dated 15 April 2018 and prepared by AECOM Technical Services., Inc. (AECOM)
- Additional Investigation Work Plan dated 28 February 2018 and prepared by AECOM
- Groundwater Monitoring and Remediation Report – Third Quarter 2010 (QMR) dated 15 November 2010 and prepared by Conestoga-Rovers & Associates (CRA)

Floating gasoline on the groundwater table extends from the site onto downgradient properties. To date, active remediation of downgradient soil and groundwater has not been performed. ACDEH requested Equilon prepare a Corrective Action Plan (CAP) for the site in the 24 November 2014 directive letter for this case. Equilon hand bails and uses absorbent socks to remove free product from its monitoring wells twice per year. In the 13 February 2015 CAP, Equilon's consultant at the time, CRA, recommended monitored natural attenuation. Equilon monitors groundwater on a semi-annual basis. In the 13 February 2015 CAP, CRA concluded that LNAPL at the site and on downgradient properties did not pose any unacceptable risks to potential receptors, pending future development.

To evaluate vapor intrusion risks to off-site residents at downgradient properties and to assess the potential for vapor intrusion to future onsite structures, Equilon's Additional Investigation Work Plan proposes to install one new soil gas well and to collect and analyze soil gas samples from 26 locations (wells SVP-1 through SVP-26). The wells consist of nested well-pairs, screened at 2.5 and 5.0 feet bgs. Only 5-ft deep samples are proposed to be collected from onsite soil gas wells located outside of the projected footprint of the future site structure. Five-ft deep and 2.5-ft deep samples are proposed to be collected from offsite soil gas wells and from wells within the projected future footprint of the proposed site structure. The workplan proposes to collect sub-slab soil gas samples from two locations within the commercial structure at 4251 MacArthur Blvd.

AECOM states in the 15 April 2018 SAMR that a feasibility study will be conducted in conjunction with a Corrective Action Plan (CAP) at a future date. AECOM provides no rationale supporting its proposal to revise the feasibility study reported in the 13 February 2015 CAP. In the CAP, CRA identified excavation as the likely most effective remedial technology for the site, pending re-development of the property. Bill Phua, the owner of the property at 4255 MacArthur Blvd., plans to construct a commercial building intended for use as a retail coffee shop at the site.

AECOM states that free product (mobile LNAPL) at the site and on downgradient properties consists of leaded gasoline, based on the results of forensic analysis conducted in 2010. Analytical laboratory reports from the referenced forensic analyses have not been submitted to the ACDEH. AECOM proposes to conduct additional soil gas investigation and compile the results in an updated Conceptual Site Model (CSM). The CSM will describe subsurface contamination and potential human and environmental receptors that could be affected by migration of the pollution.

Based on our review of the case file, ACDEH conditionally approves the workplan provided that you address the technical comments listed below as part of the implementation. Submittal of a revised workplan or a workplan addendum is not required. Provide 72-hour written notification to robert.schultz@acgov.org prior to the start of field activities. Send us the reports described below according to the specified schedule.

### **TECHNICAL COMMENTS**

ACDEH requests that you address the following technical comments as part of your implementation of the workplan, and perform the proposed work in conformance with the conditions listed below.

- 1. Shallow Soil Gas Samples.** AECOM proposes to collect and analyze shallow soil gas samples from 2.5 feet bgs to collect data to evaluate potential human health risk from vapor intrusion to existing or future structures. The soil gas wells are located away from structures with subsurface foundations. The site is unpaved and does not contain any structures. The downgradient properties are partially paved with asphalt and partially unpaved. Barometric influences are likely to affect soil gas concentrations at 2.5 feet bgs at the site and downgradient properties. AECOM's proposed collection of soil gas samples from 2.5 feet bgs appears unlikely to achieve the investigation objectives. Additional rationale supporting collection and analysis of 2.5-foot deep samples is needed prior to implementing this portion of the sampling plan. This limitation should not impede implementation of the sampling and analysis plan for samples to be collected below 5 feet bgs, or within the footprint of existing structures.
- 2. Soil Gas Sample Analysis.** As proposed in the work plan, all soil gas and groundwater samples collected pursuant to the workplan will be analyzed for the 51 Common Organic Compounds listed in Section 6.1 of the DTSC Active Soil Gas Investigations- Advisory, July 2015, in addition to other potential chemicals of concern at the site. The DTSC Advisory list includes chlorinated solvents and 1,4-dioxane. The samples will be analyzed for naphthalene using EPA Method TO-17 and fixed gasses, including helium, nitrogen, oxygen, methane, and carbon dioxide using ASTM Method D-1946.
- 3. Soil Gas Well Integrity Testing.** The soil gas wells were constructed using Teflon tubing and screened below 5 feet bgs. AECOM's proposal to test the integrity of the wells by (1) applying and monitoring a vacuum at each well, (2) using a helium shroud during sample collection, and (3) analyzing soil gas samples for fixed gasses, including helium is acceptable. Please document integrity testing methods and results in the report requested below.
- 4. LNAPL Evaluation.** Equilon reported LNAPL in downgradient wells MW-2, MW-3, and MW-4 in the 15 April 2018 SAMR. Well MW-2 is located on the downgradient mobile home park property; well MW-3 is located on-site; and well MW-4 is located on a third property, downgradient of the mobile home park. A fourth property, the residence at 4240 Redding Street, is located between the mobile home park and the property containing well MW-4. As discussed between Equilon and ACDEH on 17 October 2017, a corrective action plan (CAP) may need to be developed in connection with the planned construction at the site. Prior to developing a CAP to remove free product, ACDEH recommends that you evaluate the chemical composition and nature of the free product to support future corrective action planning. At a minimum, free product samples should be evaluated for dynamic viscosity (ASTM D445), density (ASTM D1481) and surface and interfacial tension (ASTM D971) and using the PIANO analysis (ASTM D5134 or modified EPA Method 8260). All analytical laboratory reports, including the forensic analytical laboratory reports for LNAPL samples collected from the site in 2010, must be

submitted to the ACDEH. ACDEH further requests that you submit chromatograms for the groundwater samples reported in the 15 April 2018 SAMR.

5. **Environmental Screening Levels.** AECOM proposes to compare analytical laboratory results from the soil gas investigation to the Environmental Screening Levels (ESLs) published by the Regional Water Quality Control Board – San Francisco Bay Region. The ESLs are conservative screening levels and the presence of a chemical at concentrations in excess of an ESL may indicate that additional evaluation is warranted. The presence of a chemical at concentrations in excess of an ESL does not necessarily indicate adverse effects on human health of the environment.
6. **Conceptual Site Model (CSM) and Recommendations.** Your investigation report must evaluate the results from the soil gas investigation relative to the CSM. Any data gaps or inconsistencies with the current CSM must be identified. The report must include recommendations to address vapor intrusion risks or other human health or environmental threats related to residual subsurface petroleum hydrocarbons, in the context of planned future site development. Recommended future actions to progress the case towards closure must be included in the report.
7. **Semi-Annual Groundwater Monitoring.** Semi-annual groundwater monitoring is required at this site until further notice from the ACDEH. The next groundwater monitoring event must be conducted no later than 30 June 2018 and the 2<sup>nd</sup> Half 2018 Semi-Annual Monitoring Report (SAMR) must be submitted no later than 15 October 2018. Groundwater monitoring events shall be conducted during the 1<sup>st</sup> month of the 1<sup>st</sup> and 3<sup>rd</sup> Quarters of each year (i.e., January and July). Written notice to the ACDEH 72 hours prior to groundwater sampling is required for each monitoring event. Groundwater monitoring at this site must be coordinated with the Unocal #1156 site, as required by the USTCF Commingled Plume program.

### **SUBMITTAL ACKNOWLEDGEMENT STATEMENT**

ACDEH requires a Submittal Acknowledgement Statement, signed by the Responsible Party (RP), as a cover letter to technical reports and submittals. The requirement is described in Attachment 1. 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 the State Water Board's GeoTracker Website.*

### **TECHNICAL REPORT REQUEST**

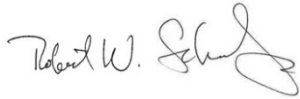
Please submit the following technical reports to the ACDEH via the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- 1 June 2018 – Analytical Laboratory Reports For LNAPL Samples (2010 Forensic Analysis) and Chromatograms for Groundwater Samples Reported in the 15 April 2018 SAMR  
File to be named: RO-486\_MISC\_R\_yyyy-mm-dd
- 1 August 2018 – Soil Gas Investigation Report  
File to be named: RO-486\_SWI\_R\_yyy-mm-dd
- 15 October 2018 – Groundwater Monitoring Report – 2nd Half 2018  
File to be named: RO0486\_GWM\_R\_yyyy-mm-dd
- 15 April and 15 October Each Year – Semi-Annual Groundwater Monitoring Report  
Files to be named: RO0486\_GWM\_R\_yyyy-mm-dd

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If you have any questions, please call me at (510) 567-6721 or send me an e-mail at [robert.schultz@acgov.org](mailto:robert.schultz@acgov.org).  
Online case files are available for review at the following website: <https://geotracker.waterboards.ca.gov>.

Sincerely,



Robert W. Schultz, CHG  
Senior Hazardous Materials Specialist  
Local Oversight and Site Cleanup Program

Attachment: Attachment 1 - Responsible Party(ies) Legal Requirements / Obligations

Cc: Kenneth Williams, MacArthur/High Trailer Park, 332 Peyton Drive, Hayward, CA 94544  
Jessica Ching, 4240 Redding Street, Oakland, CA 94619  
Shane Olton, AECOM (Sent via E-mail to: [shane.olton@aecom.com](mailto:shane.olton@aecom.com))  
Peter McIntyre, AEI Environmental (Sent via E-mail to: [pmcintyre@aeiconsultants.com](mailto:pmcintyre@aeiconsultants.com))  
Robert W. Schultz, ACDEH (Sent via E-mail to: [robert.schultz@acgov.org](mailto:robert.schultz@acgov.org))  
Dilan Roe, ACDEH, Chief Land, Water Division (Sent via E-mail to: [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org))  
Electronic File, GeoTracker