

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  
ALAMEDA, CA 94502  
(510) 567-6700  
FAX (510) 337-9335

January 10, 2018

Pacific Gas & Electric Company  
3401 Crow Canyon Road  
San Ramon, CA 94583

Attn.: Anne Conner (*Sent via electronic mail to [apb1@pge.com](mailto:apb1@pge.com)*)

Subject: Addendum Report Request; Site Cleanup Program Case No. RO0003196 and GeoTracker  
Global ID T10000008040, CNG Station, 205 Brush Street, Oakland, CA 94607

Dear Ms. Conner:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file and the recently submitted document entitled *Feasibility Study and Remedial Action Plan (FS/CAP)*, dated November 14, 2017, and prepared by Environmental Resources Management (ERM) for the subject site.

In the FS/CAP, ERM evaluates existing site conditions; proposes removal action objectives (RAOs); evaluates remedial alternatives to address chemical of concern (COC) impacts to site media; and provides a recommendation for a selected remedial strategy that is based on its effectiveness, implementability, and cost.

As proposed by ERM, remedial goals for site contaminants in soil, soil vapor, and groundwater are based on environmental screening levels (ESLs) appropriate to the exposure scenario for the site. ERM identifies the appropriate exposure scenario as the construction worker scenario for future commercial/industrial land use (as a gas regulator facility). COCs with concentrations above the ESLs have been identified in previous soil, groundwater, and soil vapor investigations conducted at the site and include petroleum hydrocarbon compounds as gasoline (TPHg), diesel (TPHd), and benzene, toluene, ethylbenzene, and xylenes (collectively BTEX); the volatile organic compound (VOC) tetrachloroethylene (PCE); assorted semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); organochlorine pesticides (OCPs); and the metal lead (Pb). The selected remedial strategy to address soil and soil vapor contamination is excavation and off-site disposal of soil. The selected remedial strategy to address groundwater contamination is monitored natural attenuation (MNA). Contaminated soil and groundwater would be managed in accordance with a soil and groundwater management plan (SGMP) prepared for the site.

The FS/CAP identifies areas of concern (AOCs) based on ESL exceedances and are categorized as soil vapor, groundwater, surficial soil contamination (approximately the upper two feet of soil beneath existing paving/buildings), and shallow soil contamination (soil above the groundwater table, currently between 5 and 6 feet below the ground surface- bgs). As the soil vapor ESL exceedance is within a shallow soil AOC, soil vapor remediation is combined with the soil excavation remedial strategy. As indicated above, ERM proposes MNA for groundwater. Therefore, only groundwater infiltrating into excavations will be removed and disposed off-site.

Construction of the gas regulator facility will include installation of subgrade piping and appurtenances. Some of these planned pipe locations intersect soil currently impacted with COCs at concentrations above remedial goals. In the shallow soil excavation areas where the trenches are excavated to install piping below the current groundwater table, soil from below the water table will be segregated for off-

site disposal to further reduce contaminant mass. Groundwater extracted to excavate the trenches would be managed in accordance with the SGMP.

ERM estimates the total volume of soil/soil vapor within the AOC(s) at approximately 450 to 1,600 cubic yards and the estimated total volume of shallow groundwater within the groundwater AOC is approximately 48,500 gallons.

The scope of work presented in the FS/CAP has not been adequately justified and cannot be approved at this time. ACDEH requests that you address the following technical comments and send us the FS/CAP addendum requested below.

### **TECHNICAL COMMENTS**

1. **Project Description** – In order for ACDEH to perform an adequate review of the FS/CAP, we request a description of the proposed development that has more detail than provided in the FS/CAP. The FS/CAP includes references to planned piping locations and identifies vapor intrusion to indoor air as not an exposure pathway. It is unclear to ACDEH what type of structures are proposed for the facility, if any of the structures are for human occupancy, and the depth and location of the planned piping routes. ACDEH requests a figure showing the layout of the proposed development relative to the identified areas of contamination in the FS/CAP addendum requested below.

In addition to the plan view figure depicting surficial and shallow soil excavation areas, please include cross sections depicting the depths of the proposed excavations, lithology, groundwater table, and bore location and depth with labels displaying selected COC concentrations.

2. **Chemicals of Potential Environmental Concern** – Based on the data gathered to date, ERM excludes several chemicals, including nickel, 2-methylnaphthalene, cobalt, and trichloroethylene (TCE), as COCs. The rationale appears to be based on the lack of secondary evidence that they provide an exposure risk. ACDEH request these chemicals of potential environmental concern (COPCs) be reevaluated as analytical data from the preconstruction sample collection is received.
3. **Groundwater Management** – The FS/CAP recommends MNA as the remedial strategy for groundwater. Proposed groundwater removal is limited to excavation dewatering associated with the portions of the piping runs that will be below the water table. Please identify the areas proposed for excavation below the groundwater table in your groundwater management discussion in the FS/CAP addendum.
4. **Pre-construction Soil Sample Collection** – Figure 6-1 of the FS/CAP depicts 60 pre-construction sample grid squares identifying locations for the collection of pre-characterization soil samples in areas proposed for soil excavation. The grid overlays the surficial and shallow excavation areas and the former UST pit. ACDEH notes that the bore SB-1, located near the center of the former UST pit, was not completed due to the presence of “concrete treated base” and ERM proposes not to collect soil samples from areas excavated to groundwater. Therefore, it is unclear which of the 60 grid squares will be sampled. Please identify the grid squares to be sampled and the location of the sample bore within each square. Additionally, adjust the sample location and collection depths, as appropriate, to accommodate Technical Comments presented below. Note that soil samples collected from below the water table will provide data regarding the presence of residual source that can be included in subsequent natural attenuation evaluations for case closure consideration.

5. **Shallow Soil Sampling** – As noted in Technical Comment 4 above, ACDEH observes the sampling grid includes covering the surficial and shallow soil excavation AOCs. ERM states soil samples will not be collected from areas excavated to groundwater as these samples would be below the groundwater table, and the remedial goals are only applicable to vadose zone samples. ACDEH notes that ERM selected the soil excavation with off-site disposal as the corrective action based on its effectiveness, implementability, and cost. And as indicated above, ERM does propose shallow soil excavation below the groundwater table in areas where the piping trenches that are excavated will be segregated for off-site disposal to further reduce contaminant mass.

ERM identifies contaminants, including benzene, toluene, ethylbenzene, and xylenes (BTEX) and naphthalene, at concentrations exceeding the remedial goals at depths to 12 feet bgs. As ERM recommends MNA for groundwater, ACDEH requests additional removal of residual source material located below the water table during the excavation of shallow soil, where appropriate. Removal of residual source may result in a shorter groundwater monitoring period and an earlier case closure. ACDEH recommends extending the depths of the of the pre-construction soil sampling in the shallow soil excavation area(s) to identify locations where additional soil excavation is appropriate.

Further, ACDEH notes that previous investigations have identified soil in the upper 10 feet bgs where the benzo(a)pyrene toxicity equivalent (BaPe) for utility workers in the 0- to 10-foot bgs zone exceeds the Cal/EPA regulatory threshold of 4.5 milligrams per kilogram (mg/kg). ACDEH requests this area(s) be identified and excavated to a depth of at least 10 feet bgs. Please show this area(s) on a figure in the FS/CAP addendum.

6. **Import Backfill** – As stated in the FS/CAP, ERM will backfill the excavation(s) using imported, certified-clean fill material. Please provide ACDEH with the analytical data from proposed import sources for our review and approval prior to import to the site. Our pre-approval of the import material, if the import source is known, may expedite the backfill activities.
7. **Project Schedule** – The proposed schedule for implementing proposed remedial actions are based on ACDEH approval of the FS/CAP. We note the existing site structures have not yet been demolished, a requirement for the proposed soil excavation. Also the 30-day public notification period prior to CAP implementation does not appear to have been incorporated into the project schedule.

ACDEH requests preparation of a baseline project schedule providing the sequencing of milestones for remedial actions and site redevelopment activities. The schedule must incorporate at a minimum the following activities: submittal of analytical data from proposed import sources prior to import to the site; well destruction, if performed; well installation, if performed; demolition of existing site foundations and improvements; soil import and excavation backfilling; gas regulator facility construction; and groundwater monitoring. The schedule must include all submittals including but not limited to the submittal of a Monitoring Well Decommissioning Report, Site Management Plan (SMP) for Redevelopment Construction, Soil Import Documentation Report, Monitoring Well Installation Report, and Remedial Soil Excavation Completion Report. The project schedule should include adequate ACDEH review time for each phase of work dependent on our authorization.

#### **TECHNICAL REPORT REQUEST**

Please submit reports to the State Water Resources Control Board's (SWRCBs) GeoTracker website, in accordance with the following specified file naming convention and schedule:

- **March 12, 2018 – Feasibility Study/ Remedial Action Plan Addendum** (file to be named: RO0003196\_FSCAP\_ADEND\_R\_yyyy-mm-dd)

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at [keith.nowell@acgov.org](mailto:keith.nowell@acgov.org).

Sincerely,

Keith Nowell, PG, CHG  
Hazardous Materials Specialist

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

cc: Ben LePage, Pacific Gas & Electric Company, 3401 Crow Canyon Road, San Ramon, CA 94583  
(sent via electronic mail to [Ben.LePage@pge.com](mailto:Ben.LePage@pge.com))

John Lucio, Project Manager, Environmental Resources Management, 1277 Treat Boulevard, Suite 500, Walnut Creek, CA (sent via electronic mail to [john.lucio@erm.com](mailto:john.lucio@erm.com))

Arun Chemburkar, Project Manager, Environmental Resources Management, 1277 Treat Boulevard, Suite 500, Walnut Creek, CA (sent via electronic mail to [arun.chemburkar@erm.com](mailto:arun.chemburkar@erm.com))

Dilan Roe, (sent via electronic mail to [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org))

Paresh Khatri (sent via electronic mail to [paresh.khatri@acgov.org](mailto:paresh.khatri@acgov.org))

Keith Nowell, (sent via electronic mail to [keith.nowell@acgov.org](mailto:keith.nowell@acgov.org))

GeoTracker

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)</b>	<b>REVISION DATE:</b> December 14, 2017
	<b>ISSUE DATE:</b> July 25, 2012
	<b>PREVIOUS REVISIONS:</b> September 17, 2013, May 15, 2014, December 12, 2016
<b>SECTION:</b> ACDEH Procedures	<b>SUBJECT:</b> 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/](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<sup>1</sup> 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
<b>2016 Subsurface Investigation Report</b>	2016 S1	✓	✓	Effluent	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
<b>2012 Site Assessment Work Plan</b>	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2010 GW Investigation Report</b>	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	✓	✓	✓	✓	✓

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

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)</b>	<b>REVISION DATE:</b> NA
	<b>ISSUE DATE:</b> December 14, 2017
	<b>PREVIOUS REVISIONS:</b> September 17, 2013, May 15, 2014, December 12, 2016
<b>SECTION:</b> ACDEH Procedures	<b>SUBJECT:</b> 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/](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.