



August 13, 2018

Ms. Mona Hsieh & Mr. Patrick Kong
Green Oak Builders
888 Brannan Street, #101
San Francisco, CA 94103
(Sent via electronic mail to mona.hsieh@yahoo.com)
(Sent via electronic mail to patrickykong@gmail.com)

Subject: Conditional Approval of *Corrective Action Implementation Plan for Vapor Mitigation Report*
Site Cleanup Case No. RO0003238, Mixed Use Redevelopment Project, 3101 35th Avenue,
Oakland, CA 94619

Dear Ms. Hsieh and Mr. Kong:

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file in conjunction with the submittal entitled *Corrective Action Implementation Plan for Vapor Mitigation (CAIP-VM)*, prepared by PES Environmental, Inc. (PES) on your behalf. The CAIP-VM presents the installation of a subslab soil vapor mitigation system (VMS) which includes a vapor barrier, sub-slab ventilation system and installation of trench dams.

As presented by PES, the CAIP-VM depicts the VMS under the building footprint (sub-slab), consisting of a permeable gravel layer with vent piping equipped with sub slab vapor probe ports and connecting to vertical risers and a Geo-Seal vapor barrier. In addition to the sub-slab ventilation system, the VMS will include trench dams for utilities entering the property.

ACDEH generally concurs with the plans provided with the CAIP-VM and requests that you incorporate the VMS plans for submittal to the City Of Oakland, address the following technical comments, and send us the technical reports described below.

TECHNICAL COMMENTS

- 1. Extent of the VMS-** As depicted on Plate 3, the VMS is depicted solely under the building footprint. A discussion of the VMS extending beneath the parking area outside of the building footprint was discussed during meetings leading up to the submittal of the CAIP-VM. Additional performance monitoring may be required if VMS installation is limited to the building footprint. ACDEH will provide comments as part of our review of the Operations and Maintenance/Site Management (O&M/SMP) Plan requested below.
- 2. Paver Selection-** The CAIP-VM does not specify type of paver to be installed in the adjacent parking area located besides the north side of the building. Discussions regarding the use of permeable and non-permeable pavers were included in meetings held leading up to the CAIP-VM submittal. Permeable pavers are depicted in the CAIP-VM Figure 7 prepared by Almar Environmental (Almar). As previously discussed, a risk assessment may be required depending on the type of paver used. This can be addressed further when the type of paver is selected.
- 3. Trench Dams-** The plans do not show trench dams for utilities exiting the property. Based on this design, additional performance monitoring requirements may be required to address potential contaminant migration.
- 4. Active Venting System Contingency-** Section II of the *General Notes & Specifications* is entitled *Passive Vent System*. As a condition of CAIP-VM approval, ACDEH requires installation of appropriate electrical connections that will enable the system to become an active system, in the event it becomes warranted.

5. **Soil Vapor Probe Destruction-** Ten soil vapor probes (SVPs) were installed during the course of environmental investigations conducted for the subject case. Almar was unable to locate seven of the SVPs at the time the probes were to be destroyed. Earthmoving activities may be performed in association with the VMS installation and during general site grading. ACDEH requests that contractors at the site be familiarized with the SVP locations. If encountered, these probes should be identified and locations appropriately marked so they can be properly destroyed.
6. Prior to building occupancy of the new residential redevelopment the following documents must be submitted to ACDEH for review and approval:
 - a. **Land Use Covenant (LUC).** A LUC documenting long-term site use will be required to be recorded, and must include the following site use restrictions: (1) implementation of the SMP, which shall be incorporated therein by reference, including preservation of the site surface cover and maintenance of the vapor mitigation systems and utility trench dams; (2) prohibition on the extraction of groundwater for any use, including but not limited to domestic, potable or industrial uses; and (3) prohibition on growing fruits or vegetables for consumption using site soils (edible gardening shall only be permitted using imported soil in raised beds).
 - b. **O&M/SMP for Long Term Site Use.** An O&M/SMP for long-term site management providing details regarding the location and construction of the VMS and utility trench dams, precautions should subsurface work be required in the area of installed mitigation measures, protocols for handling potentially impacted soil and groundwater exceeding residential screening criteria that may remain beneath the ground floor slab and foundations, and notification and documentation procedures should the VMS and/or trench dam be damaged. The O&M/SMP must include as-built drawings and specifications of the VMS and utility trench dams and must be maintained at the site address by the property manager or designated representative and will be recorded at the Alameda County Clerk-Recorder's Office.
 - c. **VMS and Utility Trench Dam Record Report of Construction.** A VMS and utility trench dam record report of construction with as-built drawings and other information relevant to the installation of the VMS and trench dams and certifying the VMS and trench dams were installed in accordance with the design plans. The report must include indoor air sampling results conducted in the newly constructed building to verify the effectiveness of the VMS.
7. **Continued Geotracker Electronic Report and Data Upload Compliance** – Geotracker compliance is a State requirement that ACDEH is tasked with implementing. 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 State Water Resources Control Board (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 Site Cleanup Programs. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites was required in GeoTracker. Please see Attachment 1 for limited additional details, and the state GeoTracker website for full details. ACDEH requests future notification of documents uploaded to GeoTracker.

TECHNICAL REPORT/WORK SCHEDULE

Please perform the requested work and submit technical reports to ACDEH via electronic mail, Attention: Keith Nowell, in accordance with the schedule below. The technical reports may be combined as appropriate. The submittal compliance date for reports with a "Date to be Determined" notation will be finalized in a subsequent Directive Letter and will be based on the date(s) proposed in the Revised Project Schedule.

- **September 14, 2018** – Revised Project Schedule;
(File to be named RO0003238_DEV_SCH_yyy-mm-dd)
- Date to be Determined – Soil Import Documentation, if applicable;
- Date to be Determined – Approved Building Permit Plans;
- Date to be Determined – Vapor Probe Decommissioning Report, if applicable;
- Date to be Determined – Remedial Soil Excavation Completion Report, if performed;
- Date to be Determined – VMS and Trench Dam Record Report of Construction;
- Date to be Determined – Long Term Site Use SMP/O&M Plan;
- Date to be Determined – Land Use Covenant.

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 the SWRCB's GeoTracker Website.

Please make this change to your submittals to ACDEH.

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 me an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Keith Nowell, P.G., C.HG.
Hazardous Materials Specialist

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

cc: Carl Michelsen, PES Environmental, Inc., 7665 Redwood Blvd #200, Novato, CA 94945
(Sent via electronic mail to smorrison@pesenv.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)

Keith Nowell, ACDEH (Sent via electronic mail to keith.nowell@acgov.org)

Jonathan Sanders, ACDEH (Sent via electronic mail to jonathan.sanders@acgov.org)

Electronic File

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.