



April 8, 2016

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

Subject: Work Plan Review, Fuel Leak Case No. RO0003164 and GeoTracker Global ID T10000006539, Green Oak Builders, 3101 35th Avenue, Oakland, CA 94619

Dear Mr. Kong and Ms. Hsieh:

Alameda County Environmental Health (ACEH) has reviewed the case file, including the recently submitted document entitled *Soil, Groundwater, and Soil Gas Workplan* (Work Plan) dated March 24, 2016 and prepared by Almar Environmental (Almar) for the subject site. The Work Plan proposes advancing five soil bores using direct push methods for the recovery of soil and grab-groundwater (GGW) samples and one soil bore for the collection of a soil-gas sample.

ACEH requests that you address the following technical comments and incorporate them into the work plan addendum requested below.

TECHNICAL COMMENTS

- 1. Additional Soil Bores** – ACEH was provided a figure, captioned Figure 5, as an attachment to an electronic mail dated October 2, 2015. Figure 5 was prepared by Almar and provided additional locations for soil bores which were to be investigated in a work plan approved by ACEH in its letter of the same date. These locations have not been investigated.

ACEH requests that the soil bores identified as DP-6 and DP-7 on the October 2, 2015 Figure 5 be incorporated in to the work plan addendum in lieu of the DP-6 proposed in the Work Plan.

- 2. Additional Soil Bores Analysis** – The presence of a subsurface structure and suspected hydraulic hoists were identified in the vicinity of the October 2, 2015 DP-6 and DP-7 soil bores. Therefore, ACEH requests semi-volatile organic compounds (SVOCs), using EPA Test Method 8270, total petroleum hydrocarbons (TPH) as diesel (TPHd) and as oil (TPHo), by EPA Test Method 8015, and the five LUFT metals - cadmium (Cd), chromium (Cr), lead (Pb), nickel (Ni) and zinc (Zn)- by EPA Test Method 6010, be added to the scope of analysis for these soil bores. The expanded scope of analysis should be performed on both soil and GGW samples.
- 3. Bore Logs** – The Work Plan indicates the soils will be logged using the United (Unified?) Soil Classification System (USCS); however, there is no mention of the use of a photoionization detector (PID) to screen site soils. As previous site work does not include PID screening values on the bore logs, please include language in the work plan addendum indicating a PID will be used and the screening concentrations will be included on the logs.

- 4. Soil Sampling** – ACEH recommends that soil samples be collected and analyzed at intervals of no more than five feet, in areas of obvious contamination, the soil/groundwater interface, and at significant changes in lithology. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Please ensure that the analytical results define the vertical and horizontal extent of total petroleum hydrocarbon (TPH) impacts at the site.

In accordance with the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP), ACEH requests at least one soil sample from each bore be recovered from the upper five-foot (0- to 5 feet below the ground surface- bgs) interval and within the five- to- 10-foot bgs interval.

- 5. Groundwater Sampling** – Laboratory provided glassware, consisting of three 40 milliliter (ml) VOAs and one one-liter amber, are proposed for collecting GGW samples from each soil bore. The one-liter amber is for providing a sufficient quantity of sample for use in the TPHd analysis. However, DP-9 is the only bore from which TPHd analysis is proposed. It is unclear to ACEH why GGW samples from the other soil bores will be collected in ambers if TPHd analysis is not anticipated to be performed. Please include the rationale for GGW collection in the work plan addendum requested below.
- 6. Analysis for Total Petroleum Hydrocarbons as Gasoline** – Proposed soil and GGW analysis includes analyzing for TPH as gasoline (TPHg) by EPA Test Method 8015 and for VOCs by EPA Test Method 8260. As TPHg may also be reported in the 8260 analysis, ACEH recommends the elimination of the 8015 analysis for TPHg and requests the analytical laboratory report TPHg with the 8260 scan. Verify ahead of time that the analytical laboratory can perform the analysis and eliminate the cost for the 8015.
- 7. Soil Gas Boring Advancement** – Task 6 of Section 4.1- *Boring and Construction of Soil Gas Sampling Points* states “boring will be advanced with either...” but only identifies one boring advancement technique. Hence, it is unclear to ACEH how the soil gas bore will be advanced. ACEH requests that the bore advancement methodologies be identified and the criteria used for the method selection be provided. Please address the appropriate equilibration time with the method selected. See Technical Comment 8 below.

In accordance with the LTCP, ACEH requests the depth of soil gas sample collection be five feet beneath the bottom of the proposed foundation.

- 8. Soil Gas Bore Equilibration Time** – Task 3 in Section 3.3- *Groundwater Sampling* states that the groundwater recharge rate is known to be slow and that casing may need to be left in the soil bores for up to 24 hours, indicating slow fluid migration in the subsurface. Task 7 in Section 4.2- *Purging and Sampling of Soil Gas Sampling Points* says the soil gas sampling points will be sampled a minimum of 2 hours after installation.

The July 2015 *Advisory- Active Soil Gas Investigations* prepared by California Environmental Protection Agency/Department of Toxic Substances Control (Cal EPA/DTSC), and the Regional Water Quality Control Boards of the Los Angeles (LARWQCB) and San Francisco (SFRWQCB) regions states that, for soil gas wells installed with the direct push method, not to conduct the purging, leak testing and soil gas sampling for at least two hours following vapor probe installation and that **finer-grained material may take longer, up to 48 hours, to equilibrate** (emphasis added).

ACEH requests an appropriate equilibration time be used for the soil type.

9. **Tracer Gas** – Please include a description of the techniques to be employed in maintaining and field monitoring of the helium enriched atmosphere during soil gas sample collection.
10. **Securing of Soil Bores** – Please describe what means of securing boreholes will be undertaken should the bores remain open overnight. This applies to both the accumulation of groundwater for sample collection and the equilibration time for the soil gas bore, both referenced in Technical Comment 8 above.
11. **Standard Operating Procedures** – Task 7 in Section 4.2- *Purging and Sampling of Soil Gas Sampling Points* states “WTI will sample.... “ ACEH is not familiar with WTI or its practices. Please include WTI’s Standard Operating Procedures for soil gas sample collection as an appendix to the work plan addendum for ACEH review.
12. **Investigation Derived Waste** –The Work Plan addresses storage, but not disposal, of investigation derived waste (IDW). Please include language in the work plan addendum addressing appropriate disposal of IDW. The disposal should occur within 180 days of generation.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board’s Geotracker website, in accordance with the following specified file naming convention and schedule:

- **May 24, 2016** – Work Plan Addendum for a Soil, Groundwater, and Soil-Gas Investigation (file to be named: RO0003164_WP_ADEND_R_YYYY-MM-DD).

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.

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

Thank you for your cooperation. ACEH 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

Sincerely,

Keith Nowell, PG, CHG
Hazardous Materials Specialist

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

Mr. Kong and Ms. Hsieh
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cc: Forrest Cook, Almar Environmental, 407 Almar Avenue, Santa Cruz, CA 95060
(Sent via E-mail to cook.forrest@gmail.com)

Dilan Roe, ACEH (Sent via E-mail to: dilan.roe@acgov.org)

Keith Nowell, ACEH (Sent via E-mail to keith.nowell@acgov.org)

GeoTracker/ File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) 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 registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional 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.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.