# ALAMEDA COUNTY **HEALTH CARE SERVICES AGENCY**



ALEX BRISCOE, Agency Director

**ENVIRONMENTAL HEALTH DEPARTMENT** ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

January 14, 2015

Dr. Joginder Sikand c/o Jasminder & Sonia Sikand 1066 Rock Harbor Point Hercules, CA 94547

Mr. Anis Rahman Albany Hill Mini Mart 800 San Pablo Avenue Albany, CA 94706

Subject:

Request for Ozone System Shutdown, Rebound Testing, and Groundwater Monitoring; Fuel Leak

Case No. RO0000262 and Geotracker Global ID T0600102131, Albany Hill Mini Mart, 800 San

Pablo Avenue, Albany, CA 94706

Dear Dr. Sikand and Mr. Rahman:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the Soil and Soil Vapor Assessment Report, dated July 11, 2014. The report was prepared and submitted on your behalf by Agua Science Engineers, Inc. (ASE). Thank you for submitting the report. The report documents the collection of shallow soil samples in the 0 to 5 foot depth interval beneath the subject site, and the unsuccessful collection of onsite soil vapor samples at a depth of 5 feet below the foundation as prescribed by the Low Threat Underground Storage Tank Case Closure Policy (LTCP) in order to address LTCP data gaps previously identified at the site. Soil vapor samples were unsuccessful due to the presence of groundwater at a depth of 3.5 to 4.5 feet below grade surface (bgs). Groundwater at this depth has not previously been encountered at the site and ASE speculated that a waterline break in the general area may be responsible for the shallow nature of groundwater at the time. The report recommended an additional attempt to collect soil vapor samples at two onsite locations (BH-EE and BH-GG).

Although the site actively dispenses gasoline, the site also contains a minimum of three commercial spaces that are unrelated to fuel dispensing (mini-mart, jewelry shop, and a barber shop), and the site is located in a mixed use area with a residential apartment building immediately west of the property, and a commercial establishment across Washington Avenue that likely includes a basement. Vapor location BH-EE was to be used as a proxy for the evaluation of the risk of vapor intrusion to the adjacent residential apartment building, and location BH-GG was chosen to evaluate the risk to the commercial building on the southern property line. Additionally, the unusual distribution of soil vapor, with the highest concentrations offsite across the street and immediately adjacent to the probable basement requires further evaluation as discussed below. Finally, although two vapor monitoring points (VMP-1 and VMP-2) have been installed beneath two buildings in proximity to release locations, they were installed to a depth of 1.5 feet bgs rather than the requisite depth of five feet below the building foundation used under scenario 4 of the LTCP vapor intrusion criterion.

Based on the data submitted with the report, ACEH has re-evaluated site data, in conjunction with case files, and the State Water Resources Control Board's (SWRCBs) LTCP. Based on ACEH staff review, we have determined that the site now appears to additionally meet the Media-Specific Criteria for Direct Contact and Outdoor Air, but continues to fail to meet the LTCP Media-Specific Criteria for Vapor Intrusion to Indoor Air (Thus the site appears to meet all other criteria of the LTCP).

As a consequence, and based on the review of the case file ACEH requests that you address the following technical comments and send us the documents requested below.

#### **TECHNICAL COMMENTS**

1. 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.

Our review of the case files indicates that the site data and analysis fail to support the requisite characteristics of one of the four scenarios. Specifically, while shallow soil samples were collected in the most recent site investigation and all concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and TPH as diesel were less than 100 mg/kg, the presence of groundwater at a shallow depth (3.5 to 4.5 feet bgs) indicates that a 5-foot thick bioattenuation (vadose) zone may not be present beneath the site. Additionally, because the shallow groundwater was not sampled, and has not been sampled historically, the dissolved-phase concentration of the shallow groundwater is not known. ACEH acknowledges that the presence of groundwater at a shallow depth may be an unusual and temporary condition.

Additionally, because the ozone sparging system continues to operate, it is unknown if dissolved-phase groundwater contaminant concentrations may rebound to higher concentrations than currently after system shutdown. Therefore, at this juncture, it appears appropriate to shut down the remedial system and test for contaminant rebound, and determine the appropriateness of cycling the remedial system by the collection of groundwater and soil vapor samples at the site.

With regard to the likely basement across Washington Avenue, very limited data is currently available. One soil sample (BH-BB at 3.5 feet) in the 0 to 5 foot depth interval suggests that total TPH concentrations are less than 100 milligrams per kilogram (mg/kg), and one soil sample (BH-O at 9.5 feet) in the 5 to 10 foot depth interval indicates that total TPH concentrations are over 100 mg/kg (377 mg/kg TPHg and TPHd combined). Presuming the basement is approximately 8 - 9 feet bgs would require a vapor sample to be collected at a depth of approximately 13 - 14 feet bgs to meet LTCP evaluation criteria. This is likely below the depth historic groundwater has been encountered at the site. It appears appropriate to request the collection of additional soil samples in the 0 to 5 and the 5 to 10 foot depth intervals adjacent to the basement, and to collect soil vapor samples, from a permanent vapor well, at 5 and 10 feet in an attempt to determine the risk of vapor intrusion into the basement with multiple lines of evidence.

Please note, that if direct measurement of soil gas is proposed, ensure that your strategy is consistent with the field sampling protocols described in the Department of Toxic Substances Control's Final Vapor Intrusion Guidance (October 2011). Consistent with the guidance, ACEH requires installation of permanent vapor wells to assess temporal and seasonal variations in soil gas concentrations.

Consequently, please submit a brief work plan using standard protocols employed at the site to collect soil vapor samples from permanent wells at a depth of 5 feet below the foundation of the buildings at and adjacent the site, and to collect data as detailed above. Should shallow groundwater be again encountered, it appears appropriate to sample the groundwater in an effort to determine the dissolved-phase concentration of the groundwater. Please submit a work plan by the date identified below.

- 2. System Shutdown and Remediation Monitoring Work Plan As noted above, it appears appropriate to shut the remedial system down in order to determine the potential for contaminant rebound at the site. Due to the potential of rebound to affect sensitive receptors (residential apartment building to west and commercial establishment with a basement to the north) please propose a monitoring schedule and environmental media (vapor and / or groundwater) to monitor these sensitive receptors. ACEH anticipates that the monitoring interval will be at closer intervals initially. Please submit a Remediation Monitoring Work Plan by the date identified below.
- 3. Groundwater Monitoring Groundwater at the subject site has not been monitored since March 2014. In conjunction with system shutdown, please initiate quarterly groundwater monitoring in order to collect sufficient dissolved-phase analytical stat in order to quickly determine the appropriateness of further

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remedial actions at the site. Please additionally include naphthalene in the analytical suite in order to evaluate the dissolved-phase plume with respect to the LTCP. Please submit groundwater monitoring reports by the dates identified below.

#### **TECHNICAL REPORT REQUEST**

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

- March 20, 2015 Site Assessment and Remediation Monitoring Work Plan File to be named: RO262\_WP\_R\_yyyy-mm-dd
- March 27, 2015 First Quarter 2015 Quarterly Groundwater Monitoring and Remedial Progress Report File to be named: RO262\_GWM\_REM\_R\_yyyy-mm-dd
- July 3, 2015 Second Quarter 2015 Quarterly Groundwater Monitoring Report and Remedial Progress Report File to be named: RO262\_GWM\_REM\_R\_yyyy-mm-dd
- October 16, 2015 Third Quarter 2015 Quarterly Groundwater Monitoring Report and Remedial Progress Report; File to be named: RO262\_REM\_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: <a href="http://www.acgov.org/aceh/index.htm">http://www.acgov.org/aceh/index.htm</a>. If your email address is not listed on the first page of this letter, or in the list of cc's listed below, ACEH is requesting your email address to help expedite communications and to help lower overall costs.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at <a href="mark.detterman@acgov.org">mark.detterman@acgov.org</a>.

Sincerely,

Mark Detterman, PG, CEG Senior Hazardous Materials Specialist

Enclosures: Attachment 1 - Responsible Party (ies) Legal Requirements / Obligations and Electronic Report

Upload (ftp) Instructions

cc: Robert Kitay, Aqua Science Engineers, Inc, 55 Oak Court, Suite 220, Danville, CA 94526, (sent via electronic mail to rkitay@aquascienceengineers.com)

Dilan Roe (sent via electronic mail to <a href="mailto:dilan.roe@acgov.org">dilan.roe@acgov.org</a>)

Mark Detterman (sent via electronic mail to <a href="mailto:mark.detterman@acgov.org">mark.detterman@acgov.org</a>)

Geotracker, Electronic 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 **SWRCB** visit the 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.
- <u>Do not</u> 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. <u>Documents</u>
  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 <a href="ftp://alcoftp1.acgov.org">ftp://alcoftp1.acgov.org</a>
    - (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.
- 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.