



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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November 16, 2012

Ms. Elaine Kirk
Marks Management Co.
505 Sansome Street, # 1400
San Francisco, CA 94111
(sent via electronic mail to:
EKirk.marks@earthlink.net)

Mr. William H. Banker, Jr.
San Pablo Avenue Venture
c/o Banker, Marks, & Kirk
1720 Broadway, Suite 202
Oakland, CA 94612
(sent via electronic mail to: BillBanker@comcast.net)

Subject: **Work Plan Addendum Request with Conditional Approval of Work Plan**; Fuel Leak Case No. RO00002520 (Global ID #T06019788682), Maz Glass; 3800 San Pablo Avenue, Emeryville, CA 94608

Dear Ms. Kirk and Mr. Banker:

Alameda County Environmental Health (ACEH) has reviewed the case file, including the *Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures* dated July 13, 2012 and the *Third Quarter 2012 Groundwater Monitoring Report*, dated September 27, 2012. The reports were prepared and submitted on your behalf by Gribi Associates (Gribi). Thank you for submitting the reports.

Based on ACEH staff review of the work plan the proposed scope of work is conditionally approved for implementation *provided that the technical comments below are incorporated* during the proposed field investigation. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The referenced work plan proposes a series of actions with which ACEH is in general agreement; however, ACEH requests several modifications to the approach. Please submit a work plan addendum (Figure 2) to document these changes and the results of the pilot test by the dates identified below.
 - a. **Request for a Minimum of Two Additional Soil Bores** – The remedial investigation report continues to document substantial groundwater contamination; however, has been relatively unsuccessful in locating a soil source at the site, and proposes to conduct an extended pilot test for an ozone injection system to treat the groundwater contamination. ACEH is concerned that without directly addressing (locating and remediating) a residual soil source, groundwater contaminant concentrations will rebound quickly, perhaps substantially, and an extended remediation effort and associated costs may ensue. Two potential soil sources are suggested by available data, one near or at the former location of the dispenser kiosk, and one near and upgradient of soil bore B-5, which yielded a groundwater concentration indicative of free phase 780,000 µg/l TPHg. As a consequence ACEH requests the installation of a sufficient number of soil bores to adequately characterize likely source areas in order to specifically locate and quantify residual soil contamination concentrations, with the intent that this knowledge will be

incorporated into a remedial system selection and design process. Please submit a work plan addendum (Figure 2) to document proposed locations by the date identified below.

Another additional soil bore is requested within closest proximity to the recently discovered UST at the southwest corner of the site, along Appgar Street, without installation through the former tank excavation. The intent of this soil bore is to determine the potential for soil and groundwater contamination associated with this UST. ACEH acknowledges that UST removal confirmation soil samples detected very limited contamination associated with this UST; however, the definite presence of staining and odors indicate that a potential for impact to soil and groundwater in the vicinity of the UST is present. It is additionally anticipated that the bore will provide augment data relative to the intent of the two bores (B-24 and B-25) proposed to be installed on the east side of San Pablo Avenue. Please submit a work plan addendum (Figure 2) to document the proposed location by the date identified below.

- b. Approval of Limited Ozone Pilot Testing** – The interim remedial work plan proposed a three well, three month long ozone sparging pilot test to address groundwater contamination. As noted above, ACEH is concerned that without an applied remedial effort targeting residual soil contamination, the success of the endeavor has the potential to be limited or unsuccessful. As a consequence, ACEH requested the installation of additional soil bores into the potential soil source zones, and incorporation of that data into the remedial selection and design process. This may require the selection of an alternative remediation option if injection of ozone into the vadose zone is required and thus is not viable. As noted in the referenced work plan ozone works best where source removal has removed the worst impacts, while ACEH notes that source removal has not been specifically located.

In regards to the ozone pilot test, because the residual soil source has not been identified, ACEH specifically requests that the ozone pilot test be sufficiently limited in length to allow identification of appropriate system parameters (radius of influence, optimum ozone injection concentration and flow rate, and optimum system operations for health and safety). As such ACEH anticipates a pilot test no longer than a **30 day time period** without appropriate justification. ACEH requests the submittal of a site investigation and pilot test by the date identified below.

- c. Bore Logging** – To reiterate and to clarify the proposed logging protocols, ACEH requests that PID readings and the depth of first and stabilized groundwater be included on the logs. Except for rare instances, these important details have not been recorded on soil or well bore logs as previously requested.
- d. Soil Selection Protocols** – The work plan proposes to collect approximately three soil samples in each groundwater monitoring well, and one to two soil samples in soil bores. To prevent miscommunication ACEH additionally requests that soil samples be collected in all bores (inclusive of the ozone injection wells), and submitted for analysis, at signs of contamination (odor, discoloration, PID responses, etc.) and at significant changes in lithology. This will require the collection and submittal of additional soil analytical samples to the analytical laboratory.
- 2. Request for Preferential Pathway Study** - Subsurface investigation work appears to suggest that the extent of groundwater contamination does not reach the western side of San Pablo Avenue and references deep storm drain and sewer lines are present in the San Pablo Avenue right-of-way. As a consequence it appears appropriate to conduct a preferential pathway study to determine the extent, if any, that a groundwater plume may be using granular fill around a utility line for uncontrolled migration. Please submit the results of the preferential pathway with the site investigation and pilot test results and the corrective action plan as requested below.

The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of a groundwater plume encountering preferential pathways and conduits that could spread contamination. We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (utilities, utility laterals, pipelines, foundational, and etc.) for vertical and lateral migration that may be present in the vicinity of the site.

Discuss your analysis and interpretation of the results of the preferential pathway study (including the well survey and utility survey requested below) and report your results in the report requested below. The results of your study shall contain all information required by California Code of Regulations, Title 23, Division 3, Chapter 16, §2654(b).

- a. Utility Survey** - An evaluation of all utility lines, utility laterals, and trenches (including sewers, storm drains, pipelines, trench backfill, foundation backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please reduce, and synthesize available information and maps, and generate appropriate (vicinity and / or site specific) maps and cross-sections illustrating the location and depth of all utility lines and trenches within and near the site and plume areas(s) as part of your study.
 - b. Well Survey** - The preferential pathway study is requested to include a well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a ¼ mile radius of the subject site.
- 3. Requested Groundwater Analysis** – There are several analytes that it appears appropriate to include to document environmental conditions in groundwater at the site:
 - a. EDB & EDC Analysis** - EDB and EDC analysis appears to have been conducted on the majority of groundwater analytical testing; however, does not appear to have been conducted in the plume core. This may be an unintended oversight; however, now that the plume core is more closely defined, it would appear appropriate to include this analysis, at least initially on a one-time basis. This may be subject to revision based on the results of the one-time sampling event.
 - b. Baseline Chromium and Bromide Analysis** – Due to the potential for ozone treatment to oxidize naturally occurring chromium and bromide to hexavalent chromium and bromate, ACEH also requests collection of a baseline chromium, hexavalent chromium, and bromide and bromate groundwater concentrations to assess baseline conditions and the potential for this reaction at the site.
 - c. TPHho and SVOC Analysis** – Please incorporate into the quarterly groundwater monitoring analytical suite on a permanent basis TPHho and at least initially on a one-time basis SVOCs. This is appropriate because some of the former USTs at site are reported to have contained heating oil, and because of the presence of naphthalene and other SVOCs in existing analytical results.
 - d. Quarterly Groundwater Monitoring** – Please continue quarterly groundwater monitoring for a minimum period of one calendar year. Please submit these reports by the dates identified below.
- 4. Low-Threat Closure Policy** – The LTCP identifies criteria that each area of the site will be required to meet and to document, such as the adequacy of any bioattenuation zones (requiring the collection of analytical data within the upper five feet bgs, and the collection of soil vapor at a depth of five feet). Please address these new criteria in this investigation; it is anticipated that additional soil samples will be required in this round of investigation and in future rounds. While not previously discussed, collection of these environmental samples does not negate the need to collect the environmental samples previously discussed.
- 5. Request for Continued SCM Updating** – A Site Conceptual Model (SCM) was included in the remedial investigation report. Thank you for including the SCM, it helps communicate site details. ACEH requests that updates to the SCM be continued and refined as new data becomes available which requires modification to the site's conceptual model. Data gaps noted by ACEH include the following; however, are not limited to the following observations:
 - a. Low-Threat Closure Data Gaps** – As noted above, the LTCP identifies changes in investigation styles and methods. Soil vapor data collected at a depth of five feet and the collection of soil

analytical data within the top five feet bgs are a part of these changes. Additional data gaps may also be present.

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:

- **December 14, 2012** – Revised Figure 2 (Work Plan Addendum)
File to be named: RO2520_WP_ADEND_yyyy-mm-dd
- **February 1, 2012** – Quarterly Groundwater Monitoring Report (can be merged with following report)
File to be named: RO25200_GWM_R_yyyy-mm-dd
- **February 8, 2013** – Soil and Groundwater Investigation and Pilot Test
File to be named: RO2520_SWI_IR_R_yyyy-mm-dd
- **May 10, 2012** – Quarterly Groundwater Monitoring Report
File to be named: RO2520_GWM_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>.

If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

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

cc: James Gribi, Gribi Associates, 1090 Adams Street, Suite K, Benicia, CA 94510, (sent via electronic mail to: JGribi@gribiassociates.com)

Donna Drogos, (sent via electronic mail to donna.drogos@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1
Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. 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, 7835, 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, late 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 SCP)	REVISION DATE: July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) 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.