

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director



ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
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April 1, 2011

Neil & Linda Mussallem
PO Box 66
Gilroy, CA 95020

Griffin Capital Investors LLC
6601-6603 Shellmound Street
Emeryville, CA 94608

Vince Herington
Sybase Inc.
1 Sybase Drive
Dublin, CA 94568

Thomas Richardson
PO Box 7817
Berkeley, CA 94707

Jacon Warren
Wintzen Inc.
6601 Shellmound Street
Emeryville, CA 94608

Subject: Request for Vapor Intrusion Work Plan; Fuel Leak Case No's. RO0000042 / RO0000043 and Geotracker Global ID's T0600100825 / T0600100470, Mussallem / Sybase and Richardson / Sybase, 6601 and 6603 Bay Street, Emeryville, CA 94608

Dear Ladies and Gentlemen:

Alameda County Environmental Health (ACEH) staff has reviewed the case files including the *Site Investigation and Closure Request Report*, dated May 14, 2010, submitted on your behalf by Erler & Kalinowski, Inc. (EKI). The report was submitted in response to an ACEH letters dated December 29, 2008 and August 14, 2009. Thank you for submitting the report.

The report documents the collection of soil and grab groundwater samples, and the collection of groundwater samples from two extant monitoring wells on the adjacent site (MW-5 and MW-7). Concentrations in the wells decreased substantially from the previous sampling event in December 1996 (up to 250 µg/l TEPH, 99 µg/l TPPH, 2 µg/l MTBE, and non-detectable BTEX concentrations). The report also documents the presence of sheen in grab groundwater samples collected from temporary wells GGW-1 and GGW-2 (concentrations up to 34,000 µg/l TEPH, 550 µg/l TPPH, and 56 µg/l benzene).

The report also reviews data that documents that the subject sites and site vicinity are developed over a landfill that in-filled a portion of the San Francisco Bay relatively early in the past century. The report advances the case that petroleum hydrocarbon contamination beneath the site was first introduced during landfill processes and that the subsequent installation of diesel and gasoline underground storage tanks (USTs) may have further compounded the hydrocarbon contamination. This is based on a series of technical arguments using laboratory chromatographs indicating differing and atypical chromatographic patterns across the area of investigation in various soil or groundwater samples, and the depth of contamination, with higher concentrations in soil being found generally in the saturated zone of groundwater below approximate 6.7 feet below surface grade (bgs); then substantially decreasing between the depths of 14 and 16 feet bgs.

Taken as a whole the data tends to support an argument that a part of the contamination is landfill related; however, ACEH also notes that the chromatographs also support contributions from the former USTs. The presence of soil contamination below current groundwater levels was ascribed to fill processes; however, impacted soil can also be created by formerly lower levels as generally documented in previous depth-to-water measurements in wells MW-5 and MW-7 over time, and further supported by the reported 7.5 foot depth-to-water measurement in an onsite well (unidentified but currently presumed to be a tank basin well) used to determine the depth of the UST removal confirmation samples collected in 1989. Additionally ACEH observes that 6,000-gallon and 7,500-gallon USTs generally have a nominal diameter of approximately eight feet and a burial depth of 3 or 4 feet, extending an excavation to 11 or 12

feet bgs. Early reports indicate that free phase inflow in 1989 early in the UST removal process occurred at a depth of 8 to 9 feet bgs, followed by an inflow of groundwater.

ACEH also notes that the recent investigation documents substantial decreases in hydrocarbon concentrations towards Shellmound Street in somewhat upgradient and lateral positions from the former UST locations (GGW-2, GGW-3, and GGW-4). These data appear to imply the entire landfill area is not as significantly impacted as that in proximity to the former UST locations, and again may imply the USTs were a source of the hydrocarbons or were unfortunately installed at the same location as hydrocarbon impacted landfill materials.

The May 2010 report also clarified the appropriate classification for groundwater beneath the site. Total Dissolved Solids (TDS) was found to range between 690 and 1,530 mg/l TDS, indicating it is generally not suitable as drinking water. This is generally consistent with recent data from the adjacent site to the south. ACEH also generally acknowledges that the larger area of the landfill may in part be impacted by fill constituents, including hydrocarbons. Although the collection methodology was different, this may be supported by similar recent groundwater concentrations at GGW-3 and well MW-3 at the adjacent site.

The referenced report contains a request for closure. Based on factors discussed below in Technical Comments, this fuel leak case cannot be closed at this time; this specifically includes lack of compliance with state Geotracker regulations. This decision is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact Mr. George Lockwood in the SWRCB Underground Storage Tank Program at (916) 341-5752 or GLockwood@waterboards.ca.gov for information regarding the appeal process.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below.

TECHNICAL COMMENTS

1. **GeoTracker Compliance** - The site remains out of compliance with state GeoTracker requirements. Required uploads have not been forthcoming and include at a minimum analytical EDFs, GEO_WELL data, and GEO_MAPs. A well survey to GeoTracker standards is also required; however, may be in progress by the consultant at the adjacent site. Please coordinate this issue with that consultant. Please see Attachment 1 for limited additional details, and the state GeoTracker website for full details.
2. **Request for Vapor Intrusion Work Plan** – In regards to vapor intrusion, the May 2010 report documented relatively low volatile hydrocarbon components (BTEX) are present in comparison to concentrations of TEPH or TPPH, and compares the concentrations to the RWQCBs *Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns* (Table E-1 of the RWQCB ESL document). All groundwater and grab groundwater concentrations are currently below these values. However, recently disclosed reports for the adjacent site to the south (Emery Bay Plaza; RO0000440) indicate that significant methane is present beneath that building at concentrations generally in excess of 25% of the Lower Explosive Limit (LEL), and at many of the sample locations over the LEL. Recent vapor intrusion research appears to suggest that oxygenated soil is a requisite to preventing petroleum hydrocarbon vapor intrusion at a site; however, related research also indicates that the presence of methane at a site significantly limits (occludes) the infiltration of oxygen into the subsurface and that this process is especially important beneath larger buildings such as exist at the site.

Based on the totality of these observations in regards to soil, groundwater, and vapor in the vicinity of the site, ACEH judges it warranted to request the submittal of a vapor intrusion work plan to evaluate vapor intrusion concerns beneath both onsite buildings as well as the downgradient offsite building. The evaluation is further supported with knowledge of the previously cited heterogeneity of the landfill deposits and landfill contaminants, as well as with the referenced DTSC preference for soil gas data

for performing a vapor intrusion assessment. The requested vapor survey should generate data that would assist in determining if further fill heterogeneity, fill contaminants, or fill derived methane may be present beneath onsite buildings and the downgradient building. This would also allow an evaluation of the effectiveness of the passive methane vent wells in that building, and help determine if onsite buildings also require methane mitigation (if not already investigated, mitigated, but not reported to ACEH). The sampling of the vent well stack emissions may be appropriate. Coordination of the vapor intrusion survey with the consultant at the adjacent site is appropriate; consequently these consultants have been copied with this letter.

3. **Groundwater Monitoring** – Please continue groundwater monitoring on an annual basis using wells MW-3, MW-5, and MW-7 at this time. Please incorporate chlorinate solvents a minimum of one time to evaluate the need for further inclusion of these analytes, and if they might impact soil vapor concerns at the sites. It is understood that these may be landfill related; however, these potential contaminants would be a more significant vapor intrusion consideration. Please coordinate future groundwater monitoring events with events on the adjacent site in order to obtain a better understanding of the site.

TECHNICAL REPORT REQUEST

Please submit the following deliverables and technical reports to ACEH (Attention: Mark Detterman), according to the following schedule:

- **April 22, 2011** – Geotracker Uploads
- **May 27, 2011** – Vapor Intrusion Work Plan
- **June 24, 2011** – Annual Groundwater Monitoring Report
- **60 Days After Approval of Work Plan** – Vapor Intrusion Report

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.

Should you have any questions, please contact 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

Ladies and Gentlemen
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cc: Michelle King, Eler & Kalinowski, Inc, 1870 Ogden Drive, Burlingame, CA 94010
(sent via electronic mail to mkking@ekiconsult.com)

Jeff Shaw, Eler & Kalinowski, Inc, 1870 Ogden Drive, Burlingame, CA 94010
(sent via electronic mail to jshaw@ekiconsult.com)

Chris Baldassari, PES Environmental, Inc, 1682 Novato Blvd, Suite 100, Novato, CA 94947
(sent via electronic mail to cbaldassari@pesenv.com)

Robert Creps PES Environmental, Inc, 1682 Novato Blvd, Suite 100, Novato, CA 94947
(sent via electronic mail to RCreps@pesenv.com)

Donna Drogos, ACEH, (sent via electronic mail to donna.drogos@acgov.org)
Mark Detterman, ACEH, (sent via electronic mail to mark.detterman@acgov.org)
Geotracker, Case 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 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: July 20, 2010
	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 (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.