



ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
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April 27, 2011

Mr. Robert Stetson
Kelly Moore Painting Co, Inc.
987 Commercial Street
San Carlos, CA 94070

Mr. Vern Willirich
Firestone Tire & Rubber Co.
Address unknown

Mr. Harry Eberlin
9581 La Jolla Farms
La Jolla, CA 92037

(sent via electronic mail to rstetson@kellymoore.com)

Subject: Request for Work Plan; Fuel Leak Case No. RO0000119 (Global ID # T0600101674),
Firestone #3655, 969 San Pablo Avenue, Albany, CA 94706

Dear Messrs. Stetson, Willrich, and Eberlin:

Alameda County Environmental Health (ACEH) staff has reviewed the case file inclusive of the *Groundwater Monitoring Report – March 2010*, dated May 3, 2010, and the *Groundwater Monitoring Report – September 2010*, dated December 22, 2010. Both reports were prepared and submitted on your behalf by ProTech Consulting & Engineering (ProTech). The two reports describe and report on two more recent samplings of groundwater requested by ACEH. This request by ACEH was based on a part of the State Water Resources Control Board (SWRCB) decision to revisit the question of the appropriate groundwater monitoring interval at sites with environmental investigations (contained in Resolution 2009-0042). Based on a reinterpretation of state regulations, Resolution 2009-0042 required agencies to reduce standard quarterly monitoring requirements to semiannual or less frequent monitoring; however, upon review, this site had not been monitored since September 2000. As a consequence, to determine the status of contaminants in groundwater beneath this site and to determine future appropriate actions, ACEH requested the resumption of groundwater sampling at the site. Thank you for submitting the reports.

Based on ACEH staff review of the case file and of these documents we request that you address the following technical comments regarding the site, and send us the technical documents requested below.

TECHNICAL COMMENTS

- 1. GeoTracker Compliance** - The site is out of compliance with state GeoTracker requirements (i.e. not County requirements). The majority of required uploads have not been provided and include at a minimum all recent analytical EDFs, GEO_WELL data, and GEO_MAPs, and all bore logs. Uploads of well survey data (GEO_XY and GEO_Z), completed to GeoTracker standards, are also required (The location of well MW-4 in particular has changed from mid-lot to edge of property over time). Please see Attachment 1 for limited additional details, and the state GeoTracker website for full details.
- 2. Appropriate ESL Tables** – The referenced reports compare the analytical results Maximum Contaminant Levels (MCLs) and to the Environmental Screening Levels (ESLs) contained in an older version of the San Francisco RWQCB's *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* (the more recent version incorporated several changes to residential ESL values for contaminants of concern at the site), and also states that there is no threat to public health from drinking water due to disallowed consumptive use of groundwater shallower than 50 ft bgs and due to normal sanitation hazards.

ACEH is not aware of an exclusion of the consumptive use of shallow groundwater, but is aware of a generalized potential for sanitation hazards in shallow groundwater. Specifically, please understand that at present all groundwater in the East Bay Plain Groundwater Basin that underlies Albany is currently classified as 'MUN' (potentially suitable for municipal or domestic water supply). According to the RWQCB *Water Quality Control Plan (Basin Plan)*, dated January 18, 2007, for the San Francisco Bay Basin, "the term 'groundwater' includes all subsurface waters, whether or not these waters meet the classic definition of an aquifer or occur within identified groundwater basins.' The Basin Plan also states that 'all groundwaters are considered suitable, or potentially suitable, for municipal or domestic water supply (MUN)." Therefore, the groundwater beneath the subject site must be considered beneficial for these uses unless shown to be non-beneficial using criteria presented in the Basin Plan (The proposed "Zone B Berkeley / Albany Groundwater Management Zone" contained in the June 1999 *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report* was ultimately not adopted in the 2007 Basin Plan). Please adjust your evaluation to reflect this in future reports. However, please also be aware that case closure does not necessarily require cleanup to MUN cleanup goals, only that those goals can be met within an identified reasonable timeframe.

3. **Preferential Pathway Study (Source of Chlorinated VOCs)** – The referenced reports have advanced a potential alternative source for the chlorinated volatile organic compounds (VOCs) documented in groundwater collected from well MW-4 downgradient of the former waste oil UST at the site (as the well with the highest remaining concentrations). Specifically, a sewer line leak from an offsite source was suggested as a possible source. A concrete sewer line, presumed to lie in the street, and located downgradient of MW-4 is mentioned; however, was not depicted on site maps to allow an understanding of the potential for the line to impact well MW-4, nor if the flow line, burial depth, or flow direction of the sewer might further suggest if it is a viable potential source of the VOCs. Conversely, both soil and groundwater data (each with elevated concentrations of VOCs) from the waste oil UST removal and overexcavation operations strongly implicates the former UST as a source of VOCs. Additionally the inability to fully remove contaminated soil adjacent to or beneath the building on the east side of the overexcavation, and the lack of subsequent confirmation samples in that direction suggest a potential residual soil reservoir may be present at the site.

Finally, because PCE, DCA and DCE were traditionally used as "preferred degreasers" during the time period Firestone occupied the facility, it would not be unusual for the former waste oil UST to be a source once elevated concentrations were documented in association with the UST, but also that surface spillage of these compounds may have potentially occurred in informal yard operations rather than facility operations. Older site maps depict a number of surface storm drain catch basins at the site that may have received surface run-off from such events; however, again, the flow lines, depths, and etc. have not been investigated or depicted in an attempt to document or to eliminate these as a potential concern. As a consequence of these lines of evidence, and to evaluate the proposed alternative source, ACEH requests an evaluation of preferential pathways for the site be submitted according to the schedule identified below.

Specifically, the purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of plume migration along those pathways that might spread contamination (both on to, as well as off, the site). ACEH requests that the study detail the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for vertical and lateral migration that may be present in the site vicinity. Please report your results in the report requested next below. The results of your study are to 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 and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please include maps (and cross-sections when appropriate) to illustrate the location and depth of utility lines and trenches within and near the site and plume areas(s) as part of your study. Please include utility laterals to the site (or vicinity sites when appropriate).

b. Well Survey - The well survey is to include a detailed survey of all wells within a ¼ mile radius of the subject site. Please use both the California Department of Water Resources as well as the Alameda County Public Works Agency; the source information is sufficiently different to warrant inclusion of both in the study.

- 4. Request for a Soil Gas Survey** – Review of the UST removal and overexcavation report (remedial excavation report dated February 4, 1991) indicates that the overexcavation was unable fully remove impacted soil adjacent to or beneath the building on the east side of the overexcavation, and did not collect removal confirmation samples along the eastern wall of the excavation. This suggests that a potential residual contaminant soil reservoir may be present at the site beneath the building. Recent research appears to indicate that chlorinated VOCs in soil gas are reticent to degrade and can lead to vapor intrusion concerns. As a consequence ACEH requests the submittal of a work plan for a soil gas survey for the site. If incorporated into the design, such a survey can also quickly determine if additional soil sources remain proximal to, or beneath, the building, and at other previously undocumented locations (such as, but not limited to, on- or off-site storm catch basins). This is both appropriate and requested. Additionally, because indoor vapor intrusion concerns are generally more elevated at chlorinated VOC sites, it may also be appropriate to include a contingency sub-slab vapor survey in the requested work plan should elevated soil vapor concentrations be found at the site. Analytes should include all contaminants of potential concern at the site.

Please incorporate DTSC guidelines into the soil vapor work plan (*Interim Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, December 15, 2004 [Revised February 7, 2005] and *Advisory – Active Soil Gas Investigation [Draft]* March 3, 2010). This should include at a minimum installation of the soil vapor probes to a depth of 5 feet below grade surface, introduction of an appropriate tracer to verify exclusion of surface air, a shroud to ensure retention of the tracer gas around the sample port, a gloved entry in to the shroud to assist in that goal, and inclusion of atmospheric gases (carbon dioxide, oxygen, nitrogen), and methane in the analytical suite to assist in the interpretation of the data. Please submit the work plan by the date identified below.

- 5. Request For Well MW-6 Relocation** – An effort to relocate well MW-6 does not appear to have been undertaken since the resumption of groundwater monitoring in September 2009. Because the well is proximal to the former UST location and the building, and contains chlorinated VOC concentrations, ACEH requests that it be relocated, repaired if required, and incorporated into the next groundwater sampling event.
- 6. Groundwater Monitoring and Sampling** – ACEH requests continuation of groundwater monitoring; however, on an annual basis, using the third quarter of a year as the sampling interval (September). The collection of additional data on a semi-annual basis does not currently appear justified. On an interim basis, please also incorporate TPH as motor oil and TPH as hydraulic oil into the sampling program for all wells. TPH motor oil does not appear to have been previously sampled in groundwater at this former waste oil UST. TPH hydraulic oil also does not appear to have been incorporated in the sampling program previously as stated in intent in the *Hydraulic Lift Removal Letter Report* dated December 23, 1998. If this is in error, please provide or locate the data and communicate such with the preferential pathway study, as indicated below. Conversely, a hydrocarbon fingerprint may be used to type the carbon range of any detectable petroleum hydrocarbon in groundwater at the site, and may offer a cost savings. Inclusion of these additional appropriate analytes in future groundwater sampling events is dependent on the results of this request; both the sampling interval and analytes requested are subject to modification.
- 7. Request for a Site Conceptual Model** – ACEH is in general concurrence with the recommendation that a Site Conceptual Model (SCM) be completed for the site. A SCM synthesizes all the analytical data and evaluates all potential exposure pathways and potential receptors that may exist at the site, including identifying or developing any appropriate site cleanup objectives and goals. At a minimum, the SCM should include the following:

- a. Local and regional plan view maps that illustrate the location of sources (former facilities, piping, tanks, etc.) extent of contamination, direction and rate of groundwater flow, potential preferential pathways, and locations of receptors;
- b. Geologic cross section maps that illustrate subsurface features, man-made conduits, and lateral and vertical extent of contamination;
- c. Plots of chemical concentrations versus time;
- d. Plots of chemical concentrations versus distance from the source;
- e. Complete summary tables of chemical concentrations in different media (i.e. soil, groundwater, and soil vapor); and
- f. Copies of well logs, boring logs, and well survey maps;
- g. Discussion of likely contaminant fate and transport, and
- h. Identification of any remaining data gaps (i.e. downgradient delineation of hydraulic oil in soil and groundwater [hydraulic lift soil sample #1-2 contained 1,400 mg/kg at a location a number of feet below groundwater], potential contaminant volatilization to indoor air, contaminant migration along preferential pathways such as onsite catch basins, or others); please include a proposed scope of work to address those data gaps in the SCM as identified below.

TECHNICAL REPORT REQUEST

Please submit the following deliverable to ACEH (Attention: Mark Detterman), according to the following schedule:

- **June 3, 2011** – Documentation of Geotracker Compliance
- **July 1, 2011** – Preferential Pathway Study (inclusive of Comment 6 data, as needed)
- **August 5, 2011** – Work Plan for Soil Gas Survey / Sub-Slab Vapor Survey
- **December 2, 2011** – Annual Groundwater Monitoring Report
- **60 Days After Work Plan Approval** – Soil Gas / Sub-Slab Vapor Survey
- **60 Days After Soil Gas / Sub-Slab Vapor Survey Review** - Site Conceptual Model with Data Gap Work Plan

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

Messrs. Stetson, Willrich, and Eberlin
RO0000185
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Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Sherwood Lovejoy, Jr., TCG / ProTech - North Bay, 394 Cecilia Way, Tiburon, CA 94920
(sent via electronic mail to protech@tcg-international.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, e-File

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.