

**RECEIVED**

By Alameda County Environmental Health 4:44 pm, Feb 02, 2016

MCG Investments, LLC  
c/o Kay & Merkle  
100 The Embarcadero – Penthouse  
San Francisco, CA 94105  
(415) 357-1200

January 15, 2016

Mr. Mark Detterman  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
Environmental Protection, Local Oversight Program  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Subject: Letter of Transmittal for Data Gap Investigation Workplan Addendum  
Letter  
Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608  
ACEH Fuel Leak Case No. RO0000063, GeoTracker Global ID No.  
T0600102099**

Dear Mr. Detterman:

As required in your letter of December 15, 2015 and e-mail of January 13, 2016, we submit this transmittal letter and accompanying *Data Gap Investigation Workplan Addendum Letter* for the above-reference subject site.

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.

Sincerely,

MCG Investments LLC,  
A California Limited Liability  
Company



Walter F. Merkle  
Authorized Agent



**AllWest Environmental, Inc.**

Specialists in Physical Due  
Diligence and Remedial Services

2141 Mission Street, Suite 100  
San Francisco, CA 94110  
Tel 415.391.2510  
Fax 415.391.2008

January 15, 2016

Mr. Mark Detterman  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
Environmental Protection, Local Oversight Program  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**RE: Data Gap Investigation Workplan Addendum Letter  
Former McGrath Steel, 6655 Hollis St. and 1471 67th St., Emeryville, CA 94608  
ACEH Case No. RO0000063, Geotracker Global ID # T0600102099**

Dear Mr. Detterman:

As requested in your e-mail of January 13, 2016, AllWest has prepared an addendum letter to our *Data Gap Investigation Workplan* dated October 30, 2015 for the above-referenced subject site. This letter addresses your corresponding technical comments regarding the *Data Gap Investigation Workplan* raised in your Alameda County Environmental Health (ACEH) letter of December 15, 2015, and further discussed in my subsequent e-mail of January 7, 2016 and your e-mailed response of January 13, 2016.

The following revisions in scope of work are proposed:

**1. Work Plan Modifications**

- a. Soil Selection Protocols** – As requested in the ACEH December 15, 2015 letter and in accordance with the California State Water Resources Control Board (SWRCB), *Low-Threat Underground Storage Tank Closure Policy (LTCP) Appendix 3, Scenario 3*, dated August 17, 2012, we will modify our soil sampling plan and depth intervals accordingly. At least two (2) soil samples will be collected within the bio-attenuation zone extending 5 feet below the building foundation at signs of contamination including elevated photo-ionization detector (PID) readings, discoloration or odors, changes in lithology, capillary fringe zone above groundwater, etc. If the previously listed conditions are not encountered, samples will instead or additionally be collected at depth intervals of 0, 5 and 10 feet below ground surface (bgs).
- b. Groundwater Collection From SB-26** – To evaluate the possibility of encountering groundwater at depths shallower than the planned 25 to 30 feet bgs boring depth, and to ensure an adequate amount of time for groundwater recovery without delaying the

investigation drilling activities, AllWest proposes advancing two closely spaced adjacent borings, SB-26A and SB-26B. Boring SB-26A will be advanced to approximately 15 feet bgs, and left open overnight if necessary to allow for potential shallow groundwater recovery. If groundwater is not initially encountered in SB-26A, then boring SB-26B will be located within approximately 2 feet adjacent to SB-26A, and advanced to the originally planned total depth of 25 to 30 feet bgs, or first encountered groundwater.

If groundwater is encountered promptly in SB-26A, then SB-26B will not be advanced. If groundwater is not encountered promptly in SB-26A, then SB-26B will be advanced to first encountered groundwater and a groundwater sample collected and placed on hold at the analytical laboratory. If groundwater is subsequently encountered in SB-26A by the next day, a groundwater sample will be collected for laboratory analysis, and the archived groundwater sample from SB-26B will not be analyzed. If no groundwater is encountered in SB-26A by the next day, then the archived SB-26B sample will be analyzed. Groundwater analysis will be for the constituents specified in the *Data Gap Investigation Workplan*. Both borings will then be properly abandoned by tremied cement grout.

- c. Temporary Soil Vapor Probes** – In accordance with the California State Water Resources Control Board (SWRCB), *Low-Threat Underground Storage Tank Closure Policy* (LTCP), dated August 17, 2012, temporary soil vapor probes will be advanced to and installed at 5 feet below the building foundation footings. According to building plans reviewed at the City of Emeryville Community Development Department, Building Division, the 1471 67<sup>th</sup> Street warehouse foundation footing depths range from 18 inches (1.5 feet) bgs for the column footings to 2 feet bgs for the shear wall footings. Therefore, AllWest will advance and install the temporary soil vapor probes SVP-1 through SVP-5 within the warehouse building at 7 feet bgs, 2 feet below the deepest foundation footings.

According to the building plans, the foundation footing depths for the office building at 6655 Hollis Street are 12 inches (1 foot) bgs. Therefore, AllWest will advance and install the temporary soil vapor probe SVP-6, adjacent to the office building, at 6 feet bgs, 1 foot below the foundation footings.

- d. Additional Soil Sampling** – As requested in the December 15, 2015 ACEH letter and in accordance with the LTCP *Appendix 4, Scenario 4*, AllWest will collect soil samples from the boreholes of all temporary soil vapor probes. At least two (2) soil samples will be collected within the bio-attenuation zone extending 5 feet below the building foundation at signs of contamination including elevated PID readings, discoloration or odors, changes in lithology, capillary fringe zone above groundwater, etc. If the previously listed conditions are not encountered, samples will instead or additionally be collected at depth intervals of 0, and 5 feet below the building foundation (2 to 7 feet bgs).
- e. Vapor Probe Analytical Suite** - As requested in the ACEH letter and in accordance with the LTCP *Appendices 3 and 4, Scenarios 3 and 4*, will additionally analyze soil vapor

samples for oxygen, carbon dioxide and methane by ASTM D1946 to determine if a vapor bio-attenuation zone (where oxygen concentration is greater than 4%) is present beneath the subject site. In accordance with the State of California Department of Toxic Substance Control (DTSC) *Advisory – Active Soil Gas Investigations*, July 2015 (DTSC, 2015), AllWest will also specify that Teflon™ rather than Nylaflow™ tubing be used in all soil vapor probe construction and above-ground sample train components, due to the adsorption of naphthalene to Nylaflow™ tubing. It is AllWest's opinion that use of Teflon™ tubing is more cost-effective and time-efficient than performing an additional sample collection and analysis for naphthalene using Tenax™ sample tubes and EPA Method TO-17.

- f. **Shroud Helium Tracer Concentration** - As requested in the ACEH December 15, 2015 letter and e-mail of January 13, 2016, and in accordance with the DTSC *Advisory – Active Soil Gas Investigations, Appendix C* (DTSC, July 2015), AllWest will conduct helium leak tracer gas concentration measurements of the soil vapor during purging operations by using a helium gas detection meter connected to the sampling tubing train with a “T” connector and 3-way valve within the leak detection shroud. These measurements will determine whether a leak is present within the vapor probe seal. If a significant helium leak is detected in the purged soil vapor (greater than 5% of the ambient shroud helium concentration), the vapor probe will be reinstalled, provided the drilling rig and crew are still available onsite to do so.

In addition, AllWest will continuously monitor the ambient helium concentration within the leak detection shroud using a helium gas detection meter at all sample locations, and collect one ambient shroud helium leak detect sample in a Summa canister for helium analysis by ASTM D1946 as verification of meter accuracy, as originally proposed in our *Data Gap Investigation Workplan*. Ambient helium concentration within the shroud will be maintained at least two orders of magnitude higher than the reporting limit of the laboratory analytical method or the field meter used to analyze the sample, per *Advisory – Active Soil Gas Investigations, Appendix C* (DTSC, July 2015). The typical target ambient helium concentration of 20% used by AllWest is at least 3 orders of magnitude above typical laboratory detection limits and at least 2 orders of magnitude above typical field meter detection limits.

2. **Semiannual Groundwater Monitoring** – As requested in the ACEH December 15, 2015 letter, AllWest will resume the semiannual groundwater monitoring program for the four existing monitoring wells at the subject site during February and August of each year. AllWest will also resume free product monitoring and passive product skimming recovery if free product is present in monitoring well MW-3.

If you have any questions or concerns or would like additional information, please feel free to contact AllWest at 415-391-2510.

Mr. Mark Detterman  
January 15, 2016

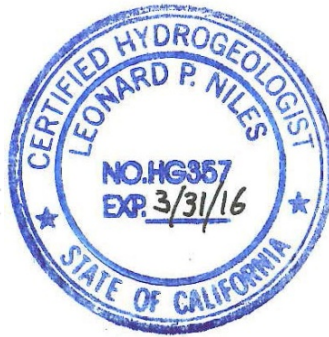
Page 4 of 4

Sincerely,

AllWest Environmental, Inc.

*Leonard P. Niles*

Leonard P. Niles, P.G., C.H.G.  
Senior Project Manager



Cc: Mr. Jon Wactor, Wactor & Wick LLP Environmental Attorneys  
Mr. Walter Merkle, MCG Investments, LLC c/o Kay & Merkle, LLP

ATTACHMENTS

Attachment A – ACEH Letter of December 15, 2015  
Attachment B – ACEH E-Mail of January 13, 2016

# Attachment A



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

December 15, 2015

MCG Investments LLC  
c/o Mr. Walter Merkle  
123 Estudillo Avenue  
San Leandro, CA 94577

Shirley J Davini & Dorothy D McGuire  
123 Estudillo Avenue  
San Leandro, CA 94577

Mr. David Davini  
Loretta A McGrath Family Trust  
Address Unknown

Subject: Conditional Work Plan Approval; Fuel Leak Case No. RO0000063; (Global ID # T0600102099); McGrath Steel Company, 6655 Hollis Street, Emeryville, CA 94608

Dear Ladies and Gentlemen:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site including the *First Semiannual 2015 Groundwater Monitoring Report*, dated May 15, 2015 (received September 24, 2015), and the *Data Gap Investigation Workplan*, dated October 30, 2015. Both reports were prepared and submitted on your behalf by AllWest Environmental, Inc. (AllWest). Thank you for submitting the reports. Both reports were submitted as the result of a meeting that occurred on August 7, 2015 in the offices of your attorney, Mr. Jon Wactor.

The work plan proposed the installation of one soil bore (SB-26) to a depth of 25 to 30 feet below grade surface (bgs), the installation of six temporary soil vapor probes along the northern and western edges of the property to approximately 5 feet bgs, and the concurrent construction of five semi-permanent sub-slab vapor points or vapor pins along the same property margins.

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 work. 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 these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: [mark.detterman@acgov.org](mailto: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 report by the date identified below.
  - a. **Soil Selection Protocols** – The work plan proposes to collect three soil samples in soil bore SB-26 at predetermined depth intervals. To eliminate miscommunication ACEH requires that soil samples be collected and submitted for analysis, at signs of contamination (odor, discoloration, PID responses, etc.), at significant changes in lithology, and just above groundwater. Additionally to conform to the Low Threat Closure Policy (LTCP), soil samples are required in the 0 to 5 and the 5 to 10 foot depth intervals; however, please be aware that delineating the vertical extent of soil contamination additionally remains a standard requirement.
  - b. **Groundwater Collection From SB-26** – Soil bore SB-26 has been proposed to be installed to an approximate depth of 25 to 30 feet bgs for the purpose of the collection of groundwater. Depth to water appears to be highly variable at the site and vicinity. It is therefore important to allow sufficient time for groundwater at shallower depths to appear within the proposed borehole prior to extending the bore to 25 to 30 feet bgs in order to obtain an additional groundwater sample.

- c. **Temporary Soil Vapor Probes** - The work plan proposed the installation of six temporary soil vapor probes to a depth of approximately 5 feet bgs. Please be aware that the LTCP requires soil vapor to be collected five feet below existing building foundations. Therefore to adhere to the LTCP, ACEH will require the vapor probes to be installed to a depth five feet below building foundations. This may require an investigation into the nature of the building foundation, which should be documented in the report requested below; for example spread footings typically are approximately 18 inches deep thus necessitating a vapor probe installation depth of 6.5 feet.
- d. **Additional Soil Sampling** – As noted above, the work plan proposed the installation of six temporary soil vapor probes. In order to adhere to the LTCP, ACEH requires the collection and laboratory analysis of soil from each probe at signs of contamination (odor, discoloration, PID responses, etc.), and at significant changes in lithology. This data is expected to determine the potential extent or presence of a vapor bioattenuation zone at the site as required by the LTCP analysis.
- e. **Vapor Probe Analytical Suite** – The work plan proposes to analyze soil vapor for Total Petroleum Hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tert-butyl ether (MTBE), and naphthalene by TO-15(M).

In addition ACEH requests the collection of soil gases (oxygen, carbon dioxide, and methane) in order to determine if a sufficient vapor bioattenuation zone is present beneath the site, and to determine if petroleum biodegradation by-products are present or represent a potential hazard at the site.

In order to remain consistent with existing revised Department of Toxic Substance Control (DTSC; *Advisory – Active Soil Gas Investigations*, July 2015, Appendix B) guidance for Nylaflow tubing (in regards to naphthalene adhesion to the tubing), ACEH also requires that naphthalene laboratory analysis is additionally conducted by Method TO-17. This is expected to provide multiple lines of evidence for concentrations of naphthalene, and to gather the data quickly in one mobilization.

- f. **Shroud Helium Tracer Concentration** – In the event helium (or another tracer) is detected in a vapor sample, revised DTSC documents (2015, op. cite; Appendix D) provide guidelines for the acceptability of the soil vapor result provided the shroud (helium) tracer concentration is known. Therefore, in order to increase the likelihood of the collection of acceptable data in one mobilization, ACEH requests that the tracer concentration in the shroud be documented from a minimum of 50% of the vapor samples rather than the proposed one ambient sample. While a 100% conformance to DTSC guidelines is preferred, this modification is required to ensure consistent tracer use methodology during the vapor sampling program.
2. **Semi-Annual Groundwater Monitoring** – Please resume groundwater monitoring of all site vicinity wells on a semi-annual basis, and continue analytical analysis for all chemicals of concern at the site. Please sample groundwater in the months of August and February of each year until otherwise arranged. Please include a table reporting the total volume of free-phase and groundwater removed during each servicing of the free-phase passive skimmer (past and future) in these groundwater monitoring reports. Please submit semi-annual 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 Attachment 1 and the specified file naming convention below, according to the following schedule:

- **February 29 2016** – Site Investigation Report  
File to be named: RO63\_SWI\_R\_yyyy-mm-dd
- **May 20, 2016** – Semi-Annual Groundwater Monitoring Report  
File to be named: RO63\_GWM\_R\_yyyy-mm-dd
- **November 4, 2016** – Semi-Annual Groundwater Monitoring Report  
File to be named: RO63\_GWM\_R\_yyyy-mm-dd



Ladies and Gentlemen  
RO0000063  
December 15, 2015, Page 3

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 your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

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

Sincerely,



Digitally signed by Mark Detterman  
DN: cn=Mark Detterman, o=ACEH,  
ou=ACEH,  
email=mark.detterman@acgov.org, c=US  
Date: 2015.12.15 14:17:33 -08'00'

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

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

cc: Leonard Niles, AllWest Environmental, Inc, 530 Howard Street, Suite 300, San Francisco, CA  
94105; (sent via electronic mail to: [leonard@allwest1.com](mailto:leonard@allwest1.com))

Dilan Roe, ACEH, (sent via electronic mail to: [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org))  
Mark Detterman (sent via electronic mail to [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org))  
Electronic File, GeoTracker

## 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/](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.

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b>	<b>REVISION DATE:</b> May 15, 2014
	<b>ISSUE DATE:</b> July 5, 2005
	<b>PREVIOUS REVISIONS:</b> October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> 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](mailto: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](mailto: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.

# Attachment B

**From:** [Detterman, Mark, Env. Health](#)  
**To:** ["Leonard Niles"](#)  
**Cc:** ["Jon Wactor"](#); ["Walter Merkle"](#); ["Marc Cunningham"](#); ["Carol Ebert"](#); [Sara Bloom](#)  
**Subject:** RE: RO0000063 Former McGrath Steel, ACEH Letter of 12/15/15  
**Date:** Wednesday, January 13, 2016 11:36:56 AM

---

If the changes are different from what was either in the work plan and approved in the ACEH letter, they should be per the language of that letter. If so, then I'd keep it comprehensive, but as short as possible; its less to review and get through, so maybe a quicker response.

*Mark Detterman*  
*Senior Hazardous Materials Specialist, PG, CEG*  
*Alameda County Environmental Health*  
*1131 Harbor Bay Parkway*  
*Alameda, CA 94502*  
*Direct: 510.567.6876*  
*Fax: 510.337.9335*  
*Email: [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org)*

*PDF copies of case files can be downloaded at:*

*<http://www.acgov.org/aceh/lop/ust.htm>*

---

**From:** Leonard Niles [mailto:[leonard@allwest1.com](mailto:leonard@allwest1.com)]  
**Sent:** Wednesday, January 13, 2016 11:31 AM  
**To:** Detterman, Mark, Env. Health  
**Cc:** 'Jon Wactor'; 'Walter Merkle'; 'Marc Cunningham'; 'Carol Ebert'; Sara Bloom  
**Subject:** RE: RO0000063 Former McGrath Steel, ACEH Letter of 12/15/15

Mark,

Do you want these changes in scope of work addressed in some sort of workplan addendum letter, or should we just go ahead and do the field work? We have pushed back the drilling & sampling schedule to January 25-27 to allow time for drilling permit approval.

Thanks,

Len

**Leonard Niles, P.G., C.H.G.**  
Senior Project Manager  
**AllWest Environmental, Inc.**

2141 Mission Street, Suite 100  
San Francisco, CA 94110  
office (415) 391-2510 x204  
fax (415) 391-2008  
[Leonard@AllWest1.com](mailto:Leonard@AllWest1.com)



---

**From:** Detterman, Mark, Env. Health [<mailto:Mark.Detterman@acgov.org>]  
**Sent:** Wednesday, January 13, 2016 11:14 AM  
**To:** 'Leonard Niles'  
**Cc:** Jon Wactor; Walter Merkle; Marc Cunningham; 'Carol Ebert'  
**Subject:** RE: R00000063 Former McGrath Steel, ACEH Letter of 12/15/15

Hi Len,

As you may know from other sites we are working on, it's been extraordinarily busy around here and timely responses can be problematic. Regardless, here are my thoughts / responses to your questions below.

1a) – Soil sampling under the LTCP is done from ground surface; it's just the vapor criteria that requires a vapor sample 5 ft below the foundation. Sampling in the 0 to 5 and 5 to 10 ft intervals should be based on evidence of contamination and not specifically at 5 or 10 feet bgs. I've not encountered foundations on piers or micropiles at an environmental site yet, but likely will. These foundation types may push vapor collection to below the water table, so it would not be possible, and we'd likely make a site specific evaluation; likely based on the slab I would think.

In regards to the 30 foot separation between LNAPL and a foundation or a receptor, ACEH has not seen these two possible LTCP scenarios advanced as a viable option in the County as the distance is from the receptor to the LNAPL both vertically and horizontally, and groundwater is typically shallower than 30 feet, at least west of the hills.

1b – It would be great if a hole could remain open over night, but I understand your plight. Most of a day may be what you can manage; start these early. I'd base my downhole determinations on depth to water in wells, and in previous soil bores / wells at a site, and stop well short of TD. As you will be aware, changes in color / staining are very useful in determining the top of at least the smear zone, and often water. While water has been first observed at 24 to 30 ft, a significant number of bores indicate water between 7 – 11 -14 feet bgs. Many times tight water formations turn out to be "water table aquifers" and water samples from 30 feet are well below the water table and non-representative.

1c – Same as 1a. Residential or commercial basements are also treated the same; 5 feet below (I've a site where there is a basement and water is shallower than 5 ft below that, so a site specific evaluation was made – near the base of the basement, but above the bottom due to the water depth). Elevator pits are also a concern as they extend deeper and can act as a piston pushing air to upper levels.

1d – To meet the LTCP requirements, a relatively undisturbed (core) soil sample needs to be collected in the 0 to 5 foot zone based on evidence of contamination. After clearing a hole, the driller will need to push a sleeve / core to collect at least one appropriately selected soil sample, two if Scenario 4b (Appendix 4) is used (two soil samples in 0 – 5 foot zone, not at 0 or at 5 feet, but at indications of contamination or changes in lithology if

there were no PID, discoloration, or other signs of contam. present in that 0 to 5 depth interval; ACEH does not believe in absolute depth samples such as 0 and 5 ft; but on evidence based data).

1e – The TO-17 sampling process is relatively short, and many consultants have been conducting both for naphthalene for some time. However, ACEH observes DTSC guidance; and DTSC accepts Teflon provided the entire sampling train is Teflon and not a mixture. However, please be aware that it has been the experience of ACEH that drillers do not typically carry Teflon tubing (more \$\$, and less easy to install apparently), and that it will typically require an extra effort to ensure the tubing is actually Teflon.

1f – I may have misread or misunderstood your vapor sampling protocols. If you are collecting shroud tracer concentrations at all vapor points and in the soil vapor also then that is perfect. This was not apparently clear to me at the time I read the work plan. Sorry if I misread it. The point is to collect and analyzed for the tracer in the soil vapor sample and the in the shroud so that a leak percentage can be determined at each location if needed and in conformance with the DTSC guidance.

I think that is it. If these bring up other questions, or I have not fully understood your questions, let me know.

Thanks,

*Mark Detterman*  
*Senior Hazardous Materials Specialist, PG, CEG*  
*Alameda County Environmental Health*  
*1131 Harbor Bay Parkway*  
*Alameda, CA 94502*  
*Direct: 510.567.6876*  
*Fax: 510.337.9335*  
*Email: [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org)*

*PDF copies of case files can be downloaded at:*

*<http://www.acgov.org/aceh/lop/ust.htm>*

---

**From:** Leonard Niles [<mailto:leonard@allwest1.com>]  
**Sent:** Thursday, January 07, 2016 4:06 PM  
**To:** Detterman, Mark, Env. Health  
**Cc:** Jon Wactor; Walter Merkle; Marc Cunningham; 'Carol Ebert'  
**Subject:** RO0000063 Former McGrath Steel, ACEH Letter of 12/15/15

Mark,

I have some questions regarding your letter of December 15, 2015 in response to our Data Gap Investigation Workplan of October 30, 2015 for the former McGrath Steel site at 6655 Hollis Street, Emeryville, ACEH Case #RO0000063 (attached). My questions are as follows, referenced by your technical comment numbers:

1.a.) We will modify our soil sampling plan and intervals accordingly to specify sampling at signs of contamination, changes in lithology, above groundwater, etc. Regarding the

LTCP requirements for sampling at the 0-5 and 5-10 feet depth intervals, is this depth below ground surface or depth below building foundation? The LTCP specifies depth below existing or potential building foundations; therefore I presume we would have to sample at 0, 5 and 10 feet below base of foundation. We currently don't have any data on the building foundation depth, so will need to obtain that. Also, what is the definition of "foundation"; if the building foundation is resting on piers or driven micropiles they can be quite deep. Or is it the base of the slab-on-grade foundation?

Also, the LTCP requires a minimum of 30 feet definition between the building foundation and any unweathered LNAPL. Since LNAPL has been historically encountered at the site (in MW-3) do we need to collect a soil sample at 30 feet below foundation regardless of depth to groundwater? Groundwater at the site was typically encountered at 29-30 feet bgs, although sometimes much shallower.

1.b.) Regarding waiting time for potential groundwater recovery at shallow depths while drilling, prior to advancing to the planned 25-30 feet bgs, what is a realistic amount of time to wait? I actually had one agency case worker (who shall remain nameless) who insisted we had to wait overnight, which is totally unrealistic. We should be able to get a good idea of what the current depth to groundwater is simply by measuring the existing monitoring wells at the site before drilling.

1.c.) Regarding the soil vapor probes to be advanced to 5 feet below building foundation per the LTCP, my question is the same as for 1.a. above; basically what is the definition of "base of foundation"? You used the example of spread footings at 18", which would give a sample depth of 6.5 feet. OK, but what if the building is sitting on 30 feet bgs micropiles? Any soil vapor sample collected much more than 5 feet below the floor slab is not going to be valid for risk assessment purposes. The LTCP diagram appears to use a residential house with a crawl space as their example for the 5 feet below foundation attenuation zone; I am wondering how this applies to commercial buildings with slab-on-grade foundations?

1.d.) Regarding additional soil samples to be collected from the vapor probe boreholes - although in our workplan we said the borings would be conducted by either Geoprobe DPT continuous core sampler or drive point, in practice the drillers usually use a drive point with expendable tip to advance to 5 feet bgs with no soil core recovery. So we will need to do continuous core recovery for each of the 6 vapor probe boreholes and collect a soil sample at both 0 and 5 feet below foundation, correct? Which will add 12 additional soil samples and analyses to the scope of work. That also rules out the option to use a temporary PRT expendable drive point type soil vapor probe.

The LTCP Appendix 4, Scenario 4 (no bio-attenuation zone) to my understanding does not specify soil samples to be collected. With this scenario, the screening levels would be the same as the CHHSLs with engineered fill (or use ESLs or the new DTSC HERO screening levels?). The LTCP Appendix 4, Scenario 4 (with bio-attenuation zone) implies soil samples to define the 5 foot bio-attenuation zone to take advantage of the higher screening levels (1,000-fold attenuation factor). Please let us know if we have to collect soil samples at both 0 and 5 feet below the foundation in each probe boring.

1.e.) We will add the oxygen, carbon dioxide and methane analyses to the soil vapor analytical suite, per the LTCP. Regarding the requested naphthalene analysis by EPA Method TO-17 in addition to the TO-3/TO-15/ASTM D1946 used for everything else, the TO-17 requires Tenax tubes, which are a totally different sampling setup from the Summas used for the other analyses. It would be very cumbersome and impractical to collect Summa and Tenax tube samples simultaneously if it is even possible at all. We would probably have to do them separately and sequentially, thereby doubling the sampling time.



Since the only apparent justification for using TO-17 to analyze for naphthalene is it adsorbs to Nylaflow tubing (per the DTSC Active Soil Gas Advisory), why not just use Teflon tubing instead and use Summas and TO-15 to analyze for naphthalene along with all the other VOCs? According to the DTSC Active Soil Gas Advisory Table B-1, there is no adsorption problem with using Teflon tubing for naphthalene. Can't we simply specify Teflon tubing will be used for all probes and be done with it?

1.f.) Regarding helium leak tracer gas samples, I presume that you meant the DTSC Active Soil Gas Advisory Appendix C rather than D, since Appendix D deals with low permeability sampling. I am a bit confused as to exactly what you are requesting. You said the helium tracer gas concentration within the shroud needs to be documented in at least 50% of the samples, rather than the 1 ambient sample we proposed. However, we always document the ambient shroud helium tracer gas concentration in 100% of the samples using a gas detection meter, and that was made clear in our workplan. The 1 ambient helium sample is intended solely as a check on the accuracy of the helium gas meter. Do you mean that we are to collect ambient shroud leak detection gas samples for 50% of the vapor sample events? Or something else, as per Appendix C?

The DTSC Appendix C figures appear to illustrate a quite different setup from that, where helium tracer gas is both sampled by a Summa and monitored by a meter not from ambient air in the shroud, but from the soil vapor in the subsurface vapor probe prior to collecting the actual soil vapor sample. The ambient shroud tracer gas concentration is monitored by a second separate gas meter. I am unclear from Appendix C whether the Summa used is actually supposed to be for tracer gas analysis, or is just the standard soil vapor purge Summa. It seems redundant to both monitor the soil gas with a helium meter and analyze the soil gas Summa for helium, but is that what you were referring to?

The purpose of this procedure supposedly is to find out beforehand if there is a leak in the probe seal before collecting the actual soil vapor sample, but there is an obvious flaw with this logic. OK, you've got a leak in the vapor probe seal - what are you going to do about it? The DTSC seems to think we have the drillers standing by ready to reinstall the probe at a moment's notice. The reality is the drillers are usually long gone by the time we sample these (which is usually the day after installation). So even if we find a leak prior to sampling, we would have to remobilize again at a later date anyway to reinstall the probes and resample.

So there is actually little or no benefit to this procedure, since we will eventually find out from analysis of the tracer gas in the soil vapor samples whether there was a leak anyway, and need to remobilize and resample. It would just take a lot of extra time (and analytical costs?) for little or no benefit. Some additional clarification on this procedure would be appreciated.

2.) We will resume the semiannual groundwater monitoring.

Can we discuss these issues in a phone call so we can proceed forward with the investigation? Do we need to submit an addendum to the workplan addressing these issues before we proceed with the field work? We have tentatively scheduled the field work for January 20 and 21, dependent upon ACPWA drilling permit approval and resolving scope of work issues.

Thanks,

Len

**Leonard Niles, P.G., C.H.G.**

Senior Project Manager

**AllWest Environmental, Inc.**

2141 Mission Street, Suite 100

San Francisco, CA 94110

office (415) 391-2510 x204

fax (415) 391-2008

[Leonard@AllWest1.com](mailto:Leonard@AllWest1.com)

