

MCG Investments, LLC  
c/o Kay & Merkle  
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April 1, 2014

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

**RECEIVED**

By Alameda County Environmental Health at 3:27 pm, Apr 10, 2014

**Subject: Letter of Transmittal for Indoor Air Quality Monitoring Work Plan, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608, ACEH Fuel Leak Case No. RO0000063, GeoTracker Global ID No. T0600102099**

Dear Mr. Detterman:

As proposed and discussed in our e-mails of January 16, 2014, we submit this transmittal letter and accompanying *Indoor Air Quality Monitoring Work Plan*.

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

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San Francisco, CA 94110

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## INDOOR AIR QUALITY MONITORING WORK PLAN

**Former McGrath Steel  
6655 Hollis Street and 1471 67<sup>th</sup> Street  
Emeryville, California**

**Alameda County Fuel Leak Case # RO0000063  
GeoTracker Facility Global ID # T0600102099**

PREPARED FOR:

MCG Investments, LLC  
c/o Kay & Merkle  
100 The Embarcadero – Penthouse  
San Francisco, California 94105

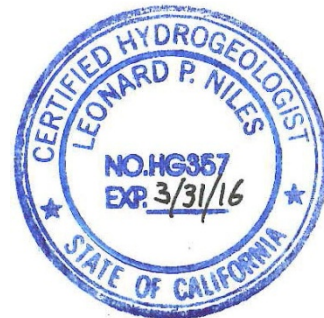
ALLWEST PROJECT 14007.28  
April 1, 2014

PREPARED BY:

Christopher Houlihan  
Project Manager

REVIEWED BY:

Leonard P. Niles, PG, CHG  
Senior Project Manager





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## **INDOOR AIR QUALITY MONITORING WORK PLAN**

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Emeryville, California**

**Alameda County Fuel Leak Case # RO0000063  
GeoTracker Facility Global ID # T0600102099**

### **I. INTRODUCTION**

AllWest Environmental, Inc. (AllWest) has prepared this work plan describing tasks to further characterize site conditions at the subject site referenced above (Figure 1). This proposed work will be performed in partial response to a request by the Alameda County Environmental Health Services (ACEH) for a *Focused Site Conceptual Model and Data Gap Investigation Work Plan* in their letter of November 8, 2013. This work was proposed and discussed in our e-mails of January 16, 2014.

The purpose of this investigation is to evaluate the potential for impact by soil vapor intrusion of constituents of concern (COCs) including petroleum hydrocarbons, fuel oxygenates, and volatile organic compounds (VOCs) to the indoor air quality at the subject site by collecting indoor air quality (IAQ) samples within the site buildings.

This work plan briefly summarizes the site setting and background including previous investigations conducted at the property. More detailed descriptions of site conditions and previous investigations are presented in the AllWest reports listed in Section II.

### **II. PROJECT BACKGROUND**

The subject property is located at the southwest corner of the intersection of Hollis and 67<sup>th</sup> Streets in a commercial and industrial district of the City of Emeryville, Alameda County, California. A site vicinity map is included as Figure 1.

The subject property consists of two parcels (Assessor's Parcel Numbers 049-1511-01 and 049-1511-014). Parcel 01, on the southwest corner of Hollis and 67<sup>th</sup> Streets at the

6655 Hollis Street address, is developed with an approximately 4,100 square foot two-story commercial office building constructed in 1947, and a smaller metal tool shed building. Parcel 14, to the west of Parcel 1 at the 1471 67<sup>th</sup> Street address, is developed with an approximately 15,246 square foot light industrial warehouse building constructed circa 1946 (Stellar Environmental Solutions, Inc., (Stellar) *Phase I Environmental Site Assessment, 6655 Hollis Street, Emeryville, California*, June 2011).

Two 2,000-gallon single-wall steel USTs formerly present under the sidewalk in front of the warehouse at 1471 67<sup>th</sup> Street were removed in 1996 by Subsurface Environmental Corp (SEC) (SEC, 1996). A site plan with former UST locations and historical and current boring and monitoring well locations is included as Figure 2.

Several subsurface investigations and groundwater monitoring events have been performed since 1996. Data indicate the petroleum hydrocarbon plume in groundwater extends beneath the subject property buildings.

The McGrath Steel Company occupied the subject site from circa 1950 to 2007. The subject property was last occupied by CMC Rebar. The property currently appears to be vacant, although a neighboring painting contracting business, Giampolini & Co., appears to occasionally use the Parcel 14 structure (warehouse building).

Site location and description, background information, and a summary of previous investigations, remedial actions and monitoring activities have been summarized in our *Additional Site Characterization and Interim Remedial Action Workplan* (AllWest, 2011), *Additional Site Characterization Workplan Addendum* (AllWest, 2012a), *Third Quarter 2012 Groundwater Monitoring* (AllWest, 2012b), *Fourth Quarter 2012 Groundwater Monitoring* (AllWest, 2013a), *Subsurface Investigation* (AllWest, 2013b), *First Quarter 2013 Groundwater Monitoring* (AllWest, 2013c), and *Second Quarter 2013 Groundwater Monitoring* (AllWest, 2013d), *Additional Site Characterization and Monitoring Well Installation Report* dated August 30, 2013 (AllWest, 2013e) and *Fourth Quarter 2013 Groundwater Monitoring Report, Former McGrath Steel, 6655 Hollis Street and 1471 67<sup>th</sup> Street, Emeryville, California* (AllWest, 2014).

### **III. PURPOSE AND SCOPE OF WORK**

The purpose of this investigation is to evaluate the potential for impact by soil vapor intrusion of petroleum hydrocarbons, fuel oxygenates, and VOCs in soil and groundwater originating from the former USTs to the indoor air quality at the subject site by collecting indoor air quality (IAQ) samples within the office building (Parcel 01) and warehouse building (Parcel 14). The scope of work, as proposed, consists of the following tasks:

1. Prepare a written workplan for conducting additional IAQ monitoring at the site. Submit the workplan to ACEH for review and concurrence;

2. Update the site-specific health and safety plan;
3. Collect six IAQ samples from within the subject property buildings (four in the 1471 67th Street warehouse building and two in the 6655 Hollis Street office building), and one outdoor ambient air (OAA) control sample upwind from the two subject site buildings. The IAQ and OAA samples will be collected over a 24-hour period per procedures outlined in the California Department of Toxic Substances Control (DTSC) *Final – Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, October 2011;
4. Maintain IAQ and OAA samples under chain-of-custody and transport the samples to a Department of Health Services (DHS) certified analytical laboratory, Calscience Environmental Laboratories, Inc. of Garden Grove, California, for chemical analyses. Other qualified analytical laboratories may be used as necessary. Analyze IAQ and OAA samples total petroleum hydrocarbons as gasoline (TPH-g) by EPA Method TO-3 (M) and full-scan volatile organic compounds (VOCs) by EPA Method TO-15 SIM;
5. Present IAQ and OAA sampling data in a written report with conclusions and recommendations as applicable. Upload report and data to ACEH and GeoTracker websites;
6. Conduct a second semiannual indoor air monitoring event approximately six months after the first event. Collect six IAQ samples (four in the 1471 67th Street warehouse building and two in the 6655 Hollis Street office building) from within the subject property buildings, and one outdoor ambient air (OAA) control sample upwind from each of the two subject site buildings. The IAQ and OAA samples will be collected over an 8-hour period per procedures outlined in the California DTSC *Final – Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, October 2011;
7. Maintain IAQ and OAA samples under chain-of-custody and transport the samples to a Department of Health Services (DHS) certified analytical laboratory, Calscience Environmental Laboratories, Inc. of Garden Grove, California, for chemical analyses. Other qualified analytical laboratories may be used as necessary. Analyze IAQ and OAA samples for total petroleum hydrocarbons as gasoline (TPH-g) by EPA Method TO-3 (M) and full-scan volatile organic compounds (VOCs) by EPA Method TO-15 SIM;
8. Present IAQ and OAA sampling data in a written report with conclusions and recommendations as applicable. Upload report and data to ACEH and GeoTracker websites.

## IV. INVESTIGATIVE ACTIVITIES

### A. Health and Safety Plan

AllWest will update the existing site specific health and safety plan prior to mobilizing to the site. All site personnel will be required to review the health and safety plan.

### B. Indoor Air Quality Sampling

Prior to sampling, AllWest will perform a survey of the building layout and conditions to determine optimum IAQ sample locations, and conduct an inventory of chemicals at the site that may affect IAQ sample data. Examples of building and chemical survey forms per the DTSC *Vapor Intrusion Guidance* are included in Appendix B.

To evaluate the potential indoor air quality impact of intrusion of petroleum hydrocarbons and VOCs in the vapor phase from soil beneath the concrete floor slab in site buildings, six IAQ samples (IAQ-1 through IAQ-6) and one OAA control sample (OAA-1) will be collected at the subject site. Air samples will be collected in approximately the same locations during both sampling events. Proposed indoor air sample locations are shown on Figure 3.

AllWest will collect air quality samples in laboratory prepared 6-liter capacity SUMMA canisters. Flow rates of approximately 3.5 milliliters per minute (ml/min) are used to fill the canisters over a 24 hour period. The canisters are filled to approximate 80% of capacity. All pertinent field observations, pressure, times and readings are recorded. Sampling is conducted in general accordance with the DTSC *Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, October 2011. Sample containers are labeled, placed in a dark container and transported under chain-of-custody control to the California State-certified analytical laboratory, Calscience Environmental Laboratories, Inc. (Calscience) in Garden Grove, California. Other certified analytical laboratories may be used if necessary. An example of an indoor air quality field sampling log is included in Appendix C.

A second IAQ monitoring event will be performed six months from the first event in order to evaluate any seasonal variability in sub-slab vapor conditions, as recommended in the DTSC *Vapor Intrusion Guidance* (DTSC, October 2011). The scope of work, number of samples and sampling methodology will be similar to those described above, except that samples will be collected over an 8-hour period at flow rates of 10.4 ml/min. Laboratory analyses will be similar to those described below in Section VI.

During both sampling events, one outdoor OAA sample will be collected in a secure exterior area in the presumed upwind direction, inaccessible to the public, chosen to ensure that the SUMMA canister is not stolen or tampered with overnight. The OAA sample will be secured by lock and chain to an immovable object.

## **V. QUALITY ASSURANCE / QUALITY CONTROL PROGRAM**

### **A. Sample Preservation, Storage and Handling**

All SUMMA canisters are removed from the flow controller, labeled with sampling information, including initial and final vacuum pressures, and placed in a dark container for transport to the analytical laboratory.

### **B. Chain-Of-Custody Program**

All samples collected for this project will be transported under chain-of-custody protocol. The chain-of-custody program allows for the tracing of possession and handling of individual samples from the time of field collection through laboratory analysis. The document includes the signature of the collector, date and time of collection, sample number, number and type of sample containers including preservatives, SUMMA canister ID numbers, initial and final SUMMA canister vacuums, parameters requested for analysis, signatures of persons and inclusive dates involved in the chain of possession. Upon delivery to the laboratory the document will also include the name of the person receiving the samples, the date and time samples were received, and final vacuum pressure as received by the laboratory.

## **VI. ANALYTICAL METHODS**

All samples selected for analysis will be analyzed by a State of California certified independent analytical laboratory. Calscience Environmental Laboratories, Inc. of Garden Grove, California) will likely perform all indoor air sample analyses. However, other qualified laboratories may be utilized as necessary.

The six IAQ samples and one OAA air sample collected during both sampling events will be analyzed for TPH-g by analytical method TO-3 (M) and for VOCs using EPA Method TO-15 SIM (low level detection limits).



## **VII. REPORT PREPARATION**

A written report will be prepared for this investigation after the completion of all field work and receipt of analytical results. Included in the report will be sampling field logs, chain-of-custody documents and copies of the analytical laboratory reports. The report will be reviewed by a California Professional Geologist. Analytical data will be compared to RWQCB soil vapor and indoor air ESLs for commercial use to evaluate potential indoor soil vapor intrusion impact.

The report and associated documents will be uploaded to the California State Water Resources Control Board (SWRCB) GeoTracker database, and the ACEH FTP website. A similar report will be prepared for the second semiannual IAQ monitoring event to be performed six months after the first event.

## **VIII. PROJECT STAFF AND SCHEDULE**

Mr. Leonard P. Niles, P.G., C.H.G., a California Professional Geologist (PG 5774) and Certified Hydrogeologist (CHG 357), will provide technical oversight for this project and act as the project manager and regulatory liaison. Additionally, AllWest's staff of engineers, geologists, and technicians will be employed to perform the various tasks of the project. AllWest will inform ACEH at least 72 hours prior to the start of field activities. AllWest will inform ACEH of any significant developments during the course of the investigations.

## **IX. LIMITATIONS**

AllWest has prepared this remedial investigation and corrective action plan for the exclusive use of MCG Investments, LLC (Client) for this particular project and in accordance with generally accepted practices at the time of the work and with our written proposal. No other warranties, either expressed or implied, are made as to the professional advice offered. This plan is not a specification for the proposed work and should not be used to bid out any of the proposed work found within. Reliance on this plan by any party other than the Client is at the user's sole risk.

## **X. REFERENCES**

Alameda County Environmental Health Services, 2005. *Fuel Leak Site Case Closure*, Clearprint Paper Co. June 27.

AllWest Environmental, Inc. (AllWest), 2011. *Additional Site Characterization and Interim Remedial Action Workplan, Former McGrath Steel, 6655 Hollis Street, and 1471 67<sup>th</sup> Street, Emeryville, California, 94608*. September 27.

AllWest, 2012a. *Additional Site Characterization Workplan Addendum, Former McGrath Steel, 6655 Hollis Street, and 1471 67<sup>th</sup> Street, Emeryville, California, 94608.* July 31.

AllWest, 2012b. *Third Quarter 2012 Groundwater Monitoring, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608.* August 23.

AllWest, 2013a *Fourth Quarter 2012 Groundwater Monitoring, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608.* January 9.

AllWest, 2013b. *Subsurface Investigation, Former McGrath Steel, 6655 Hollis Street, Emeryville, California.* February 4.

AllWest, 2013c. *First Quarter 2013 Groundwater Monitoring, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608.* April 18.

AllWest, 2013d. *Second Quarter 2013 Groundwater Monitoring, Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608.* July 11.

AllWest, 2013e. *Additional Site Characterization and Monitoring Well Installation Report, Former McGrath Steel, 6655 Hollis Street, Emeryville, California, August 30.*

AllWest, 2014. *Fourth Quarter 2013 Groundwater Monitoring Report, Former McGrath Steel, 6655 Hollis Street and 1471 67<sup>th</sup> Street, Emeryville, California.* January 8.

California Regional Groundwater Quality Control Board, San Francisco Bay Region (SFRWQCB), 1999. *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report.* June.

SFRWQCB, 2013. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final – May 2013*

SFRWQCB, 2013. *Water Quality Control Plan (Basin Plan), June 29.*

Environmental Strategies Consulting, Inc. (ESC), 2005. *Groundwater Well Destruction at Former Clearprint Paper Company, Inc. Located at 1482 67<sup>th</sup> Street in Emeryville, California, June 23.*

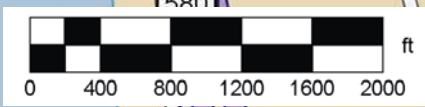
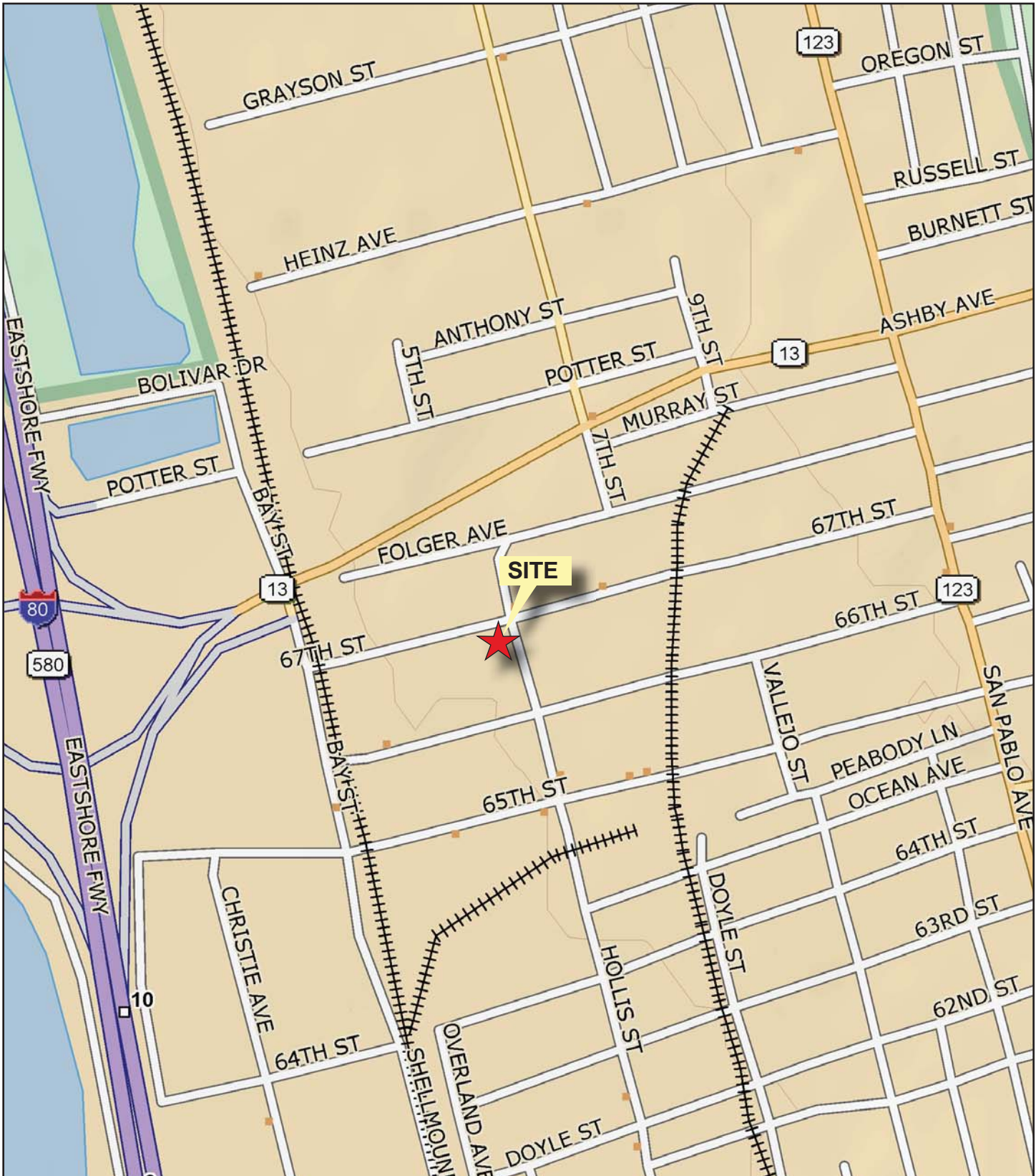
Stellar Environmental Solutions, Inc. (Stellar), 2011. *Phase I Environmental Site Assessment, 6655 Hollis Street, Emeryville, California.* June.

Subsurface Environmental Corp., 1996. *Tank Removal Closure Report.* September 16.

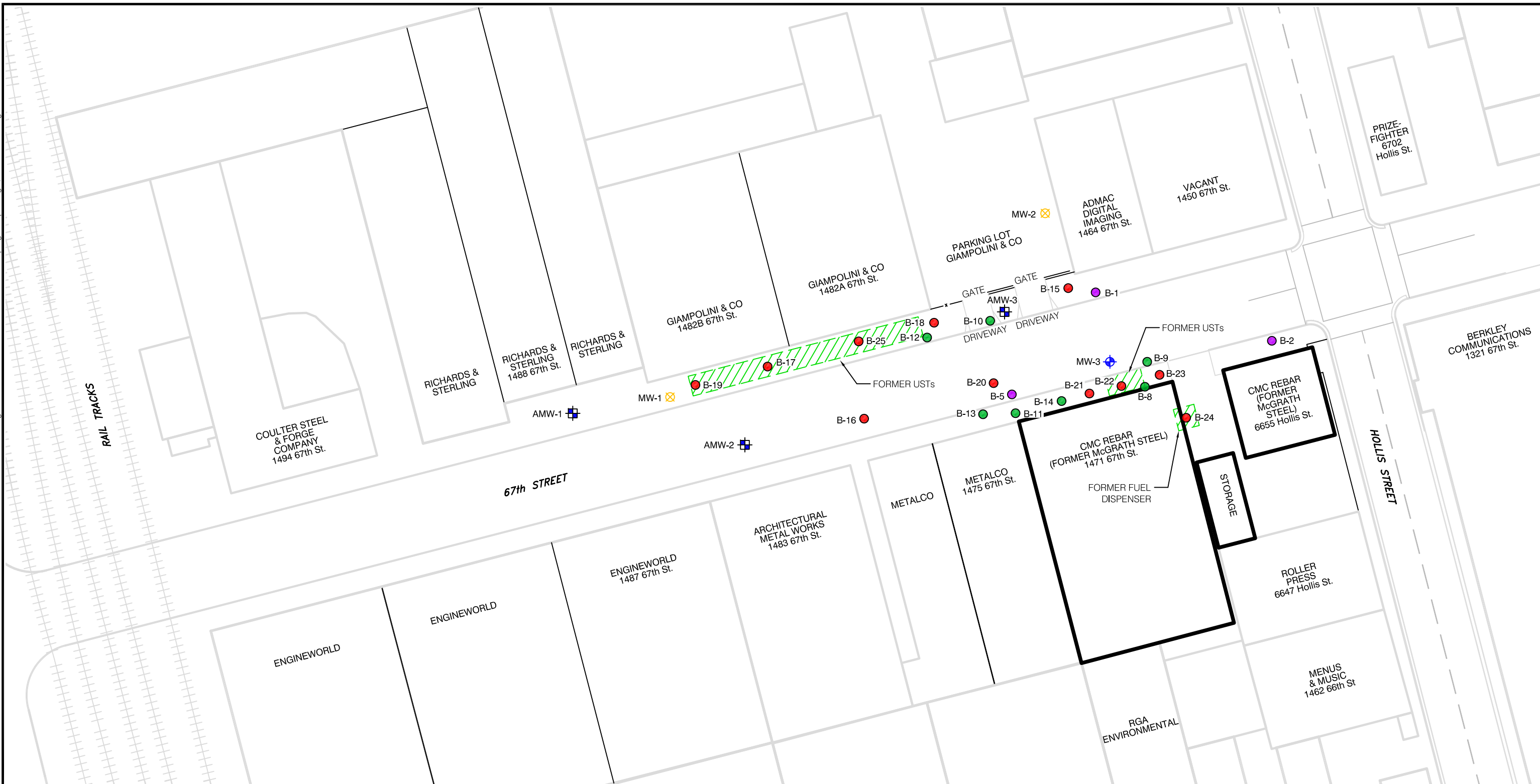
Weiss Associates (WA), 1998. *Subsurface Investigation Report.* August 5.

WA, 2006. *Site Characterization Report.* March 2.

# FIGURES



 MN (12.5° E)	 <b>AllWest</b>	VICINITY MAP
		FIGURE 1
	6655 HOLLIS STREET	
	EMERYVILLE, CALIFORNIA 94608	
	SOURCE: DELORME TOPO	
	PROJECT NO. 14007.28	PREPARED BY: D. CAMACHO
		DATE: 3/3/14



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>MW-2 ☒ MONITORING WELL (CLEARPRINT/ESC - DESTROYED, 2005)</li> <li>MW-3 ⊕ MONITORING WELL (ESC, 1995)</li> <li>AMW-3 ⊕ MONITORING WELL (ALLWEST, 2013)</li> <li>B-5 ● SOIL BORING (WEISS ASSOCIATES, 1998)</li> <li>B-14 ● SOIL BORING (WEISS ASSOCIATES, 2005)</li> <li>B-25 ● SOIL BORING (JANUARY 16, 17, &amp; 18, 2013)</li> </ul>	<ul style="list-style-type: none"> <li> FORMER USTs, FUEL DISPENSERS (REMOVED 1994 &amp; 1996)</li> <li> FENCE</li> </ul>	<p>APPROXIMATE SCALE IN FEET</p>	<p>PROJECT NO. 14007.28</p>	<p align="center"><b>FIGURE 2</b></p> <p align="center"><b>SITE PLAN WITH BORING AND MONITORING WELL LOCATIONS</b></p> <p align="center">Former McGrath Steel 6655 Hollis Street, Emeryville, California</p> <p>SOURCE: Morrow Surveying and Google Earth</p> <p>DRAWN BY: CM <span style="float: right;">(03/26/2014)</span></p>
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C:\Drawing\_Files\AllWest\_Environmental\14007.28\IA\_Sampling\_Workplan\Fig 3\_Proposed Indoor Air Sample Locations - 03/27/2014



**LEGEND**

IAQ-6 ⊗ Proposed Indoor Air Sample Location

0 20 40  
APPROXIMATE SCALE IN FEET

**FIGURE 3**

**PROPOSED INDOOR AIR SAMPLE LOCATIONS**

Former McGrath Steel	
6655 Hollis Street, Emeryville, California	
PROJECT NO: 14004.28	
SOURCE: Morrow Surveying and Google Earth	
DRAWN BY: CM	(03/27/2014)

# APPENDIX A



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

November 8, 2013

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

Mr. Jon Braden  
McGrath Steel Company  
Address Unknown

Mr. David Davini  
Loretta A McGrath Family Trust  
Address Unknown

Subject: Request for Feasibility Study / Corrective Action Plan; Fuel Leak Case No. RO0000063; (Global ID # T0600102099); McGrath Steel Company, 6655 Hollis Street, Emeryville, CA 94608

Dear Messrs. Merkle and Braden, and Meses. Davini and McGuire:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site including the *Additional Site Characterization and Monitoring Well Installation Report*, dated August 30, 2013 (received October 21, 2013), and the *Second Quarter 2013 Groundwater Monitoring*, dated July 11, 2013. Both reports were prepared and submitted on your behalf by AllWest Environmental, Inc. (AllWest). Thank you for submitting the reports. The site characterization report recommended the installation of a passive skimming device in well MW-3 to recover Light Non-Aqueous Phased Liquid Product (LNALP) that is currently present at thickness of 0.41 feet, and indicated that an indoor vapor intrusion risk might be present for the buildings immediately adjacent to the former underground storage tank (UST) location.

ACEH has evaluated the data and recommendations presented in the above-mentioned reports, in conjunction with the case files, and the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). Based on ACEH staff review, we have determined that the site fails to meet the LTCP General Criteria d (LNAPL Removal), e (Site Conceptual Model), f (Secondary Source Removal) and the Media-Specific Criteria for Groundwater, the Media-Specific Criteria for Vapor Intrusion to Indoor Air, and the Media-Specific Criteria for Direct Contact (see Geotracker for a copy of the LTCP checklist).

Therefore, at this juncture ACEH requests that you prepare a Data Gap Investigation Work Plan that is supported by a focused Site Conceptual Model (SCM) to address the Technical Comments provided below.

ACEH would like to invite you to meeting in order to discuss the site and to resolve any questions that may arise due to these changes. ACEH requests notification of suitable dates and times for the meeting.

#### **TECHNICAL COMMENTS**

- 1. LTCP General Criteria d; Removal of LNAPL to the Maximum Extent Practicable** – The LTCP requires LNAPL to be removed to the extent practicable at release sites where investigations indicate the presence of free product by removing in a manner that minimizes the spread of the unauthorized release into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges, or disposes of recovery byproducts in compliance with applicable laws. Additionally, the LTCP requires that abatement of free product migration be used as a minimum objective for the design of any free product removal system.



ACEH's review of the case files indicates that recoverable LNAPL remains at the site in well MW-3, and based on groundwater analytical concentrations may extend to at least soil bore B-20. Grab groundwater concentrations collected in January 2013 indicate that concentrations up to 160,000 micrograms per liter ( $\mu\text{g/l}$ ) Total Petroleum Hydrocarbons [TPH] as gasoline, 95,000  $\mu\text{g/l}$  TPH as diesel, 21,000  $\mu\text{g/l}$  benzene, and 140,000  $\mu\text{g/l}$  MTBE were detected at soil bores B20 and B21. These concentrations are significantly over concentrations that the *Technical Justification for Vapor Intrusion Media-Specific Criteria* generated in support of the LTCP, suggests is "indirect" evidence of LNAPL.

The proposed installation of a passive skimmer at well MW-3 appears appropriate; however, may not be a sufficient effort based on the data cited. Based on the location of potential preferential pathways in previous reports, in particular the sewer, this utility line may affect the distribution of the LNAPL at times. A storm drain line has not been depicted on these figures; however, if present may also be a preferential pathway. Please present your analysis of LNAPL migration and plume extent in a focused SCM and Data Gap Investigation Work Plan described in Technical Comment 7.

If based on your analysis further abatement of LNAPL is necessary, please present a proposed strategy in an Interim Remedial Action Plan (IRAP) as described in Technical Comment 8.

2. **LTCP General Criteria e (Site Conceptual Model)** – According to the LTCP, the SCM is a fundamental element of a comprehensive site investigation. The SCM establishes the source and attributes of the unauthorized release, describes all affected media (including soil, groundwater, and soil vapor as appropriate), describes local geology, hydrogeology and other physical site characteristics that affect contaminant environmental transport and fate, and identifies all confirmed and potential contaminant receptors (including water supply wells, surface water bodies, structures and their inhabitants). The SCM is relied upon by practitioners as a guide for investigative design and data collection. All relevant site characteristics identified by the SCM shall be assessed and supported by data so that the nature, extent and mobility of the release have been established to determine conformance with applicable criteria in this policy.

Our review of the case files indicates that insufficient data collection and analysis has been undertaken to assess the nature, extent, and mobility of the release and to support compliance with General Criteria d as discussed in Item 1 above, General Criteria f, and Media Specific Criteria for Vapor Intrusion to Indoor Air, Groundwater, and Direct Contact and Outdoor Air Exposure as described in Technical Comments 3, 4, 5, and 6 below, respectively.

3. **General Criteria f – Secondary Source Has Been Removed to the Extent Practicable** – The bore log for soil bore B-22 appears to have documented the removal of the secondary soil source beneath the former USTs to the extent practicable. As documented by the bore log for soil bore B-24, it is not clear that the secondary source beneath the former dispenser has been removed to the extent practicable. Additionally, the presence of LNAPL can be considered a significant residual source; however, under the LTCP it is not considered a secondary source. Please present a response to the adequacy of secondary source removal in a focused SCM as described in Technical Comment 7 and a proposed scope of work to address the identified data gap under the LTCP.
4. **LTCP Media Specific Criteria for Groundwater** – To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed in the policy.

Our review of the case files indicates that the site data collection and analysis do not support the requisite characteristics of one of the five scenarios under the criteria. Our review of the case files indicates that insufficient data and analysis has been presented to support the requisite characteristics of plume stability or plume classification as follows:

- a. **Length of LNAPL Plume** – As noted above the extent of the LNAPL plume may extend further west than well MW-3. Based on grab groundwater analytical concentrations at soil bore B-21, and a southwesterly gradient direction depicted in the recent soil and groundwater investigation report, the LNAPL plume may extend beneath the adjacent site building. At present the extent of the LNAPL plume does not appear to be defined.

- b. **Length of Groundwater Dissolved-Phase Plume** – The length of the dissolved-phased plume may be adequately defined to the west; however, the recently installed wells suggest that the direction of groundwater flow is to the southwest beneath buildings immediately adjacent to the former UST excavation. Thus the dissolved-phase plume does not appear to be defined to the southwest, and the length of the dissolved-phase plume to the southwest has not been defined.
- c. **Water Well Survey** – A survey has not been conducted to determine the location of any water supply wells in the vicinity of the subject site. As a consequence, ACEH requests that a ¼-mile radius well survey be conducted using both Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA) water well resources. All water supply wells should be located on a vicinity map. Please note that construction well details are considered to be confidential and therefore should not be uploaded to public websites.
- d. **Benzene Concentrations** – Benzene concentrations up to 21,000 µg/l have been detected in grab groundwater samples (B-20), and up to 9,800 µg/l in groundwater collected from well MW-3, beneath the LNAPL. Thus benzene concentrations exceed all LTCP groundwater media-specific criteria.
- e. **Current Groundwater Classification** – Again as previously addressed, please be aware that all groundwater in the East Bay Plain Groundwater Basin that underlies Emeryville is 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 is considered beneficial for these uses unless shown to be non-beneficial using criteria presented in the Basin Plan (Please note that the proposed "Zone B Berkeley / Albany Groundwater Management Zone" contained in the June 1999 *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, that was referenced in your work plan addendum, was not adopted in the 2007 Basin Plan). Please adjust future evaluations to reflect these classifications; however, please also be aware that case closure does not require cleanup to MUN cleanup goals, rather that those goals can be met within an identified reasonable timeframe. This is also stated to be consistent and reflected in the LTCP.

Alternatively, should alternative interpretations be possible from this data, please provide justification of why the site satisfies the Groundwater Media-Specific Criteria in a SCM that assures that the identified deficiencies have been addressed.

- 5. **LTCP Media Specific Criteria for Vapor Intrusion to Indoor Air** – The LTCP describes conditions, including bioattenuation zones, which if met will assure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to human occupants of existing or future site buildings, and adjacent parcels. Appendices 1 through 4 of the LTCP criteria illustrate four potential exposure scenarios and describe characteristics and criteria associated with each scenario.

Our review of the case files indicates that the site data and analysis fail to support the requisite characteristics of one of the four scenarios. Specifically, it appears that petroleum contamination is present at concentrations greater than 100 mg/kg TPH at multiple locations in the 0 to 5 and the 5 to 10 foot depth intervals beneath the site and site vicinity and groundwater benzene concentrations are greater than 1,000 ug/l benzene. Additionally, because no soil vapor samples have been collected, no soil vapor oxygen data is available.

Therefore, please present a strategy in the Data Gap Investigation Work Plan as described in Technical Comment 7 below to collect additional data to satisfy the bioattenuation zone characteristics of Scenarios 1, 2 or 3, or to collect soil gas data to satisfy Scenario 4, to ensure that exposure to petroleum vapors in indoor air does not pose unacceptable health risks to human occupants of existing or future site buildings, and adjacent parcels. Should vapor wells be proposed for installation ACEH requests that soil be collected and analyzed in the 0 to 5 foot interval, at lithologic changes, and at areas of obvious

impact. ACEH additionally requests that soil samples collected from these borings be submitted for all requisite analysis, including naphthalene analysis.

Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Vapor Intrusion to Indoor Air in the SCM described in Technical Comment 7 that assures that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to occupants of adjacent buildings.

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

- 6. LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria** – The LTCP describes conditions where direct contact with contaminated soil or inhalation of contaminants volatilized to outdoor air poses a low threat to human health. According to the policy, release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if the maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 for the specified depth bgs. Alternatively, the policy allows for a site specific risk assessment that demonstrates that maximum concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health, or controlling exposure through the use of mitigation measures, or institutional or engineering controls.

Our review of the case files indicates that benzene concentrations up to 12 mg/kg is present at a depth of 10 feet in soil bore B21, and that this concentration exceeds allowable concentrations listed in Table 1 of the LTCP. Because of the potential southwesterly groundwater flow direction, additional elevated soil contamination may be present beneath the immediately adjacent building(s).

Therefore, please present a strategy in the Data Gap Investigation Work Plan as described in Technical Comment 7 below to collect additional data to laterally define the extent of soil contamination that does not satisfy the direct contact and outdoor air exposure criteria in areas immediately downgradient of the former UST location and soil bore B21. ACEH requests that soil be collected and analyzed in the 0 to 5 and the 5 to 10 foot intervals, at the groundwater interface, lithologic changes, and at areas of obvious impact. ACEH additionally requests that groundwater samples be collected from these borings and requisite analysis, including naphthalene and polycyclic aromatic hydrocarbons (PAH) analysis, be conducted.

Alternatively, please provide justification of why the site satisfies the Media-Specific Criteria for Direct Contact and Outdoor Air Exposure in an focused SCM and Data Gap Investigation Work Plan described in Item 7 below that assures that exposure to petroleum constituents in soil will have no significant risk of adversely affecting human health.

- 7. Focused Site Conceptual Model and Data Gap Investigation Work Plan** – Please prepare a Data Gap Investigation Work Plan to address the technical comments listed above. Please support the scope of work in the Data Gap Investigation Work Plan with a focused SCM and Data Quality Objectives (DQOs) that relate the data collection to each LTCP criteria. For example please clarify which scenario within each Media-Specific Criteria a sampling strategy is intended to apply to.

In order to expedite review, ACEH requests the focused SCM be presented in a tabular format that highlights the major SCM elements and associated data gaps, which need to be addressed to progress the site to case closure under the LTCP. Please see Attachment A "Site Conceptual Model Requisite Elements". Please sequence activities in the proposed revised data gap investigation scope of work to enable efficient data collection in the fewest mobilizations possible.

- 8. Interim Remedial Action Plan** - ACEH requests that interim remedial actions, in addition to the installation of a passive skimmer into well MW-3, be identified and implemented to abate LNAPL migration. Please present the proposed strategy in an IRAP by the date identified below.

- 9. Quarterly Groundwater Monitoring** – Please institute quarterly groundwater monitoring of all site vicinity wells for a minimum period of one year for all chemicals of concern at the site. This will allow groundwater contaminant trends to be established quickly at the site.

**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:

- **January 10, 2014** – Data Gap Investigation Plan and Focused Site Conceptual Model  
File to be named: RO63\_WP\_SCM\_R\_yyyy-mm-dd
- **January 17, 2014** – Interim Remedial Action Plan  
File to be named: RO63\_IRAP\_R\_yyyy-mm-dd
- **January 24, 2014** – Quarterly Groundwater Monitoring Report  
File to be named: RO63\_GWM\_R\_yyyy-mm-dd
- **60 Days After Work Plan Approval** – Soil and Groundwater Investigation Report  
File to be named: RO63\_SWI\_R\_yyyy-mm-dd
- **April 25, 2014** – Quarterly Groundwater Monitoring Report  
File to be named: RO63\_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 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, ou,  
email=mark.detterman@acgov.org, c=US  
Date: 2013.11.08 09:49:40 -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

*Attachment A - Site Conceptual Model Requisite Elements*

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/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/](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.

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)</b>	<b>REVISION DATE:</b> July 25, 2012
	<b>ISSUE DATE:</b> July 5, 2005
	<b>PREVIOUS REVISIONS:</b> October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> 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](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 A**

**Site Conceptual Model Requisite Elements**

# ATTACHMENT A

## Site Conceptual Model

The site conceptual model (SCM) is an essential decision-making and communication tool for all interested parties during the site characterization, remediation planning and implementation, and closure process. A SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely magnitude of potential impacts to receptors.

The SCM is initially used to characterize the site and identify data gaps. As the investigation proceeds and the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened until it is said to be “validated”. At this point, the focus of the SCM shifts from site characterization towards remedial technology evaluation and selection, and later remedy optimization, and forms the foundation for developing the most cost-effective corrective action plan to protect existing and potential receptors.

For ease of review, Alameda County Environmental Health (ACEH) requests utilization of tabular formats to (1) highlight the major SCM elements and their associated data gaps which need to be addressed to progress the site to case closure (see Table 1 of attached example), and (2) highlight the identified data gaps and proposed investigation activities (see Table 2 of the attached example). ACEH requests that the tables presenting the SCM elements, data gaps, and proposed investigation activities be updated as appropriate at each stage of the project and submitted with work plans, feasibility studies, corrective action plans, and requests for closures to support proposed work, conclusions, and/or recommendations.

The SCM should incorporate, but is not limited to, the topics listed below. Please support the SCM with the use of large-scaled maps and graphics, tables, and conceptual diagrams to illustrate key points. Please include an extended site map(s) utilizing an aerial photographic base map with sufficient resolution to show the facility, delineation of streets and property boundaries within the adjacent neighborhood, downgradient irrigation wells, and proposed locations of transects, monitoring wells, and soil vapor probes.

- a. Regional and local (on-site and off-site) geology and hydrogeology. Include a discussion of the surface geology (e.g., soil types, soil parameters, outcrops, faulting), subsurface geology (e.g., stratigraphy, continuity, and connectivity), and hydrogeology (e.g., water-bearing zones, hydrologic parameters, impermeable strata). Please include a structural contour map (top of unit) and isopach map for the aquitard that is presumed to separate your release from the deeper aquifer(s), cross sections, soil boring and monitoring well logs and locations, and copies of regional geologic maps.
- b. Analysis of the hydraulic flow system in the vicinity of the site. Include rose diagrams for depicting groundwater gradients. The rose diagram shall be plotted on groundwater elevation contour maps and updated in all future reports submitted for your site. Please address changes due to seasonal precipitation and groundwater pumping, and evaluate the potential interconnection between shallow and deep aquifers. Please include an analysis of vertical hydraulic gradients, and effects of pumping rates on hydraulic head from nearby water supply wells, if appropriate. Include hydraulic head in the different water bearing zones and hydrographs of all monitoring wells.
- c. Release history, including potential source(s) of releases, potential contaminants of concern (COC) associated with each potential release, confirmed source locations, confirmed release locations, and existing delineation of release areas. Address primary leak source(s) (e.g., a tank, sump, pipeline, etc.) and secondary sources (e.g., high-



## ATTACHMENT A

### Site Conceptual Model (continued)

concentration contaminants in low-permeability lithologic soil units that sustain groundwater or vapor plumes). Include local and regional plan view maps that illustrate the location of sources (former facilities, piping, tanks, etc.).

- d. Plume (soil gas and groundwater) development and dynamics including aging of source(s), phase distribution (NAPL, dissolved, vapor, residual), diving plumes, attenuation mechanisms, migration routes, preferential pathways (geologic and anthropogenic), magnitude of chemicals of concern and spatial and temporal changes in concentrations, and contaminant fate and transport. Please include three-dimensional plume maps for groundwater and two-dimensional soil vapor plume plan view maps to provide an accurate depiction of the contaminant distribution of each COC.
- e. Summary tables of chemical concentrations in different media (i.e., soil, groundwater, and soil vapor). Please include applicable environmental screening levels on all tables. Include graphs of contaminant concentrations versus time.
- f. Current and historic facility structures (e.g., buildings, drain systems, sewer systems, underground utilities, etc.) and physical features including topographical features (e.g., hills, gradients, surface vegetation, or pavement) and surface water features (e.g. routes of drainage ditches, links to water bodies). Please include current and historic site maps.
- g. Current and historic site operations/processes (e.g., parts cleaning, chemical storage areas, manufacturing, etc.).
- h. Other contaminant release sites in the vicinity of the site. Hydrogeologic and contaminant data from those sites may prove helpful in testing certain hypotheses for the SCM. Include a summary of work and technical findings from nearby release sites, including the two adjacent closed LUFT sites, (i.e., Montgomery Ward site and the Quest Laboratory site).
- i. Land uses and exposure scenarios on the facility and adjacent properties. Include beneficial resources (e.g., groundwater classification, wetlands, natural resources, etc.), resource use locations (e.g., water supply wells, surface water intakes), subpopulation types and locations (e.g., schools, hospitals, day care centers, etc.), exposure scenarios (e.g. residential, industrial, recreational, farming), and exposure pathways, and potential threat to sensitive receptors. Include an analysis of the contaminant volatilization from the subsurface to indoor/outdoor air exposure route (i.e., vapor pathway). Please include copies of Sanborn maps and aerial photographs, as appropriate.
- j. Identification and listing of specific data gaps that require further investigation during subsequent phases of work. Proposed activities to investigate and fill data gaps identified.

**TABLE 1**  
**INITIAL SITE CONCEPTUAL MODEL**

CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
Geology and Hydrogeology	Regional	<p>The site is in the northwest portion of the Livermore Valley, which consists of a structural trough within the Diablo Range and contains the Livermore Valley Groundwater Basin (referred to as "the Basin") (DWR, 2006). Several faults traverse the Basin, which act as barriers to groundwater flow, as evidenced by large differences in water levels between the upgradient and downgradient sides of these faults (DWR, 2006). The Basin is divided into 12 groundwater basins, which are defined by faults and non-water-bearing geologic units (DWR, 1974).</p> <p>The hydrogeology of the Basin consists of a thick sequence of fresh-water-bearing continental deposits from alluvial fans, outwash plains, and lacustrine environments to up to approximately 5,000 feet bgs (DWR, 2006). Three defined fresh-water bearing geologic units exist within the Basin: Holocene Valley Fill (up to approximately 400 feet bgs in the central portion of the Basin), the Plio-Pleistocene Livermore Formation (generally between approximately 400 and 4,000 feet bgs in the central portion of the Basin), and the Pliocene Tassajara Formation (generally between approximately 250 and 5,000 or more feet bgs) (DWR, 1974). The Valley Fill units in the western portion of the Basin are capped by up to 40 feet of clay (DWR, 2006).</p>	None	NA
	Site	<p><b>Geology:</b> Borings advanced at the site indicate that subsurface materials consist primarily of finer-grained deposits (clay, sandy clay, silt and sandy silt) with interbedded sand lenses to 20 feet below ground surface (bgs), the approximate depth to which these borings were advanced. The documented lithology for one on-site boring that was logged to approximately 45 feet bgs indicates that beyond approximately 20 feet bgs, fine-grained soils are present to approximately 45 feet bgs. A cone penetrometer technology test indicated the presence of sandier lenses from approximately 45 to 58 feet bgs and even coarser materials (interbedded with finer-grained materials) from approximately 58 feet to 75 feet bgs, the total depth drilled. The lithology documented at the site is similar to that reported at other nearby sites, specifically the Montgomery Ward site (7575 Dublin Boulevard), the Quest Laboratory site (6511 Golden Gate Drive), the Shell-branded Service Station site (11989 Dublin Boulevard), and the Chevron site (7007 San Ramon Road).</p> <p><b>Hydrogeology:</b> Shallow groundwater has been encountered at depths of approximately 9 to 15 feet bgs. The hydraulic gradient and groundwater flow direction have not been specifically evaluated at the site.</p>	<p>As noted, most borings at the site have been advanced to approximately 20 feet bgs, and one boring has been advanced and logged to 45 feet bgs; CPT data was collected to 75 feet bgs at one location. Lithologic data will be obtained from additional borings that will be advanced on site to further the understanding of the subsurface, especially with respect to deeper lithology.</p> <p>The on-site shallow groundwater horizontal gradient has not been confirmed. Additionally, it is not known if there may be a vertical component to the hydraulic gradient.</p>	<p>Two direct push borings and four multi-port wells will be advanced to depth (up to approximately 75 feet bgs) and soil lithology will be logged. See items 4 and 5 on Table 2.</p> <p>Shallow and deeper groundwater monitoring wells will be installed to provide information on lateral and vertical gradients. See Items 2 and 5 on Table 2.</p>
Surface Water Bodies		<p>The closest surface water bodies are culverted creeks. Martin Canyon Creek flows from a gully west of the site, enters a culvert north of the site, and then bends to the south, passing approximately 1,000 feet east of the site before flowing into the Alamo Canal. Dublin Creek flows from a gully west of the site, enters a culvert approximately 750 feet south of the site, and then joins Martin Canyon Creek approximately 750 feet southeast of the site.</p>	None	NA
Nearby Wells		<p>The State Water Resources Control Board's GeoTracker GAMA website includes information regarding the approximate locations of water supply wells in California. In the vicinity of the site, the closest water supply wells presented on this website are depicted approximately 2 miles southeast of the site; the locations shown are approximate (within 1 mile of actual location for California Department of Public Health supply wells and 0.5 mile for other supply wells). No water-producing wells were identified within 1/4 mile of the site in the well survey conducted for the Quest Laboratory site (6511 Golden Gate Drive; documented in 2009); information documented in a 2005 report for the Chevron site at 7007 San Ramon Road indicates that a water-producing well may exist within 1/2 mile of the site.</p>	<p>A formal well survey is needed to identify water-producing, monitoring, cathodic protection, and dewatering wells.</p>	<p>Obtain data regarding nearby, permitted wells from the California Department of Water Resources and Zone 7 Water Agency (Item 11 on Table 2).</p>

**TABLE 2  
DATA GAPS AND PROPOSED INVESTIGATION**

Item	Data Gap	Proposed Investigation	Rationale	Analysis
5	Evaluate the possible presence of impacts to deeper groundwater.  Evaluate deeper groundwater concentration trends over time.  Obtain data regarding the vertical groundwater gradient.  Obtain more lithological data below 20 feet bgs.	Install four continuous multichannel tubing (CMT) groundwater monitoring wells (aka multi-port wells) to approximately 65 feet bgs in the northern parking lot with ports at three depths (monitoring well locations may be adjusted pending results of shallow grab groundwater samples; we will discuss any potential changes with ACEH before proceeding). Groundwater monitoring frequency to be determined. Soil samples will be collected only if there are field indications of impacts. Soil lithology will be logged. However, information regarding the moisture content of soil may not be reliable using sonic drilling technology (two borings will be logged using direct push technology; see Item 4, above).	One well is proposed at the western (upgradient) property boundary to confirm that there are no deeper groundwater impacts from upgradient. Two wells are proposed near the center of the northern parking lot to evaluate potential impacts in an area where deeper impacts, if any, would most likely to be found. One well is proposed at the eastern (downgradient) property boundary to confirm that there are no impacts extending off-site. Port depths will be chosen based on the locations of saturated soils (as logged in direct push borings; see Item 4, above), but are expected at approximately 15, 45, and 60 feet bgs.	<i>Groundwater:</i> VOCs by EPA Method 8260, dissolved oxygen, oxidation/reduction potential, temperature, pH, and specific conductance.
6	Evaluate possible off-site migration of impacted soil vapor in the downgradient direction (east).  Evaluate concentration trends over time.	Install 4 temporary nested soil vapor probes at approximately 4 and 8 feet bgs along the eastern property boundary. Based on the results of the sampling, two sets of nested probes will be converted to vapor monitoring wells to allow for evaluation of VOC concentration trends over time.	Available data indicate that PCE and TCE are present in soil vapor in the eastern portion of the northern parking lot. Samples are proposed on approximately 50-foot intervals along the eastern property boundary to provide a transect of concentrations through the vapor plume. The depths of 4 and 8 feet bgs are chosen to provide data closest to the source (i.e., groundwater) while avoiding saturated soil, and also provide shallower data to help evaluate potential attenuation within the soil column. Two sets of nested vapor probes will be converted into vapor monitoring wells (by installing well boxes at ground surface); the locations of the permanent wells will be chosen based on the results of samples from the temporary probes.	<i>Soil vapor:</i> VOCs by EPA Method TO-15.
7	Evaluate potential for off-site migration of impacted groundwater in the downgradient direction (east).	Advance two borings to approximately 20 feet bgs in the parking lot of the property east of the Crown site for collection of grab groundwater samples.	Two borings are proposed off-site, on the property east of the Crown site, just east of the building in the expected area of highest potential VOC concentrations.	<i>Groundwater:</i> VOCs by EPA Method 8260, dissolved oxygen, oxidation/reduction potential, temperature, pH, and specific conductance.
8	Evaluate VOC concentrations just north of the highest concentration area.	Advance two borings to approximately 20 feet bgs north of Building A for collection of soil and grab groundwater samples. Soil samples will be collected at two depths in the vadose zone. Soil samples will be collected based on field indications of impacts (PID readings, odor, staining) or, in the absence of field indications of impacts, at 5 and 10 feet bgs.	The highest concentrations of PCE in groundwater were detected at boring NM-B-32, just north of Building A. The nearest available data to the north are approximately 75 feet away. One of the borings will be advanced approximately 20 feet north of NM-B-32 to provide data close to the highest concentration area. A second boring will be advanced approximately halfway between the first boring and former boring NM-B-33 to provide additional spatial data for contouring purposes. These borings will be part of a transect in the highest concentration area.	<i>Groundwater:</i> VOCs by EPA Method 8260, dissolved oxygen, oxidation/reduction potential, temperature, pH, and specific conductance.  <i>Soil:</i> VOCs by EPA Method 8260 (soil samples to be collected using field preservation in accordance with EPA Method 5035).
9	Evaluate VOC concentrations in soil vapor in the south parcel of the site.	Install four temporary soil vapor probes at approximately 5 feet bgs around boring SV-25, where PCE was detected in soil vapor at a low concentration.	PCE was detected in soil vapor sample SV-25 in the southern parcel, although was not detected in groundwater in that area. Three probes will be installed approximately 30 feet from of boring SV-25 to attempt to delineate the extent of impacts. A fourth probe is proposed west of the original sample, close to the property boundary and the location of mapped utility lines, which may be a potential conduit, to evaluate potential impacts from the west.	<i>Soil vapor:</i> VOCs by EPA Method TO-15.
10	Obtain additional information regarding subsurface structures and utilities to further evaluate migration pathways and sources.	Ground penetrating radar (GPR) and other utility locating methodologies will be used, as appropriate, to further evaluate the presence of unknown utilities and structures at the site.	Utilities have been identified at the site that include an on-site sewer lateral and drain line, and shallow water, electric, and gas lines. Given the current understanding of the distribution of PCE in groundwater at the site, it is possible that other subsurface utilities, and specifically sewer laterals, exist that may act as a source or migration pathway for distribution of VOCs in the subsurface.	NA

# APPENDIX B

## APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: \_\_\_\_\_ Date/Time Prepared: \_\_\_\_\_  
Affiliation: \_\_\_\_\_ Phone Number: \_\_\_\_\_

### Occupant Information

Occupant Name: \_\_\_\_\_ Interviewed:  Yes  No  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone: \_\_\_\_\_ Email: \_\_\_\_\_

### Owner/Landlord Information (Check if same as occupant )

Occupant Name: \_\_\_\_\_ Interviewed:  Yes  No  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone: \_\_\_\_\_ Email: \_\_\_\_\_

### Building Type (Check appropriate boxes)

- Residential  Residential Duplex  Apartment Building  Mobile Home  Commercial (office)  
 Commercial (warehouse)  Industrial  Strip Mall  Split Level  Church  School

### Building Characteristics

Approximate Building Age (years): \_\_\_\_\_ Number of Stories: \_\_\_\_\_  
Approximate Building Area (square feet): \_\_\_\_\_ Number of Elevators: \_\_\_\_\_

### Foundation Type (Check appropriate boxes)

- Slab-on-Grade  Crawl Space  Basement

### Basement Characteristics (Check appropriate boxes)

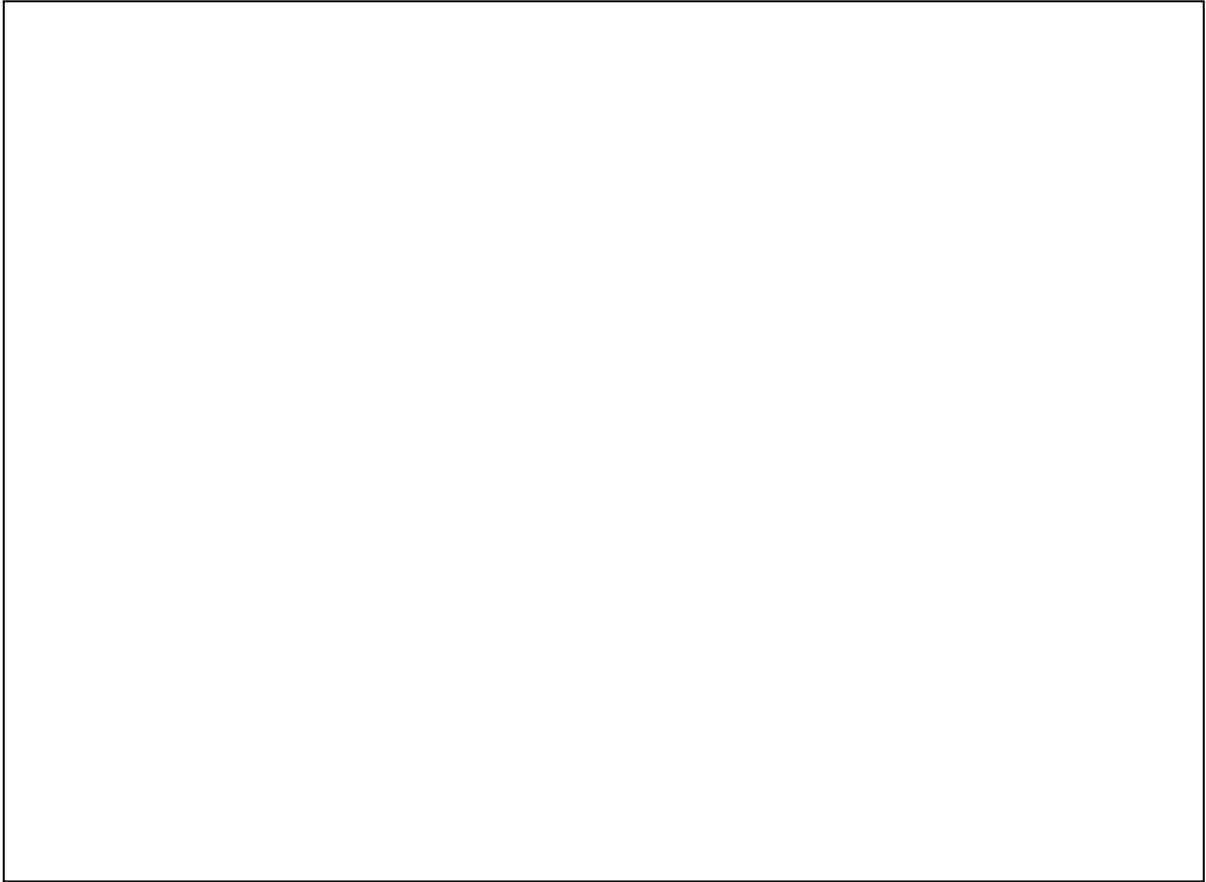
- Dirt Floor  Sealed  Wet Surfaces  Sump Pump  Concrete Cracks  Floor Drains

### Factors Influencing Indoor Air Quality

Is there an attached garage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there smoking in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there new carpet or furniture?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Have clothes or drapes been recently dry cleaned?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has painting or staining been done with the last six months?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has the building been recently remodeled?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Has the building ever had a fire?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a hobby or craft area in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Is gun cleaner stored in the building?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a fuel oil tank on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a septic tank on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Has the building been fumigated or sprayed for pests recently?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____
Do any building occupants use solvents at work?	<input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____

### Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.



**Primary Type of Energy Used** (Check appropriate boxes)

Natural Gas    Fuel Oil    Propane    Electricity    Wood    Kerosene

### Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.

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### General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.

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### APPENDIX M – BUILDING SCREENING FORM

Occupant of Building \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Field Investigator \_\_\_\_\_ Date \_\_\_\_\_

<b>Field Instrument Reading</b>	<b>Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)</b>	<b>If Consumer Product, Potential Volatile Ingredients</b>

Comments:  
\_\_\_\_\_  
\_\_\_\_\_



**AllWest Environmental, Inc.**

Specialists in Physical Due Diligence and Remedial Services

530 Howard Street, Suite 300  
San Francisco, CA 94105  
Tel 415.391.2510  
Fax 415.391.2008

### INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: \_\_\_\_\_ Project Name: \_\_\_\_\_

Date: \_\_\_\_\_ Site Location: \_\_\_\_\_

Sample ID No: \_\_\_\_\_ Canister Type: \_\_\_\_\_ Serial No: \_\_\_\_\_

Regulatory Agencies: \_\_\_\_\_ Contractor: \_\_\_\_\_

Indoor/Outdoor: \_\_\_\_\_ Building Name/Location: \_\_\_\_\_

Initial Vacuum: \_\_\_\_\_ ("Hg) Final Vacuum: \_\_\_\_\_ ("Hg) Canister Volume: \_\_\_\_\_ (L)

Sampling Interval (hrs): \_\_\_\_\_ Flow Regulator: \_\_\_\_\_ (ml/min) Regulator Serial No: \_\_\_\_\_

Laboratory Name and Location: \_\_\_\_\_

Laboratory Analyses: \_\_\_\_\_

### SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sampler: \_\_\_\_\_



# APPENDIX C



# AllWest

## APPLICATION FOR AUTHORIZATION TO USE

**REPORT TITLE:** INDOOR AIR QUALITY MONITORING WORK PLAN

Former McGrath Steel  
6655 Hollis Street and 1471 67th Street  
Emeryville, CA 94608

**PROJECT NUMBER:** 14007.28

To: AllWest Environmental, Inc.  
2141 Mission Street, Suite 100  
San Francisco, CA 94110

From (Applicant): \_\_\_\_\_  
\_\_\_\_\_

*(Please clearly identify name and address of person/entity  
applying for permission to use or copy this document)*

Ladies and Gentlemen:

Applicant states they have thoroughly reviewed the report and had the opportunity to discuss with AllWest the report's methodology, findings and conclusion(s).

Applicant hereby applies for permission to rely upon AllWest's work product, as described above, for the purpose of (state here the purpose for which you wish to rely upon the work product):

Applicant only can accept and rely upon AllWest work product under the strict understanding that Applicant is bound by all provisions in the Terms and Conditions attached to the report. Every report, recommendation, finding, or conclusion issued by AllWest shall be subject to the limitations stated in the Agreement and subject report(s). If this is agreeable, please sign below and return one copy of this letter to us along with the applicable fees. Upon receipt and if acceptable, our signed letter will be returned. AllWest may withhold permission at its sole discretion or require additional re-use fees or terms.

**FEES:** A \$1,500 coordination and reliance fee, payable in advance, will apply. If desired, for an additional \$150 report reproduction fee, we will reissue the report in the name of the Applicant; the report date, however, will remain the same. All checks will be returned if your request for reliance is not approved.

**REQUESTED BY**

**APPROVED BY**

\_\_\_\_\_  
Applicant Company

AllWest Environmental, Inc.

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature and Date

\_\_\_\_\_  
Signature and Date

## **GENERAL CONDITIONS TO THE WORK AUTHORIZATION AGREEMENT**

It is hereby agreed that the Client retains AllWest to provide services as set forth in the Work Authorization attached hereto (the "Work"). This contract shall be controlled by the following terms and conditions, and these terms and conditions shall also control any further assignments performed pursuant to this Work Authorization. Client's signature on this Work Authorization constitutes Client's agreement to the all terms to this contract, including these General Conditions.

### **FEES AND COSTS**

1. AllWest shall charge for work performed by its personnel at the rates identified in the Work Authorization. These rates are subject to reasonable increases by AllWest upon giving Client 30 days advance notice. Reimbursable Costs will be charged to the Client in addition to the fees for the basic services under this Agreement and all Additional Services (defined below) under the Agreement. Reimbursable Costs include, but are not limited to, expenses for travel, including transportation, meals, lodging, long distance telephone and other related expenses, as well as the costs of reproduction of all drawings for the Client's use, costs for specifications and type-written reports, permit and approval fees, automobile travel reimbursement, costs and fees of subcontractors, and soil and other materials testing. No overtime is accrued for time spent in travel. All costs incurred which relate to the services or materials provided by a contractor or subcontractor to AllWest shall be invoiced by AllWest on the basis of cost plus twenty percent (20%). Automobile travel reimbursement shall be at the rate of fifty- eight cents (\$0.58) per mile. All other reimbursable costs shall be invoiced and billed by AllWest at the rate of 1.1 times the direct cost to AllWest. Reimbursable costs will be charged to the client only as outlined in the Work Authorization if the scope of work is for Phase I Environmental Site Assessment, Property Condition Assessment, Seismic Assessment or ALTA survey. Invoices for work performed shall be submitted monthly. Payment will be due upon receipt of invoice. Client shall pay interest on the balance of unpaid invoices which are overdue by more than 30 days, at a rate of 18% per annum as well as all attorney fees and costs incurred by AllWest to secure payment of unpaid invoices. AllWest may waive such fees at its sole discretion.

### **STANDARD OF CARE**

2. AllWest will perform its work in accordance with the standard of care of its industry, as it is at the time of the work being performed, and applicable in the locale of the work being performed. AllWest makes no other warranties, express or implied regarding its work.

### **LIMITATION OF REMEDIES**

3. Client expressly agrees that to the fullest extent permitted by law, Client's remedies for any liability incurred by AllWest, and/or its employees or agents, for any and all claims arising from AllWest's services, shall be \$50,000 or its fees, whichever is greater.

Client may request a higher limitation of remedies, but must do so in writing. Upon such written request, AllWest may agree to increase this limit in exchange for a mutually negotiated higher fee commensurate with the increased risk to AllWest. Any such agreed increase in fee and limitation of remedies amount must be memorialized by written agreement which expressly amends the terms of this clause.

As used in this section, the term "limitation of remedies" shall apply to claims of any kind, including, but not limited to, claims brought in contract, tort, strict liability, or otherwise, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to AllWest's services or the services of AllWest's subcontractors, consultants, agents, officers, directors, and employees from any cause(s). AllWest shall not be liable for any claims of loss of profits or any other indirect, incidental, or consequential damages of any nature whatsoever. Client & AllWest have specifically negotiated this limitation.

### **INDEMNIFICATION**

4. Notwithstanding any other provision of this Agreement, Client agrees, to the fullest extent permitted by law, to waive any claim against, release from any liability or responsibility for, and , indemnify and hold harmless AllWest, its employees, agents and sub-consultants (collectively, Consultant) from and against any and all damages, liabilities, claims, actions or costs of any kind, including reasonable attorney's fees and defense costs, arising or alleged to arise out of or to be in any way connected with the Project or the performance or non-performance of Consultant of any services under this Agreement, excepting only any such liabilities determined by a court or other forum of competent jurisdiction to have been caused by the negligence or willful misconduct of Consultant. This provision shall be in addition to any rights of indemnity that Consultant may have under the law and shall survive and remain in effect following the termination of this Agreement for any reason. Should any part of this provision be determined to be unenforceable, AllWest and Client agree that the rest of the provision shall apply to the maximum extent permitted by law. The Client's duty to defend AllWest shall arise immediately upon tender of any matter potentially covered by the above obligations to indemnify and hold harmless.

### **MEDIATION & JUDICIAL REFERENCE**

5. In an effort to resolve any conflicts or disputes that arise regarding the performance of this agreement, the Client & AllWest agree that all such disputes shall be submitted to non-binding mediation, using a mutually agreed upon mediation service experienced in the resolution of construction disputes. Unless the parties mutually agree otherwise, such mediation shall be a condition precedent to the initiation of any other adjudicative proceedings. It is further agreed that any dispute that is not settled pursuant to such mediation shall be adjudicated by a court appointed referee in accordance with the Judicial Reference procedures as set forth in California Code of Civil Procedure Section 638 et seq. The parties hereby mutually agree to waive any right to a trial by jury regarding any dispute arising out of this agreement.

The parties further agree to include a similar mediation, Judicial Reference & waiver of jury trial provision in their agreements with other independent contractors & consultants retained for the project and require them to similarly agree to these dispute resolution procedures. The cost of said Mediation shall be split equally between the parties. This agreement to mediate shall be specifically enforceable under the prevailing law of the jurisdiction in which this agreement was signed.

### **HAZARDOUS WASTE**

6. Client acknowledges that AllWest and its sub-contractors have played no part in the creation of any hazardous waste, pollution sources, nuisance, or chemical or industrial disposal problem, which may exist, and that AllWest has been retained for the sole purpose of performing the services set out in the scope of work within this Agreement, which may include, but is not necessarily limited to such services as assisting the Client in assessing any problem which may exist and in assisting the

Client in formulating a remedial program. Client acknowledges that while necessary for investigations, commonly used exploration methods employed by AllWest may penetrate through contaminated materials and serve as a connecting passageway between the contaminated material and an uncontaminated aquifer or groundwater, possibly inducing cross contamination. While back-filling with grout or other means, according to a state of practice design is intended to provide a seal against such passageway, it is recognized that such a seal may be imperfect and that there is an inherent risk in drilling borings of performing other exploration methods in a hazardous waste site.

AllWest will not sign or execute hazardous waste manifests or other waste tracking documents on behalf of Client unless Client specifically establishes AllWest as an express agent of Client under a written agency agreement approved by AllWest. In addition, Client agrees that AllWest shall not be required to sign any documents, no matter requested by whom, that would have the effect of AllWest providing any form of certification, guarantee, or warranty as to any matter or to opine on conditions for which the existence AllWest cannot ascertain. Client also agrees that it shall never seek or otherwise attempt to have AllWest provide any form of such certification, guarantee or warranty in exchange for resolution of any disputes between Client and AllWest, or as a condition precedent to making payment to AllWest for fees and costs owing under this Agreement.

Client understands and agrees that AllWest is not, and has no responsibility as, a generator, operator, treater, storer, transporter, arranger or disposer of hazardous or toxic substances found or identified at the site, including investigation-derived waste. The Client shall undertake and arrange for the removal, treatment, storage, disposal and/or treatment of hazardous material and investigation derived waste (such as drill cuttings) and further, assumes full responsibility for such wastes to the complete exclusion of any responsibility, duty or obligation upon AllWest. AllWest's responsibilities shall be limited to recommendations regarding such matters and assistance with appropriate arrangements if authorized by Client.

## **FORCE MAJUERE**

7. Neither party shall be responsible for damages or delays in performance under this Agreement caused by acts of God, strikes, lockouts, accidents or other events or condition (other than financial inability) beyond the other Party's reasonable control.

## **TERMINATION**

8. This Agreement may be terminated by either party upon ten (10) days' written notice should the other party substantially fail to perform in accordance with its duties and responsibilities as set forth in this Agreement and such failure to perform is through no fault of the party initiating the termination. Client agrees that if it chooses to terminate AllWest for convenience, and AllWest has otherwise satisfactorily performed its obligations under this Agreement to that point, AllWest shall be paid no less than eighty percent (80%) of the contract price, provided, however, that if AllWest shall have completed more than eighty percent of the Work at the time of said termination, AllWest shall be compensated as provided in the Work Authorization for all services performed prior to the termination date which fall within the scope of work described in the Work Authorization and may as well, at its sole discretion and in accordance with said Schedule of Fees, charge Client, and Client agrees to pay AllWest's reasonable costs and labor in winding up its files and removing equipment and other materials from the Project.

Upon notice of termination by Client to AllWest, AllWest may issue notice of such termination to other consultants, contractors, subcontractors and to governing agencies having jurisdiction over the Project, and take such other actions as are reasonably necessary in order to give notice that AllWest is no longer associated with the Project and to protect AllWest from claims of liability from the work of others.

## **DOCUMENTS**

9. Any documents prepared by AllWest, including, but not limited to proposals, project specifications, drawings, calculations, plans and maps, and any ideas and designs incorporated therein, as well as any reproduction of the above are instruments of service and shall remain the property of AllWest and AllWest retains copyrights to these instruments of service. AllWest grants to Client a non-exclusive license to use these instruments of service for the purpose of completing and maintaining the Project. The Client shall be permitted to retain a copy of any instruments of service, but Client expressly agrees and acknowledges that the instruments of service may not be used by the Client on other projects, or for any other purpose, except the project for which they were prepared, unless Client first obtains a written agreement expanding the license to such use from AllWest, and with appropriate compensation to AllWest. Client further agrees that such instruments of service shall not be provided to any third parties without the express written permission of AllWest.

Client shall furnish, or cause to be furnished to AllWest all documents and information known to Client that relate to the identity, location, quantity, nature, or characteristics of any asbestos, PCBs, or any other hazardous materials or waste at, on or under the site. In addition, Client will furnish or cause to be furnished such reports, data, studies, plans, specifications, documents and other information on surface or subsurface site conditions, e.g., underground tanks, pipelines and buried utilities, required by AllWest for proper performance of its services. IF Client fails to provide AllWest with all hazardous material subject matter reports including geotechnical assessments in its possession during the period that AllWest is actively providing its services (including up to 30 days after its final invoice), Client shall release AllWest from any and all liability for risks and damages the Client incurs resulting from its reliance on AllWest's professional opinion. AllWest shall be entitled to rely upon Client - provided documents and information in performing the services required in this Agreement; however, AllWest assumes no responsibility or liability for the accuracy or completeness of Client-provided documents. Client-provided documents will remain the property of the Client.

## **ACCESS TO PROJECT**

10. Client grants to AllWest the right of access and entry to the Project at all times necessary for AllWest to perform the Work. If Client is not the owner of the Project, then Client represents that Client has full authority to grant access and right of entry to AllWest for the purpose of AllWest's performance of the Work. This right of access and entry extends fully to any agents, employees, contractors or subcontractors of AllWest upon reasonable proof of association with AllWest. Client's failure to provide such timely access and permission shall constitute a material breach of this Agreement excusing AllWest from performance of its duties under this Agreement.

## **CONFIDENTIAL INFORMATION**

11. Both Client and AllWest understand that in conjunction with AllWest's performance of the Work on the project, both Client and AllWest may receive or be exposed to Proprietary Information of the other. As used herein, the term "Proprietary Information" refers to any and all information of a confidential, proprietary or secret nature which may be either applicable to, or relate in any way to: (a) the personal, financial or other affairs of the business of each of the Parties, or (b) the

research and development or investigations of each of the Parties. Proprietary Information includes, for example and without limitation, trade secrets, processes, formulas, data, know-how, improvements, inventions, techniques, software technical data, developments, research projects, plans for future development, marketing plans and strategies. Each of the Parties agrees that all Proprietary Information of the other party is and shall remain exclusively the property of that other party. The parties further acknowledge that the Proprietary Information of the other party is a special, valuable and unique asset of that party, and each of the Parties agrees that at all times during the terms of this Agreement and thereafter to keep in confidence and trust all Proprietary Information of the other party, whether such Proprietary Information was obtained or developed by the other party before, during or after the term of this Agreement. Each of the Parties agrees not to sell, distribute, disclose or use in any other unauthorized manner the Proprietary Information of the other party. AllWest further agrees that it will not sell, distribute or disclose information or the results of any testing obtained by AllWest during the performance of the Work without the prior written approval of Client unless required to do so by federal, state or local statute, ordinance or regulation.

### **INDEPENDENT CONTRACTOR**

12. Both Client and AllWest agree that AllWest is an independent contractor in the performance of the Work under this Agreement. All persons or parties employed by AllWest in connection with the Work are the agents, employees or subcontractors of AllWest and not of Client. Accordingly, AllWest shall be responsible for payment of all taxes arising out of AllWest's activities in performing the Work under this Agreement.

### **ENTIRE AGREEMENT**

13. This Agreement contains the entire agreement between the Parties pertaining to the subject matter contained in it and supersedes and replaces in its entirety all prior and contemporaneous proposals, agreements, representations and understandings of the Parties. The Parties have carefully read and understand the contents of this Agreement and sign their names to the same as their own free act.

### **INTEGRATION**

14. This is a fully integrated Agreement. The terms of this Agreement may be modified only by a writing signed by both Parties. The terms of this Agreement were fully negotiated by the Parties and shall not be construed for or against the Client or AllWest but shall be interpreted in accordance with the general meaning of the language in an effort to reach the intended result.

### **MODIFICATION / WAIVER / PARTIAL INVALIDITY**

15. Failure on the part of either party to complain of any act or omission of the other, or to declare the other party in default, shall not constitute a waiver by such party of its rights hereunder. If any provision of this Agreement or its application be unenforceable to any extent, the Parties agree that the remainder of this Agreement shall not be affected and shall be enforced to the greatest extent permitted by law.

### **INUREMENT / TITLES**

16. Subject to any restrictions on transfers, assignments and encumbrances set forth herein, this Agreement shall inure to the benefit of and be binding upon the undersigned Parties and their respective heirs, executors, legal representatives, successors and assigns. Paragraph titles or captions contained in this Agreement are inserted only as a matter of convenience, and for reference only, and in no way limit, define or extend the provisions of any paragraph. , et al., incurred in that action or proceeding, in addition to any other relief to which it or they may be entitled.

### **AUTHORITY**

17. Each of the persons executing this Agreement on behalf of a corporation does hereby covenant and warrant that the corporation is duly authorized and existing under the laws of its respective state of incorporation, that the corporation has and is qualified to do business in its respective state of incorporation, that the corporation has the full right and authority to enter into this Agreement, and that each person signing on behalf of the corporation is authorized to do so. If the Client is a joint venture, limited liability company or a partnership, the signatories below warrant that said entity is properly and duly organized and existing under the laws of the state of its formation and pursuant to the organizational and operating document of the entity, and the laws of the state of its formation, said signatory has authority act on behalf of and commit the entity to this Agreement.

### **COUNTERPARTS**

18. This Agreement may be signed in counterparts by each of the Parties hereto and, taken together, the signed counterparts shall constitute a single document.

### **THIRD PARTY BENEFICIARIES / CONTROLLING LAW**

19. There are no intended third party beneficiaries of this Agreement. The services, data & opinions expressed by AllWest are for the sole use of the client, are for a particular project and may not be relied upon by anyone other than the client. This Agreement shall be controlled by the laws of the State of California and any action by either party to enforce this Agreement shall be brought in San Francisco County, California.

### **TIME BAR TO LEGAL ACTION**

20. Any legal actions by either party against the other related to this Agreement, shall be barred after one year has passed from the time the claimant knew or should have known of its claim, and under no circumstances shall be initiated after two years have passed from the date by which AllWest completes its services.