Timothy L. Bishop, P.G.
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6463
TimBishop@chevron.com

Mr. Keith Nowell
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject:
Response To Comments and Revised Site Investigation Work Plan
10151 International Blvd, Oakland, California
Fuel Leak Case No.: RO0002444

Dear Mr. Nowell:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me

Sincerely,

Tim Bishop
Union Oil of California – Project Manager

Attachment:
Response To Comments and Revised Site Investigation Work Plan

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Union Oil Company of California

Response To Comments and Revised Site Investigation Work Plan

Union Oil Station No. 7124
10151 International Boulevard
Oakland, California

July 2, 2013

ARCADIS

Revised Site Investigation Work Plan

Union Oil Station No. 7124
10151 International Boulevard
Oakland, California

Katherine Brandt
Certified Project Manager

David Lay , P.G.
Principal Geologist

Prepared for:
Union Oil Company of California

Prepared by:
ARCADIS U.S., Inc.
2000 Powell Street Suite 700
Emeryville
California 94608
Tel 510.596.9675
Fax 510.652.4906

Our Ref.:
B0047297.2013

Date:
July 2, 2013

ARCADIS

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Appendix

1. Introduction

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), ARCADIS is pleased to submit this Response to Comments and Revised Site Assessment Work Plan (Work Plan) for Union Oil Service Station No. 7124 located at 10151 International Boulevard in Oakland, California (the "site"; Figures 1 and 2). This work plan has been developed at the request of the Alameda County Environmental Health Department (ACEH) in a letter dated May 3, 2013.

1.1 Summary

In an effort to further delineate and characterize impacted groundwater in the predominantly downgradient direction of the site, ARCADIS proposes the advancement of four Cone Penetrometer Testing (CPT) locations. The CPT locations will be used to assess site lithology and for the collection of grab groundwater samples. The specific scope of work is discussed in Section 3.

The installation of three permanent monitoring wells as proposed in the approved 2009 work plan entitled Work Plan for Additional Assessment and Remediation Pilot Testing (Stantec 2009 and 2010) will not be implemented as recent groundwater analytical results, specifically total petroleum hydrocarbons as gasoline (TPH-g) and methyl tertiary butyl ether (MTBE), do not support the need for additional monitoring wells.

1.2 Response to Comments

The ACEH letter dated May 3, 2013 included technical comments "1. a" through "1. i". ARCADIS concurs with technical comments a, c, d, g, h, and i (Appendix A-ACEH Directive Letter Dated May 3 2013). Historical evidence does not indicate that waste or diesel products were not used at the site; therefore, the soil samples collected within the top 10 feet will be analyzed for naphthalene and polycyclic aromatic hydrocarbons (PAH). ARCADIS proposes to submit the Updated Site Conceptual Model as requested in technical comment "2" once the data has been collected from the activities outlined in this work plan. ARCADIS concurs with technical comment "3" and will upload the electronic files per the ACEH's request.

1.2.1 Response to Comment 1. b

"ACEH recommends remediation of primary and secondary source removal activities be assessed subsequent to the collection of data during the additional site investigation activities."

This comment continues with a request for additional information as the site history is identified as inadequate. ARCADIS will provide additional information to the ACEH as requested. In response to

the first portion presented above, ARCADIS will assess potential remediation options once the additional data is collected and indicates a need for remediation at the site.

1.2.2 Response to Comment 1. e

"Historic groundwater levels at the site have been reported within the range of approximately 13 to 19 feet below ground surface. If groundwater is not encountered in this interval then please present your contingency plan for monitoring groundwater in this previously identified impacted zone."

ARCADIS requests clarification on the type of contingency plan requested. Grab groundwater samples, proposed below, will augment existing groundwater monitoring well data to address current groundwater conditions. Soil sample collection will also occur at the proposed CPT locations in the top 10 feet to assess current shallow soil conditions. In the event groundwater levels encountered are below the historical range, the proposed groundwater and soil sampling will address potential impacts and allow for proper assessment of site conditions.

1.2.3 Response to Comment 1. f

"Historic groundwater suggests a predominately western flow direction; however the proposed locations are to the north of the site and therefore fail to adequately delineate the plume. No justification has been provided to support the proposed well locations."

Historical groundwater has fluctuated from north to west with a few instances of a southern flow observed. However, more recent data suggests a predominantly north to northwest flow direction, leading to the investigation being aimed in that direction. Furthermore, multiple residences to the northwest and west limit areas to conduct an investigation to the west. However, as shown on Figure 3, one CPT location (CPT-1) is proposed near the west-northwest site property line, as well as locations to the north to ensure the site is adequately delineated.

2. Site Background

The site is located at the western corner of the intersection of International Boulevard and 102nd Avenue in Oakland, California (Figures 1 and 2). The site is a former Royal-branded service station that is currently a fenced-off, non-operational service station.

The site is located in a mixed commercial and residential use area. Properties immediately adjacent to the site are primarily commercial, including Abe's Lotto Liquors to the north of the site, Commercial Auto Transmissions to the south of the site across 102nd Avenue, and a check cashing, hardware, and auto

transmission stores to the east of the site across International Boulevard. Residential property is immediately adjacent to the west of the site.

A leaking underground storage tank (LUST) site is located at the eastern corner of 101st Avenue and International Boulevard: Quan's Automotive (ACEH #RO0002444).

The average groundwater depth at the site is approximately 16.7 feet below ground surface (bgs) and the more recent flow direction is predominantly to the north.

2.1 Previous Site Investigations

Few investigations and remedial actions have been conducted at the site during the last 15 years. Previous investigations conducted at the site have primarily been in response to elevated levels of petroleum hydrocarbons discovered during product line and dispenser removal and replacement. Investigation activities have occurred at the site in attempts to delineate the lateral and vertical extent of petroleum hydrocarbon impacts to soil and groundwater. Approximately 60 cubic yards of impacted soil were removed during over excavation of product line and dispenser replacement in 2000.

3. Proposed Scope of Work

Summarized below are the activities proposed to further refine ARCADIS' understanding of the site and obtain the necessary data to evaluate potential shallow soil impacts and the extent of impacted downgradient groundwater, including CPT advancement, shallow soil sampling, and grab groundwater sampling. These activities include pre-implementation activities, soil and groundwater sampling, and procedures for waste characterization, handling, and disposal. The proposed activities are contingent upon receiving an executed access agreement in order to conduct work on the off-site properties.

4. Health and Safety, Permitting, and Utility Clearance

Prior to initiating field work, a site-specific Health and Safety Plan (HASP) will be completed in compliance with applicable Occupational Safety and Health Administration (OSHA) regulations, particularly those in Title 8 California Code of Regulations (CCR) 5192, and other applicable federal, state, and local laws, regulations, and statutes. The HASP will be available for use by ARCADIS employees and contractors.

All necessary permits and access agreements will be obtained prior to the initiation of field activities.

The proposed CPT locations will be cleared of potential conflict with existing underground utilities by calling Underground Service Alert (USA) a minimum of one week prior to advancement of locations. A private utility locating service will be contracted to further identify any potential underground utilities. The proposed CPT

locations will be advanced using a CPT drill rig. Prior to advancing the CPT, each location will be hand cleared using either a hand auger, for shallow soil sampling, and an air knife, if needed, to a minimum depth of 8 feet 1 inch bgs.

5. Cone Penetrometer Testing (CPT)

In order to delineate soil and groundwater, ARCADIS proposes to advance four CPT locations (CPT-1 to CPT-4) as shown on Figure 3. The locations may be modified in the field based on encountered obstructions (e.g.; overhead and/or underground utilities).

5.1 CPT Advancement

It is anticipated that the CPT locations will be advanced to a total depth of approximately 30 feet bgs using direct push drilling methods outfitted with a CPT device. The CPT borings will be conducted using a piezocone connected to stainless steel rods advanced by direct push drilling methods. The piezocone measures sleeve friction, tip resistance and pore pressure, which will be used to evaluate soil type and create a nearly continuous lithologic log of the borehole. All soil boring activities will be conducted under the supervision of a State of California licensed professional geologist.

5.2 Grab Groundwater Sampling post CPT advancement

ARACDIS will collect a grab groundwater sample at each proposed CPT location (Figure 3). The grab groundwater sample will be collected in order to assess the elevated concentration of TPH-g detected in the grab groundwater sample from SB-4 in 2008. ARCADIS will collect the groundwater sample for analysis with a disposable Teflon® bailer decanted into the appropriate laboratory-supplied containers. ARCADIS will place the sample on ice, where it will be cooled to approximately 4 ºC and transported to a State of California-certified laboratory under chain-of-custody documentation. The grab groundwater sample collected will be analyzed for the following:

- TPH-g by United States Environmental Protection Agency (USEPA) Method 8015B;
- Benzene, toluene, ethylbenzene and total xylenes (BTEX, collectively) by USEPA Method 8260B; and
- MTBE, tertiary-butyl alcohol (TBA), di-isopropyl ether (DIPE), ter-amyl methyl ether (TAME), ethyl tert-butyl ether (ETBE), ethanol, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (1,2-DCA) by USEPA Method 8260B.

5.3 Field Screening Activities

ARCADIS will collect soil samples during borehole clearance activities using a hand auger for field screening and lithologic description at 2-foot intervals from ground surface to 8 feet 1 inch bgs. ARCADIS will retain samples for laboratory analysis at 5-feet and 8 feet bgs or where petroleum impacts are observed. ARCADIS will analyze soil samples in the field for VOCs using a PID. The soil screening procedures will involve ARCADIS staff measuring approximately 30 grams from a relatively undisturbed soil sample, and placing this sample in a sealed container (e.g., zip-lock-type bag). The bag will be warmed in the sun for approximately 20 minutes, then the head space within the bag will be tested for total organic vapor, measured in ppm. The PID results will be noted on the field boring logs. The soil samples collected will be analyzed for the following:

- TPH-g by USEPA Method 8015B;
- BTEX by USEPA Method 8260B;
- MTBE, TBA, DIPE, TAME, ETBE, ethanol, EDB, and 1,2-DCA by USEPA Method 8260B; and
- Naphthalene and polycyclic aromatic hydrocarbon (PAH) by USEPA Method 8270C at locations CPT-1 and CPT-2.

6. Equipment Decontamination

The drilling subcontractor will steam clean down-hole drilling and sampling equipment following the completion of each soil boring. Decontamination of non-dedicated or non-disposable field equipment will be conducted using an Alconox® solution and deionized water rinse between each sample to prevent potential cross contamination.

7. Management of Investigation Derived Waste

ARCADIS will store soil cuttings and purge and decontamination water generated during site investigation activities temporarily on-site in properly labeled Department of Transportation approved 55-gallon steel drums pending waste profiling results. An EMC disposal contractor will transport the investigation derived waste to an appropriate disposal or treatment facility following waste characterization.

8. Access

ARCADIS will obtain legal access to the properties prior to the advancement of any of the proposed CPT borings. In the event access to this off-site property is not granted, the proposed CPT will not be installed.

Furthermore, the proposed investigation will be postponed until all the proposed activities can be completed in the two anticipated mobilizations.

9. Conceptual Site Model

ARCADIS will begin site investigation activities when access to the off-site property is received. Following completion of investigation activities, a technical report will be prepared and submitted to the ACEH. This report will document the results of the site assessment investigations and will include the following:

- Site conditions and background information,
- A scaled site plan illustration with CPT locations and other relevant site features,
- Documentation of the collection of soil and groundwater samples,
- Documentation of the CPT results, and
- Results of the laboratory analyses performed on the soil and groundwater samples.

10. Schedule

ARCADIS is prepared to initiate field work after receipt of all necessary approvals and permits. A Conceptual Site Model will be submitted to the ACEH within 60 days of receiving the final sampling results.

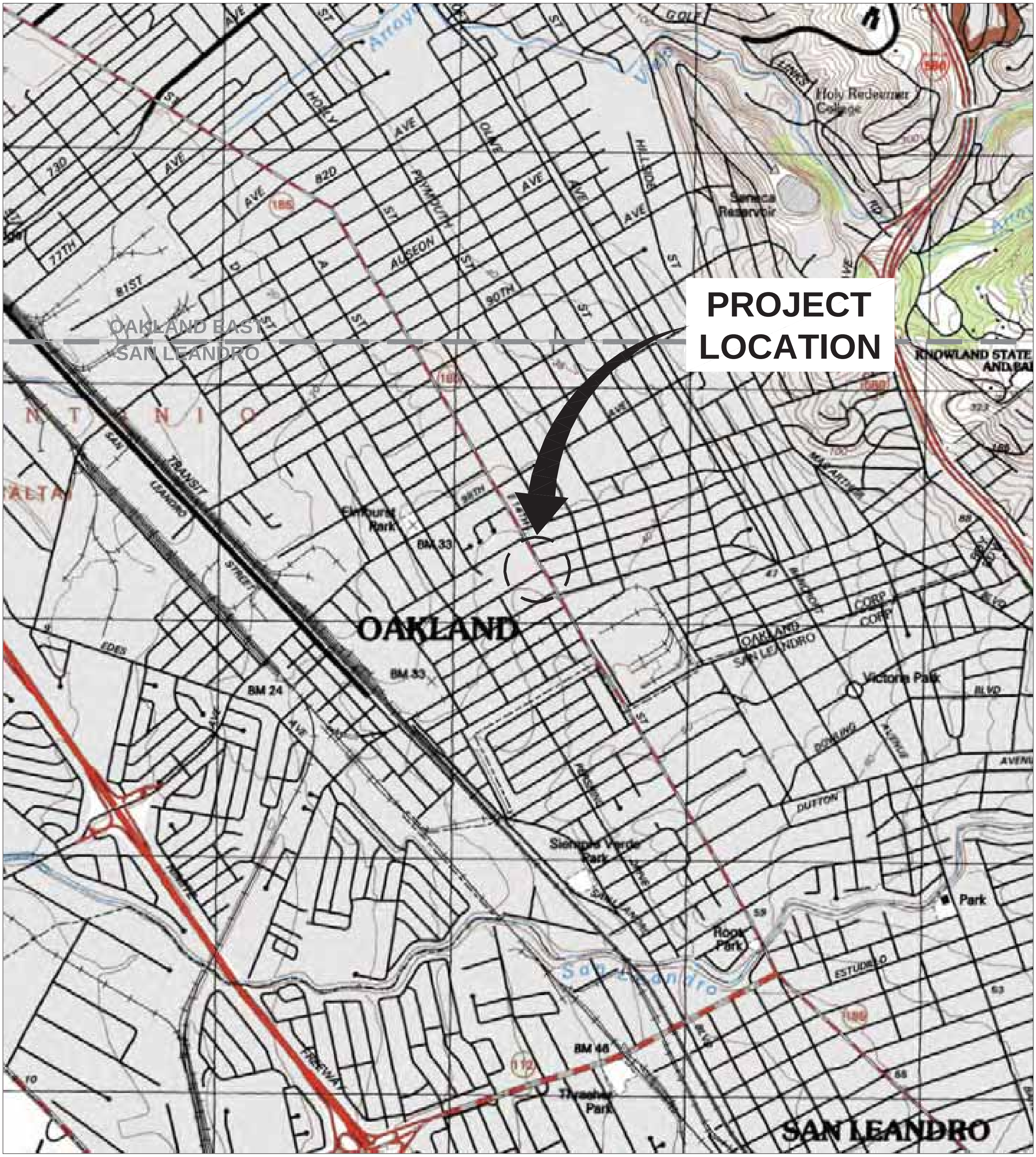
11. References

Stantec 2009, Work Plan for Additional Assessment and Remediation Pilot Testing for 10151 International Boulevard, Oakland, California. July 20.

Stantec 2010. Letter Addendum to Stantec's Work Plan for Additional Site Assessment and Remediation Pilot Testing for 10151 International Boulevard, Oakland, California.

ARCADIS

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., SAN LEANDRO, CALIFORNIA, 1993, AND OAKLAND EAST, CALIFORNIA, 1997.

0 2000' 4000'

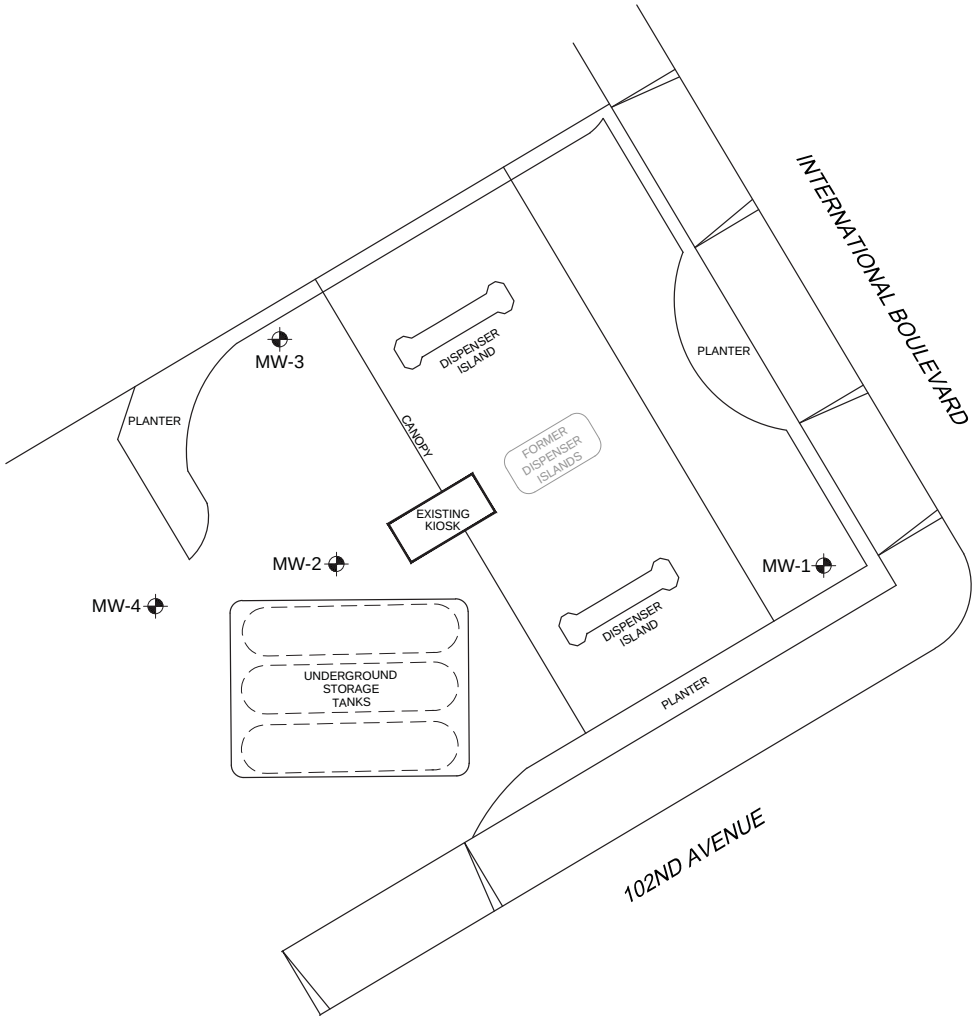
Approximate Scale: 1 in. = 2000 ft.

UNION OIL
STATION NO. 7124
10151 INTERNATIONAL BOULEVARD
OAKLAND, CALIFORNIA

SITE LOCATION MAP

ARCADIS

FIGURE
1



LEGEND

MW-1 GROUNDWATER MONITORING WELL

NOTES:

1. BASE MAP PROVIDED BY TRC, DATED JANUARY 2010, AT A SCALE OF 1"=20'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 20' 40'

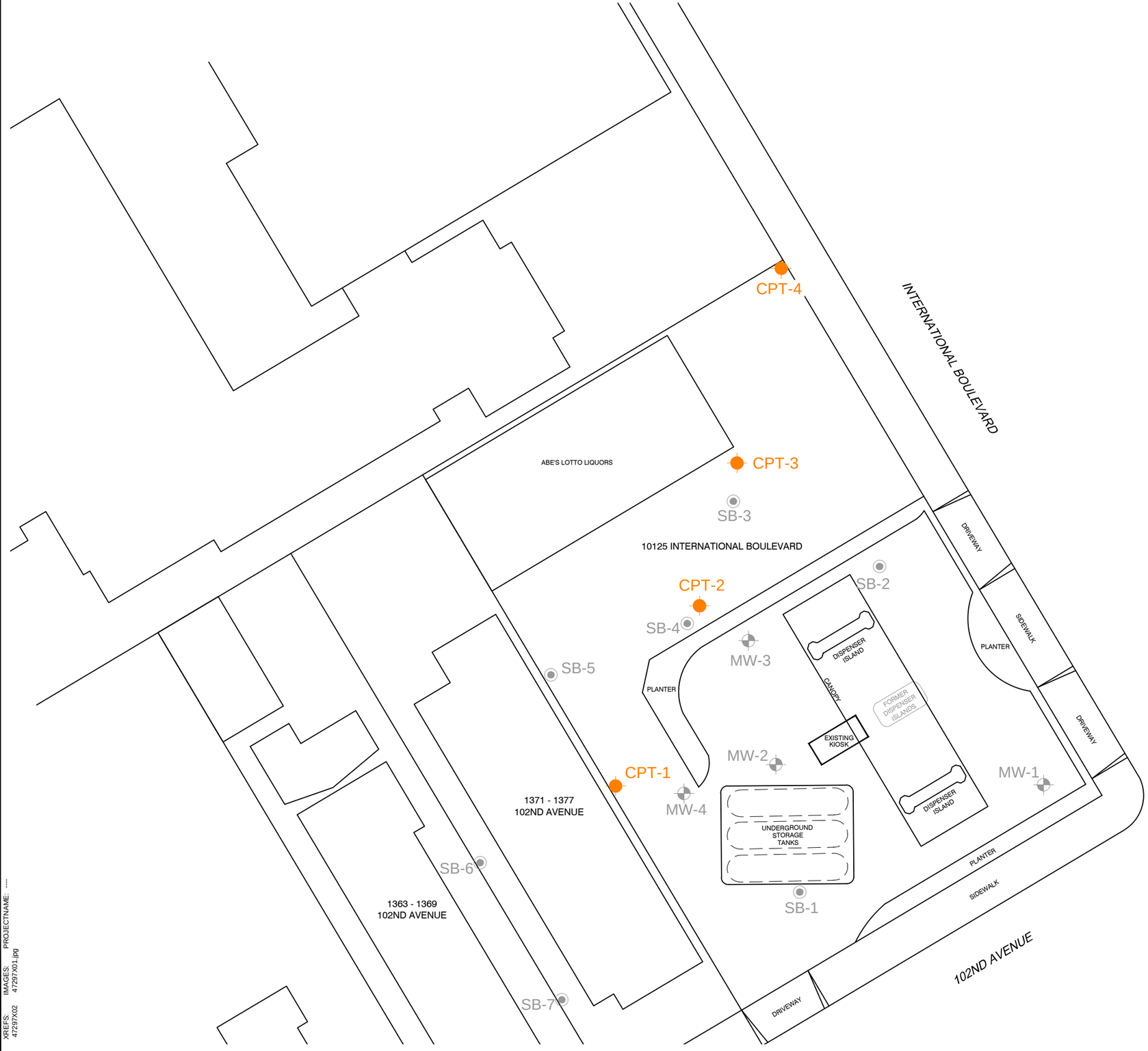
GRAPHIC SCALE

UNION OIL
STATION NO. 7124
10151 INTERNATIONAL BOULEVARD
OAKLAND, CALIFORNIA

SITE PLAN

ARCADIS

FIGURE
2



LEGEND

MW-1 GROUNDWATER MONITORING WELL

SB-1 SOIL BORING LOCATION

CPT-1 PROPOSED CPT LOCATION

NOTES:

1. BASE MAP PROVIDED BY TRC, DATED JANUARY 2010, AT A SCALE OF 1"=20'. ADDITIONAL SITE INFORMATION PROVIDED BY STANTEC, DATED SEPTEMBER 23, 2008, AT A SCALE OF 1"=40'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

UNION OIL
STATION NO. 7124
10151 INTERNATIONAL BOULEVARD
OAKLAND, CALIFORNIA

SITE PLAN WITH PROPOSED CPT LOCATIONS

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FIGURE 3

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Appendix **A**

ACEH Directive Letter

Dated May 3, 2013

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

May 3, 2013

Roya Kambin (*Sent via E-mail to: RKambin@chevron.com*)
Chevron
6101 Bollinger Canyon Road
San Ramon, CA 94583

Ed Ralston (*Sent via E-mail to: Ed.C.Ralston@p66.com*)
Phillips 66
76 Broadway Street
Sacramento, CA 95818

Monument Gas & Mart
111 E14th Street
San Leandro, CA 94577

Ibrahim Abbushi
16376 Kildare Road
San Leandro, CA 94578-1267

Subject: Additional Site Investigation Work Plan for Fuel Leak Case No. RO0002444 and GeoTracker Global ID T0600173591, Unocal #7124, 10151 International Blvd., Oakland, CA 94603

Dear Ms. Kambin:

Thank you for the recently submitted document entitled *Additional Site Investigation Work Plan*, dated March 5, 2013, prepared by Arcadis for the subject site. The work plan proposes to further delineate and characterize impacted soil and groundwater downgradient of the site, by advancing two soil borings and completing both as temporary pre-packed wells. One soil boring is proposed to be advanced east of the Abe's Lotto Liquors building and the second soil boring advanced off-site to the north, on the southeast corner of the AutoZone building. The data collected from both soil borings is proposed to be used to assess the downgradient edge of the known groundwater impacts by site constituents of concern.

Alameda County Environmental Health (ACEH) has evaluated the data and recommendations presented in the above-mentioned report in conjunction with the case files and the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP) criteria. Based on ACEH's review, insufficient data has been presented to determine whether the site meets LTCP criteria for General Criteria B, C, E, F, and H, and Media Specific criteria for Groundwater, and Outdoor Air and Direct Contact. Therefore we request that you address the following technical comments, and send us a Revised Site Investigation Work Plan in accordance with the schedule below.

TECHNICAL COMMENTS

1. **Comments on 2013 Work Plan** – The case currently has an approved work plan entitled *Work Plan for Additional Assessment and Remediation Pilot Testing,* prepared by Stantec Consulting Corporation, dated July 20, 2009 and amended on December 13, 2010. The work plan was prepared to address data gaps identified for the site in addition to evaluating a remedial method addressing residual site pollution. The approved work plan proposed the installation of three off-site monitoring wells, sampling soil gas and performing a hydrogen peroxide injection pilot test.

   As the 2009 work plan was prepared prior to the implementation of the LTCP, certain elements of the work plan are no longer required. A summary of our comments is provided below:

   a. Soil vapor sampling is no longer required, as the site characteristics satisfy Scenario 3 of the Media Specific criteria for vapor intrusion to indoor air.

   b. ACEH recommends remediation of primary and secondary source removal activities be assessed subsequent to the collection of data during the additional site investigation activities. Additionally the site history presented in the work plan and case file documents is inadequate, going back only as far as 1997. ACEH requests that a site history be prepared that documents petroleum products used at the site from the initial date of station operation. Based on our review, ACEH cannot determine the current status of the station. TRC (previous consultant for the site) reported that the station was closed and fenced off in 2009; however, there is no documentation if the tanks and appurtenant structures have been removed.

   c. ACEH agrees that in order to advance the case to closure under the Media Specific criteria for groundwater, the extent of the plume needs to be defined and plume stability established. However, ACEH prefers the location and installation of the three permanent monitoring wells in the approved 2009 work plan, rather than the temporary pre-packed wells proposed in the 2013 work plan.

   d. The current groundwater monitoring well network contains wells screened from 10 to 25 feet below the ground surface. Our review of the cross sections presented in the case file documents indicates the more permeable units are not being monitored. Therefore, ACEH requests the revised work plan present a proposed strategy to increase the likelihood that the downgradient dissolved-phase contaminant plume is quickly delineated and to optimize off-site monitoring well locations and screen intervals (i.e. Cone Penetrometer Testing, continuously sampled direct push, etc.).

      The 2013 Work Plan proposes the installation of wells with 20-foot screen intervals. ACEH recommends the use of monitoring wells designed such that the screen interval plus the sand pack length will total 5 feet or less. This request is based on technical literature that has determined that shorter screen intervals are more likely to provide representative groundwater samples. The proposed strategy should minimize the screen length at each well location to the extent possible, with well screens minimally longer than the water-bearing zone, including any capillary fringe zone. If a well intersects multiple water bearing units, than well clusters or multilevel wells (similar to Continuous Multi-Phase Tubing [CMT]) should be proposed.

e. Historic groundwater levels at the site have been reported within the range of approximately 13 to 19 feet below the ground surface. If groundwater is not encountered in this interval then please present your contingency plan for monitoring groundwater in this previously identified impacted zone.

f. Historic groundwater data suggests a predominantly western flow direction; however, the proposed locations are to the north of the site and therefore fail to adequately delineate the plume. No justification has been provided to support the proposed well locations.

g. The grab groundwater sample collected in 2008 from soil boring SB-4 had a concentration of 45,000 micrograms per liter of total petroleum hydrocarbons as gasoline. ACEH requests further delineation be conducted in this area.

h. Please collect and analyze soil samples at maximum intervals of not more than five feet, at signs of obvious contamination, at the soil/groundwater interface, and at significant changes in lithology. Submit a sufficient number of soil samples for laboratory analyses to define the vertical extent of contamination. Please collect groundwater samples from each boring and submit for laboratory analysis.

i. If your revised site history indicates that waste oil or diesel products were used at the site, please collect and analyze soil samples within the top 10 feet (0 to 5 feet and 5 to 10 feet) to evaluate soil from this interval as required by the LTCP media specific criteria for Direct Contact and Outdoor Air Include naphthalene and polycyclic aromatic hydrocarbon (PAH) analysis for soil samples collected from the top ten feet.

2. **Revised Site Investigation Work Plan** – Please revise the work plan to address the comments identified in Item 1 above. Please support the proposed scope of work with an Updated Site Conceptual Model (SCM) presented in a tabular format that highlights the major SCM elements and identified data gaps. Please see Attachment A for a description of the requisite SCM elements.

3. **Electronic Submittal of Information (ESI)** –ACEH's review of the electronic case file database indicates that the record is incomplete. Please upload the results of the semi-annual groundwater monitoring events conducted since April 16, 2012, and the 1997 Soil Gas Survey report in accordance with the instructions included in Attachment 1.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **July 2, 2013** – Revised Soil and Water Investigation Work Plan (file name: RO0002444_WP_R_yyyy-mm-dd);

- **June 2, 2013** – ESI Compliance;

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 567-6764 or send me an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o, ou, email=keith.nowell@acgov.org, c=US
Date: 2013.05.03 17:33:02 -07'00'

Keith Nowell, P.G., C.H.G.
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations

ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Katherine Brandt, ARCADIS U.S., Inc., 2000 Powell Street, 7th Floor, 2000 Powell Street, 7th Floor (Sent via E-mail to: *Katherine.Brandt@arcadis-us.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Keith Nowell, ACEH (*Sent via E-mail to: keith.nowell@acgov.org*)
GeoTracker, e-file

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

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

ELECTRONIC SUBMITTAL OF REPORTS

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

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single Portable Document Format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to 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 ://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 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

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Site Conceptual Model Requisite Elements

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.

Alameda County Environmental Health (ACEH) requests utilization of a tabular format that highlights the major SCM elements and their associated data gaps, which need to be addressed to progress the site to case closure. Update the SCM at each stage of the project and submit with work plans, feasibility studies, corrective action plans, and requests for closures.

The SCM should incorporate, but is not limited to, the topics listed below. Please maximize 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-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.