



James P. Kiernan, P.E.
Project Manager

**Chevron Environmental
Management Company**
6001 Bollinger Canyon Road
Room C2102
San Ramon, CA 94583
Tel (925) 842-3220
jkiernan@chevron.com

December 2, 2016

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health 10:20 am, Dec 06, 2016

Re: Second Remedial Action Plan Addendum
Commingled Plume #0068
706, 726, and 800 Harrison Street, Oakland, California
Fuel Leak Case No.: RO0000484/RO0000321/RO0000231

I have reviewed the attached report dated December 2, 2016.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Arcadis U.S., Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13257(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

James P. Kiernan, P.E.
Project Manager

Attachment: Second Remedial Action Plan Addendum by Arcadis

Ms. Kit Soo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Arcadis U.S., Inc.
2999 Oak Road
Suite 300
Walnut Creek
California 94597
Tel 925 274 1100
Fax
www.arcadis.com

Subject:

Second Remedial Action Plan Addendum

800, 726, 706 Harrison Street
Oakland, California
Fuel Leak Case No.: RO0000231, RO0000321, and RO0000484
Commingled Plume #0068

ENVIRONMENTAL

Date:

December 2, 2016

Contact:

Katherine Brandt

Dear Ms. Soo:

Phone:

510.596.9675

Arcadis U.S. Inc. (Arcadis), on behalf of Chevron Environmental Management Company's (CEMC's) affiliate, Union Oil Company of California (Union Oil), has prepared this *Second Remedial Action Plan (RAP) Addendum* to notify Alameda County Department of Environmental Health (ACDEH) of design changes to the planned air sparge/soil vapor extraction (AS/SVE) system originally proposed in Arcadis' RAP dated April 18, 2014 for the above referenced site. This report was requested by ACDEH in a letter dated November 3, 2016 (Attachment A), which summarized the discussions during a meeting regarding the site between Arcadis, CEMC, and ACDEH on August 30, 2016. Please note that in the November 3, 2016 letter, other documents were also requested that will, or have been, submitted under separate cover.

Email:

Katherine.Brandt@arcadis.com

Our ref:

B0047339.ST16

The April 18, 2014 RAP presented relevant background information, a summary of pilot test activities completed to evaluate potential remedial action alternatives, and a detailed design basis for the selected remedial action; AS/SVE. The first *RAP Addendum* was submitted on July 1, 2014 in response to technical comments from ACDEH regarding volatile organic compound vapor recovery and the proposed remediation well network at 706 Harrison Street. A *Remediation Performance Evaluation and Monitoring Plan* (monitoring plan) was submitted on February 10, 2015 to present the planned AS/SVE system monitoring, optimization, and operation and maintenance throughout operation.

Since the submittal of the first *RAP Addendum* in 2014, the proposed location of the AS/SVE system enclosure has changed several times due to negotiation with the property owners of 706 and 726 Harrison Street. The 2015 monitoring plan showed the system enclosure on the 726 Harrison Street

property, adjacent to the existing building. This was a change from the equipment layout as presented in the April 2014 *RAP* and the July 2014 first *RAP Addendum*. However, the decision was subsequently made to move the planned system back to 706 Harrison Street.

Access Negotiation: Negotiations with the 706 Harrison Street property owner to allow for system placement and regarding equipment location are ongoing but are anticipated to be completed by the end of 2016. The planned final location of the remediation system compound will be along the southern property boundary of 706 Harrison Street as initially proposed in the *RAP*. The proposed remediation system layout, including the planned trenching, is attached as Figure 1.

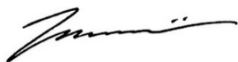
Permitting: All applicable permitting agencies will be notified of the system location change. Building department approval is pending final access agreement signatures (anticipated December 2016). The Authority to Construct (ATC) permit was issued by the Bay Area Quality Management District (BAADMD) on August 4, 2015. The public notification was issued by the BAAQMD and comments by the public were addressed collectively by BAAQMD and Arcadis in June 2015, prior to the issuance of the ATC permit.

Schedule: System installation and implementation is anticipated to begin during the first quarter 2017. As stated in the February 10, 2015 *Monitoring Plan*, a groundwater monitoring event will be performed before system startup to establish baseline conditions and a remedial system groundwater performance monitoring program will be implemented. The groundwater performance monitoring schedule included in the *Monitoring Plan* remains unchanged.

The Remediation Start-up Report will be submitted 60 days after the successful start-up of the AS/SVE system.

If you have any questions or comments regarding the contents of this document, please contact Katherine Brandt of Arcadis at 510.596.9675 or by e-mail at Katherine.Brandt@arcadis.com.

Sincerely,
ARCADIS



Tamera Rogers
Project Manager



Katherine Brandt
Professional Geologist



Copies:

Mr. James Kiernan, CEMC (Electronic Copy)

Mr. Ed Ralston, Phillips 66 (Electronic Copy)

Ms. Cherie McCaulou, San Francisco Bay Region RWQCB (Geotracker)

Mr. Muhammad Usman and Mr. Mahmood M. Ali, Property Owners – 800 Harrison Street

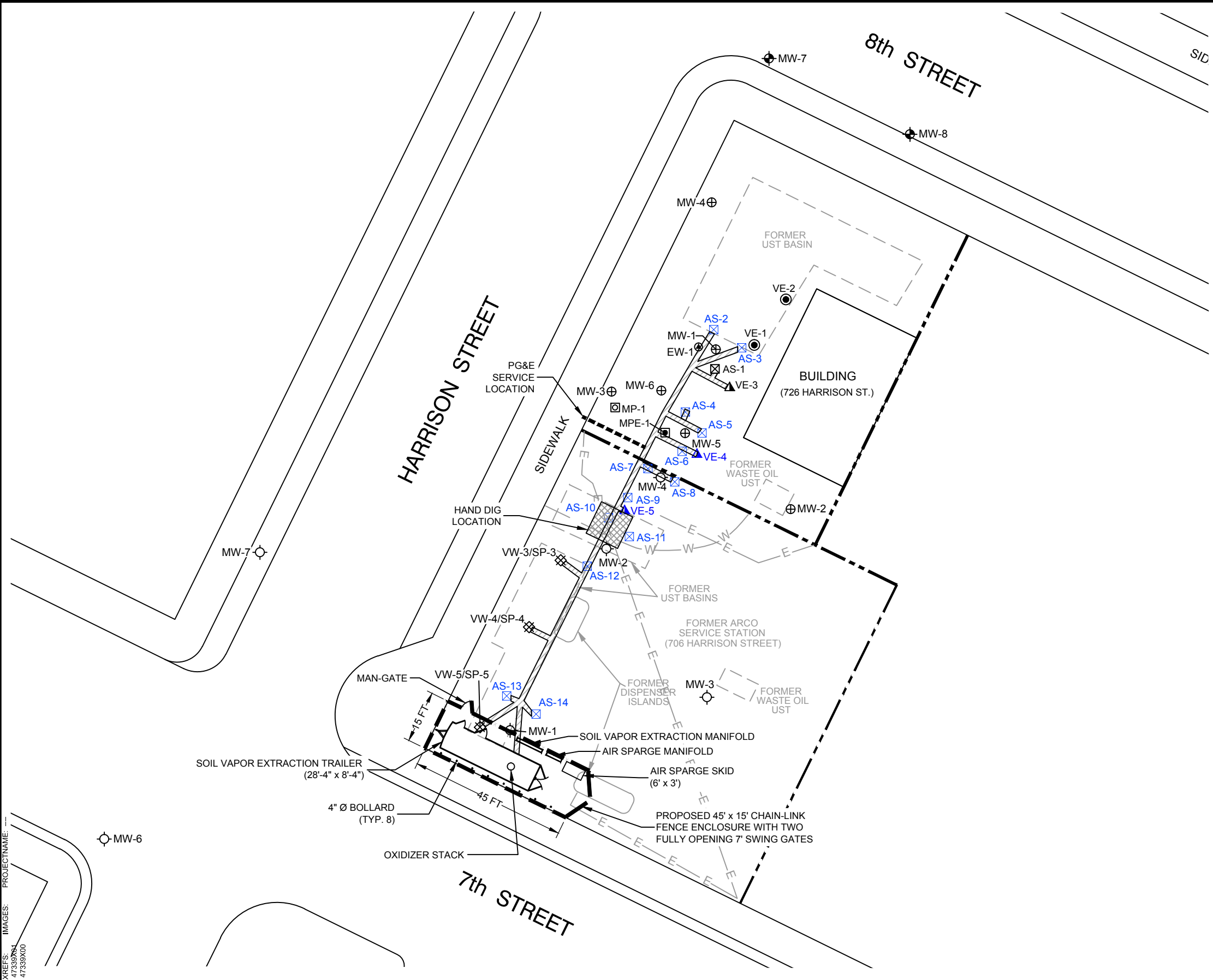
Mr. Peter Yee and Mr. Kin Chan, Property Owners – 726 Harrison Street
Mr. Bo Gin, Property Owner – 706 Harrison Street

Enclosures:

Figure 1 – Remediation System Layout – November 2016

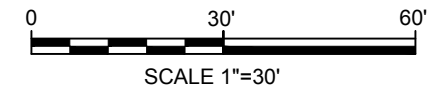
Attachment A – ACDEH Letter dated November 3, 2016

CITY: SAN RAFAEL, CA DIV/GROUP: ENV/CAD DB: M. HOEFER, J. HARRIS
 C:\Users\jharris\Desktop\ENVCAD\B0047339\ST16\00001\DWG\M7339B23.dwg LAYOUT: 1
 XREFS: 47339X00 47339X00 PROJECTNAME: ---
 PAGES: 11/23/2016 11:25 AM ACADYER: 19:15 (LMS TECH) PAGES: 11/23/2016 4:39 PM BY: HARRIS, JESSICA



- LEGEND**
- PROPERTY BOUNDARY
 - MW-1 ⊕ GROUNDWATER MONITORING WELL (UNOCAL)
 - MW-1 ⊙ GROUNDWATER MONITORING WELL (GIN)
 - VW-3/SP-3 ⊗ SOIL VAPOR/SPARGE WELL (GIN)
 - MW-1 ⊕ GROUNDWATER MONITORING WELL (YEE)
 - AS-1 ⊠ AIR SPARGE WELL (YEE)
 - EW-1 ⊕ EXTRACTION WELL (YEE)
 - MPE-1 ⊠ MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE)
 - MP-1 ⊠ PILOT TEST MONITORING POINT
 - VE-1 ⊙ VAPOR EXTRACTION WELL (DESTROYED)
 - VE-3 ▲ PILOT TEST VAPOR EXTRACTION WELL
 - AS-2 ⊠ PROPOSED AIR SPARGE WELL
 - VE-4 ▲ PROPOSED VAPOR EXTRACTION WELL
 - ▬ PROPOSED SYSTEM TRENCHING
 - W — WATER UTILITY LINE
 - E — ELECTRICAL UTILITY LINE
 - ELECTRIC UTILITY TRENCH

- NOTE:**
- BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'.
 - COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.



SCALE(S) AS INDICATED				
THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING.	USE TO VERIFY FIGURE REPRODUCTION SCALE			
No.	Date	Revisions	By	Ckd
THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.				

Professional Engineer's Name GEOFFREY RADER	
Professional Engineer's No. CB0249	
State CA	Date Signed 7/20/2017
Designed by GR	Project Mgr. KB
Drawn by MTHJLH	Checked by GR

ARCADIS U.S., INC.

UNION OIL COMPANY OF CALIFORNIA STATION NO. 0752 706/726/800 HARRISON STREET OAKLAND, CALIFORNIA

CONSTRUCTION DOCUMENTS

SITE PLAN WITH PROPOSED REMEDIATION SYSTEM

ARCADIS Project No. B0047339.2015.00003
Date NOVEMBER 2016
ARCADIS 2999 OAK ROAD SUITE 300 WALNUT CREEK, CA 94597 TEL: 925.274.1100

ALAMEDA COUNTY
**HEALTH CARE SERVICES
AGENCY**

REBECCA GEBHART, Interim Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

November 3, 2016

RO0000231 Responsible Parties:

James Kiernan
Chevron Environmental Management Company
6101 Bollinger Canyon Road, Suite 5213
San Ramon, CA 94583
(Sent via E-mail to: jkiernan@chevron.com)

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

Muhammad Usman
800 Harrison Street
Oakland, CA 94607

Mahmood M Ali
Armsco, Inc.
P.O. Box 5427
Novato, CA 94948-5427

RO0000321 Responsible Parties:

Peter Yee
1000 San Antonio Avenue
Alameda, CA 94501

Kin Chan
4328 Edgewood Avenue
Oakland, CA 94602-1316

RO0000484 Responsible Parties:

Bo Gin
342 Lester Avenue
Oakland, CA 94606-1317

Subject: August 30, 2016 Meeting Summary and Technical Report Request for Commingled Plume for Fuel Leak Case No. RO0000231 (GeoTracker Global ID T0600101486), Unocal #0752, 800 Harrison Street, Oakland, CA 94607; Fuel Leak Case No. RO0000321 (GeoTracker Global ID T0600102122), Chan's Service Station/Shell, 726 Harrison Street, Oakland, CA 94607; and Fuel Leak Case No. RO0000484 (GeoTracker Global ID T0600100985), Oakland Auto Parts, 706 Harrison Street, Oakland, CA 94607

Dear Responsible Parties:

We recently participated in a meeting on August 30, 2016. Attendees of the meeting included James Kiernan (Chevron Environmental Management Company [Chevron]; Kathy Brandt (Arcadis); and Dilan Roe and Kit Soo (Alameda County Department of Environmental Health [ACDEH]).

The purpose of the meeting was to discuss the three fuel leak cases (listed below) which are part of the Commingled Plume Account (CPA) Program, a subaccount under the Underground Storage Tank (UST) Cleanup Fund Program, for this site. We understand that the CPA application (#0068) was accepted by the State Water Board in 2014. The CPA Program was created to encourage and assist responsible parties in coordinating cleanup efforts where commingled plumes exist. A "commingled plume" means the condition that exists when groundwater contaminated with petroleum from two or more discrete unauthorized releases have mixed or encroached upon one another to the extent that the corrective action performed on one plume will necessarily affect the other.

The joint claimants for CPA #0068 and their associated fuel leak cases are listed below. ACDEH understands that Chevron is the appointed representative for corrective action at the site, for itself and as Attorney-in-Fact for Union Oil Company of California (Union Oil):

- RO0000484 - 706 Harrison Street Property is a former ARCO service station owned by Mr. Bo Gin. This property currently contains an asphalt parking lot. Former facilities at the 706 Harrison Street Property included four 1,000-gallon and two 6,000-gallon fuel USTs, one steel waste oil UST, product line piping, pump islands, and a station building. The USTs and associated piping were reported to have been removed in January 1991.
- RO0000321 - 726 Harrison Street is a former Shell service station owned by Mr. Peter Yee. This property currently contains an asphalt parking lot and one building used for commercial usage associated with the parking lot. Former facilities at the 726 Harrison Street Property included three 4,000-gallon USTs, one 8,000-gallon fuel UST, one steel 1,000-gallon waste oil UST, product line piping, pump islands, and a station building. The USTs and associated piping were reported to have been removed in October 1995.
- RO0000231 - 800 Harrison Street is an active 76 Station (Union Oil) owned by Mr. Muhammad Usman. Current station facilities include a single-story convenience store, three product dispenser islands under two canopies, and two 12,000-gallon double-walled poly-steel gasoline USTs.

The site is located in a mixed commercial and residential area.

Benzene and MTBE have been detected in groundwater samples at concentrations greater than the Low-Threat Closure Policy Groundwater-Specific Criteria 2 and 4. As a result, a Remedial Action plan (RAP), dated April 18, 2014, prepared by ARCADIS on behalf of Chevron and Union Oil was submitted. The full-scale remedy proposed in the RAP is based on site characterization and pilot test findings, which selected Air Sparging/Soil Vapor Extraction (AS/SVE) as the most appropriate technology to treat hydrocarbon impacts at the site. Specifically, impacted soil will be treated via SVE and groundwater will be treated through AS.

ACDEH approved the 2014 RAP in the directive letters dated July 14, 2014 and March 11, 2015. However, due to permitting, PG&E scheduling, system selection, and CPA budget approval issues, installation of the remedial system has been delayed.

During the August 30, 2016 meeting, Chevron provided an update on the remaining activities that need to be resolved prior to system installation and startup:

- Remediation Equipment Availability
- Relocation of the Oxidizer. The oxidizer will need to be relocated because the initially proposed location is not a viable location due to an accident occurring in that area which brought up safety concerns. The new location of the oxidizer is likely on the 706 Harrison Street Property but Chevron still needs to negotiate on a financial agreement with the site owner.
- Bay Area Air Quality Management District (BAAQMD) Permitting – ACDEH understands that the air permit application has been submitted and is waiting for finalization of the permit.

TECHNICAL REPORT REQUEST

As discussed during the meeting, ACDEH request the following:

- Letter report which documents proposed change to the approved system, including the trenching design due to where the oxidizer will ultimately reside. Please include a revised schedule for the installation and implementation of the proposed system, associated notification/public participation period, groundwater monitoring program etc. – Submit to ACDEH prior to system installation for review and approval.
- Remediation Start-Up Report presenting documentation and information on the system installation, inspection, start-up and testing to verify that the operation meets or exceeds performance design criteria. The report should include but not limited to data/information on equipment operating performance, system control functionality, measurement accuracy, compliance for applicable permits, and safety.
- Copy of the CPA Application and Approval for case files.
- 2nd Half 2016 Semi-Annual Groundwater Monitoring Report.

Please upload the documentation to the ACDEH ftp site (Attention: Kit Soo) and to the State Water Resources Control Board's GeoTracker website according to the following schedule and naming convention:

- December 2, 2016 – Letter Report on change in system and trenching design
File to be named: RAP_ADD_yyyy-mm-dd RO231
- December 2, 2016 – CPA Application and Approval Documentation
File to be named: STATE_INFO_yyyy-mm-dd RO231
- December 16, 2016 – Second Half 2016 Semi-Annual Groundwater Monitoring Report
File to be named: GWM_R_yyyy-mm-dd RO231
- February 16, 2017 – Remediation Start-Up Report
File to be named: REM_R_yyyy-mm-dd RO231

Sincerely,

Kit Soo

Digitally signed by Kit Soo
DN: cn=Kit Soo, o=Alameda
County, ou=Department of
Environmental Health,
email=kit.soo@acgov.org, c=US
Date: 2016.11.03 10:58:54 -07'00'

Kit Soo, California PG 8957
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

Responsible Parties
RO0000231, RO0000321, and RO0000484
November 3, 2016
Page 4

cc: Katherine Brandt, ARCADIS, 2999 Oak Road, Suite 300, Walnut Creek, CA 94597 (*Sent via E-mail to: Katherine.Brandt@arcadis-us.com*)

Robert Kitay, Aqua Science Engineers, Inc., 55 Oak Ct., Suite 220, Danville, CA 94526 (*Sent via E-mail to: rkitay@aquascienceengineers.com*)

Dilan Roe, ACEH (*Sent via E-mail to: dilan.roe@acgov.org*)

Paresh Khatri, ACEH (*Sent via E-mail to: paresh.khatri@acgov.org*)

Kit Soo, ACEH (*Sent via E-mail to: kit.soo@acgov.org*)

GeoTracker, eFile

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

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

REQUIREMENTS

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

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

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses,** and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.