4096 Piedmont Avenue #194 Oakland, California 94611 510 547 8196 Telephone 510 547 8706 Facsimile





May 8, 2015

RECEIVED

By Alameda County Environmental Health 12:18 pm, May 15, 201

Mr. Keith Nowell Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502-6577

Re: Former Mobil RAS #04FGN/14994 East 14th Street/San Leandro, California

Dear Mr. Nowell:

Attached for your review and comment is a copy of the letter report entitled Well Destruction Report, dated May 8, 2015, for the above-referenced site. The report was prepared by Cardno of Petaluma, California, and responds to comments regarding activities at the subject site.

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

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek Project Manager

Attachment: Cardno's Well Destruction Report, dated May 8, 2015

cc:

w/ attachment Mr. Jana Gluckman

w/o attachment

Mr. Greg Gurss, Cardno



May 8, 2015 Cardno 2785C.R03

Ms. Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Well Destruction Report

Former Mobil Service Station 04FGN 14994 East 14<sup>th</sup> Street, San Leandro, California

Alameda County RO# 0000422

Mr. Sedlachek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation, Cardno prepared this well destruction report for the subject site (Plate 1). Cardno ERI destroyed wells MW1A through MW3A and VW1 through VW5 as requested by the Alameda County Health Care Services Agency (County), in a letter dated March 18, 2015 (Appendix A). The purpose of this work was to destroy the remaining wells in preparation for the issuance of a No Further Action letter for the site.

# SITE DESCRIPTION

Former Mobil Service Station 04FGN is located at 14994 East 14<sup>th</sup> Street, on the northern corner of the intersection of East 14<sup>th</sup> Street and 150<sup>th</sup> Avenue in San Leandro, California (Plates 1 and 2). The surrounding areas consist of commercial properties. The site is currently in use as a retail shopping center.

Cardno

601 N. McDowell Boulevard Petaluma, CA 94954 USA

Phone: +1 800 382 9105 Fax: +1 707 789 0414

www.cardno.com

WELL DESTRUCTION

Field activities were conducted under the direction of the County and the advisement of a State of California professional geologist and in accordance with a site-specific health and safety plan and well destruction field protocol (Appendix B). Well construction details are listed in Table 1.

**Pre-Field Activities** 

Prior to field activities, Cardno ERI obtained well destruction permits from the Alameda County Public Works Agency (Appendix C). The property owner and tenants were notified prior to the start of fieldwork. Underground Service Alert and the County were notified at least 48 hours prior to the onset of field activities.

**Well Destruction Activities** 

On April 13, 2015, Cardno ERI destroyed wells MW1A through MW3A by tremie grouting each well with neat cement. The wells were subsequently placed under 25 psi of pressure for a period of five minutes. The well vaults were removed and the area was resurfaced to match the surrounding area. Wells VW1 through VW5 were destroyed by removing the annular seal and sand pack materials using a hand auger then filling the resultant boring with neat cement grout.

**Well Completion Reports** 

California Department of Water Resources (DWR) well destruction forms (DWR-188s) will be submitted to the DWR and the County under separate cover.

Waste Management Plan

Rinsate water generated during well destruction was transported off site for disposal. Construction materials generated during well destruction activities were transported to recycling facilities. Waste disposal documentation is included in Appendix D.

**CONCLUSIONS AND RECOMMENDATIONS** 

A C-57 licensed well driller, under permit from the Alameda County Public Works Agency, destroyed the remaining wells associated with the site. Waste materials associated with the well destruction activities have been removed from the site. Cardno recommends the issuance of a No Further Action letter for this site.

Cardno 2785C.R03 Former Mobil Service Station 04FGN, San Leandro, California

### CONTACT INFORMATION

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services Company, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Mr. Greg Gurss, Cardno, 601 North McDowell Boulevard, Petaluma, California, 94954. The agency contact is Mr. Keith Nowell, Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, Alameda, California, 94502-6577.

# **LIMITATIONS**

For documents cited that were not generated by Cardno, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Mr. Greg A. Gurss, Cardno's project manager for this site, at (916) 692-3130 or at <a href="mailto:greg.gurss@cardno.com">greg.gurss@cardno.com</a> with any questions regarding this report.

Sincerely,

SCANNEL

Greg Gurss Senior Project Manager

for Cardno 707 766 2000

Email: greg.gurss@cardno.com

David R. Daniels

P.G. 8737 for Cardno 707 766 2000

Email: david.daniels@cardno.com

May 8, 2015 Cardno 2785C.R03 Former Mobil Service Station 04FGN, San Leandro, California

Enclosures:

References

Acronym List

Plate 1

Site Vicinity Map

Plate 2

Generalized Site Plan

Table 1

Well Construction Details

Appendix A

Correspondence

Appendix B

Field Protocol

Appendix C

**Permits** 

Appendix D

Waste Documentation

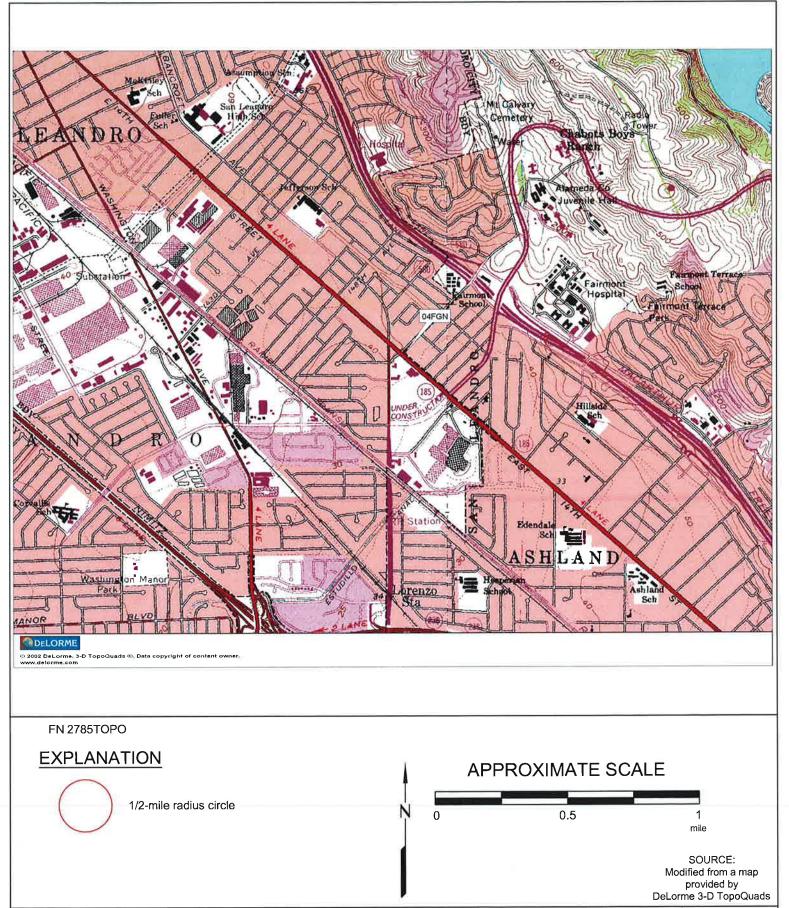
Mr. Keith Nowell, Alameda County Health Services Agency, 1131 Harbor Bay Parkway, Alameda, cc: California, 94502

Mr. Jana Gluckman, 2110 Stonehaven Drive, Los Altos, California 94024

May 8, 2015 Cardno 2785C.R03 Former Mobil Service Station 04FGN, San Leandro, California

# **ACRONYM LIST**

μg/L	Micrograms per liter	NEPA	National Environmental Policy Act
μs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m <sup>3</sup>	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid		





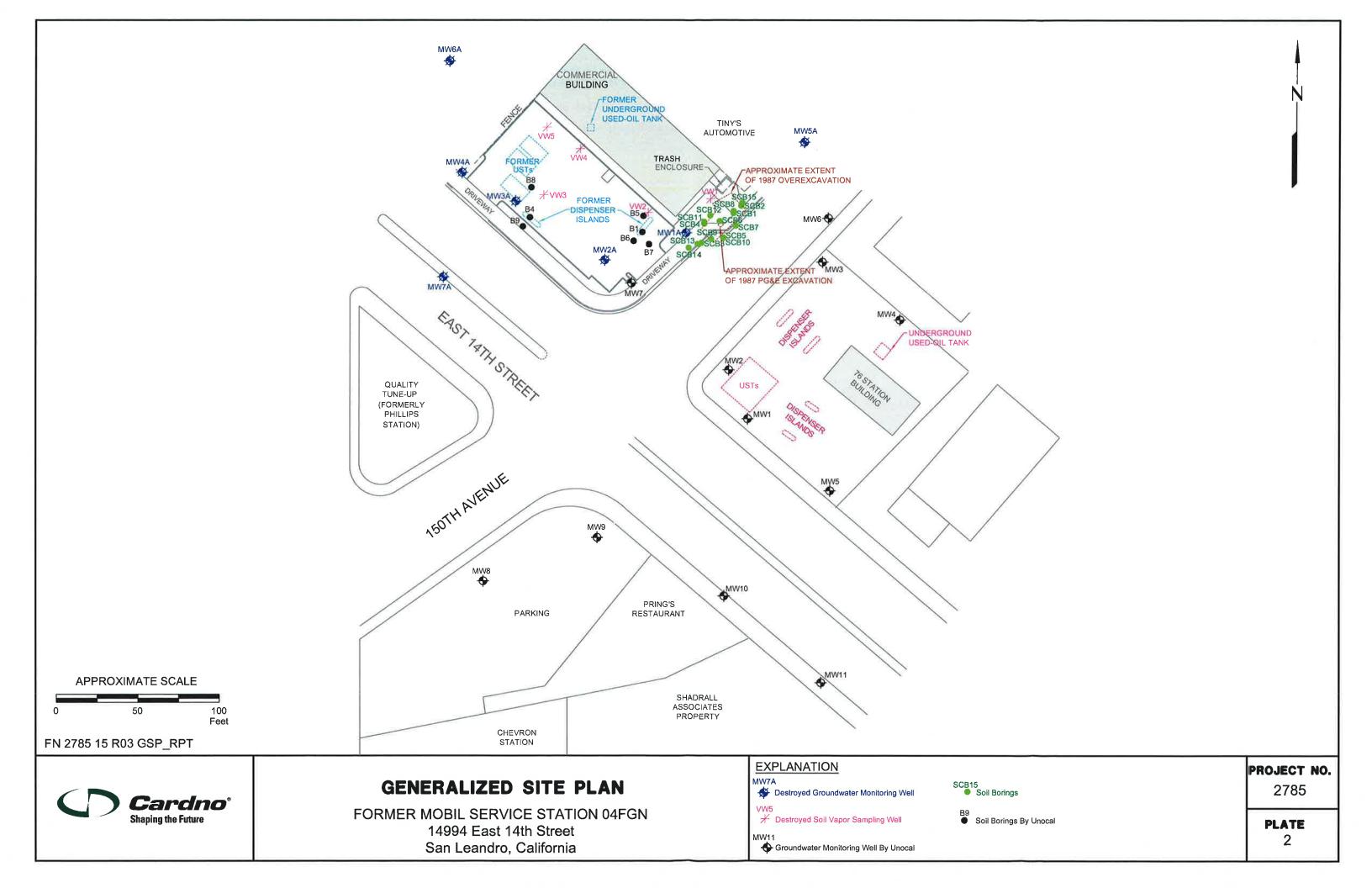
# SITE VICINITY MAP

FORMER MOBIL SERVICE STATION 04FGN 14994 East 14th Street San Leandro, California PROJECT NO.

2785

PLATE

1



# TABLE 1 WELL CONSTRUCTION DETAILS

Former Mobil Service Station 04FGN 14994 East 14th Street San Leandro, California (Page 1 of 1)

	Well	Well	TOC	Well	Boring	Well	Borehole	Casing	Screened	Slot	Filter Pack	
Well	Installation	Destruction	Elevation	Casing	Depth	Depth	Diameter	Diameter	interval	Size	Interval	Filter Pack
ID	Date	Date	(feet)	Material	(feet)	(feet)	(inches)	(inches)	(feet)	(inches)	(feet)	Material
Monitoring	y Wells											
MW1A	03/31/88	04/13/15	16.34	PVC	24	19	8	2	9-19	0.020	8-19	#3 Sand
MW2A	02/10/94	04/13/15	16.12	PVC	24	24	8	2	8.5-24	0.010	7-24	#2/12 Lonestar Sand
MW3A	02/10/94	04/13/15	16.42	PVC	23	23	8	2	8-23	0.010	6.5-23	#2/12 Lonestar Sand
MW4A	06/01/95	03/09/00	37.18	PVC	26.5	26.5	11	4	9-24	0.010	7-26.5	#2/12 Lonestar Sand
MW5A	06/01/95	03/09/00	35.91	PVC	26.5	26.5	11	4	9-24	0.010	7-26.5	#2/12 Lonestar Sand
MW6A	06/02/95	03/09/00	37.10	PVC	26.5	26.5	11	4	9-24	0.010	7-26.5	#2/12 Lonestar Sand
MW7A	07/28/95	03/09/00	37.39	PVC	26.5	26.5	11	4	9-24	0.010	7-26.5	#2/12 Lonestar Sand
Soil Vapor	Wells											
VW1	11/24/10	04/13/15		SS	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW2	11/23/10	04/13/15	-	SS	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW3	11/24/10	04/13/15	***	SS	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW4	11/23/10	04/13/15		SS	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW5	11/24/10	04/13/15		SS	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand

Notes: Wells MW1A through MW7A surveyed to a separate reference point than wells MW4A through MW7A.

TOC = Top of casing.

PVC = Polyvinyl chloride.

SS = Stainless steel.

= Not measured.

# APPENDIX A CORRESPONDENCE

# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



ALEX BRISCOE, Agency Director

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

March 18, 2015

Ms. Jennifer Sedlachek
(Sent via E-mail to:
jennifer.c.sedlachek@exxonmobile.com)
ExxonMobile Environmental Services Co.
4096 Piedmont Avenue #194
Oakland, CA 94611

Fuk and Ying Sit 20775 Scofield Drive Cupertino, CA 95014-2922

C&H Development Co. 43 Panoramic Way Walnut Creek, CA 94595 Attn.: Basil Christopoulos

C&H Development Co. 3744 Mt. Diablo Blvd., #101 Lafayette, CA 94549 Attn.: Susan Brown Jana Gluckman 2110 Stonehaven Drive Los Altos, CA 94024-7045

Wang Luk 20775 Scofield Drive Cupertino, CA 95014-2922

Bertram Kubo (former) Kubo Mobil Station 5772 Sellers Avenue Oakley, CA 94561

Subject: Well Destruction Authorization for Fuel Leak Case No. RO0000422 (GeoTracker Global ID T0600100912), Mobile #04-FN, 14994 East 14<sup>th</sup> Street, CA 94578

# Dear Responsible Parties:

The public comment period for the subject site ended on March 16, 2015. No comments were received by Alameda County Environmental Health (ACEH). You are free to proceed with the destruction of all wells associated with the site (groundwater, vapor, etc.), as requested in the January 5, 2015 letter from ACEH. As requested in the letter, please contact the Alameda County Public Works Agency to obtain well destruction permits. Following the well destruction, please provide ACEH a well destruction report according to the schedule outlined below. The well destruction report should document site activities, provide well destruction permit documentation, and documentation indicating that any remaining investigation, remediation, and well destruction derived waste have been removed from the site.

# **TECHNICAL REPORT REQUEST**

Please submit reports to Alameda County Environmental Health (Attention: Keith Nowell), and 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:

Responsible Parties RO0000422 March 18, 2015, Page 2

> May 28, 2015 - Monitoring Well Destruction and Waste Removal Activities - File to be named RO422\_WELL\_DCM\_R\_yyyymm-dd

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

Should you have any questions, please contact me at (510) 567--6764 or send me an electronic mail message at keith.nowell@acgov.org.

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.

Sincerely,

Digitally signed by Keith Nowell DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, emall=keith.nowell@acgov.org, c=US

Date: 2015.03.18 11:08:23 -07'00'

Keith Nowell, PG, CHG

Level Nowell

Hazardous Materials Specialist

Attachment 1 - Responsible Party (ies) Legal Requirements/Obligations and Enclosures:

Electronic Report Upload (ftp) Instructions

Rebekah Westrup, Cardno ERI, 601 North McDowell, Petaluma, CA 94954 (Sent via E-mail to: cc:

rebekah.westrup@cardno.com)

Dilan Roe, ACEH, (sent via e-mail to dilan.roe@acgov.org) Keith Nowell, ACEH, (sent via e-mail keith.nowell@acgov.org)

Geotracker, Electronic File

### 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). the requirements Please **SWRCB** website for more information on these visit (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 <a href="ftp://alcoftp1.acgov.org">ftp://alcoftp1.acgov.org</a>
    - (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.

# **APPENDIX B**

# FIELD PROTOCOL



# Cardno ERI Well Destruction Field Protocol

All destruction techniques and methods should be Environmental Protection Agency, American Society of Testing and Materials, and appropriate regulatory agency approved methodologies.

# **Preliminary Activities**

Prior to the onset of field activities at the site, Cardno ERI obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno ERI marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to well destruction, the well borehole is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

# **Overdrilling Well Destruction Procedures**

Each well to be destroyed is overdrilled to its respective total depth. The drill rig is equipped with a continuous flight hollow-stem auger of equal or greater size than the original well borehole. After the annular space backfill and casing(s) are removed from each well by overdrilling, the well borehole is backfilled by pumping the agency-specified sealing material through a tremie pipe placed within the augers to the total depth of the borehole. Each well borehole is backfilled from its respective total depth to within approximately 5 feet of surface grade. After the seal hardens, the remaining annular space of each well borehole is either backfilled with hydrated bentonite chips to approximately 2 feet below ground surface (bgs) followed by sand to the base of the pavement (or 6 inches below grade if no pavement is present), or backfilled with neat cement grout to just below surface grade. The destruction of each well is completed to surface grade with material that best matches existing surface conditions and meets local agency requirements.

# Pressure Grouting Well Destruction Procedures

Due to the potential close proximity of wells to buried utility lines, subsurface structures or surface structures, wells may be destroyed in place by pressure grouting. Prior to pressure grouting a well, the total depth of the well's casing is measured and compared to the well's original borelog and construction details to verify that obstructions are not present. If present, obstructions that would prevent adequate filling of the well must be removed before pressure grouting. An agency-specified sealing material is then pumped under pressure into the casing of the well. Pressure grouting must be continued until a sufficient amount of sealing material has been emplaced to ensure that the sand filter pack and well casing are filled to within 5 feet of surface grade. The amount of sealing material needed can be calculated using the following equation:

Sealant (cubic feet) = L \*  $({R_b}^2 + 2.1*{R_c}^2)$ Where L is the length of casing (feet) to be filled (total length minus 5 feet),  $R_b$  is the radius (feet) of the borehole and  $R_c$  is the radius (feet) of the casing.

After the seal hardens, the well casing is removed to a depth required by client or local agency. The open hole is either backfilled with 3 feet of hydrated bentonite chips followed by 1½ feet of sand to approximately 6 inches bgs, or backfilled with neat cement grout to just below surface grade. The remaining hole is completed with material that best matches existing surface conditions and meets local agency requirements.

# Soil Sampling Procedures

If drilling has not been recently conducted at the site, Cardno ERI collects a profile sample from the soil cuttings using a 6-inch long brass sleeve. The brass sleeve is sealed with Teflon<sup>TM</sup> tape, capped, placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory under proper chain-of-custody protocol.

# Air Monitoring Procedures

Cardno ERI performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated photo-ionization detector or lower explosive level meter.

# **Waste Treatment and Soil Disposal**

Soil cuttings generated from the well destruction are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

# **APPENDIX C**

# **PERMITS**

# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/24/2015 By jamesy

Permit Numbers: W2015-0248 to W2015-0251 Permits Valid from 04/13/2015 to 04/16/2015

Application Id:

1426874549896

Site Location:

14994 EAST 14TH STREET, SAN LEANDRO

(FORMER MOBIL STATION 04FGN,)

**Project Start Date:** 

04/13/2015

Completion Date: 04/16/2015

City of Project Site: San Leandro

**Assigned Inspector:** 

Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant:

Cardno ERI - Nadya Vicente

Phone: 707-280-7487

**Property Owner:** 

601 North McDowell Blvd, Petaluma, CA 95954 Jana Gluckman

Phone: --

Client:

Contact:

10943 Sweet Oak Street, Cupertino, CA 95014 Jennifer Sedlachek ExxonMobil Corp

Phone: 510-547-8196

4096 Piedmont Ave #194, Oakland, CA 94611 **David Daniels** 

Phone: 707-766-2000

Cell: --

\$1456.00

Receipt Number: WR2015-0133

**Total Amount Paid:** 

Total Due:

\$1456 00

**PAID IN FULL** 

Payer Name: Nadya M Vicente Paid By: MC

# **Works Requesting Permits:**

Well Destruction-Monitoring - 3 Wells

Driller: Cardno ERI - Lic #: 611383 - Method: press

Work Total: \$1191.00

### **Specifications**

Permit #	Issued Date	Expire Date	Owner Well	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth		Orig. Permit #	DWR#
			Iu		Diaiii.				r Citilit #	
W2015-	03/24/2015	07/12/2015	MW1A	8.00 in.	2.00 in.	5.00 ft	19.00 ft	3S/2W6C	No Records	No Records
0248										
W2015-	03/24/2015	07/12/2015	MW2A	8.00 in.	2.00 in.	5.00 ft	24.00 ft	3S/2W6C	No Records	No Records
0249										
W2015-	03/24/2015	07/12/2015	MW3A	8.00 in.	2.00 in.	5.00 ft	23.00 ft	3S/2W6C	No Records	No Records
0250										

# **Specific Work Permit Conditions**

- 1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
- 2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit

# Alameda County Public Works Agency - Water Resources Well Permit

number and site map.

- 4. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
- 5. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
- 6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 7. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 8. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Well Destruction-Vapor monitoring well - 5 Wells

Driller: Cardno ERI - Lic #: 611383 - Method: over Work Total: \$265.00

### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR#
W2015- 0251	03/24/2015	07/12/2015	VW1	4.00 in.	0.25 in.	4.00 ft	6.00 ft	3S/2W6C	W2010- 0858	No Records
W2015- 0251	03/24/2015	07/12/2015	VW2	4.00 in.	0.25 in.	4.00 ft	6.00 ft	3S/2W6C	W2010- 0858	No Records
W2015- 0251	03/24/2015	07/12/2015	VW3	4.00 in.	0.25 in.	4.00 ft	6.00 ft	3S/2W6C	W2010- 0858	No Records
W2015- 0251	03/24/2015	07/12/2015	VW4	4.00 in.	0.25 in.	4.00 ft	6.00 ft	3S/2W6C	W2010- 0858	No Records
W2015- 0251	03/24/2015	07/12/2015	VW5	4.00 in.	0.25 in.	4.00 ft	6.00 ft	3S/2W6C	W2010- 0858	No Records

# **Specific Work Permit Conditions**

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

# Alameda County Public Works Agency - Water Resources Well Permit

- 2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 6. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
- 7. Applicant shall contact assigned in spector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 8. Remove the Christy box or similar structure. Overdrill or clean out to original depth. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
- 9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 10. Vapor monitoring wells constructed with tubing shall be decomissioned by complete removal of tubing, grout seal, and fill material of sand or bentonite. Fill material may be removed by hand auger if material can be removed completely.

Vapor monitoring wells constructed with pvc pipe less than 2" shall be overdrilled to total depth.

Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).

# APPENDIX D WASTE DOCUMENTATION

# NON-HAZARDOUS WASTE

# **NON-HAZARDOUS WASTE MANIFEST**

Please	print or type (Form designed for use on elite (12 pitch) typewriter)			r		
	NON-HAZARDOUS WASTE MANIFEST  1. Generator's US EPA ID No.			Manifest Document No. 2 7 RS 20	150414	2. Page 1 / of /
	3. Generator's Name and Malling Address					
	EXXOUNCEL OF COST ATTN: SMES ADMIN	VISTRATOR , San Leandro,	11			
	2356 W. 180 TH ST + 1100 14994 E. 1424 St	, Jan Leaners,	C. M			
	TORRANCE, CA 90504 4. Generator's Phone ( 310 ) 212-2938 ( FM 04-	FC, N				
					207 700	2000
	5. Transporter 1 Company Name	US EPA ID Number		A. State Transp		2000
	CARDNO			B. Transporter	1 Phone	
	7. Transporter 2 Company Name 8.	US EPA ID Number		C. State Trans	porter's ID	
				D. Transporter	2 Phone	
	Designated Facility Name and Site Address	US EPA ID Number		E. State Facilit	√'s ID	
	INSTRATING.					
	1105 C. AIRPORT BOAD			F. Facility's Ph	ODG	
	RIO VISTA, CA 94571			F. Facility 8 F II	530-753-1	829
				L	40	14
	11. WASTE DESCRIPTION			ntainers	13. Total	14. Unit Wt /Vol.
. (			No.	Туре	Quantity	Wt /Vol.
-	a.					
	NON-HAZARDOUS PURGE WAT	TER	1	Trailer	30	3/4
			'	Challen	00	
	b.					
GE	<b>.</b>					1
йl				1 1		
E R						
R	c.					
4						
6						
R	d.					
			1			
n i						
	G. Additional Descriptions for Materials Listed Above			H. Handling C	odes for Wastes Listed Above	e
	C. Additional Educations for indicated Education					
	15. Special Handling Instructions and Additional Information					
			1 /5			
3			COLUMN TO CA			
	<ol> <li>GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipme in proper condition for transport. The materials described on this manifest are not a</li> </ol>	ent are fully and accurately described subject to federal hazardous waste re	and are in egulations.	all respects		
	In proper container to transport the	112.0			_	
		*				Date
1	Printed/Typed Name On behals 63	Signature		22	Mon	th Day Yea
	Frankst Azar R Mandagov	Y	1		04	14 13
Ŧ	17, Transporter 1 Acknowledgement of Receipt of Materials (					Date
Ř		Signature		- 1	Mon	
↑日本区の中の日十世代	Printed/Typed Name	Signature	5	mother		
S	Jarin Finhy	Vinn	6	110		Date
ğ	18. Transporter 2 Acknowledgement of Receipt of Materials					
ΪI	Printed/Typed Name	Signature			Mor	th Day Yea
Ā						
	19. Discrepancy Indication Space					
F						
A						
ĭ	20. Facility Owner or Operator; Certification of receipt of the waste materials covered	by this manifest, except as noted in i	tern 19.			
L	20.1 doubty Owner of Operator, Oerthication of Toochi of the masternate covered	-,				Date
1		Signature	_	Λ	- Mor	
Ţ	Printed/Typed Name	Signature		1. 1	L	
Y	MICHAEL WHITEHEAD		<u>h</u>			1-11

