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By Alameda County Environmental Health at 3:17 pm, Apr 03, 2014

Atlantic Richfield Company

Chuck Carmel Project Manager

PO Box 1257 San Ramon, CA 94583 Phone: (925) 275-3803 Fax: (925) 275-3815 E-Mail: charles.carmel@bp.com

March 21, 2014

Re: Well Abandonment/Destruction Report

Atlantic Richfield Company Station #6113

785 East Stanley Boulevard, Livermore, California

ACEH Case #RO0000393

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,

Chuck Carmel Project Manager

Attachment





WELL ABANDONMENT/DESTRUCTION REPORT Atlantic Richfield Company Station #6113 785 East Stanley Boulevard Livermore, Alameda County, California

Prepared for:

Mr. Chuck Carmel Atlantic Richfield Company P.O. Box 1257 San Ramon, CA 94583

Prepared by:

Broadbent & Associates, Inc. 1370 Ridgewood Drive, Suite 5 Chico, California 95973 (530) 566-1400

March 21, 2014



March 21, 2014

Project No. 06-82-637

Atlantic Richfield Company P.O. Box 1257 San Ramon, CA 94583 Submitted via ENFOS

Attn.: Mr. Chuck Carmel

Re: Well Abandonment/Destruction Report, Atlantic Richfield Company Station No. 6113,

785 East Stanley Boulevard, Livermore, Alameda County, California; ACEH Case No. RO0000393; GeoTracker Global ID # T0600100111

Dear Mr. Carmel:

Broadbent & Associates, Inc. (Broadbent) is pleased to submit this *Well Abandonment/Destruction Report* for Atlantic Richfield Company Station No. 6113 located at 785 E. Stanley Boulevard, Livermore, California (Site). This report documents the permanent decommissioning of seven groundwater monitor and three vapor extraction wells as recommended in the Alameda County Environmental Health's request (Appendix A) to complete the case closure activities for the Site.

Should you have questions or require additional information, please do not hesitate to contact us at (530) 566-1400.

ROBERT H

No. 561

Sincerely,

BROADBENT & ASSOCIATES, INC.

Jason Duda Senior Scientist

Robert H. Miller, P.G., C.HG.

Principal Hydrogeologist

Enclosures

cc: Mr. Jerry Wickham, Alameda County Environmental Health (Submitted via ACEH ftp

Site)

Electronic copy uploaded to GeoTracker

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DRAWINGS

Drawing 1 Site Location Map

Drawing 2 Site Map

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Appendix A Regulatory Correspondence

Appendix B Well Destruction Permit

WELL ABANDONMENT/DESTRUCTION REPORT

Atlantic Richfield Company Station No. 6113 785 E. Stanley Blvd, Livermore, CA ACEH Case #RO0000393

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM (a BP affiliated company) Broadbent & Associates, Inc. (Broadbent) has prepared this *Well Abandonment/Destruction Report* documenting case closure activities at Atlantic Richfield Company Station No. 6113, located at 785 E. Stanley Blvd, Livermore, California (Site). Case Closure was recommended by Alameda County Environmental Health (ACEH) in their January 22, 2014 *Well Decommissioning* letter. A copy of this letter is provided in Appendix A. This report includes discussions of field activities performed and recommendations.

2.0 SITE BACKGROUND

The Site is an active ARCO-brand gasoline retail station that consists of an AM/PM station building, two underground storage tanks (USTs), and three dispenser islands with a total of six dispensers. The Site is located on the southwestern corner of Murrieta Avenue and East Stanley Boulevard in Livermore, California (Drawing 1). The land use in the immediate vicinity of the Site is mixed commercial and residential. The Site surface area is predominantly covered with concrete and asphalt.

3.0 FIELD ACTIVITIES PERFORMED

Between March 3 and 7, 2014, Broadbent oversaw National EWP of Richmond, California, pressure grout monitor wells MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, and RMW-13, and vapor extraction wells VW-1, VW-2, and VW-4. The top two feet of well casing was also removed from each well following completion of pressure grouting with the exception of offsite well MW-12, which was left intact due to its proximity to several underground utilities. When possible, the well vaults associated with each well were also removed during destruction activities, including several remedial junction boxes, and completed at the surface to match existing surroundings. A Site Map depicting abandoned well locations is provided as Drawing 2.

3.1 Preliminary Field Activities

Prior to initiating field activities, Broadbent obtained the necessary well destruction permits from Zone 7 Water Agency (Zone 7, Appendix B), prepared a site health and safety plan specific to the work scope, and cleared the Site for subsurface utilities. The utility clearance included notifying Underground Service Alert of the work a minimum of 48 hours prior to initiating well destruction/abandonment activities and securing the services of Ground Penetrating Radar Systems, Inc. (GPRS) of San Jose, California, a private utility locating company, to confirm the absence of underground utilities.

3.2 Well Destruction Activities

Between March 3 and 7, 2014, monitor wells MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, and RMW-13, and vapor extraction wells VW-1, VW-2, and VW-4 were destroyed by pressure grouting. Following completion of pressure grouting, the top two feet of well casing was removed from each well, with the exception of well MW-12 as previously discussed. Well boxes for each well were removed, with the exception of MW-12, and completed at the surface to match the existing surroundings. A total of seven remedial junction boxes containing unused piping for potential future remediation efforts were also either removed or left in place due to the proximity of underground utilities, and filled with concrete to match the surrounding surface onsite. The horizontal remedial piping was plugged prior to the introduction of concrete within each junction box but the remaining piping was left in place onsite. Each well was destroyed in accordance with Zone 7's guidelines.

3.3 Well Destruction-Derived Residuals Management

Residual soil, concrete and well debris were temporarily accumulated onsite in 55-gallon, DOT-approved drums, pending characterization for proper management. Broadbent coordinated the removal and transportation of surplus materials with Belshire Environmental Services, Inc. to an appropriate California-regulated facility.

4.0 CONCLUSIONS & RECOMMENDATIONS

Monitor and vapor extraction wells were abandoned in general accordance with Zone 7's monitor well destruction recommendations. Well abandonment work activities complete the Site case closure process. No further actions are recommended. We anticipate that following submittal of this report, Atlantic Richfield Company will be issued a "Remedial Action Completion Certificate." Atlantic Richfield Company is eagerly awaiting receipt of this documentation.

5.0 LIMITATIONS

This document has been prepared for the exclusive use of Atlantic Richfield Company. The findings presented in this report are based upon the observations of Broadbent field personnel. Services were performed in accordance with the generally accepted standard of practice at the time this report was written. No warranty, expressed or implied, is intended.

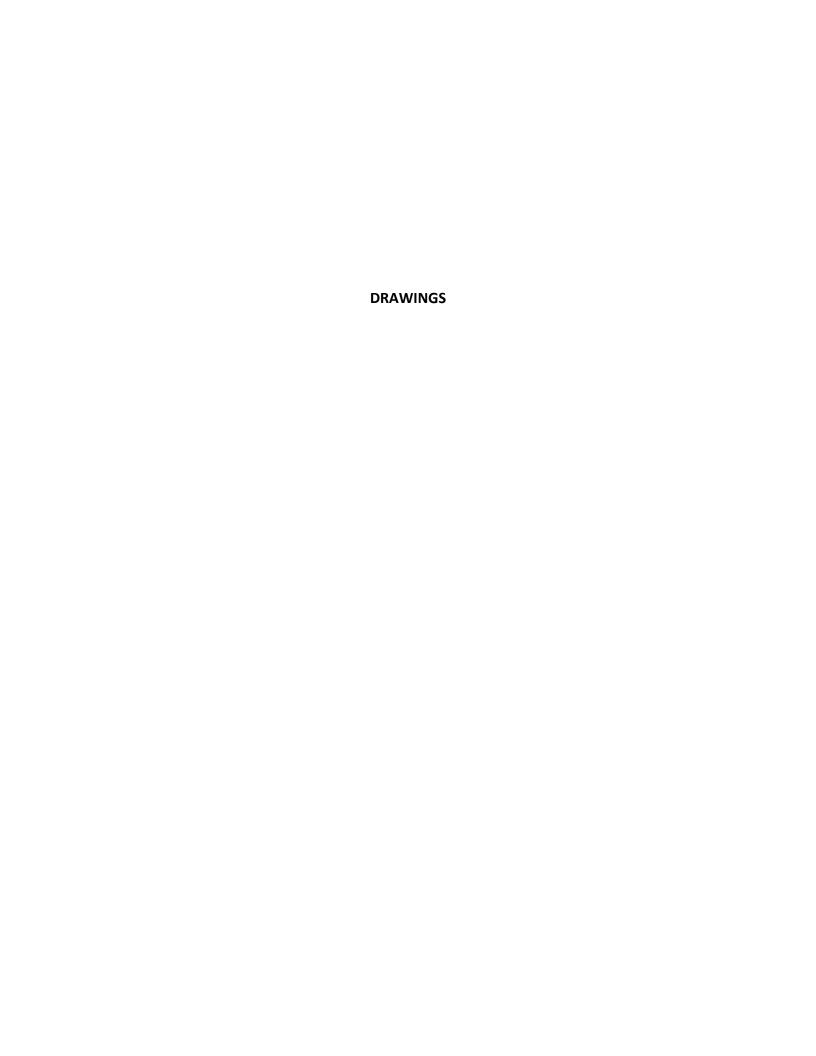
Well Abandonment/Destruction Report Atlantic Richfield Company Station No.6113 March 21, 2014 Page 3

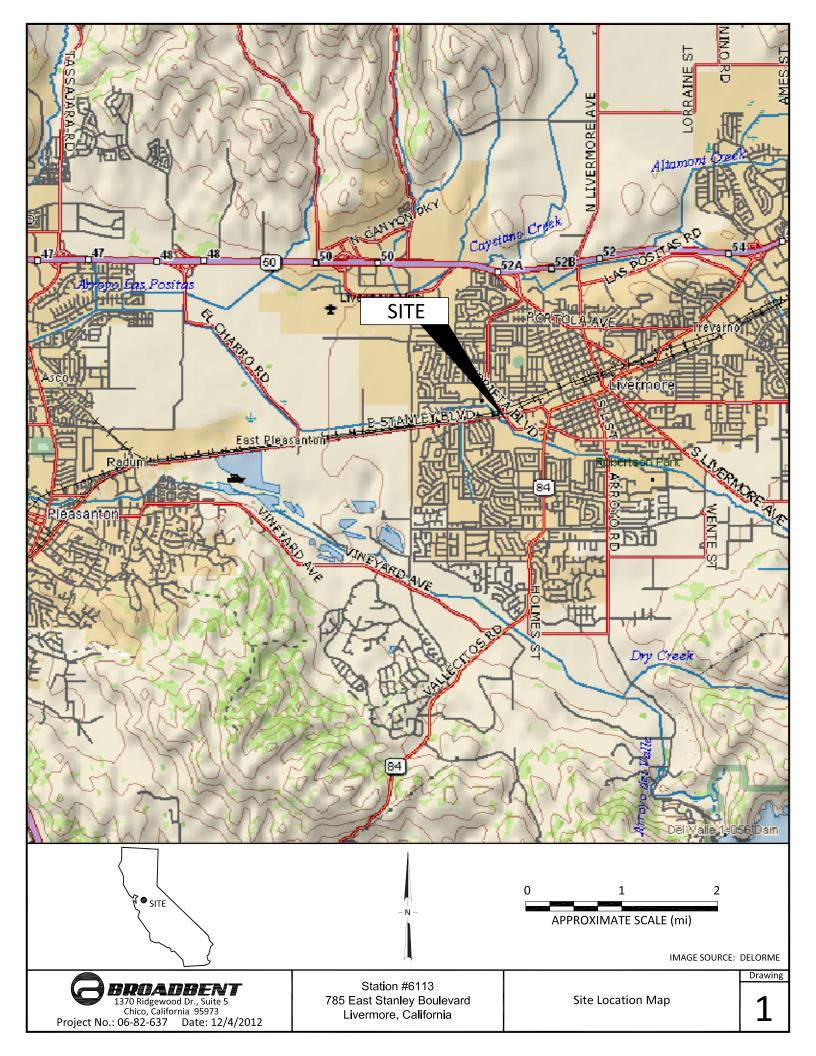
ATTACHMENTS:

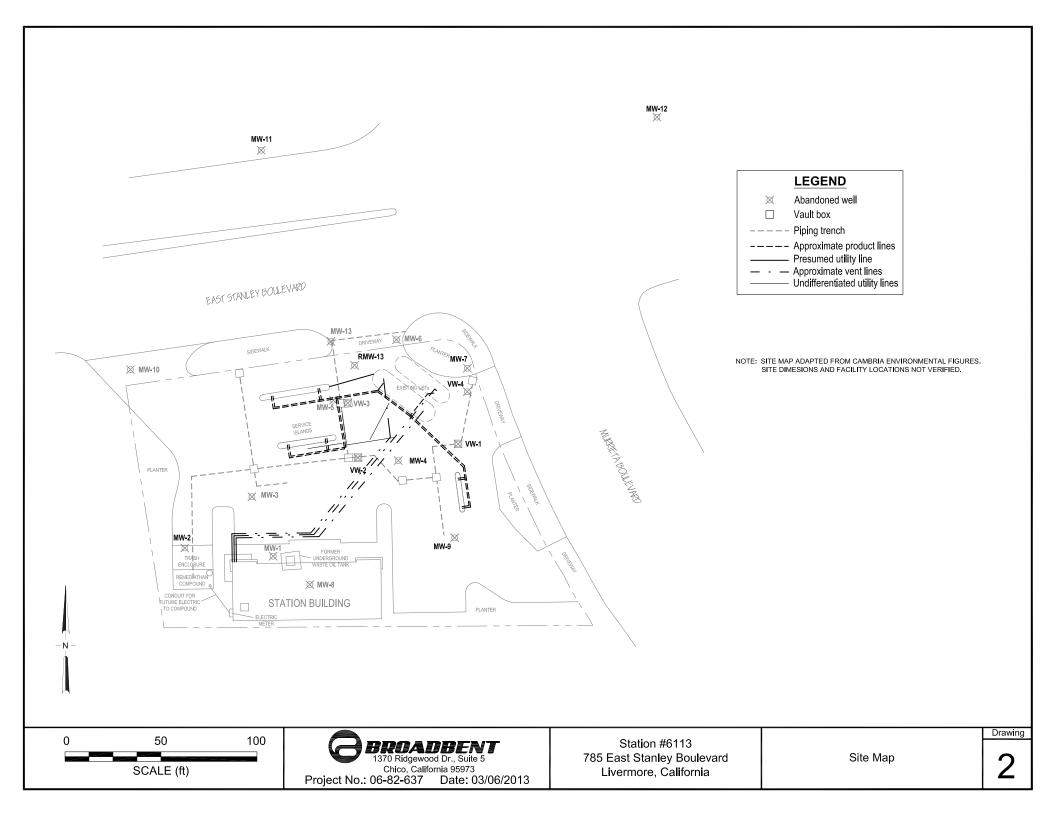
Drawing 1: Site Location Map

Drawing 2: Well Abandonment Map

Appendix A. Regulatory Correspondence Appendix B Well Destruction Permit







APPENDIX A

REGULATORY CORRESPONDENCE

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



ALEX BRISCOE, Director

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

January 22, 2014

Charles Carmel
Atlantic Richfield Company
PO Box 1257
San Ramon, CA 94583
(Sent via E-mail to: charles.carmel@bp.com)

Omid Enterprises, Inc. c/o Abbas Farahbakhsh 8110 Blackwood Lane Roseville, CA 95747-9745

Subject: Well Decommissioning for Fuel Leak Case No. RO0000393 and GeoTracker Global ID T0600100111, ARCO #06113, 785 East Stanley Boulevard, Livermore, CA 94550

Dear Mr. Carmel and Mr. Farahbakhsh:

Alameda County Environmental Health (ACEH) have reviewed the fuel leak case file and case closure summary for the above-referenced site and concur that no further action related to the underground storage tank fuel release is required at this time. No comments were received on the proposed case closure during a public comment period conducted between November 12, 2013 and January 13, 2014. Prior to issuance of remedial action completion certification and case closure, we request that the monitoring wells at the site be properly decommissioned, should the monitoring wells have no further use at the site. Please decommission the monitoring wells and provide documentation of the well decommissioning to this office no later than May 6, 2014. Remedial action completion certification will be issued following receipt of the documentation.

Well destruction permits may be obtained from the Zone 7 Water Agency (http://www.zone7water.com). If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

May 6, 2014 – Well Decommissioning Report
 File to be named: WELL_DCM_R_yyyy-mm-dd RO393

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.

Responsible Parties RO0000393 January 22, 2014 Page 2

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org. Case files can be reviewed online at the following website: http://www.acgov.org/aceh/index.htm. As 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,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Danielle Stefani, Livermore Pleasanton Fire Department, 3560 Nevada St, Pleasanton, CA 94566 (Sent via E-mail to: <u>dstefani@lpfire.org</u>)

Colleen Winey (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551 (Sent via E-mail to: cwiney@zone7water.com)

Jason Duda, Broadbent & Associates, Inc., 1324 Mangrove Avenue, Suite 212, Chico, CA 95926 (Sent via E-mail to: jduda @broadbentinc.com)

Matt Herrick, Broadbent & Associates, Inc., 1324 Mangrove Avenue, Suite 212, Chico, CA 95926 (Sent via E-mail to: mherrick@broadbentinc.com)

Jerry Wickham, ACEH (Sent via E-mail to: jerry.wickham@acgov.org)

GeoTracker, eFile

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. (https://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.
- <u>Do not</u> 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.
 <u>Documents with password protection will not</u> 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.

APPENDIX B

WELL DESTRUCTION PERMIT

TO POST OF THE POS

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306 E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT BP Station #6113	PERMIT NUMBER 2014031
	WELL NUMBER see attached
785 E. Stanley Blvd., Livermore	APN99-0256-005-02
Coordinates Sourceft. Accuracy∀ft. LAT:ft. LONG:ft. APN	PERMIT CONDITIONS (Circled Permit Requirements Apply)
CLIENT A Hantic Richfield Company Address P.D. Box 1251 Phone (125) 275-380 City San Ramen Zip 94583 APPLICANT TASON DULY Email Journal Description Company Email Journal Description Company Email Journal Description Company Email Description Company Emai	A. GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller. 3. Permit is void if project not begun within 90 days of approval date. 4. Notify Zone 7 at least 24 hours before the start of work.
Address 1370 Ridgewood Or., Gtc 5 Phone (530) 566-1400 City Ch. (0 Zip 9593 TYPE OF PROJECT: Well Construction Geotechnical Investigation	B. WATER SUPPLY WELLS 1. Minimum surface seal diameter is four inches greater than the well casing diameter. 2. Minimum seal depth is 50 feet for municipal and industrial wells
Well Destruction Cathodic Protection PROPOSED WELL USE: Domestic Municipal Industrial Dewatering Contamination Investigation Other I O Well 5 Irrigation Remediation Groundwater Monitoring Other	or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. 3. Grout placed by tremie. 4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements. 5. A sample port is required on the discharge pipe near the wellhead.
DRILLING METHOD: Mud Rotary Air Rotary Hollow Stem Auger Cable Tool Direct Push Other DRILLING COMPANY National EWP DRILLER'S LICENSE NO 953646	C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. 3. Grout placed by tremie.
WELL SPECIFICATIONS: Drill Hole Diameter in. Maximum Casing Diameter in. Depthft. Surface Seal Depth ft. Number	D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
SOIL BORINGS: Number of Borings Maximum Hole Diameter in. Depth ft.	CATHODIC. Fill hole above anode zone with concrete placed by tremie. WELL DESTRUCTION. See attached.
ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE 1 hereby agree to comply with all requirements of this permit and Alameda	SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.
County Ordinance No. 73-68. APPLICANT'S SIGNATURE Date 2-10-14	Approved Wyman Hong Date 2/25/14

ATTACH SITE PLAN OR SKETCH

Revised: January 4, 2010

Zone 7 Water Resources Engineering Groundwater Protection Ordinance

785 E. Stanley Boulevard
Livermore

Wells 35/2E-18A4 (MW-2), 35/2E-18A6 (MW-4), 35/2E-18A9 (MW-7), 35/2E-18A11 (MW-9), 35/2E-18A12 (VW-1), 35/2E-18A13 (VW-2), 35/2E-18A15 (MW-11), 35/2E-18A16 (MW-12), 35/2E-18A18 (VW-4) and 35/2E-18A21 (RMW-13)

Permit 2014031

<u>Destruction Requirements:</u>

- 1. Remove from the well any pump, appurtenances, debris, or other materials.
- 2. Sound the well as deeply as practicable and record for your report.
- 3. Fill casing with neat cement or cement grout sealing material to two feet below the finished grade and pressurize to 25 psi and maintain for 5 minutes, forcing the sealing material through the existing perforations and into the surrounding formation.
- 4. Release the pressure and refill the empty portion of the casing with grouting material allowing it to spill over the top of the casing to form a cap.
- 5. Cut and remove any casing(s) to two feet below the finished grade or original ground, whichever is the lower elevation (optional).
- 6. After seal has set, backfill the remaining hole with compacted material.

