#### **RECEIVED**



Thomas K. Bauhs Project Manager

Enclosure: Report

2:45 pm, Dec 20, 2007

Alameda County Environmental Health Thomas K. Bauhs Project Manager Retail and Terminal Business Unit Chevron Environmental Management Company 6001 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 842-8898 Fax (925) 842-8370

(date)
Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577
Re: Chevron Facility #
Address:
I have reviewed the attached report titled and dated
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 Conestoga Rovers & Associates, upon whose assistance and advice I have relied.
This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.
I declare under penalty of perjury that the foregoing is true and correct.
Sincerely,



2000 Opportunity Dr, Suite 110, Roseville, California 95678 Telephone: 916-677-3407, ext. 100 Facsimile: 916-677-3687 www.CRAworld.com

December 14, 2007

Mr. Jerry Wickham Alameda County Health Care Services Agency (ACHCSA) Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California, 94502

Re:

**Well Destruction Report** 

Former Chevron Service Station 9-1924 4904 Southfront Road Livermore, California

#### Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) has prepared this *Well Destruction Report* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above (Figure 1). CRA properly destroyed all site monitoring wells in response to a case closure letter issued by the ACHCSA, dated October 26, 2006 (Attachment A).

On December 6, 2007, CRA staff scientist Chris Benedict and project geologist Dan Glaze observed Gregg Drilling and Testing (C57# 485165) properly destroy remediation well RW-1 (figure 2).

Alameda County Flood Control and Water Conservation District Zone #7 approved pressure grouting of the 12-inch diameter remediation well. The well was grouted in place with Portland I/II cement. The well vault doors were removed and the well vault was finished to grade with concrete. Table A below presents the well destructions and methods of all site groundwater monitoring wells.

Table A a Well Destruction Methods						
Well I.D.	Destruction Date	Destruction Method	Report Reference	Comments		
C-1	4/2000	Unknown	Delta, <i>Monitoring Well</i> Destruction Results Report,  January 23, 2002	Unable to Locate- Presumed destroyed during April 2000 station up-grades.		
C-2	4/2000	Unknown	Delta, Workplan for Monitoring Well Destruction, April 5, 2001	Destroyed during April 2000 station up-grades.		
C-3	4/2000	Unknown	Delta, Workplan for Monitoring Well Destruction, April 5, 2001	Destroyed during April 2000 station up-grades.		
C-4	1985	Unknown	Delta, Workplan for Monitoring Well Destruction, April 5, 2001	Destroyed during UST removal activities 1985		



C-5	11/2001	Drill Out	Delta, <i>Monitoring Well</i> Destruction Results Report, January 23, 2002	
C-6	4/2000	Unknown	Delta, Workplan for Monitoring Well Destruction, April 5, 2001	Destroyed during April 2000 station up-grades.
C-7	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 21.89'
C-8	11/2001	Pressure Grout	Delta, Monitoring Well Destruction Results Report, January 23, 2002	
C-9	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 23.06'
C-10	11/2001	Drill Out	Delta, Monitoring Well Destruction Results Report, January 23, 2002	
C-11	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 19.04'
C-12	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 18.39'
C-13	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 21.35'
C-14	11/2001	Drill Out	Delta, <i>Monitoring Well</i> Destruction Results Report, January 23, 2002	
C-15	4/2000	Unknown	Delta, Workplan for Monitoring Well Destruction, April 5, 2001	Destroyed during April 2000 station up-grades.
C-16	4/2000	Unknown		Unable to Locate- Presumed destroyed during street construction activities.
C-17	11/2001	Drill Out	Delta, <i>Monitoring Well</i> Destruction Results Report, January 23, 2002	
C-18	4/2000	Unknown		Unable to Locate- Presumed destroyed during street construction activities.
C-19	11/2001	Drill Out	Delta, <i>Monitoring Well</i> Destruction Results Report, January 23, 2002	
C-20	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 24.05'
C-21	12/11/2006	Pressure Grout	Cambria	Total Well Depth: 25.03'
RW-1	12/06/2007	Pressure Grout	CRA, Well Destruction Report, December 11 <sup>th</sup> , 2007	Total Well Depth: 32'

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A Department of Water Resources (DWR) Well Completion Report for destruction of RW-1 was submitted to the DWR on December 14<sup>th</sup>, 2007.

No soil or groundwater investigation-derived waste was generated during this event.

SSIONAL GEO

No. 7820

CRA's Standard Operating Procedures for Monitoring Well Destruction is presented as Attachment B. A copy of the well destruction permit from Alameda County Flood Control and Water Conservation District Zone #7 is presented as Attachment C.

As stated in the ACHCSA June 28, 2007 letter, CRA looks forward to the issuance of the remedial action completion certificate.

Please call Brian Carey at (916) 677-3407, ext. 106 or Chris Benedict at (916) 677-3407 ext. 125 if you have any questions or comments.

Sincerely,

Conestoga-Rovers & Associates

Chris Benedict Staff Scientist

RY

Brian Carey, P.G. # 7820 Senior Project Geologist

Figures:

1 - Vicinity Map

2 – Site Plan

Attachments:

A – Regulatory Correspondence

B – Standard Operating Procedures

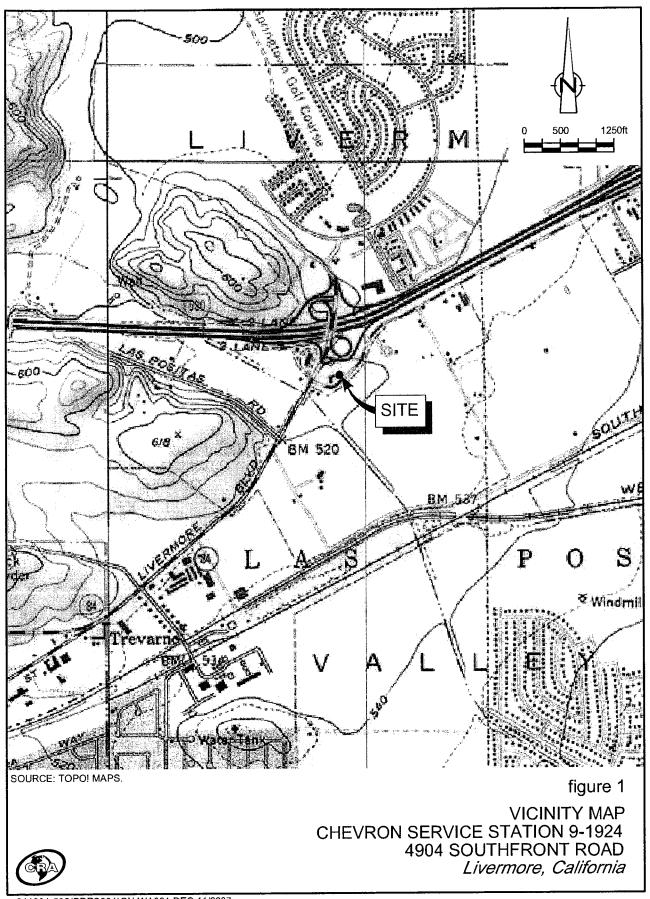
C – Permits

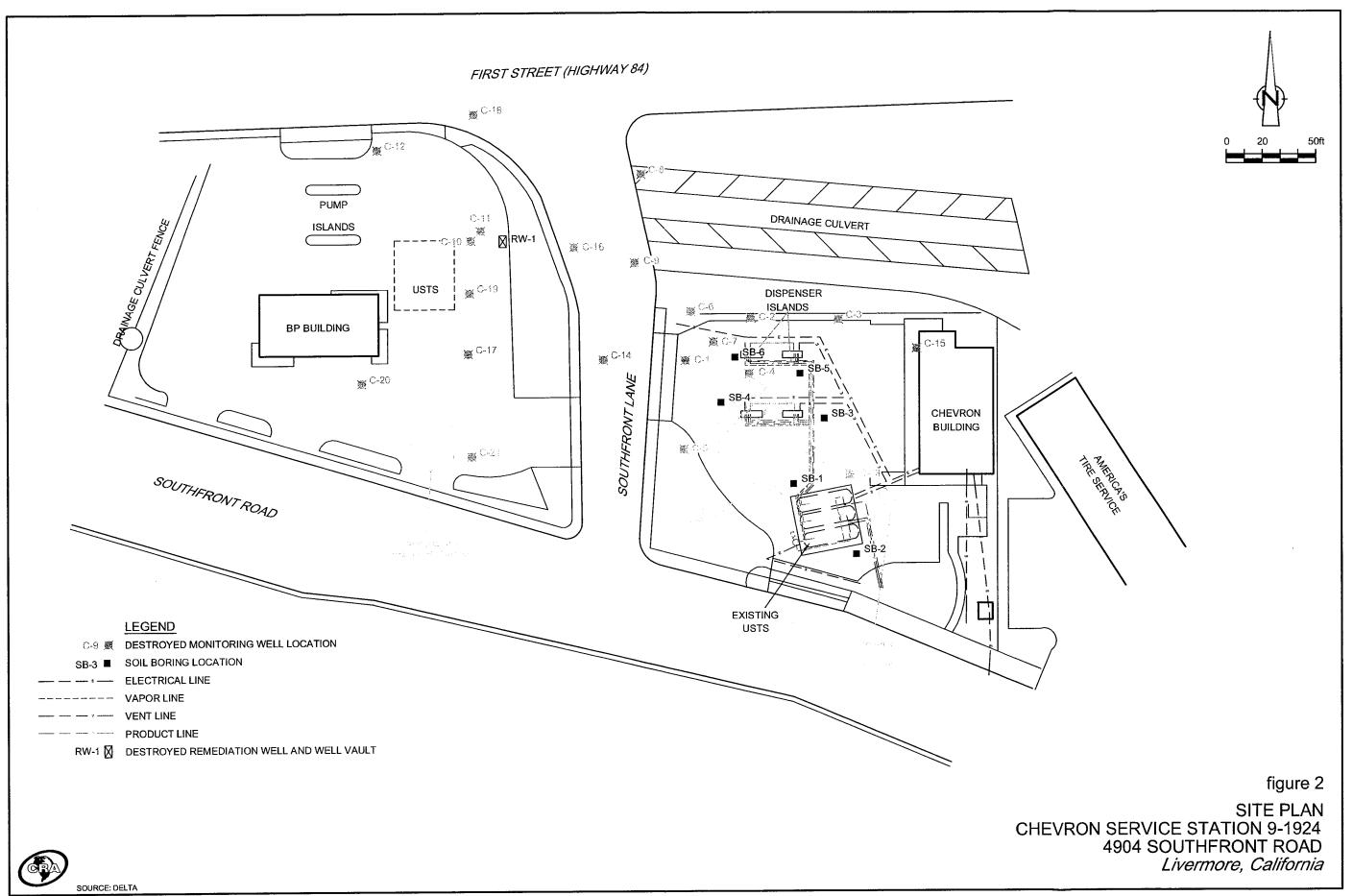
cc: Ms. Stacie Hartung-Frerichs, Chevron Environmental Management Company, P.O. Box 6012, San Ramon, CA 94583

Mr. Wyman Hong, Alameda County Flood Control and Water Conservation District Zone #7, 100 North Canyons Parkway, Livermore, CA 94551

Conestoga-Rovers & Associates file copy

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#### **ATTACHMENT A**

**Regulatory Correspondence** 

## ALAMEDA COUNTY HEALTH CARE SERVICES

**AGENCY** 





DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

(510) 567-6700 FAX (510) 337-9335

October 26, 2006

Mr. Dana Thurman Chevron Environmental Management Company 6001 Bollinger Canyon Road P.O. Box 6012 San Ramon, CA 94583-2324

Subject: Fuel Leak Case No. RO0000477, Chevron #9-1924, 4904 Southfront Road, Pleasanton, CA – Request for Well Decommissioning

Dear Mr. Thurman:

Alameda County Environmental Health (ACEH) and California Regional Water Quality Control Board staff 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. Prior to issuance of a remedial action completion certificate, the monitoring wells installed at the site and off-site are to be properly destroyed, should the monitoring wells have no further use. Please decommission the monitoring wells and provide documentation of the well decommissioning to this office. A remedial action completion certificate will be issued following receipt of the documentation.

Well destruction permits may be obtained from the Zone 7 Water Agency (www.Zone7water.com). If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham

Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Colleen Winey, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway Livermore, CA 94551

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street Pleasanton, CA 94566

David Herzog, Cambria Environmental Technology, Inc., 2000 Opportunity Drive, Suite 110, Roseville, CA 95678

Donna Drogos, ACEH Jerry Wickham, ACEH File

## ALAMEDA COUNTY HEALTH CARE SERVICES

**AGENCY** 



DAVID J. KEARS, Agency Director

June 28, 2007

Thomas Bauhs
Chevron Environmental Management Company
6001 Bollinger Canyon Road
P.O. Box 6012, Room K2204
San Ramon, CA 94583-2324

Milton and Violet Price Trust C/o Jeanne R. Price 225 Bush Street San Francisco, CA 94104-4215 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700



Subject: Fuel Leak Case No. RO0000477 and Geotracker Global ID T0600100341, Chevron #9-1924, 4904 Southfront Road, Livermore, CA 94550

Dear Thomas Bauhs and Jeanne Price:

In correspondence dated January 17, 2007, Alameda County Environmental Health (ACEH) requested that you make reasonable efforts to attempt to locate and decommission four monitoring wells that previously could not be located and were presumed destroyed. As described in recently submitted correspondence dated June 5, 2007, Conestoga-Rovers and Associates (CRA), on behalf of Chevron Management Company, conducted well search activities on March 17, 2007. Well RW-1 was located in a service vault but wells C-1, C-16, and C-18 could not be located visually or with a metal detector. CRA indicates in the June 5, 2007 correspondence that every reasonable effort has been made to locate wells C-1, C-16, and C-18 and the wells will not likely be located without extensive excavation of the roadway and service station. CRA also indicates that wells C-16 and C-18 were apparently destroyed during street construction and well C-1 was destroyed during station upgrades in April 2000.

Based upon the information presented, we concur that reasonable efforts have been made to locate wells C-1, C-16, and C-18 and no further efforts are required to locate these wells. Therefore, please properly destroy well RW-1 and provide documentation of the well decommissioning to this office. A remedial action completion certificate will be issued following receipt of the documentation.

If you have any questions, please call me at (510) 567-6791.

Sincerely.

leny Wickham

Hazardous Materials Specialist

Thomas Bauhs Milton and Violet Price Trust RO0000477 June 28, 2007 Page 2

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Wyman Hong, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway Livermore, CA 94551

Colleen Winey, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway Livermore, CA 94551

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street Pleasanton, CA 94566

David Herzog, Cambria Environmental Technology, Inc., 2000 Opportunity Drive, Suite 110, Roseville, CA 95678

Donna Drogos, ACEH Jerry Wickham, ACEH File



#### **ATTACHMENT B**

**Standard Operating Procedures** 

### Conestoga-Rovers & Associates

### STANDARD FIELD PROCEDURES FOR MONITORING WELL DESTRUCTION

This document presents standard field methods for properly destroying groundwater monitoring wells. The objective of well destruction is to destroy wells in a manner that is protective of potential water resources. The two procedures most commonly used are pressure grouting and drilling out the well. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

#### **Pressure Grouting**

Pressure grouting consists of injecting neat Portland cement through a tremie pipe under pressure to the bottom of the well. The cement is composed of about five gallons of water to a 94 pound. sack of Portland I/II Cement. Once the well casing is full of grout, it is pressurized for five minutes by applying a pressure of 25 pounds per square inch (psi) with a grout pump. The well casing can also be pressurized by extending the well casing to the appropriate height and filling it with grout. In either case, the additional pressure allows the grout to be forced into the sand pack. After grouting the sand pack and casing, the well vault is removed and the area resurfaced or backfilled as required.

#### Well Drill Out

When well drill out is required, the well location is cleared for subsurface utilities and a hollow-stem auger (or other appropriate) drilling rig is used to drill out the well casing and filter pack materials. First, drill rods are placed down the well and used to guide the augers as they drill out the well. A guide auger is used in place of the drill rods if feasible. Once the well is drilled out, the boring is filled with Portland cement injected through the augers or a tremie pipe under pressure to the bottom of the boring. The well vault is removed and the area resurfaced or backfilled as required.

I:\misc\Templates\SOPs\Well Destruction SOP.doc



#### **ATTACHMENT C**

**Permits** 

# ZONE

#### **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 4707 15+ 5t.  Livermore, CA	PERMIT NUMBER 27186  WELL NUMBER 3S/2E-3K7 (RW-1)  APN 099-0040-013-34			
California Coordinates Source ft. Accuracy• ft.  CCN ft. CCE ft.  APN	PERMIT CONDITIONS (Circled Permit Requirements Apply)			
CLIENT Name Churran F. M.C. Address Po Dow (2004) Phone 925-642-8548 City San Ramen Zip 94543  APPLICANT Name Churboga-Ramers & Association Email Churboga-Ramers & Association Fax 516-677-3667  Address 2000 poodwith Dr. Stylio Phone 916-677-3167	A. GENERAL     A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.     Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.     Permit is void if project not begun within 90 days of approval date.			
Address Tool Opportunity 0.5 St. 110 Phone Qil. (171-2)167  City Construction Zip 15 L 7 8  TYPE OF PROJECT:  Well Construction Contamination Investigation Cathedic Protection Other  PROPOSED WELL USE:  Domestic Irrigation Remediation Industrial Groundwater Monitoring Industrial Other Contamination Investigation Cathedic Protection Other Cathedic Protect	<ol> <li>WATER SUPPLY WELLS</li> <li>Minimum surface seal diameter is four inches greater than the well casing diameter.</li> <li>Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.</li> <li>Grout placed by tremie.</li> <li>An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.</li> <li>A sample port is required on the discharge pipe near the wellhead.</li> </ol>			
DRILLING METHOD:  Mud Rotary Air Rotary Hollow Stem Auger Cable Tool Direct Push Other Pressure Grow  DRILLING COMPANY Green Drilly and Testing  DRILLER'S LICENSE NO. 445165	<ul> <li>C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS</li> <li>1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.</li> <li>2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.</li> <li>3. Grout placed by tremie.</li> </ul>			
WELL SPECIFICATIONS:  Drill Hole Diameterin. Maximum  Casing Diameterin. Depthft.  Surface Seal Depthft. 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	G. 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.			
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.  APPLICANT'S SIGNATURE Chris Benedict	Approved Wyman Hong Date 10/26/07			
ATTACH SITE PLAN OR SKETCH				

# Zone 7 Water Resources Engineering Groundwater Protection Ordinance

Chevron
4707 - 1<sup>st</sup> Street
Livermore
Well 3S/2E-3K7 (RW-1)
Permit 27186

#### Destruction Requirements:

- 1. Remove from the well any pump, appurtenances, debris, or other materials to the bottom of the casing.
- 2. In one continuous operation fill the casing from the bottom up to two feet below grade with neat cement or cement grout using a tremie pipe. The bottom end of the tremie pipe should remain submerged in the sealing material during the entire grouting process. Allow the sealing material to spill over the top of the casing to fill any annular space between the casing and soil.
- 3. Remove the casing, seal, and gravel pack to two feet below the finished grade or original ground, whichever is the lower elevation.
- 4. After the seal has set, backfill the remaining hole with native material.
- 5. The well destruction must be performed by a contractor possessing a valid California well driller's license (C-57 license).