



RECEIVED  
BUREAU OF STREET LIGHTS & SIGNS

OCT 15 2012

DEPT OF PUBLIC HEALTH

Edwin M. Lee  
*Mayor*

Barbara Garcia MPA  
*Director of Health*

Rajiv Bhatia MD, MPH  
*Director of Environmental Health*

July 12, 2012

Ms. Shannon Couch  
ARCO  
P.O. Box 1257  
San Ramon, California 94583

Mr. Ben Terry  
Chevron Environmental Management Co.  
6111 Bollinger Canyon Road, Room 3652  
San Ramon CA 94583

Subject: Groundwater Monitoring Plan and Remediation System Expansion and Schedule- Approval

2601 Lombard Street and 2 Richardson Avenue Commingled Plume Site  
DPH-LOP Case Numbers: 10212 and 10058

Dear Ms. Couch:

The San Francisco Department of Public Health, Local Oversight Program (DPH-LOP) reviewed the "Response Letter" dated July 2, 2012, submitted on your behalf by Stantec. The letter presents an amended groundwater sampling plan and a schedule for expansion of the remediation system.

Project History

The project addresses a commingled plume from two former gasoline station sites. A former ARCO site, 2 Richardson Avenue, is now an auto repair business. A former Texaco (Exxon/Chevron/Valero) site, 2601 Lombard Street, is a current Valero retail gasoline station. The sites are located roughly on the north and south sides of Lombard at the intersection of Lombard, Richardson and Broderick streets. Adjacent land uses are mainly residential with a hotel east of 2 Richardson across Broderick Street.

A commingled plume agreement was signed by ARCO and Chevron in 1999. The site was designated as the Lombard at Richardson Commingled Plume Site. Additional investigations were performed and a Corrective Action Plan submitted to DPH LOP in 2007. A DPE system was installed in late 2009. Operation was stopped by a city zoning issue and numerous neighbor complaints. The system was moved during 4Q10 to address noise issues. The soil vapor portion was briefly started up in 1Q11. The system was again shut down because of neighbor complaints. Noise abatement changes were made to the system and the DPE systems restarted for continuous operation in August 2011. The system has been periodically shut down for adjustments and maintenance. The remediation system is in full operation as of the date of this letter.



**Local Oversight Program**

1390 Market Street  
Suite 210

San Francisco, CA 94102

Phone 415.252.3920

Fax 415.252.3910

[www.sfenvironmentalhealth.org](http://www.sfenvironmentalhealth.org)

### Proposed Groundwater Monitoring Plan

Stantec presented a revised proposed groundwater monitoring plan. Various well will be monitored and/or sampled quarterly, semiannually, annually or not sampled. Stantec requested that specific wells (EA-7 and A-8) be excluded from monitoring and sampling requirements due to their dangerous locations and Well R-1 because of its redundant location. DPH LOP concurs with eliminating these wells from the sampling program. Please note that all project wells must be sampled for a last time prior to case closure.

The letter proposes that the remaining project wells will be sampled with the following schedule:

- Collect annual grab groundwater samples from wells RW-1, EA-3, EA-4, EA-5, EA-6, and EA-8
- Collect annual samples from wells A-4, A-11 and A-14
- Collect semi-annual samples from wells A-2R, A-7R, A-9, A-12R, A-13, V-2R, V-3, V-4 and V-5
- Collect quarterly samples from A-1, A-3, A-5, A-6, V-1 and RW-2
- Not sample, but monitor and assess well R-1 quarterly

The proposed wells V-7, V-8 and A-15 should be monitored and sampled quarterly for the first year, then semi-annually after the first year.

DPH LOP accepts the proposed sampling plan with the inclusion of the proposed wells as stated above.

### Remediation System Expansion and Schedule

The Dual Phase Extraction (DPE) remediation systems (Soil Vapor Extraction, SVE, and Groundwater Extraction and Treatment, GWET) are currently operational.

Radius of Influence (ROI) tests were conducted on November 30, 2011 to test the area impacted by the soil vapor extraction system. The tested ROI ranged from 33 feet (V-4) to 51 feet (A-2R) among the seven wells tested. The current ROI do not reach the Broderick Street wells, which include well A-5, the well with the highest contaminant concentrations.

Stantec proposed a modified SVE expansion along Broderick Street, which is down gradient direction from the plume source. The intent of the SVE expansion is to increase the quantity of contaminant recovered and impact a larger area of the existing plume. The expanded system will cover wells along Broderick Street, including well A-5. The proposed expansion includes two new 4-inch diameter extraction wells (V-7, V-8) and one new 2-inch diameter monitoring well (A-15). The extraction wells will be located along the east side of Broderick Street, not aligned with, but roughly between existing wells A-6 and A-5, and wells A-5 and A-4. Well A-15 will be located in the east side sidewalk of Broderick Street, roughly aligned with well A-1.

Stantec proposes the following schedule for remediation system expansion.

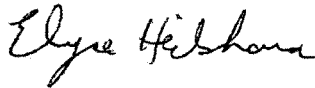
- July 2012: Submit change order to UST Fund
- August 2012: Submit permit applications to complete proposed activities
- September 2012: Install wells
- October 2012: Perform remediation system trenching activities in Broderick Street
- November 2012: Connect new extraction wells to remediation system.

**DPH LOP approves the sampling plan as proposed and including sampling the proposed wells quarterly for the first year and semi-annually thereafter.**

**DPH LOP approves the proposed remediation system expansion plan and the proposed schedule for remediation system expansion.**

Should you have any questions, please contact me at (415) 252-3885 or [elyse.heilshorn@sdfdph.org](mailto:elyse.heilshorn@sdfdph.org).

Sincerely,



Elyse D. Heilshorn, P.E. REA

Senior Environmental Health Inspector

cc: Jaff Auchterlonie, Stantec, via email

Christine Sniezek, Pinnacle Environmental Management Support

