

**ExxonMobil**  
**Environmental Services Company**  
4096 Piedmont Avenue #194  
Oakland, CA 94611  
510.547.8196  
510.547.8706 FAX  
jennifer.c.sedlachek@exxonmobil.com

**RECEIVED**  
9:04 am, Aug 27, 2008  
Alameda County  
Environmental Health

**Jennifer C. Sedlachek**  
Project Manager



August 22, 2008

Mr. Jerry T. Wickham  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Subject: Fuel Leak Investigation Site No. RO0002635  
Former Exxon RAS #74121, 10605 Foothill Boulevard, Oakland, California

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Vapor Sampling Work Plan* for the above-referenced site. The letter, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, is submitted in response to your letter dated June 23, 2008 which requested the work plan.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

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

Sincerely,

Jennifer C. Sedlachek  
Project Manager

Attachment: ETIC Vapor Sampling Work Plan

c: w/ attachment:  
Mr. Ken Phares - MacArthur Boulevard Associates, Oakland, California  
Mr. Peter McIntyre - AEI Consultants

c: w/o attachment:  
Mr. Bryan Campbell - ETIC Engineering, Inc.

22 August 2008

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

Subject: Vapor Sampling Work Plan  
Former Exxon Retail Site 74121, 10605 Foothill Boulevard, Oakland, California  
Fuel Leak Investigation Site No. RO0002635

Dear Ms. Sedlachek:

ETIC Engineering, Inc. (ETIC) has prepared this Vapor Sampling Work Plan for ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation for former Exxon Retail Site 74121, 10605 Foothill Boulevard, Oakland, California. This work plan was prepared in response to a request by the Alameda County Health Care Services Agency (ACHCSA) dated 23 June 2008 (Appendix A).

A Well Installation and Additional Risk Assessment Report, dated May 2007, was previously submitted for the site (ETIC 2008). The report detailed the results of a subsurface investigation, human health risk assessment, and corrective action plan for the site. The report detailed the results of the installation of soil vapor monitoring wells (VW1 through VW5). The proposed corrective action outlined in the report was an excavation in the former tank pit area. The report indicated that water was discovered within the vapor wells during sampling attempts in January, February, and April 2007. An attempt was made to remove the water from the vapor wells using small diameter tubing and a peristaltic pump. Water was removed from wells VW1 and VW5 and vapor samples were collected (Table 2); however, the wells were not purged prior to the collection of the vapor samples. Water returned to wells VW2 through VW4 and no vapor samples could be collected.

In its letter dated 23 June 2008, the ACHCSA responded to the report and requested further evaluation of the concentrations of analytes including benzene in soil vapor. The ACHCSA also requested soil vapor sampling to evaluate potential vapor intrusion onsite for future site occupants, particularly in the tank pit area outside of the proposed excavation. The ACHCSA requested this information to help assess whether the proposed excavation will be effective in mitigating potential vapor intrusion concerns.

Well construction details are provided in Table 1. Soil vapor sample analytical results are provided in Table 2.

## **Discussion**

The site is currently a small landscaped area located on the south corner of the intersection of Foothill Boulevard and 106th Avenue (Figure 1) and an irrigation system for the landscaping is located onsite. The existing vapor wells (VW1 through VW5) are all screened from 5.25 to 5.75 feet below ground surface (bgs) (Table 1). The vapor wells are situated within soils at the site which are composed of mostly clay and silt that extend from ground surface to approximately 17 feet bgs and static groundwater at the site has ranged from 15 to 19 feet bgs.

Based on the site conditions and on the previous attempts at collecting soil vapor samples, it appears that perched water may exist within the shallow clay and silt soils at the site. Guidelines by the Department of Toxic Substances Control (DTSC) state that every attempt should be made to collect representative vapor samples but that it may not be possible to collect soil gas samples from the subsurface in some instances including for sites with a "saturated vadose zone due to a shallow water table or sites with clay-rich soil" (DTSC 2004).

This work plan outlines a scope of work for another attempt at the collection of vapor samples from the existing vapor wells (VW1 through VW5) at the site. The scope of work listed below states the steps to be taken to avoid encountering water in the vapor wells including discontinuing irrigation of the landscaping prior to sampling and not sampling during precipitation events. However, if water is encountered in the vapor wells during the proposed sampling, attempts will not be made to remove the water as this may preclude performing the proper purging before sampling. If vapor samples cannot be collected from the wells, then an evaluation of vapor intrusion will be made using soil and water samples and without vapor samples.

## **Scope of Work**

The following work will be conducted and data will be collected to evaluate human health risks resulting from potential exposure to hydrocarbons beneath the site.

An advisory published by the DTSC and the Los Angeles Regional Water Quality Control Board (DTSC/LARWQCB 2003) and vapor intrusion evaluation guidelines published by the DTSC (DTSC 2004) will be used as a reference for the collection of the shallow soil vapor samples proposed below.

ETIC proposes to conduct the following activities:

- An attempt will be made to collect soil vapor samples from the existing vapor wells (VW1 through VW5). Prior to the collection of the vapor samples, irrigation of the onsite landscaping will be discontinued and the vapor sampling will not be collected during periods of precipitation.

- Soil vapor samples will be collected in 1-liter Summa canisters and will be analyzed by a state-certified laboratory. Sample collection methods are described in Appendix B.
- If vapor samples are collected, then a risk assessment of the potential vapor intrusion pathway will be evaluated and will include a comparison of concentrations of chemicals of concern to relevant environmental screening levels adopted by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SF 2007).

The soil vapor samples will be analyzed for:

- Total Petroleum Hydrocarbons as gasoline by EPA Method TO-3M.
- Benzene, toluene, ethylbenzene, and total xylenes by EPA Method TO-15.
- Methyl tertiary butyl ether, tertiary butyl alcohol, diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, 1,2-dibromoethane, and 1,2-dichloroethane by EPA Method TO-15.
- Oxygen/argon by ASTM D1946.
- 1,1-Difluoroethane (as a tracer) by EPA Method TO-15.

### **Schedule and Reporting**

Completion of the field work is contingent upon approval of this work plan by the ACHCSA. Depending on the ability to collect vapor samples, a report will be submitted following completion of the field work. ETIC will keep the ACHCSA informed on the progress of the field activities.

### **References**

DTSC/LARWQCB (Department of Toxic Substances Control and California Regional Water Quality Control Board – Los Angeles Region). 2003. Advisory – Active Soil Gas Investigations. DTSC and LARWQCB, Glendale and Los Angeles, California. 28 January.

DTSC (Department of Toxic Substances Control). 2004. Guidance for the Evaluation and Mitigation of Substance Vapor Intrusion to Indoor Air – Interim Final. 15 December.

RWQCB-SF (California Regional Water Quality Control Board, San Francisco Bay Region). 2007. Screening for Environmental Concerns At Sites With Contaminated Soil and Groundwater. RWQCB-SF, Oakland, California. November with May 2008 updates.

If you have any questions, please contact ETIC at (925) 602-4710 (ext. 21 for K. Erik Appel or ext. 24 for Bryan Campbell).

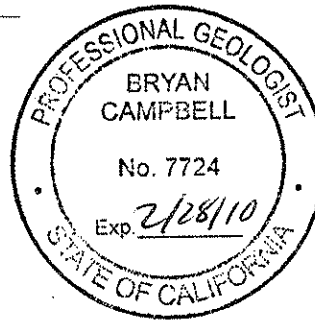
Sincerely,



K. Erik Appel  
Project Manager



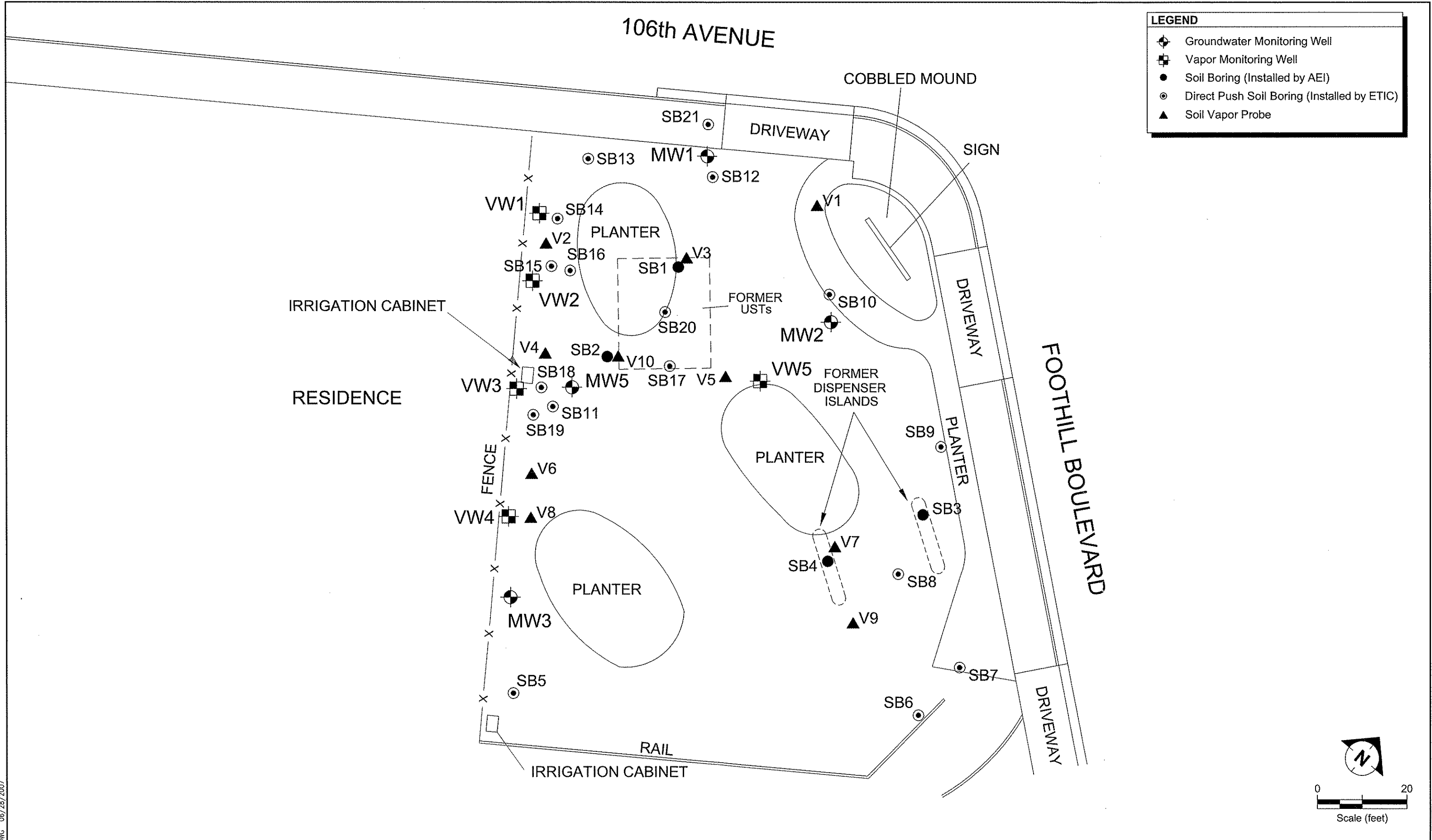
Bryan Campbell, P.G. #7724  
Senior Geologist



Attachments:

- Figure 1: Site Map
- Table 1: Well Construction Details
- Table 2: Soil Vapor Sample Analytical Results
- Appendix A: Regulatory Correspondence
- Appendix B: Field Protocols

## **Figures**



FILENAME: 202007.DWG 06/28/2007



SITE MAP  
 FORMER EXXON RS 74121  
 10605 FOOTHILL BOULEVARD,  
 OAKLAND, CALIFORNIA

FIGURE:  
**1**

## **Tables**



TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON RS 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

| Well Number | Well Installation Date | Elevation TOC (feet) | Casing Material | Total Depth (feet) | Well Depth (feet) | Borehole Diameter (inches) | Casing Diameter (inches) | Screened Interval (feet) | Slot Size (inches) | Filter Pack Interval (feet) | Filter Pack Material |
|-------------|------------------------|----------------------|-----------------|--------------------|-------------------|----------------------------|--------------------------|--------------------------|--------------------|-----------------------------|----------------------|
| MW1         | a 01/23/07             | 82.47                | PVC             | 26.5               | 25                | 8                          | 2                        | 10 - 25                  | 0.010              | 8 - 25                      | #2/12 Sand           |
| MW2         | a 01/23/07             | 84.40                | PVC             | 26.5               | 25                | 8                          | 2                        | 10 - 25                  | 0.010              | 8 - 25                      | #2/12 Sand           |
| MW3         | a 01/24/07             | 83.25                | PVC             | 26.5               | 25                | 8                          | 2                        | 10 - 25                  | 0.010              | 8 - 25                      | #2/12 Sand           |
| MW5         | a 01/23/07             | 82.65                | PVC             | 26.5               | 25                | 8                          | 2                        | 10 - 25                  | 0.010              | 8 - 25                      | #2/12 Sand           |
| VW1         | a 01/22/07             | --                   | SS              | 6                  | 6                 | 6                          | 0.125                    | 5.25 - 5.75              | 0.010              | 5 - 6                       | #2/12 Sand           |
| VW2         | a 01/22/07             | --                   | SS              | 6                  | 6                 | 6                          | 0.125                    | 5.25 - 5.75              | 0.010              | 5 - 6                       | #2/12 Sand           |
| VW3         | a 01/22/07             | --                   | SS              | 6                  | 6                 | 6                          | 0.125                    | 5.25 - 5.75              | 0.010              | 5 - 6                       | #2/12 Sand           |
| VW4         | a 01/22/07             | --                   | SS              | 6                  | 6                 | 6                          | 0.125                    | 5.25 - 5.75              | 0.010              | 5 - 6                       | #2/12 Sand           |
| VW5         | a 01/22/07             | --                   | SS              | 6                  | 6                 | 6                          | 0.125                    | 5.25 - 5.75              | 0.010              | 5 - 6                       | #2/12 Sand           |

Notes:

- a Well surveyed on 12 March 2007 by Morrow Surveying.
- PVC Polyvinyl chloride.
- SS Stainless steel.
- TOC Top of casing.

TABLE 2 SOIL VAPOR SAMPLE ANALYTICAL RESULTS, FORMER EXXON RETAIL SITE 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

| Boring ID        | Depth<br>(feet bgs) | Date     | Oxygen<br>(% by Volume) | Concentration ( $\mu\text{g}/\text{m}^3$ ) |         |                   |            |          |            |      |         |      |      |      |         |      |         |
|------------------|---------------------|----------|-------------------------|--|---------|-------------------|------------|----------|------------|------|---------|------|------|------|---------|------|---------|
|                  |                     |          |                         | Benzene                                    | Toluene | Ethyl-<br>benzene | m,p-Xylene | o-Xylene | TPH-g      | MTBE | 1,1-DFA | TBA  | DIPE | ETBE | 1,2-DCA | TAME | 1,2-EDB |
| V1               | 5.5                 | 05/01/06 | 9.4                     | 200  | <100    | <100              | <100       | <100     | 790,000    | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V2 <sup>a</sup>  | --                  | 05/01/06 | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| V3               | 5.5                 | 05/01/06 | 19                      | 120  | 160     | 140               | <100       | <100     | 110,000    | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V3 <sup>a</sup>  | 10                  | 05/01/06 | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| V4 <sup>a</sup>  | --                  | 05/01/06 | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| V5 <sup>a</sup>  | --                  | 05/01/06 | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| V6               | 7.0                 | 05/01/06 | 9.1                     | 170  | <100    | 540               | 410        | <100     | 880,000    | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V7               | 7.5                 | 05/01/06 | 21                      | 84   | 140     | <100              | 110        | <100     | 2,200      | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V7 dup           | 7.5                 | 05/01/06 | 20                      | <80  | 110     | <100              | <100       | <100     | 2,400      | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V8 <sup>a</sup>  | --                  | 05/01/06 | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| V9               | 7.5                 | 05/01/06 | 19                      | <80  | <100    | <100              | <100       | <100     | 360,000    | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V10              | 8.0                 | 05/01/06 | 11                      | 1,100                                      | 130     | 340               | 180        | <100     | 6,600,000  | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| V10              | 10.0                | 05/01/06 | 9.0                     | 1,900                                      | <100    | <100              | <100       | <100     | 17,000,000 | <100 | <10,000 | --   | --   | --   | --      | --   | --      |
| VW1 <sup>b</sup> | 5 - 6               | 4/27/07  | 11.1                    | <2.4                                       | 12      | <3.2              | 10         | 4.8      | <20,000    | <11  | <8.1    | <9.0 | <12  | <12  | <3.0    | <19  | <5.7    |
| VW2 <sup>c</sup> | --                  | 4/27/07  | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| VW3 <sup>c</sup> | --                  | 4/27/07  | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| VW4 <sup>c</sup> | --                  | 4/27/07  | --                      | --   | --      | --                | --         | --       | --         | --   | --      | --   | --   | --   | --      | --   | --      |
| VW5 <sup>b</sup> | 5 - 6               | 4/27/07  | 3.49                    | 4.4  | 11      | 4.4               | 12         | 4.8      | <23,000    | <12  | <8.9    | <9.9 | <14  | <14  | <3.3    | <21  | <6.3    |

Note: Soil vapor samples in soil borings V1 through V10 were collected after purging 7 casing volumes or approximately 70 cc of vapor from the tubing (10 cc per 12 feet of tubing).

a Soil vapor could not be extracted at depths between 4 and 10 feet bgs from this boring.

b Soil vapor samples were collected without purging (grab samples).

c Soil vapor samples were not collected due to the presence of water.

feet bgs Feet below ground surface.

TABLE 2 SOIL VAPOR SAMPLE ANALYTICAL RESULTS, FORMER EXXON RETAIL SITE 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

| Boring ID                | Depth<br>(feet bgs)  | Date | Oxygen<br>(% by Volume) | Concentration ( $\mu\text{g}/\text{m}^3$ ) |         |                   |            |          |       |      |         |     |      |      |         |      |         |
|--------------------------|--|------|-------------------------|--|---------|-------------------|------------|----------|-------|------|---------|-----|------|------|---------|------|---------|
|                          |  |      |                         | Benzene                                    | Toluene | Ethyl-<br>benzene | m,p-Xylene | o-Xylene | TPH-g | MTBE | 1,1-DFA | TBA | DIPE | ETBE | 1,2-DCA | TAME | 1,2-EDB |
| 1,1-DFA                  | 1,1-Difluoroethane.  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| 1,2-DCA                  | 1,2-Dichloroethane.  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| 1,2-EDB                  | 1,2-Dibromoethane.   |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| DIPE                     | Diisopropyl ether.   |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| ETBE                     | Ethyl tertiary butyl ether.                                  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| MTBE                     | Methyl tertiary butyl ether.                                 |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| TAME                     | Tertiary amyl methyl ether.                                  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| TBA                      | Tertiary butyl alcohol.                                      |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| TPH-g                    | Total Petroleum Hydrocarbons as gasoline reported as C6-C12. |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| dup                      | Duplicate.   |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| --                       | Not analyzed.  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |
| $\mu\text{g}/\text{m}^3$ | micrograms per cubic meter.                                  |      |                         |  |         |                   |            |          |       |      |         |     |      |      |         |      |         |

## **Appendix 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

June 23, 2008

Ms. Jennifer Sedlachek  
Exxon Mobil  
4096 Piedmont, #194  
Oakland, CA 94611

Mr. John Jay  
C/o Jay Phares Corporation  
10700 MacArthur Boulevard, Suite #200  
Oakland, CA 94605

RECEIVED

JUN 26 2008

ETIC ENGINEERING

Subject: Fuel Leak Case No. RO0002635 and Geotracker Global ID T0600120383, Exxon #7-4121, 10605 Foothill Boulevard, Oakland, CA 94605

Dear Ms. Sedlachek and Mr. Jay:

I am the caseworker recently assigned to the above-referenced fuel leak case. Please send future correspondence for this site to my attention. Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the document entitled, "*Well Installation and Additional Risk Assessment Report*," dated May 30, 2007. The "*Well Installation and Additional Risk Assessment Report*," presents subsurface investigation results, a human health risk assessment, and a corrective action plan.

Five soil vapor probes were installed at the site in January 2007. Two of the five soil vapor probes were sampled but three of the soil vapor probes could not be sampled due to water in the probes. In addition, the two probes that were sampled were not purged prior to sampling. As discussed in the technical comments below, additional soil vapor sampling is required in order to assess potential vapor intrusion for the site and off-site. Since the potential vapor intrusion pathway has not been adequately evaluated, we cannot comment on the adequacy of the proposed excavation. Therefore, we request that you conduct the soil vapor sampling discussed in the technical comments below prior to completion of a Corrective Action Plan.

We request that you address the technical comments below, perform the proposed work, and submit the work plan requested below.

**TECHNICAL COMMENTS**

1. **Proposed Excavation.** Excavation of the former tank pit area to a depth of approximately 20 feet bgs is proposed in the "*Well Installation and Additional Risk Assessment Report*," dated May 30, 2007. Although we do not necessarily object to the proposal to excavate soil in the source area, we request that you further evaluate potential vapor intrusion concerns to assess whether the scope of the proposed excavation is adequate to address site risks as discussed in technical comments 2 and 3.

2. **Tier 1 Screening of Potential Health Risks.** The "*Well Installation and Additional Risk Assessment Report*," includes a Tier 1 screening of potential human health risks. In the Tier 1 screening, soil vapor data from two soil vapor probes sampled in January 2007 are compared to Environmental Screening Levels ([ESLs] San Francisco Bay Regional Water Quality Control Board November 2007). Concentrations of VOCs in the two soil vapor samples were less than both commercial and residential ESLs for the vapor intrusion pathway. However, the Tier 1 screening did not include results from soil vapor sampling conducted in May 2006. During May 2006, soil vapor samples were collected from six soil vapor probes. The concentration of benzene in soil vapor exceeded the residential ESL ( $84 \mu\text{g}/\text{m}^3$ ) in four of the six temporary borings and exceeded the commercial ESL in one of the six borings. Further evaluation of the elevated concentrations of benzene detected in the May 2006 soil vapor samples is required. Therefore, we request that you propose additional soil vapor sampling to evaluate potential vapor intrusion on site for future site occupants, particularly in the tank pit area outside the area of proposed excavation to help assess whether the proposed excavation will be effective in mitigating potential vapor intrusion concerns. Please include plans for soil vapor sampling in the Work Plan requested below.
3. **Soil Vapor Sampling Results.** Soil vapor samples were collected from two of the five soil vapor probes installed at the site in January 2007. Soil vapor samples could not be collected from three of the five soil vapor probes due to water in the probes. In addition, the two probes that were sampled were not purged prior to sampling. Four of the soil vapor probes are located along the western boundary of the site to help assess potential off-site vapor intrusion. Please include plans to purge and sample all five soil vapor probes in the work plan requested below.
4. **Public Participation.** Public participation is a requirement for the Corrective Action Plan process. Therefore, we request that you submit a Draft CAP for ACEH review. Upon ACEH approval of a Draft CAP, ACEH will notify potentially affected members of the public who live or own property in the surrounding area of the proposed remediation described in the Draft CAP. Public comments on the proposed remediation will be accepted for a 30-day period.
5. **Quarterly Groundwater Monitoring.** Please continue quarterly groundwater monitoring and present the results in the Quarterly Reports requested below.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **August 11, 2008** – Quarterly Groundwater Monitoring Report (Second Quarter 2008)
- **August 25, 2008** – Work Plan
- **November 11, 2008** – Quarterly Groundwater Monitoring Report (Third Quarter 2008)

- **February 11, 2009** – Quarterly Groundwater Monitoring Report (Fourth Quarter 2008)

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.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### 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.

Jennifer Sedlachek  
John Jay  
RO0002635  
June 23, 2008  
Page 4

### UNDERGROUND STORAGE TANK CLEANUP FUND

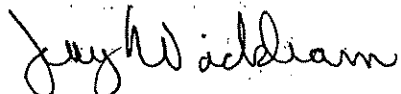
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

### 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.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org).

Sincerely,



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

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032

Bryan Campbell, ETIC Engineering, Inc., 2285 Morello Avenue, Pleasant Hill, CA 94523

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File



|   |  |
|---|--|
| <b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b> | ISSUE DATE: July 5, 2005                             |
|   | REVISION DATE: December 16, 2005                     |
|   | PREVIOUS REVISIONS: October 31, 2005                 |
| SECTION: Miscellaneous Administrative Topics & Procedures                     | SUBJECT: Electronic Report Upload (ftp) Instructions |

Effective January 31, 2006, 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

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- 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)

#### Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in Excel format. These are for use by assigned Caseworker only.

#### 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 [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org)
    - or
    - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
  - 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 and Firefox browsers will not open the FTP site.
  - b) Click on File, then on Login As.
  - 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 [dehloptoxic@acgov.org](mailto:dehloptoxic@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 at acgov.org. (e.g., [firstname.lastname@acgov.org](mailto: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)

**Appendix B**  
**Field Protocols**

## **PROTOCOLS FOR SAMPLING SOIL VAPOR WELLS**

### **SOIL VAPOR SAMPLING PROCEDURES**

To allow for subsurface conditions to equilibrate, the wells are not disturbed for a period of at least 48 hours.

A vacuum tightness test is performed on each well. The test consists of the application of vacuum and monitoring of vacuum tightness using vacuum gauges and/or a flow meter for 5 to 10 minutes.

If this is the first sampling for these vapor wells, then a purge test will be conducted for one well; otherwise, the prior purge test results may be used for sampling. The selected well should be the one with the highest expected concentrations. The test consists of the collection of vapor samples using Tedlar bags after purging the well of 1, 3, and 7 purge volumes by drawing vapor using a syringe connected to a valve on the tubing or a vacuum pump. The purge volume is estimated based on the internal volume of the tubing used and the annular space around the slotted screen. The samples are collected through a particulate filter and flow controller which regulates the flow of soil gas to no more than 200 milliliters per minute. The results of the purge test are used to dictate the purge volume to be used during the sampling of subsequent wells.

The vapor samples are collected in 1-liter stainless steel Summa canisters. The samples are collected through a particulate filter and flow controller which regulates the flow of soil gas to no more than 200 milliliters per minute. To ensure air-tight connections between the tubing, sampling port, valves, and other connections, a tracer compound is applied to joints. A leak will be evident if the tracer is detected in the analysis of the soil vapor samples.

The 1-liter Summa canisters are labeled and packaged for delivery to a state-certified laboratory for chemical analysis. The initial pressure and the final pressure readings taken from the gauges on the Summa canisters are recorded. A small vacuum of about 5 inches of mercury is left inside the sample canister and is recorded on the chain of custody. Upon receipt, the laboratory will check the pressure in the sample canister and compare it to the pressure recorded on the chain of custody for quality control purposes.