CAMBRIA

February 23, 2007

Mr. Jerry Wickham, P.G.
Alameda County Environmental Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Site Assessment Report**
Chiu Property
800 Franklin Street, Oakland, California 94607
Fuel Leak Case No. RO0000196
Cambria Project No. 589-1000

Dear Mr. Wickham:

On behalf of Mr. Tommy Chiu, Cambria Environmental Technology, Inc. (Cambria) has prepared the following *Site Assessment Report* for the above referenced site.

If you would like to discuss this document or the project, please call Mark Jonas at 510/420-3307

Sincerely,
Cambria Environmental Technology, Inc.

Mark Jonas, P.G.
Senior Project Manager

Enclosure

cc: Mr. Tommy Chu, P.O. Box 28194, Oakland, California 94606

Cambria Environmental Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

CAMBRIA

SITE ASSESSMENT REPORT
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA
FUEL LEAK CASE NO. RO0000196

February 23, 2007

Prepared for:

Mr. Tommy Chiu
P.O. Box 28194
Oakland, California 94604

Prepared by:

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Cambria Project No. 589-1000

Written by:

Celina Hernandez
Senior Staff Geologist

Reviewed By:

Mark Jonas, P.G.
Senior Project Geologist

PROFESSIONAL GEOLOGIST
MARK L. JONAS
No. 6392
STATE OF CALIFORNIA

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1.0 INTRODUCTION

On behalf of Mr. Tommy Chiu, Cambria Environmental Technology, Inc. (Cambria) has prepared the following *Site Assessment Report* for the site located at 800 Franklin Street in Oakland, California. The site is referenced under Alameda County Environmental Health's (ACEH) Fuel Leak Case No. RO0000196. This document is in accordance with Cambria's July 24, 2006 *Response to Agency Comments and Work Plan (Work Plan),* approved by ACEH's in a letter date August 8, 2006 (Appendix A). On September 28, 2006, Cambria received approval from Mr. Jerry Wickham (ACEH) to complete the proposed soil vapor assessment in Cambria's July 24, 2006 *Work Plan* as a phased approach; to defer the proposed soil vapor probes inside the building until the results of the soil vapor probes in the city sidewalk are evaluated (Appendix A).

The scope of work includes soil vapor assessment and rebuilding monitoring well MW-3. Following is a brief discussion of the site background, environmental setting, previous studies, sampling procedures and results, a discussion of the results, conclusions, and recommendation.

2.0 SITE BACKGROUND

2.1. Site Description

The site is located in a commercial area at the eastern corner of the intersection of 8th and Franklin Streets in Oakland, California (Figure 1). Its elevation is approximately 35 feet above mean sea level (msl). The site presently has a two story commercial building that occupies the entire lot (Figure 2). Retail stores currently operate on the ground floor: Cathay Chinese Herb's Company, Pacific Seafood Inc., Kim Van Jewelry, and Phoung Jewelry. Commercial offices currently operate on the second floor: Express Tax Service, Trident Financial, Mekong Reality & Mortgage Inc., and Evergreen Travel. The site is bound by commercial properties to the northeast and southeast, 8th Street to the southwest, and Franklin Street to the northwest.

2.2. Historical Background Information

Prior to 1989 the site operated as a gasoline service station. It has been reported that up to five underground storage tanks (USTs) previously existed on site. One of these tanks is said to have been removed prior to 1988 near the vicinity of existing well MW-1. However, no UST removal documentation has been discovered regarding this UST. The other four USTs were reported to have been installed circa 1970 (MES, 1989a). In 1989, these four USTs were removed.

3.0 ENVIRONMENTAL SETTING

The site is located within the Coast Range geomorphic province of California. In general, the Coast Range province consists of Jurassic eugeosynclinal basement rocks and Cretaceous and Cenozoic sedimentary and volcanic rocks that have been faulted and folded with a northwest-southeast trend. The site lies within the East Bay Plain Subbasin. Sediments beneath the site consist of coalescing alluvial deposits from the Oakland-Berkeley Hills. According to the United States Geologic Survey (USGS) Professional Paper 943, the site is located on quaternary age alluvial deposits consisting of medium-grained, unconsolidated, moderately sorted, and permeable, fine sand, silt, and clayey silt with thin beds of coarse sand.

3.1. Geology

Subsurface soil consists of light brown to yellowish brown sand-silt mixture and a poorly grade sand to approximately 36 ft, the total depth explored. Some sand-clay mixtures were encountered beneath the building from approximately 2 to 6 ft bgs, and 15 to 18 ft bgs northwest of the site in boring MW-6.

Previous investigations for this site and boring logs obtained from Bay Area Rapid Transit District (BART) predominantly identified fine to medium grained sand beneath the site. These sand deposits occasionally have a clay component. Three borings were drilled for BART proximal to the site, to a maximum depth of 70 feet below ground surface (bgs). These boring logs consistently describe a low permeability, hard, silty clay from approximately 40 feet bgs to total depth explored. Appendix B presents the boring logs for soil vapor probe borings VP-1 and VP-2. Previous boring logs are provided in the July 24, 2006 *Work Plan.*

3.2. Hydrogeology

The site is located in the East Bay Plain Subbasin, Groundwater Basin No. 2-9.04 (DWR 2003). The East Bay Plain Subbasin is a northwest trending alluvial basin, bounded on the north by San Pablo Bay, on the east by the contact with Franciscan basement rock, and on the south by the Nile Cone Groundwater Basin. The East Bay Plain Subbasin extends beneath the San Francisco Bay to the west. The East Bay Plain Subbasin aquifer system consists of unconsolidated sediments of Quaternary age. In the project area most rainfall occurs between November and March. The average annual rainfall is approximately 23 inches.

Throughout most of the East Bay Plain in the region of the site, water level contours show that the direction of groundwater flow is east to west, towards San Francisco Bay. Groundwater flow direction typically correlates to topography.

From 1860 to 1930 groundwater from the East Bay Plain was the major water supply of the East Bay, before Sierra water was imported into the area. By the late 1920's the groundwater supply was too small to meet the growing population and the wells often became contaminated by seepage or saltwater intrusion. By 1929, East Bay Municipal Utility District (EBMUD) provided imported water to East Bay communities via the Mokelumne Aqueduct. This high-quality, reliable supply soon eliminated the need for local groundwater wells. In 1996, the Regional Board reviewed General Plans for Oakland and other communities. They found that Oakland and most other cities did not have any plans to develop local groundwater resources for drinking water, due to existing or potential saltwater intrusion, contamination, or poor or limited quality (Regional Board 1999).

A water-bearing zone has been observed beneath the site within the maximum explored depth of 70 feet bgs. This water-bearing zone exists from the apparent water table to approximately 40 feet bgs. Since 1989, the depth to groundwater beneath the site typically fluctuates from approximately 20 to 24 feet bgs. The expected natural groundwater flow direction is towards the Bay to the southwest. However since groundwater monitoring at the site began in 1989 the groundwater flow direction has been predominantly towards the northwest with very little fluctuation. The observed flow direction may be influenced by the BART KBL/KBR Tunnels that run east-west and may be acting as a barrier to groundwater flow. Additionally, nearby groundwater pumping for remediation purposes may also be contributing to the anomalous flow direction.

Groundwater monitoring of site wells was conducted from October 1989 through at least 2000 and then again on a quarterly basis between September 2004 and October 2006. Prior to Cambria becoming the consultant for the subject site (2004), it is known that several documents were prepared but are missing from the client, Cambria, and ACEH's files. Therefore the entire historic monitoring and sampling frequency is currently unknown and some data is likely missing. Free product has been observed from 1/8 to 1/4 inch thickness in well MW-2. As approved by ACEH's letter dated April 7, 2006 groundwater monitoring will be performed on a semi-annual schedule during the first and second quarters beginning in 2006.

The nearest surface water bodies to the site are Oakland Inner Harbor located 2,500 feet to the southwest and Lake Merritt approximately 3,000 feet to the east.

4.0 PREVIOUS INVESTIGATIONS

Several phases of soil and groundwater assessments have been conducted at the site since the USTs were removed in 1989. Boring and well locations are presented on Figure 2.

May 1988: Frank Lee & Associates performed a soil and foundation investigation for the subject site. The purpose of this investigation was to determine the strength characteristics of the soil as a basis for making site grading and foundation design recommendations for a proposed three story commercial building. Soil beneath the site was observed to consist of generally moist, medium dense, brown silty fine sand to the total explored depth of 28.5 feet bgs. Tank backfill soil was observed to approximately 15.5 feet bgs in B-3 and to a minimum depth of 6 feet bgs in B-4. Frank Lee & Associates recommended excavating the then existing surficial material "to a minimum depth of 2 feet...and recompacted before placement of engineered fill or construction." Soil samples were collected from 1 to 4 feet bgs for analysis for volatile organic compounds (VOCs); low to medium boiling point hydrocarbons; benzene, toluene, ethylbenzene, xylenes (BTEX); and total oil and grease (TOG). None of these analytes were detected above laboratory detection limits (Frank Lee & Associates, 1988). Soil analytical data is summarized in Table 2. See Appendix B for copies of the boring logs.

August 1988: LW Environmental Services, Inc. performed a soil investigation. Gasoline hydrocarbon concentrations were detected in the vicinity of the then existing USTs (MEC, 1989b).

June 1989: The Robert J. Miller Company removed four USTs: two 6,000 gallon gasoline tanks, one 550 gallon waste oil tank, and one 1,000 gallon solvent tank. The Traverse Group Inc. (TGI) collected soil samples from beneath each tank and visually inspected the condition of each tank upon removal. No obvious pitting or corrosion was reported. The two gasoline USTs were removed from one excavation area in the northern corner of the site. The waste oil and solvent USTs were removed from one excavation area in the sidewalk south of the site, along 8th Street. Approximately 10 cubic yards of soil was deemed contaminated by TGI and stockpiled on site. Soil that TGI determined to be clean or only slightly impacted was stockpiled on site. Soil samples from the excavations and stockpiles were analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), as waste oil (TPHwo), and BTEX. Additionally, samples from the waste oil and solvent UST's excavation were analyzed for purgeable organics and semi-volatile organic compounds (SVOCs). High levels of fuel hydrocarbon contamination were detected in the northeast corner of the northeastern excavation and in the waste oil/solvent UST's excavation. Trace concentrations (less than 1.0 milligrams per kilogram [mg/kg]) of bis(2-ethylhexyl) phthalate, napthalene, and 2-methyl-napthalene were detected. The bis(2-ethylhexyl) phthalate was thought to be a result of cross contamination at the laboratory. The napthalene concentrations were assumed to be an additive of the fuels stored on site (MEC, 1989c).

September – October 1989: Miller Environmental Company (MEC) performed a preliminary investigation to determine whether fuel detected in soil during UST excavation activities impacted groundwater. Two excavation pits were re-excavated to approximately 15 feet bgs and approximately 25 cubic yards of additional contaminated soil was removed. Confirmation soil samples were collected from the overexcavation sidewalls and bottoms. The highest levels detected in the northwestern overexcavated pit were 2.3 mg/kg TPHg, 80 mg/kg TPHwo, 0.05 mg/kg toluene, and 0.14 mg/kg xylenes. TPHd, benzene, and ethylbenzene were not detected above laboratory detection limits in samples collected from the northwestern pit. The highest levels detected in the waste oil/solvent overexcavated pit were 10,000 mg/kg TPHg, 250 mg/kg TPHd, 400 mg/kg TPHwo, 50 mg/kg benzene, 210 mg/kg toluene, 54 mg/kg ethylbenzene, and 270 mg/kg xylenes. Further overexcavation in the waste oil/solvent pit was not possible due to the proximity of 8th Street and interfering utilities along the southern edge of this excavation. An estimated 32 cubic yards of contaminated soil was hauled to a Class I disposal facility. The northwestern pit was backfilled with a combination of clean fill and re-used "uncontaminated soil" from the initial excavation of the two gasoline USTs. This re-used fill was intended to be temporary and to be removed when construction took place on the property. The waste oil/solvent pit was backfilled with clean fill. In addition, three monitoring wells (MW-1, MW-2, and MW-3) were installed as part of this investigation. Analytical results from these borings and wells indicated soil and groundwater from boring MW-1 was not impacted by hydrocarbons. Impacted soil was detected in offsite borings MW-2 and MW-3, between 20 to 25 feet bgs. Groundwater was first encountered in all boreholes at approximately 25 feet bgs. The groundwater gradient and flow direction were calculated to be 0.006 feet per foot and to the west-northwest, respectively.

MEC also researched underground fuel leak cases within a ½ mile radius of the site. MEC reported that there were 16 petroleum hydrocarbon fuel leak cases with in this radius and half of these were classified as groundwater problems. Only four of these sites had reported groundwater flow directions. Of these cases groundwater flow directions were reported as towards the north at a Shell Service Station site (461 8th Street), northwest at two sites, and north-northeast at one site. However, later in the same report MEC states that the Shell Service Station, which is the closest in proximity to the site, has a groundwater flow direction to the west, away from the site. Groundwater studies in the area by others were found to be inconsistent MEC reported that a northeasterly flow direction was observed one block away at the intersection of 9th and Webster, but it was anticipated to return to the "natural westerly flow pattern" when their dewatering pumps were shut off (MEC, 1989c).

Early 1991: Construction of the existing building on site began in early 1991. It is reported that the ACEH concurred with MEC's conclusion that soil excavation in the interior portion of the site was successful in removing all but minor residual hydrocarbon contamination. As a result no objections were raised to construction activities on site. Monitoring well MW-1 was preserved in the construction process and remains accessible (MEC, 1992).

September – October 1991: MEC conducted a subsurface investigation to further define the lateral extent of offsite hydrocarbon contamination. On September 11, 1991, one borehole (B-1) was advanced and soil samples were collected. On October 2 and 3, 1991, three boreholes (B-2, MW-4, and MW-5) were advanced, soil samples were collected, and two monitoring wells were constructed (see Table 1). Groundwater was first encountered in all boreholes at approximately 25 feet bgs. No hydrocarbons were detected in soil samples collected to a depth of 20 feet bgs. However, soil samples from 25 feet bgs in boreholes B-1 and B-2 contained TPHg, Total Recoverable Petroleum Hydrocarbons (TRPH), TPHd range hydrocarbons, and toluene (see Table 2). On October 31, 1992, groundwater was sampled from wells MW-1 through MW-5. Approximately 1/8 inches of floating product was observed in well MW-2. Groundwater analytical results indicated very low to moderate concentrations of TPHg, TPHd, BTEX, and 1,2-dichloroethane (1,2-DCA) in monitoring wells MW-1, MW-2, and MW-3. No TOG was detected above laboratory detection limits in any of the wells. Also detected in well MW-3 were 1,2-dichloropropane at 0.0007 parts per million (ppm) and 1,1,1-trichoroethane (1,1,1-TCE) at 0.0014 ppm. No hydrocarbons were detected in groundwater from off site wells MW-4 and MW-5. However, very low levels of chloroform were detected in off site wells MW-4 and MW-5. See Table 3 for historic groundwater analytical results. The groundwater gradient and flow direction were calculated to be 0.008 feet per foot and to the southwest, respectively (MEC, 1992).

May 1997: On May 15, 1997, Associated Terra Consultants, Inc. (ATC) installed monitoring well MW-6. Soil samples were collected and analyzed. Soil samples had detectable concentrations of TPHd, BTEX, and methyl tertiary butyl ether (MTBE). TPHd was detected in soil at 10 feet bgs. BTEX were detected in soil at 25 feet bgs. MTBE was detected in soil at 30 feet bgs. See Table 2 for soil analytical results. Groundwater was first encountered at approximately 22.5 feet bgs. Boring logs are included in Appendix B. On May 21, 1997 ATC performed groundwater monitoring and sampling activities for all six of the site's monitoring wells.

5.0 SOIL VAPOR PROBES - INSTALLATION AND SAMPLING PROCEDURES

This section of the report presents preparations and procedures for the installation and sampling of soil vapor probes VP-1 and VP-2, completed in November and December 2006. Work was performed in accordance with the approved July 24, 2006 *Work Plan*. Soil vapor probes were constructed and sampled following Cambria's standard operating procedures (Appendix C), based on the Department of Toxic Substances Control's (DTSC) January 28, 2003 *Advisory-Active Soil Gas Investigation* (DTSC *Advisory*). Graphics of the soil vapor probes are provided in Appendix B.

5.1. Summary of Soil Vapor Probe Installation and Sampling

The objective of the soil vapor characterization was to evaluate the potential risk for vapor intrusion to occupants in the commercial building at the site and those adjacent to the site. The soil vapor probes were installed near wells MW-2 and MW-3, which have historically had high benzene concentrations. On September 28, 2006, Cambria received approval from Mr. Jerry Wickham (ACEH) to complete the proposed soil vapor assessment in Cambria's July 24, 2006 *Work Plan* as a phased approach; defer the indoor soil vapor probes until the results of the soil vapor probes in the city sidewalk are evaluated (Appendix A). To meet these objectives, Cambria completed the following tasks:

- Installed soil vapor probes VP-1 and VP-2; and
- Collected and analyzed for benzene from probes VP-1 and VP-2.

5.2. 2006 Soil Vapor Probe Installation and Sampling Procedures

Recently advanced probes VP-1 and VP-2 are identified on Figure 2. Installation activities sufficiently followed Cambria's Standard Operating Procedures (Appendix C).

Personnel Present: Installation and sampling were completed by Cambria Senior Staff Geologist Celina Hernandez and Christina McClelland, which were overseen by Cambria's Senior Project Geologist Mark Jonas, a California Professional Geologist No. 6392.

Permits: The Alameda County Public Works Agency (ACPWA) issued the subsurface drilling permit for the soil vapor probes. Also, Cambria obtained an excavation permit on behalf of Vironex to construct the probes in the sidewalk and an obstruction permit to reserve the parking meters from the City of Oakland. Copies of the permits are in Appendix D.

Drilling Company: Vironex (C57 # 705927) of Pacheco, California installed the soil vapor probes using a hand auger.

Installation and Sampling Dates: On November 17, 2006, Vironex installed soil vapor probes VP-1 and VP-2 in the city sidewalk along Franklin and 8th Streets. Cambria sampled the probes on December 28, 2006.

Prior to probe installation, Cambria marked out boring locations with white paint and notified underground service alert (USA), to have underground utilities marked. Cambria also completed a utility survey around the probe locations, with Cruz Brothers Locators of Scotts Valley, California.

Probe Materials: Vapor probes VP-1 and VP-2 were constructed using 6-inch long sections of 1-inch diameter, schedule 40 PVC well casing with 0.010 inch screen size. These pipe sections were capped on both ends using PVC pipe caps. One cap was drilled and tapped to allow for the installation of a compression fitting. Nylaflow® tubing (¼-inch) was inserted in the compression fitting and the assembly was lowered into the boring to the specified depth (approximately 5 to 5.5 fbg), with the tubing terminating above grade. Sand was added to the borehole around the probes as a filter pack. Granualar bentonite was used as a seal from the top of the filter pack to approximately 1 fbg. A soil vapor probe diagram is presented in the boring logs in Appendix B.

Soil Logging: Cambria logged the soil cuttings in each boring, as presented in Appendix B. No soil samples were collected for analyses.

Soil Vapor Sampling: Soil vapor probes were sampled on December 28, 2006. Soil vapor sampling and leak testing were performed following Department of Toxic Substances Control's (DTSC) January 28, 2003 *Advisory-Active Soil Gas Investigation* guidelines. Paper towels with shaving cream were place at sample system connections for the leak test.

Purging and sampling were conducted at a rate of approximately 100 milliliters per minute (mL/min). Vapor samples were collected in one liter Summa™ canisters after removing approximately three purge volumes from the screen interval. Each sample was labeled, documented on a chain-of-custody (COC), and submitted to Air Toxics, Ltd. of Folsom, California for analysis. Soil vapor sampling forms are presented in Appendix E.

Soil Vapor Sample Analysis: Each soil vapor sample was analyzed according to the approved *Work Plan* for benzene, and tracer compounds from the leak test isobutane, butane and propane by modified EPA method TO-15 using GC/MS in full scan mode by Air Toxics, Ltd. of Folsom, California. These tracer compounds were identified by EPA method TO-15 as the most abundant

compounds of the specific shaving cream analyzed and indicated by distinctive peaks on the petroleum hydrocarbon chromatograph separate from TPH in the gasoline range. Copies of the laboratory analytical reports and COCs are provided in Appendix F.

6.0 2006 SOIL VAPOR SAMPLING RESULTS

No concentrations of benzene, and the tracer compounds (isobutane, butane and propane) were detected in soil vapor probes VP-1 and VP-2 at a depth of approximately 5 fbg. Figure 2 presents the locations of probes VP-1 and VP-2. Analytical results are presented in Table 1. Copies of soil vapor sampling forms are presented in Appendix E. Copies of the laboratory analytical reports and COCs are included in Appendix F.

The following Tables 1-1 presents 2006 soil vapor results for benzene.

Table 1-1
Benzene Results for 2006 Soil Vapor Samples

Analyte	Frequency of Detection	Highest Concentration (uG/m^3)
Benzene	0/2 (0%)	ND<4.0

Notes: ND<n = Not detected above laboratory reporting limit, n.
Reporting Limit 4.0 uG/m^3 = 1.3 ppbv

7.0 WELL MW-3 REBUILD - PREPARATIONS AND PROCEDURES

This section of the report presents preparations and procedures for rebuild of groundwater monitoring well MW-3, completed on January 29, 2007. Work was performed in accordance with the approved July 24, 2006 *Work Plan.*

7.1. Summary of Well MW-3 Rebuild

Since 2004 monitoring well MW-3 has been filled with debris and inaccessible. ACEH requested that this well be decommissioned and rebuilt. To meet these objectives, Cambria completed the following tasks:

- Destruction of well MW-3 by pressure grouting,
- Installed four-inch well MW-3A to a total depth of 35 fbg.

7.2. Well MW-3 Destruction

In Cambria's approved July 24, 2006 *Work Plan*, Cambria proposed over-drilling existing well MW-3 and replacing new, four-inch well MW-3A in the same boring. On January 29, 2007, Cambria attempted to over-drill well MW-3, however a six-inch concrete slab was encountered approximately 16-inches below grade adjacent to well MW-3, possibly a utility vault for the gas line that is located approximately 3.5 ft north of well MW-3. Therefore over-drill stopped and the well was destroyed by pressure grouting. The well destruction log is provided in Appendix B. Monitoring well MW-3A was installed adjacent to the former MW-3.

Drilling Date: On January 29, 2007, Woodward Drilling installed well MW-3A.

Personnel Present: Cambria's Senior Staff Geologist Celina Hernandez performed the installation, which was overseen by Cambria's Senior Project Geologist Mark Jonas, a California Professional Geologist No. 6392. Vickers Concrete Coring of San Francisco completed the concrete core, Flash Safety of Oakland managed the onsite traffic control, and ACPWA's Vicky Hamlin completed the pressure grouting inspection.

Drilling Company: Woodward Drilling (C57 # 710079) of Rio Vista, California.

Permits: The ACPWA issued the subsurface drilling permit. Also, Cambria obtained City of Oakland excavation permit on behalf of Woodward Drilling to complete the well rebuild and an obstruction permit to reserve the parking meters. Copies of the permits are in Appendix D.

Well Destruction: Prior to the field activities, Cambria marked out location with white paint and notified underground service alert (USA) to have the utilities marked, and a utility survey was completed by a private utility locator. Gas and communication lines were marked approximately 3.5 ft north of well MW-3. Prior to drilling, the well vault was removed and the boring was cleared for underground utilities using a hand-auger. At approximately 16-inches below grade, a six-inch thick concrete slab was encountered on the north side of well MW-3. Cambria received verbal approval from ACPWA to destroy the well in place by pressure grouting. Total depth of the well was measured at approximately 35 fbg.

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 lb. sack of Portland I/II Cement. Once the well casing is full of grout, it remains pressurized for five minutes by applying a pressure of approximately 25 pounds per square inch (psi) with a grout pump. The additional pressure allows the grout to be forced into the sand pack. After grouting the sand pack and casing, the area was resurfaced and backfilled with concrete.

Waste Disposal: Investigation derived waste (IDW) generated during field activities was removed the same day as it is generated by Evergreen Environmental of Newark, California.

7.3. Well MW-3A Installation

Well MW-3A was installed approximately 1 ft south of former well MW-3. The well construction log is presented in Appendix B (Boring/Well Logs), and Table 1.

Drilling Date: On February 8, 2007, Woodward Drilling installed well MW-3A.

Drilling Company: Woodward Drilling (C57 # 710079) of Rio Vista, California.

Personnel Present: Cambria's Senior Staff Geologist Celina Hernandez performed the installation, which was overseen by Cambria's Senior Project Geologist Mark Jonas, a California Professional Geologist No. 6392. Vickers Concrete Coring of San Francisco completed the concrete core, Flash Safety of Oakland managed the onsite traffic control, and ACPWA's Vicky Hamlin completed the grout inspection.

Permits: The Alameda County Public Works Agency (ACPWA) issued the subsurface drilling permit. Also, Cambria obtained City of Oakland excavation permit on behalf of Woodward Drilling to complete the well rebuild and an obstruction permit to reserve the parking meters. Copies of the permits are in Appendix D.

Well Installation: Prior to the well installation, the boring was hand cleared to 5 ft bgs and no underground obstructions were encountered. Concrete was cored using a 18-inch core to fit a 12-inch well box. Cambria installed well MW-3A using 10-inch diameter hollow-stem augers. The well was constructed with 4-inch diameter PVC well casing, and screened with 0.010-inch slots. The well was screened from approximately 20 to 35 feet bgs. A filter pack consisting of No. 2/12 sand was installed 1 ft inches above the top of the well screen, overlain by two feet of bentonite, and the remaining annulus filled with bentonite-cement grout to the surface. The well was protected by a traffic-rated vault and a locking well cap. Cambria's *Standard Field Procedures for Soil Borings and Monitoring Wells* is included as Appendix G.

Soil Logging & Screening: Cambria logged the soil cuttings of the borings, as presented in Appendix B. No soil samples were collected for analyses. Soil was screened using a photoionization detector (PID). PID results are presented on the boring logs.

Waste Disposal: Investigation derived waste (IDW) generated during field activities was removed the same day as it is generated by Evergreen Environmental of Newark, California.

Well Development: Cambria obtained a City of Oakland encroachment permit and developed newly installed well MW-3A on February 23, 2007.

Well Survey: Cambria will survey newly installed monitoring well MW-3A in March 2007.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Following are conclusions and recommendations:

8.1. Conclusions

- No concentrations of benzene, and the tracer compounds (isobutane, butane and propane) were detected in soil vapor probes VP-1 and VP-2, at a depth of approximately 5 fbg. Therefore, based on these results, any vapor intrusion is none to de minimis.

8.2. Recommendation

- Based on the results, no further soil vapor investigation is recommended. Cambria recommends abandoning soil vapor probes VP-1 and VP-2.

- Continue monitoring all wells on a semi-annual basis.

9.0 REFERENCES

ATC, 1994a. *Environmental Monitoring Report, Second Quarter 1994*, 800 Franklin Street, Oakland, California. July 15, 1994.

ATC, 1994b. *Environmental Monitoring Report, Third Quarter 1994*, 800 Franklin Street, Oakland, California. November 17, 1994.

ATC, 1995a. *Environmental Monitoring Report, Fourth Quarter 1994*, 800 Franklin Street, Oakland, California. March 29, 1995.

California Department of Water Resources (DWR), 2003, *Bulletin 118 - California's Groundwater.*

Frank Lee & Associates, 1988. *Soil and Foundation Investigation Proposed Commercial Building* at 800 Franklin Street, Oakland, California. June 13, 1988.

Frank Lee and Associates, 1993. *Proposed Workplan for Active Fuel Leak Investigation and Remediation*, Former Service Station, 800 Franklin Street, Oakland, California. September 15, 1993.

Frank Lee and Associates, 1994. *Transmittal of Groundwater Level Measurements*, Former Service Station, 800 Franklin Street, Oakland, California. January 6, 1994.

KDM Environmental, Inc., 1992. *Quarterly Monitoring of Wells, Third Quarter 1992*, 800 Franklin Street, Oakland, California. November 13, 1992.

KDM Environmental, Inc., 1993a. *Quarterly Monitoring of Wells, Fourth Quarter 1992*, 800 Franklin Street, Oakland, California. March 8, 1993.

KDM Environmental, Inc., 1993b. *Quarterly Monitoring of Wells, First Quarter 1993*, 800 Franklin Street, Oakland, California. June 16, 1993.

MEC, 1989a. *Workplan for Subsurface Investigation and Remediation of Contaminated Soil*, 800 Franklin Street, Oakland, California. August 24, 1989.

MEC, 1989b. *Update on 800 Franklin Street in Oakland*, 800 Franklin Street, Oakland, California. October 9, 1989.

MEC, 1989c. *Report on Subsurface Investigation and Remediation of Contaminated Soil*, 800 Franklin Street, Oakland, California. November 3, 1989 Draft Edition.

MEC, 1990. *Workplan for Follow-on Subsurface Investigation, Related to Well Installation and Borings*, 800 Franklin Street, Oakland, California. June 6, 1990.

MEC, 1992. *Report on Subsurface Investigation, Related to Well Installation and Borings*, 800 Franklin Street, Oakland, California. January 20, 1992.

Regional Water Quality Control Board, San Francisco Bay Region – Groundwater Committee, 1999. *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report.* June.

10/21/04

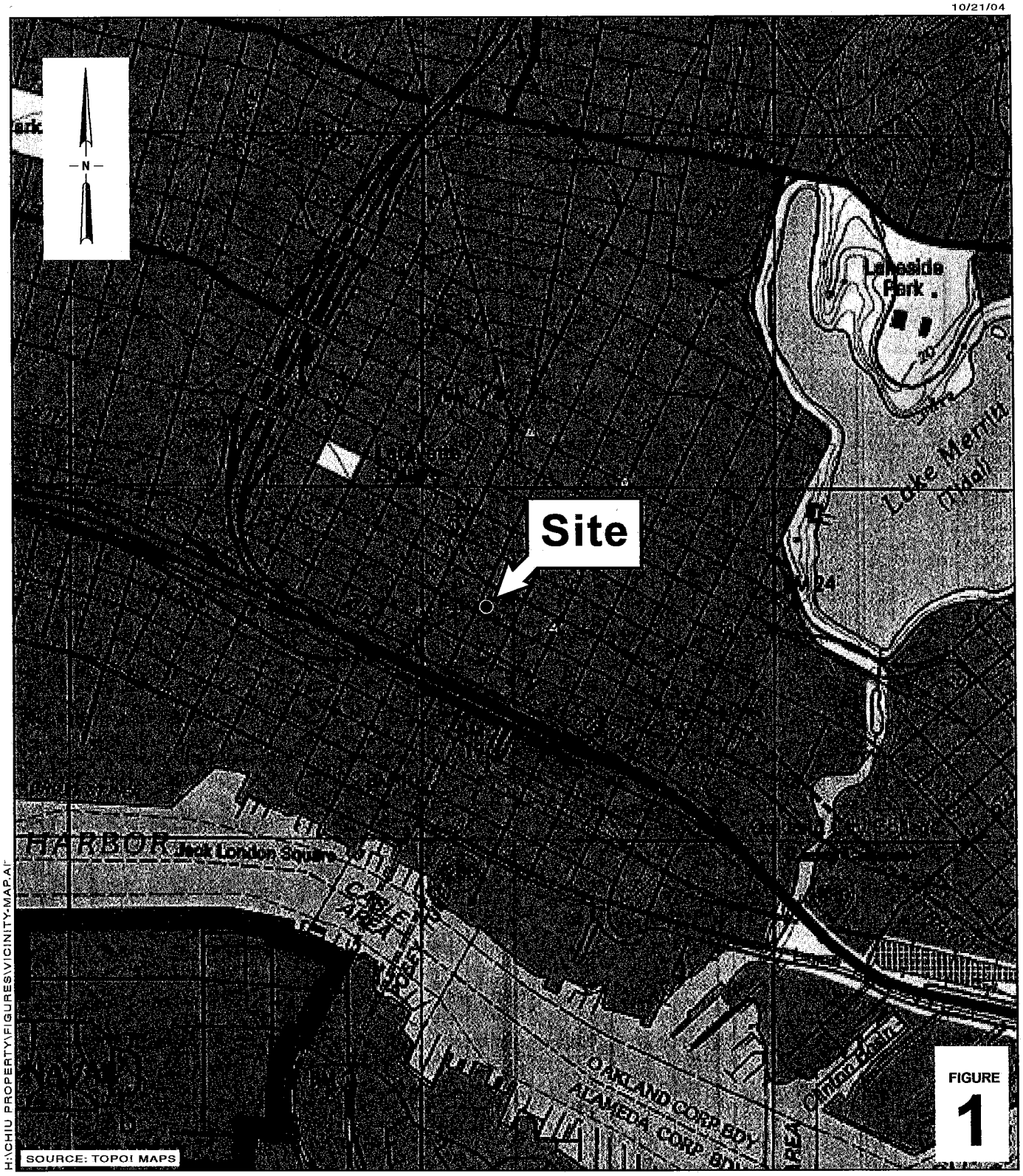


FIGURE 1

H:\CHIU PROPERTY\FIGURES\VICINITY-MAP.AI

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

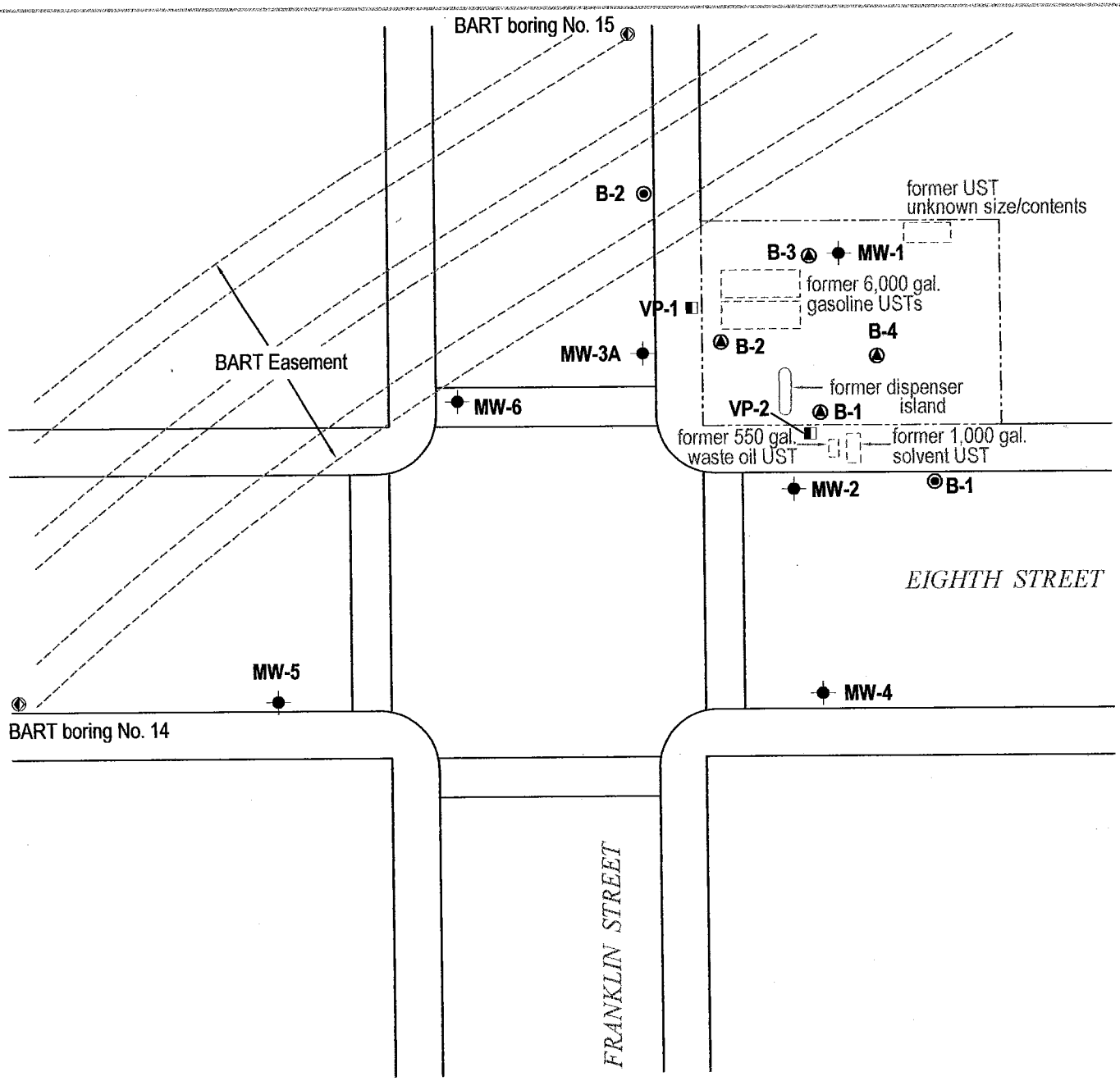
Chiu Property

800 Franklin Street

Oakland, California

CAMBRIA

Vicinity Map



EXPLANATION

MW-1	Monitoring well location
B-1	Soil boring location (Frank Lee & Assoc., 1988)
B-1	Soil boring location (Miller Environmental Co., 1991)
	Approximate BART soil boring location (BART 1963)
VP-1	Soil Vapor probe (Cambria, 2006)

N

0 20 40

Scale (ft)

FIGURE

2

H:\CHIU PROPERTY\FIGURES\CHIU-SITEPLAN.DWG

Chiu Property

800 Franklin Street

Oakland, California

CAMBRIA

Site Plan

CAMBRIA

Table 1. **Well Completion Data** - Chiu Property, 800 Franklin Street, Oakland, California

Well ID	Installation Date	Boring Diameter (inches)	Borehole Depth (feet bgs)	Well Diameter (inches)	Screen Size (inches)	Well Depth (feet bgs)	Surface Seal (feet bgs)	Sand Pack Interval (feet bgs)	Screened Interval (feet bgs)	First Encountered GW Depth (feet bgs)	TOC Elevation (feet amsl)
MW-1	1989	8	35	2	0.010	35	0-18	18-35	20-35	NA	33.42
MW-2	1989	8	35	2	0.010	35	0-18	18-35	20-35	NA	33.65
*MW-3	1989	8	35	2	0.010	35	0-18	18-35	20-35	NA	34.23
MW-3A	2/8/2007	10	35	4	0.010	35	0-17	19-35	20-35	NA	NA
MW-4	10/2/1991	8	35	2	0.010	35	0-18	18-35	20-35	25.0	33.64
MW-5	10/3/1991	8	35	2	0.010	35	0-18	18-35	20-35	26.0	33.56
MW-6	5/15/1997	8	35	2	0.010	35	0-14.5	14.5-36.25	14.5-36.25	22.5	33.98

Abbreviations and Notes:
bgs = below ground surface
GW = groundwater
TOC = top of casing
amsl = measured relative to mean sea level
NA = data not available
* = Well MW-3 was destroyed by pressure grouting on January 29, 2007 by Cambria.

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Table 2. Soil Vapor Analytical Data - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	Benzene (uG/m^3)	Isobutane (uG/m^3)	Butane (uG/m^3)	Propane (uG/m^3)
VP-1	11/17/2006	5	ND<3.9	ND	ND	ND
VP-2	11/17/2006	5	ND<4.0	ND	ND	ND
Duplicate Samples						
VP-1-Dup	11/17/2006	5	ND<4.0	ND	ND	ND
VP-2-Duplicate	11/17/2006	5	ND<4.0	ND	ND	ND

Abbreviations and Analyses:

ND<n = Not dectected (ND) above laboratory detection limit, n.

ft = Measured in feet

uG/m3 = Microgram per cubic meter.

Benzene, isobutane, butane and propane by modified EPA Method TO-15.

APPENDIX A

Agency Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ORIGINAL

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

August 8, 2006

Mr. Tommy Chiu
P.O. Box 28194
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000196, Bill Louie's Auto Service, 800 Franklin Street, Oakland, CA

Dear Mr. Chiu:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Response to Agency Comments and Work Plan," dated July 24, 2006, prepared on your behalf by Cambria Environmental Technology, Inc. The "Response to Agency Comments and Work Plan," presents responses to technical comments in our April 11, 2006 correspondence and proposes a scope of work to rebuild monitoring well MW-3 and collect soil vapor samples at four sampling locations. We concur with the proposed scope of work provided that the technical comments below are addressed during the field investigation.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Depth of Soil Vapor Samples.** The depths at which soil vapor samples will be collected do not appear to be specified in the Work. We request that soil vapor samples be collected at a depth of approximately 4 feet bgs. The recommended depth may be adjusted in the field based on encountered conditions to intercept any significant coarse-grained layers that may be preferential pathways for soil vapors. Please present results of the soil vapor sampling in the Site Assessment Report requested below.

2. **Laboratory Analyses of Soil Vapor Samples.** The Work Plan proposes analyses of soil vapor samples by EPA Methods TO-15, TO-14A, or 8260. EPA Method 8260 is acceptable provided that a reporting limit of 85 micrograms per cubic meter can be achieved.

3. **Hydraulic Gradient and Off-site Receptors.** ACEH appreciates the research conducted on of-site receptors and the BART tube. Based on the information provided, nearby buildings and the BART tube do not appear to be receptors for groundwater from the site.

4. **Groundwater Monitoring.** Groundwater monitoring is to be conducted in all existing wells on a semi-annual basis. ACEH concurs with the proposed analyses. Please present results of the groundwater sampling in the semi-annual groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

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

- **November 15, 2006** – Quarterly Monitoring Report for the Third Quarter 2006
- **December 15, 2006** – Site Assessment Report

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

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. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

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. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for 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 monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was 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).

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.

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

Sincerely,

Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Matt Meyer
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

Mark Jonas
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** Jul, ', 2005
	REVISION DATE: May 31, 2006
	PREVIOUS REVISIONS: October 31, 2005, December 16, 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
         or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of: **ftp Site Coordinator**.
   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 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)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

Jonas, Mark

From: Wickham, Jerry, Env. Health [jerry.wickham@acgov.org]
Sent: Tuesday, January 23, 2007 4:31 PM
To: Hernandez, Celina
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Celina,

Based upon these results and your request, the schedule for report submittal is extended to February 23, 2007.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

From: Hernandez, Celina [mailto:CHernandez@cambria-env.com]
Sent: Tuesday, January 23, 2007 2:34 PM
To: Wickham, Jerry, Env. Health
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Jerry,

This is a follow up to our phone conversation on January 16, 2007 regarding the Site Assessment Report status. We received an extension to January 31, 2007.

We received the soil vapor data and no concentrations were detected above laboratory reporting limits. You suggested submitting one report to include the results of the soil vapor assessment and the well rebuild, and requesting an extension if necessary. We obtained the City of Oakland permits (a minor encroachment permit, an excavation permit, and an obstruction permit), and we are scheduled to complete the well rebuild on Monday, January 29, 2007. We ask for an extension to February 23, 2007. If you have any questions, please contact me. Thank-you.

Sincerely,

Celina Hernandez
Senior Staff Geologist
Cambria Environmental Technology, Inc.
5900 Hollis Street, Emeryville, CA 94608
P. 510-420-3313
F. 510-420-9170
C. 510-376-0115

A Woman-Owned Business

-----Original Message-----
From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Thursday, September 28, 2006 4:40 PM

To: Hernandez, Celina
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Celina,

As we discussed by telephone today, the use of a phased approach for soil vapor sampling is acceptable. Based upon your request, the schedule for submittal of a Site Assessment Report is extended to January 31, 2007.

Regards,
Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Suite 250
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 Fax
jerry.wickham@acgov.org

From: Hernandez, Celina [mailto:CHernandez@cambria-env.com]
Sent: Thursday, September 28, 2006 3:19 PM
To: Wickham, Jerry, Env. Health
Cc: Jonas, Mark
Subject: 800 Franklin St., Oakland, CA

Fuel Leak Case No. RO0000196

Jerry,
Per our phone conversation on 9/28/06, the soil vapor investigation outlined in Cambria's July 24, 2006 Response to Agency Comments and Work Plan, will be a revised to a phased approach. We agreed to defer on the indoor soil vapor investigation until Cambria has completed the outdoor soil vapor investigation. After the outdoor data is reviewed, the indoor soil vapor investigation will be re-evaluated.

Due to the City of Oakland's Minor Encroachment Permit process, the MW-3 well rebuild was postponed from October 12, 2006 to November 28, 2006. We are requesting an extension for the Site Assessment Report to January 31, 2006.

If you have any questions, please contact me. Thank-you for you time.

Sincerely,

Celina Hernandez
Senior Staff Geologist
Cambria Environmental Technology, Inc.
5900 Hollis Street, Emeryville, CA 94608
P. 510-420-3313
F. 510-420-9170
C. 510-376-0115

A Woman-Owned Business

Hernandez, Celina

From: Wickham, Jerry, Env. Health [jerry.wickham@acgov.org]
Sent: Friday, September 29, 2006 4:36 PM
To: Hernandez, Celina
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Celina,

Collecting the soil vapor samples at a depth of 5 feet bgs is acceptable.

Regards
Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Suite 250
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 Fax
jerry.wickham@acgov.org

From: Hernandez, Celina [mailto:CHernandez@cambria-env.com]
Sent: Friday, September 29, 2006 2:39 PM
To: Wickham, Jerry, Env. Health
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Jerry,

I neglected to mention the approval to collect outdoor soil vapor samples at a depth of 5 ft below ground surface. Please confirm.

Sincerely,

Celina Hernandez
Senior Staff Geologist
Cambria Environmental Technology, Inc.
5900 Hollis Street, Emeryville, CA 94608
P. 510-420-3313
F. 510-420-9170
C. 510-376-0115

A Woman-Owned Business

contact the sender and delete all copies.

-----Original Message-----
From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Thursday, September 28, 2006 4:40 PM
To: Hernandez, Celina
Cc: Jonas, Mark
Subject: RE: 800 Franklin St., Oakland, CA

Celina,

As we discussed by telephone today, the use of a phased approach for soil vapor sampling is acceptable. Based upon your request, the schedule for submittal of a Site Assessment Report is extended to January 31, 2007.

Regards,
Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Suite 250
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 Fax
jerry.wickham@acgov.org

From: Hernandez, Celina [mailto:CHernandez@cambria-env.com]
Sent: Thursday, September 28, 2006 3:19 PM
To: Wickham, Jerry, Env. Health
Cc: Jonas, Mark
Subject: 800 Franklin St., Oakland, CA

Fuel Leak Case No. RO0000196

Jerry,
Per our phone conversation on 9/28/06, the soil vapor investigation outlined in Cambria's July 24, 2006 Response to Agency Comments and Work Plan, will be a revised to a phased approach. We agreed to defer on the indoor soil vapor investigation until Cambria has completed the outdoor soil vapor investigation. After the outdoor data is reviewed, the indoor soil vapor investigation will be re-evaluated.

Due to the City of Oakland's Minor Encroachment Permit process, the MW-3 well rebuild was postponed from October 12, 2006 to November 28, 2006. We are requesting an extension for the Site Assessment Report to January 31, 2006.

If you have any questions, please contact me. Thank-you for you time.

Sincerely,

Celina Hernandez
Senior Staff Geologist
Cambria Environmental Technology, Inc.
5900 Hollis Street, Emeryville, CA 94608
P. 510-420-3313

APPENDIX B

Boring Logs and Well Construction Details

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	Chiu	**DRILLING STARTED**	17-Nov-06
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	17-Nov-06
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger		
BORING DIAMETER	3-inch	**SCREENED INTERVALS**	5.5 to 6 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA
REMARKS	On Franklin St. in front of 800 Franklin St. building		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of concrete.	0.3	Portland Type I/II
0							**Silty SAND (fill):** Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
									1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-1- 5 5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil vapor probe was sampled on 12/28/2006.

WELL LOG (PID) H:\CHIU-O~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/13/07

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	VP-2
JOB/SITE NAME	Chiu	**DRILLING STARTED**	17-Nov-06
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	17-Nov-06
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger		
BORING DIAMETER	3-inch	**SCREENED INTERVALS**	5.5 to 6 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA

REMARKS On 8th St. in sidewalk in front of 800 Franklin St. building

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of Concrete.	0.3	Portland Type I/II
0							**Silty SAND (fill):** Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
							@3': Yellow-grey; 25% silt, 75% fine to medium sand.		1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-2- 5.5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil Vapor probe was sampled on 12/28/2006.

WELL LOG (PID) H:\CHIU-O~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/13/07

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3
JOB/SITE NAME	Chiu	**DRILLING STARTED**	29-Jan-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	29-Jan-07
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Woodward Drilling Co., C57 #710079	**GROUND SURFACE ELEVATION**	
DRILLING METHOD	--	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	10-inch	**SCREENED INTERVAL**	NA
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA ▼

REMARKS Well located on Franklin St. between two metered parking spaces in front of 800 Franklin St. building.

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0			8-inches of concrete.	0.7	
								Silty SAND (fill): Light brown; moist; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		
					5			**Silty SAND:** Light brown; moist; 40% silt, 60% fine to medium sand; low plasticity; low estimated permeability.	5.0	
					10					
					15			@ 15' - Olive gray, 30% silt, 60% fine to medium sand.		Portland Type I/II
					20	SM				
					25			@ 25' - Light brown.		
					30			@ 30 - 15% silt, 85% fine to medium sand; non-plastic; and moderate estimated permeability.		
								@ 32.5' - Olive gray and wet.		
					35				35.0	Bottom of Boring @ 35 ft

Notes:

Soil lithology based on soil cuttings from MW-3A and other site boring logs.

2-inch, PVC, schedule 40 well MW-3 was destroyed by pressure grouting on January 29, 2007. MW-3 was screened from approximately 20 to 35 feet below grade.

WELL LOG (PID/TPHG) H:\CHIU-O~1\BORING~1\CHIU_SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/9/07

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3A
JOB/SITE NAME	Chiu	**DRILLING STARTED**	08-Feb-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	08-Feb-07
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Woodward Drilling Co., C57 #710079	**GROUND SURFACE ELEVATION**	
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	10-inch	**SCREENED INTERVAL**	20 to 35 ft bgs
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA

REMARKS Well located on Franklin St. between two metered parking spaces in front of 800 Franklin St. building.

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
								8-inches of concrete.	0.7
0								**Silty SAND (fill):** Light brown; moist; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.	
0					5			**Silty SAND:** Light brown; moist; 40% silt, 60% fine to medium sand; low plasticity; low estimated permeability.	5.0
					10				
1					15			@ 15' - Olive gray, 30% silt, 60% fine to medium sand.	
					20	SM			
32					25			@ 25' - Light brown.	
1198					30			@ 30 - 15% silt, 85% fine to medium sand; non-plastic; and moderate estimated permeability.	
								@ 32.5' - Olive gray and wet.	
128					35				35.0

Notes:

Soil lithology based on soil cuttings from MW-3A.

4-inch well MW-3A is located adjacent to former well MW-3.

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Lonestar Sand #2/12
- 4"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 35 ft

WELL LOG (PID/TPHG) H:\CHIU-O~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/9/07

APPENDIX C

Standard Operating Procedures

Cambria

STANDARD FIELD PROCEDURES SOIL VAPOR SAMPLING DIRECT PUSH AND VAPOR POINT METHODS

This document describes Cambria Environmental Technology's standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Direct Push Method for Soil Vapor Sampling

The direct push method for soil vapor sampling uses a hollow vapor probe, which is pushed into the ground, rather than augured, and the stratigraphy forms a vapor seal between the surface and subsurface environments ensuring that the surface and subsurface gases do not mix. Once the desired soil vapor sampling depth has been reached, the field technician installs disposable polyethylene tubing with a threaded adapter that screw into the bottom of the rods. The screw adapter ensures that the vapor sample comes directly from the bottom of the drill rods and does not mix with other vapor from inside the rod or from the ground surface. In addition, hydrated bentonite is placed around the sampling rod and the annulus of the boring to prevent ambient air from entering the boring. The operator then pulls up on the rods and exposes the desired stratigraphy by leaving an expendable drive point at the maximum depth. The required volume of soil vapor is then purged through the polyethylene tubing using a standard vacuum pump. The soil vapor can be sampled for direct injection into a field gas chromatograph, pumped into inert tedlar bags using a "bell jar" sampling device, or allowed to enter a Summa vacuum canister. Once collected, the vapor sample is transported under chain-of-custody to a state-certified laboratory. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure. Drilling and sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent. Once the sampling is completed, the borings are filled to the ground surface with neat cement.

Shallow Soil Vapor Point Method for Soil Vapor Sampling

The shallow soil vapor point method for soil vapor sampling utilizes a hand auger or drill rig to advance a boring for the installation of a soil vapor sampling point. Once the boring is hand augered to the final depth, a 6-inch slotted probe, capped on either end with brass or Swagelok fittings, is placed within 12-inches of number 2/16 filter sand (Figure A). Nylon tubing of ¼-inch inner-diameter of known length is attached to the probe. A 2-inch to 12-inch layer of unhydrated bentonite chips is placed on top of the filter pack. Next pre-hydrated granular bentonite is then poured into the hole to approximately and topped with another 2-inch layer of unhydrated bentonite chips or concrete, depending if the boring will hold one probe or multiple probes. The tube is coiled and placed within a wellbox finished flush to the surface. Soil vapor samples will be collected no sooner than one week after installation of the soil-vapor points to allow adequate time for representative soil vapors to accumulate. Soil vapor sample collection will not be scheduled until after a minimum of three consecutive precipitation-free days and irrigation onsite has ceased. Figure B shows the soil vapor sampling apparatus. A measured volume of air will be purged from the tubing using a vacuum pump

and a tedlar bag. Immediately after purging, soil-vapor samples will be collected using the appropriate size Summa canister with attached flow regulator and sediment filter. The soil-vapor points will be preserved until they are no longer needed for risk evaluation purposes. At that time, they will be destroyed by extracting the tubing, hand augering to remove the sand and bentonite, and backfilling the boring with neat cement. The boring will be patched with asphalt or concrete, as appropriate.

Vapor Sample Storage, Handling, and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.

CAMBRIA

STANDARD FIELD PROCEDURES FOR SOIL BORING AND MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

SOIL BORINGS

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Professional Geologist (PG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I, II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

APPENDIX D

Permits

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0601999

Descr soil boring on 8th St Permit Issued 11/10/06

Soil Vapor probe 1

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	License Classes
Owner	CHIU CHENTSO				
Contractor	VIRONEX INC	X	(510)568-7676	705927	C57
Arch/Engr					
Agent	CAMBRIA ENVIRO/C HERNANDEZ		(510)376-0115		
Applic Addr	2110 ADAMS AVE, SAN LEANDRO, CA, 94577				

$414.25 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh

JOB SITE

ADDRESS:

DIST:

Date: 11/10/06 Amt Paid: $1,185.65
By: DLR Register R02 Receipt# 098234

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2 Soil vapor probe 1

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X0601999 *	800 Franklin St. Oakland, CA

APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
11/17/06	11/17/06	

CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #
C57 - 705927	1247727

ATTENTION: 510 - 238-3766 Yaqqq Chin

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

☒ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # B 342-23 87 Company Name Granite State

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ 11/10/06

Signature of Permittee ☒ Agent for ☐ Contractor ☐ Owner Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO

ISSUED BY	DATE ISSUED

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0601998

Descr soil boring on Franklin St Permit Issued 11/10/06

Soil vapor probe 2

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

	Applcnt	Phone#	Lic#	License Classes
Owner CHIU CHENTSO				
Contractor VIRONEX INC	X	(510)568-7676	705927	C57
Arch/Engr				
Agent CAMBRIA ENVIRO/C HERNANDEZ		(510)376-0115		

Applic Addr 2110 ADAMS AVE, SAN LEANDRO, CA, 94577

$414.25 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh

JOB SITE

ADDRESS:

DIST:

CITY OF OAKLAND

Date: 11/10/06 Amt Paid: $1,105.05
By: DLR Register R02 Receipt# 090234

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERI

 Soil Vapor probe 2

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X 0 6 0 1 9 9 8 *	800 Franklin St. Oakland, CA

APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
11/17/06	11/17/06	

CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #
C57 - 705927	1247727

ATTENTION:

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

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☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

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☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

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Policy # B 342-23 87 Company Name Granite State

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ 11/10/06

Signature of Permittee ☐ Agent for ☒ Contractor ☐ Owner — Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST (Parking meters?)

Parcel# 001 -0193-015-00

Appl# OB060743

reserve meters [two no fee with X0601998/1999] 8-374;-372; 370;368;F-800;-802;-804;-806 soil boring on Franklin St

Permit Issued 11/10/06

For Soil Vapor probes

Nbr of days: 1
Effective: 11/17/06

Nbr of meters: 6
Expiration: 11/17/06

SHORT TERM METERED

	Applcnt	Phone#	Lic#	License Classes
Owner CHIU CHENTSO				
Contractor VIRONEX INC	X	(510)568-7676	705927	C57
Arch/Engr				
Agent CAMBRIA ENVIRO/C HERNANDEZ		(510)376-0115		

Applic Addr 2110 ADAMS AVE, SAN LEANDRO, CA, 94577

$276.55 TOTAL FEES PAID AT ISSUANCE

$61.00 Applic	$180.00 Permit
$.00 Process	$22.90 Rec Mgmt
$.00 Gen Plan	$.00 Invstg
$.00 Other	$12.65 Tech Enh

ADDRESS:

CITY OF OAKLAND JOB SITE

DIST:

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 11/10/06

Issued by: _____

Date: 11/10/06 Amt Paid: $1,105.85
By: DLR Register R02 Receipt# 030234

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0700110

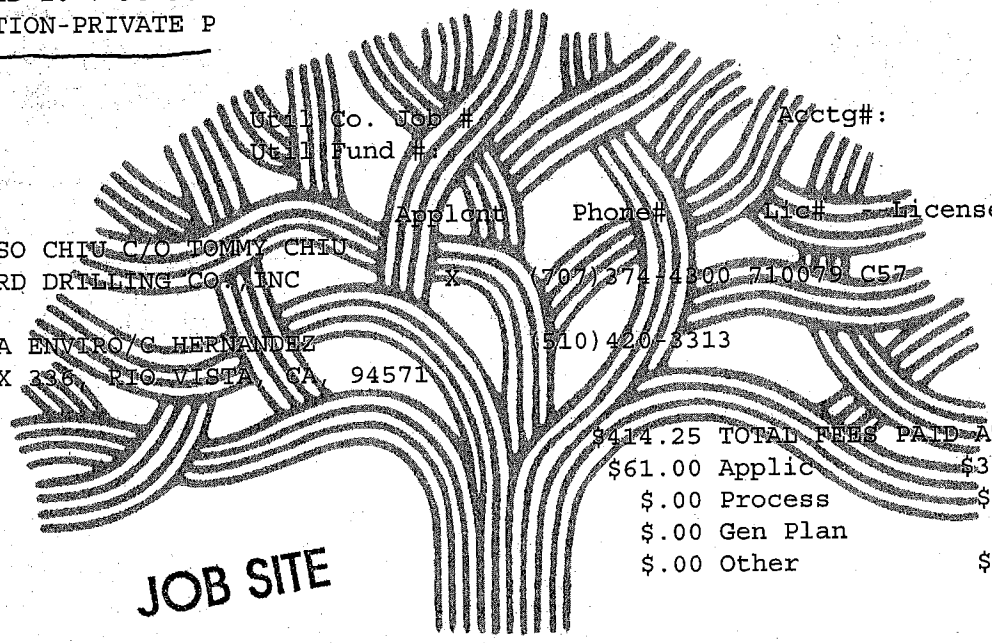
Descr MONITORING WELL rebuild Permit Issued 01/23/07
ONE MONITORING WELL TO BE INSTALLED ON FRANKLIN ST.
RECORDED 10-7-96 96-256691 RE-RECORDED 10-31-97
Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	License Classes
Owner	CHEN-TSO CHIU C/O TOMMY CHIU				
Contractor	WOODWARD DRILLING CO., INC	X	(707)374-4300	710079	C57
Arch/Engr					
Agent	CAMBRIA ENVIRO/C.HERNANDEZ		(510)420-3313		
Applic Addr	P.O.BOX 336, RIO VISTA, CA, 94571				

$414.25 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh



JDRESS:

CITY OF OAKLAND

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERIN

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X 0 7 0 0 1 1 0 *	800 Franklin St., Oakland
APPROX. START DATE: Jan. 29 / APPROX. END DATE: Jan. 29	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS: CSL 710079	CITY BUSINESS TAX #: 444677

ATTENTION:

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

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☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

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☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

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Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X Colin for Woodward Drilling 1/23/07

Signature of Permittee ☒ Agent for ☐ Contractor ☐ Owner Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# OB070092

MONITORING WELL rebuild reserve meters F-800;-802;-804;-806 Permit Issued 01/23/07
-716;-714;-712 WELL TO BE INSTALLED ON FRANKLIN ST.
RECORDED 10-7-96 96-256691 RE-RECORDED 10-31-97

Nbr of days: 1 Nbr of meters: 7
Effective: 01/29/07 Expiration: 01/29/07

SHORT TERM METERED

		Applcnt	Phone#	Lic#	License Classes
Owner	CHEN-TSO CHIU C/O TOMMY CHIU				
Contractor	WOODWARD DRILLING CO., INC	X	(707)374-4300	710079	C57
Arch/Engr					
Agent	CAMBRIA ENVIRO/C HERNANDEZ		(510)420-8313		
Applic Addr	P.O.BOX 336 RIO VISTA CA 94571				

$310.98 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$210.00	Permit
$.00	Process	$25.75	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$14.23	Tech Enh

JOB SITE

CITY OF OAKLAND

DRESS:

DIST:

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 1/23/07

Issued by: _____

Date: 01/23/07 Amt Paid: $725.23
By: SKJ Register R03 Receipt# 113897

CITY OF OAKL D • Community and Economic Developmer gency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3445 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# OB070124

MONITORING WELL rebuild reserve meters F-800;-802;-804;-806 Permit Issued 02/02/07
-716;-714;-808;-810 on 8th St 8-374 WELL TO BE INSTALLED
RECORDED 10-7-96 96-256691 RE-RECORDED 10-31-97

Nbr of days: 1 Nbr of meters: 9
Effective: 02/08/07 Expiration: 02/08/07

SHORT TERM METERED

		Applcnt	Phone#	Lic#	License Classes
Owner	CHEN-TSO CHIU C/O TOMMY CHIU				
Contractor	WOODWARD DRILLING CO., INC	X	(707)374-4300	710079	C57
Arch/Engr					
Agent	CAMBRIA ENVIRO/C HERNANDEZ		(510)420-3313		
Applic Addr	P.O.BOX 336, RIO VISTA, CA, 94571				

$379.83 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$270.00	Permit
$.00	Process	$31.45	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$17.38	Tech Enh

DIST: ADDRESS:

JOB SITE

CITY OF OA

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 2/2/07

Issued by: _____

Date: 02/02/07 Amt Paid: $379.83
By: DLR Register R02 Receipt# 099856

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: 09/22/2006 By jamesy

Permit Numbers: W2006-0827 to W2006-0828
Permits Valid from 11/28/2006 to 11/28/2006

Application Id: 1158689323427
Site Location: 800 Franklin St. at 8th Street
Project Start Date: 10/12/2006
Extension Start Date: 11/28/2006
Extension Count: 2

City of Project Site: Oakland

Completion Date: 10/13/2006
Extension End Date: 11/28/2006
Extended By: vickyh1

Applicant: Cambria Environmental, Tech., Inc. - Celina Hernandez
5900 Hollis Street, Suite A, Emeryville, CA 94608
Phone: 510-420-3313

Property Owner: Tommy Chui
PO Box 28194, Oakland, CA 94606
Phone: 510-339-3579

Client: ** same as Property Owner **

Contact: Celina Hernandez
Phone: --
Cell: 510-376-0115

Total Due: $500.00
Receipt Number: WR2006-0438 **Total Amount Paid:** $500.00
Payer Name : Cambria Environmental Tech. Paid By: CHECK **PAID IN FULL**

Works Requesting Permits: emailed James yoo 1/23/07 re. schedule

Well Construction-Monitoring-Monitoring - 1 Wells
Driller: Woodward Drilling - Lic #: 710079 - Method: hstem

Work Total: $300.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2006-0827	09/22/2006	01/10/2007	MW-3A	10.00 in.	4.00 in.	15.00 ft	35.00 ft

Specific Work Permit Conditions

1. 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.

2. Permitte, 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.

3. 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.

4. Compliance with the 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 Well Permit

Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 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.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Minimum seal depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

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.

Borehole(s) for Investigation-Environmental/Monitorinig Study - 4 Boreholes
Driller: Cambria - Lic #: 740582 - Method: other

Work Total: $200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2006-0828	09/22/2006	01/10/2007	4	3.00 in.	4.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 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.

5. 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.

6. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

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: 02/09/2007 By jamesy

Permit Numbers: W2007-0136
Permits Valid from 02/18/2007 to 02/18/2007

Application Id: 1170783427931
Site Location: 800 Franklin St. at 8th Street
Pressure Grout completed on Jan. 29, 2007,
Submitting Permit post-work
Project Start Date: 02/18/2007

City of Project Site: Oakland

Completion Date:02/18/2007

Applicant: Cambria Environmental Technology - Celina Hernandez
5900 Hollis Street, Suite A, Emeryville, CA 94608
Phone: 510-420-3313

Property Owner: Tommy Chiu
PO Box 28194, Oakland, CA 94606
Phone: 510-339-3579

Client: ** same as Property Owner **

Total Due: $300.00
Receipt Number: WR2007-0067 **Total Amount Paid:** $300.00
Payer Name : Cambria Environmental Technology Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 1 Wells
Driller: Woodward Drilling - Lic #: 710079 - Method: tremi

Work Total: $300.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2007-0136	02/09/2007	05/19/2007	MW-3	8.00 in.	2.00 in.	18.00 ft	35.00 ft	MW-3		

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 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.

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 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.

5. 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.

6. Remove well by excavation. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.

7. Work already completed on Jan 29, 2007.

APPENDIX E

Soil Vapor Sampling Field Data

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-2

Project Name: Chin
Project No: 589-1000-017
Site Address: 800 Franklin St. Oakland, CA

Date: 12/28/06
Sampler: CH / CM
PM: MJ

Purge Volume

Calculated Purge Volume: 3 purge volumes per DTSC

Time	Flow Rate	Volume	Comments
900			1/4 IL tedlar bag

Sample Collection

Flow Control Setting: 30 min
Summa Canister ID: 22960
Summa Canister Size: 1L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
909	-28 Hg	914	-5	5min

Notes: -28 Hg prior to sampling
Flow control = FC00426

Soil Vapor Sampling Point ID: VP-1

Project Name: Chin
Project No:
Site Address:

Date: 12/20/06
Sampler: CH/CM
PM: MJ

Purge Volume

Calculated Purge Volume: 3 purge volumes per DTSC

Time	Flow Rate	Volume	Comments
940			1/4D 1L Tedlerbag

Sample Collection

Flow control = FC00118

Flow Control Setting: 30 min.
Summa Canister ID: 12366
Summa Canister Size: 1L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
942	-28 Hg	948	-5 Hg	6min

Notes: For each location:
Disconnected purge line to flow meter and reconnected to line at end of pump w/ valve. Because line from flow meter wasn't working; no air.

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-1-DUP

Project Name: Chiu
Project No: 589-1000-017
Site Address: 800 Franklin St. Oakland CA

Date: 12/28/10
Sampler: CH
PM: MJ

Purge Volume

Calculated Purge Volume: Bypass cut.

Time	Flow Rate	Volume	Comments
~~0808~~ 954			1/10 1L Tedlar Bag

Sample Collection

Flow Control Setting: 30 min
Summa Canister ID: 1448
Summa Canister Size: 1 L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
957	~~-28 Hg~~ -27.5 Hg	1002	-5 Hg	5 min

Notes: Flow Control = FC 00892

Soil Vapor Sampling Point ID:

Project Name:
Project No:
Site Address:

Date:
Sampler:
PM:

Purge Volume

Calculated Purge Volume:

Time	Flow Rate	Volume	Comments

Sample Collection

Flow Control Setting:
Summa Canister ID:
Summa Canister Size:
Analysis:

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time

Notes:

APPENDIX F

Analytical Laboratory Report

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

Contact Person: Celina Hernandez
Company: Cambria Environmental Email:
Address: 5900 Hollis St Ste A City: Emeryville State: CA Zip: 94608
Phone: 510 420-3313 Fax: 510 420-9170
Collected by: (Signature) Celina

Project Info:
P.O. # 589-1000-017
Project # 589-1000-017
Project Name: Chili-Oakland

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by: VFR
Date: 1/5/07
Pressurization Gas: (N2) He

Lab I.D.	Field Sample I.D. (Location)	Can#	Date	Time	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	VP-2	2400	12/28/06	914	TO15 Benzene	-28	-5	6.0 "Hg	15.0 psi
02A	VP-1	3460	12/28/06	948	TO15 Benzene	-28	-5	5.5 "Hg	
03A	VP-1-DUP	1446	12/28/06	1002	TO15 Benzene	-27.5	-5	6.0 "Hg	
04A	TRIP	3403	12/28/06					29.0 "Hg	

Notes:

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Celina	12/28/06 1110	Secured location	12/28/06 1100
Relinquished by: (signature)	Date/Time	Received by: (signature) Monica Green AIL	Date/Time 12/29/06 930
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Customer Seals Intact?	Work Order #
	DHL	19416747055	N/A	Good	Yes No (None)	0612627

Form 1293 rev.10

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0612627

Work Order Summary

CLIENT:	Ms. Celina Hernandez Cambria Environmental Technology, Inc. 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Ms. Celina Hernandez Cambria Environmental Technology, Inc. 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3313	**P.O. #**	589-1000-017
FAX:	510-420-9170	**PROJECT #**	589-1000-017 Chiu-Oakland
DATE RECEIVED:	12/29/2006	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	01/12/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	VP-2	Modified TO-15/TICs	6.0 "Hg
01AA	VP-2 Duplicate	Modified TO-15/TICs	6.0 "Hg
02A	VP-1	Modified TO-15/TICs	5.5 "Hg
03A	VP-1-DUP	Modified TO-15/TICs	6.0 "Hg
04A	TRIP	Modified TO-15/TICs	29.0 "Hg
05A	Lab Blank	Modified TO-15/TICs	NA
06A	CCV	Modified TO-15/TICs	NA
07A	LCS	Modified TO-15/TICs	NA

CERTIFIED BY: Linda J. Fruman DATE: 01/12/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

LABORATORY NARRATIVE
Modified TO-15
Cambria Environmental Technology
Workorder# 0612627

Four 1 Liter Summa Canister samples were received on December 29, 2006. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

Method modifications taken to run these samples are summarized in the below table. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) information for sample TRIP did not match the entry on the sample tag with regard to sample identification. The discrepancy was noted in the Sample Receipt Confirmation email/fax and the information on the COC was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-2

Lab ID#: 0612627-01A
No Detections Were Found.

Client Sample ID: VP-2 Duplicate

Lab ID#: 0612627-01AA
No Detections Were Found.

Client Sample ID: VP-1

Lab ID#: 0612627-02A
No Detections Were Found.

Client Sample ID: VP-1-DUP

Lab ID#: 0612627-03A
No Detections Were Found.

Client Sample ID: TRIP

Lab ID#: 0612627-04A
No Detections Were Found.

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0612627-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010917	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/9/07 11:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	103	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2 Duplicate

Lab ID#: 0612627-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010921	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/10/07 02:56 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0612627-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010918	Date of Collection:	12/28/06
Dil. Factor:	2.47	Date of Analysis:	1/10/07 12:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.2	Not Detected	3.9	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	99	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1-DUP

Lab ID#: 0612627-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010919	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/10/07 01:21 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	101	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRIP

Lab ID#: 0612627-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010920	Date of Collection:	12/28/06
Dil. Factor:	1.00	Date of Analysis:	1/10/07 02:07 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	96	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0612627-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010906	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 01:21 PM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0612627-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010903	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 10:46 AM	

Compound	%Recovery
Benzene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0612627-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010904	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 11:38 AM	

Compound	%Recovery
Benzene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	96	70-130