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June 14, 2013

Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

c/o

Mr. Jeffery Cook
Peralta Community College District
Facilities Project Coordinator
Department of General Services
388 East 8th Street
Oakland, CA 94606

RE: Revised Work Plan for Additional Soil and Groundwater Characterization
Peralta Community College District Maintenance Yard, 501 5th Avenue, Oakland, California
Fuel Leak Case No. RO0000384, GeoTracker Global ID T0600100983
ACC Project Number: 6045.019.02

Dear Mr. Cook and Mr. Wickham:

ACC Environmental Consultants, Inc., (ACC) has prepared the enclosed Work Plan for Additional Soil and Groundwater Characterization for 501 5th Avenue in Oakland, California. The work plan was designed to obtain additional soil, soil vapor and groundwater data needed to support the pursuit of regulatory Site Closure and No Further Action status. In addition, this work plan addresses the Technical Comments presented in Alameda County Health Care Services correspondence dated September 25, 2012 and April 29, 2013 (Appendices A & B).

If you have any questions regarding the content of this work plan, please call (510) 638-8400, extension 110 or email isutherland@accenv.com.

Sincerely,

Ian Sutherland
Project Geologist

Enclosures

A·C·C ENVIRONMENTAL CONSULTANTS

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Revised Work Plan for Additional Soil and Groundwater Site Characterization
Peralta Community College District Maintenance Yard
501 5th Avenue, Oakland, California

ACC Project Number 6045-014.02

Prepared for:

Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Alameda, CA 94502-6577

c/o

Mr. Jeffery Cook
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Department of General Services
388 East 8th Street, Oakland, CA 94606

June 14, 2013

Julia Siudyla
Project Geologist

Ian Sutherland
Project Geologist

PROFESSIONAL GEOLOGIST
MISTY C. KALTREIDER
NO. 2466
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Reviewed by:
Misty C. Kaltreider, PG 7016, CEG 2466
Engineering Geologist

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1.0 INTRODUCTION

At the request of Peralta Community College District (Peralta), ACC Environmental Consultants, Inc. (ACC) has prepared this Revised Work Plan for Additional Soil and Groundwater Characterization for 501 5th Avenue in Oakland, California. The work plan was designed to obtain additional soil, soil vapor and groundwater data needed to support the pursuit of regulatory Site Closure and No Further Action status. In addition, this work plan addresses the Technical Comments in Alameda County Health Care Services correspondence dated September 25, 2012 and April 29, 2013 (Appendices A & B).

This work plan is prepared for the express use of Peralta, its agents and employees and shall not be relied upon by third party interests unless written authorization is provided by Peralta and ACC. The information and or proposed scope of work included in this work plan may be required to be submitted and approved to regulatory agencies overseeing the proposed work. This work plan is not intended to be used as a specification to address items outside the scope of this document or to provide guidance for remedial activities unless otherwise stated.

2.0 BACKGROUND

The Site is located at 501 5th Avenue in Oakland, California (Figure 1 & 2). The Peralta Community College District Maintenance Yard currently occupies the western parcel (south of East 8th Street) and the sports complex and asphalt parking lots occupy the eastern parcel (north of East 8th Street). The table below summarizes the known USTs that have been historically located at the Site (no known USTs currently exist at the Site):

UST #	Size in Gallons	Contents	Year Installed/Removed From Ground	Construction
D1	4,000	Gasoline	Installed in 1981/Removed from Ground in 1993	Fiberglass
D2	6,000	Gasoline		Fiberglass
D3	6,000	Gasoline		Fiberglass
D4	2,000	Diesel	Installed Prior to 1960/ Abandoned in place1981/ Removed from Ground in 1992	Unknown
D5	6,000	Gasoline		Unknown
D6	6,000	Gasoline		Unknown
D7	2,000	Gasoline/Premium		Unknown
D8	550	Waste Oil		Unknown
T1	1,115	Motor oil	Unknown Installation Date/Removed from Ground in 1995-1996	Unknown
T2	523	Diesel/Bunker Fuel		Unknown
T3	7,000	Diesel		Unknown
T4	7,000	Gasoline	Unknown Installation Date/Removed from Ground in 1998-1999	Unknown

Five underground storage tanks (D4, D5, D6, D7, and D8) were installed prior to the 1960's at the Site. These original five tanks were used for storage of fuel and waste oil for the City of Oakland Corporation Yard (historical occupant of the subject property 1960's through the 1980's). The tanks consisted of two 6,000-gallon gasoline tanks, one 2,000-gallon diesel tank, one 2,000-gallon ethyl (premium) gasoline tank, and one 550-gallon waste oil tank. In 1980

Peralta Community College District acquired the property. In 1981 the District abandoned the existing five (5) underground tanks (D4 – D7) by filling with them with water and installed three (3) new fiberglass gasoline underground storage tanks (D1 – D3) were installed approximately 150 feet from the original tanks.

In September 1992 (ACC Tank Closure Report, October 9, 1992), the five original underground storage tanks (D4, D5, D6, D7, and D8) were removed. During the excavation free product was observed on the groundwater within the excavation. Approximately 2,400-gallons of water were pumped out of the excavation and disposed of under manifest. The USTs were found to be in good condition and no holes were observed in the tanks. During removal, a total of eight soil samples and one grab groundwater sample were collected from the excavation. Laboratory analysis of the soil samples indicated up to 228 parts per million (ppm) of Total Petroleum Hydrocarbons (TPH) as diesel (TPH-d), 134 ppm of TPH as gasoline (TPH-g), 2,407 parts per billion (ppb) benzene, 4,617 ppb toluene, 7,170 ppb ethylbenzene, 6,147 ppb total xylenes and 5,477 ppm oil and grease. Laboratory analysis of the water samples collected from the excavation indicated 170 mg/L TPH-d, 15 mg/L TPH-g, 286 µg/L benzene, 698 µg/L toluene, 300 µg/L ethylbenzene, 808 µg/L total xylenes and 284 mg/L oil and grease.

In September 1992, a preliminary study was performed by Environ of Emeryville to evaluate the soil and groundwater conditions at the site. The study indicated that groundwater plumes characterized as BTEX and petroleum hydrocarbons exist beneath the maintenance yard portion (western parcel) and beneath the athletic field (eastern parcel) and are present beyond the tank excavation. The study suggested that impacts may have resulted from alternate, unknown sources. The plumes are included in the attached Figure 4A.

In November 1992, ACC performed a subsurface environmental site assessment of the soil around the former tank excavation (Tanks D4, D5, D6, D7, and D8). Petroleum hydrocarbons as motor oil (TPH-mo) and TPH-g were detected in the soil and groundwater samples collected from the borings. Laboratory analysis of the soil indicated up to 370 ppm of TPH-g, 12 ppm TPH-d, 5,342 ppm of TPH-mo, 76.94 ppm benzene, 73.9 ppm toluene, 30.4 ppm ethylbenzene, and 95.41 ppm xylenes.

In November 1993, three fiberglass underground gasoline tanks (D1, D2, and D3) were removed from the property by ACC. During the initial excavation a strong hydrocarbon odor and a sheen on the groundwater was observed. Soil Samples collected from the excavation indicated up to 1.3 ppm TPH-g, 190 ppb benzene, and 18 ppb toluene. Initial groundwater samples collected from the excavation indicated 27 mg/L TPH-g, 1,200 µg/L benzene, 5,100 µg/L toluene, 690 µg/L ethylbenzene and 5,700 µg/L xylenes. Approximately 3,500 gallons of water were removed from the excavation. Analysis of subsequent groundwater samples from the excavation indicated 210 µg/L TPH-g, and 14 µg/L xylenes. Due to the detectable levels reported in the soil and groundwater onsite, additional groundwater investigations were requested from the regulatory agencies.

In February 1994, four soil borings (MW-1, MW-2, MW-3 and MW-4) were drilled onsite by ACC and converted into 2-inch monitoring wells. The monitoring wells were used to evaluate

the extent of groundwater impact from the two former excavations associated with the removal of tanks D4, D5, D6, D7, and D8. Laboratory analysis of the groundwater samples collected in February 1994 from monitoring wells MW-1 and MW-4 (down gradient from the tank excavations) indicated below detectable concentrations of the constituents evaluated defining the down-gradient extent of groundwater impact. Laboratory analysis of groundwater collected from monitoring wells MW-2 and MW-3 (up-gradient of the former tank excavations) indicated detectable levels of constituents. Samples collected from borings MW-2 and MW-3 indicated detectable levels of TPH-d, TPH-g and BTEX. TPH-mo was reported in the soil from boring MW-2. However, TPH-mo was not detected in the groundwater sample from monitoring well MW-2. TPH-d was only detected in the soil from boring MW-2.

An additional soil and groundwater investigation was conducted on May 9, 1994 (ACC Additional Subsurface Report, June 1994) to evaluate possible up-gradient sources onsite. The investigation included drilling five borings up-gradient (east) of existing monitoring wells MW-2 and MW-3. Laboratory analysis of the soil samples collected during the additional investigation only indicated detectable levels of TPH-d and TPH-mo up to 11 ppm and 100 ppm, respectively. No detectable levels of TPH-g or BTEX were reported.. Groundwater was encountered approximately 5 to 6 feet below ground surface (bgs). Laboratory analysis of grab groundwater samples collected from the boreholes only indicated detectable concentrations of TPH-g up to 61 µg/L. Fine-grain fill material and Bay Mud appear to restrict the mobility of the petroleum hydrocarbons from impacting groundwater. However, groundwater flow direction data suggest that constituent movement is to the westerly direction, away from monitoring wells MW-2 and MW-3.

September 1994 ACC Quarterly Groundwater Sampling indicated below detectable levels of petroleum hydrocarbons in MW-1 and MW-4, and detectable concentrations of petroleum hydrocarbons in MW-2 and MW-3.

May 1995 ACC Quarterly Groundwater Sampling indicated below detectable levels of petroleum hydrocarbons in MW-1 and detectable concentrations of petroleum hydrocarbons in MW-2, MW-3, and MW-4.

May 1996 ACC Remedial Action and Underground Storage Tank Closure Report: Three previously unknown USTs (T1 – T3) were removed from the Site. One previously unknown UST (T4) was left in place due to its proximity to onsite buildings. Over-excavation in and around the former tank excavation was conducted to remove accessible impacted material. Approximately 2,250 cubic yards of impacted soil and 14,900 gallons of water were removed. . Residual impacted soil under buildings and subsurface utilities was left in place. ACC indicated that with the removal of the USTs and the soils in the adjacent vicinity, the bulk of the source of impact was mitigated. Quarterly groundwater monitoring was reinstated following remediation.

The May 20 and November 8, 1996 ACC Quarterly Groundwater Monitoring events documented groundwater concentrations following interim remedial action. Results of the groundwater monitoring indicated that groundwater flow direction and gradient was consistent but slightly

steeper than previous sampling events, and that detectable concentrations of petroleum hydrocarbons were found in MW-1 and MW-3.

Additional groundwater monitoring and sampling events conducted in January 1997 and February 1998 indicated that groundwater flow direction is to the west, consistent with prior sampling events. Overall, the gasoline constituent concentrations in the groundwater decreased over time whereas the TPH-d and TPH-mo fluctuated in select wells.

On March 30, 1998 ACC destroyed monitoring well MW-3 by over drilling in preparation for additional over-excavation and removal of the remaining UST (T4).

The June 10, 1999 ACC UST and Remedial Action Report indicated that interim remedial action included the removal of UST (T4), and excavation of approximately 2,209 tons of impacted soil and treatment of approximately 100,000 gallons of groundwater. Based on the findings, observations and analytical results of verification samples, no further investigation with regards to the extent of soil impact was recommended as the residual petroleum hydrocarbons should naturally degrade over time.

The August 23, 1999 ACC Groundwater Monitoring Report indicated that minor concentrations of TPH-d in MW-1. The concentrations of TPH-mo were no longer present above laboratory detection limits. TPH-g, BTEX or MtBE were not detected above the reporting limits in MW-1. ACC recommended regulatory site case closure.

During July 2012 ACC conducted a soil and groundwater characterization investigation at the site. This investigation included completing 16 soil borings in the areas around the former USTs on the western parcel (Figure 4A), and the near the athletic fields at the eastern parcel (Figure 5) to delineate the extent of soil and groundwater impact at the Site. In addition, nine (9) soil vapor samples were collected from the western parcel.

Soil samples in the western parcel indicated that the southern, western, and eastern extent of residual impacts is defined by borings ACC-B1 through B5, ACC-B8, and ACC-B13. Boring ACC-B7, completed within the former tank excavation, reported the residual impact and sheen on the water. Additionally, boring ACC-B12 reported residual impacts at 2-3 ft bgs but no other indications of residual contamination were detected.

Boring ACC-B14, advanced at the southeast area of the eastern parcel, reported residual impacts by TPH-g, ethylbenzene, and total xylenes below 17-18 feet bgs and above the respective Agency screening levels (ESLs and Risk-Based Screening Levels (RSL) for Ethylbenzene. The impacts in this area have not been completely defined and may extend west beneath East 8th Street.

Borings ACC-B16 and ACC-B17, advanced at the eastern parcel in the athletic fields, reported TPH-d and TPH-mo from 14 to 19.5 feet bgs. In addition, elevated concentrations of lead were reported in the soil up to 480 mg/Kg (B16 at 14-15 feet bgs). The southern extent of the residual impact at the eastern parcel is defined by boring ACC-B16, in which reported no detectable

concentration of constituents above the ESLs where detected.

Groundwater sampling indicated no elevated concentrations of petroleum hydrocarbon constituents in samples ACC-B1 through B3, ACC-B4 (DEEP), ACC-B8 and B9, and ACC-B11 through B13. Groundwater samples collected were highly turbid. Elevated concentrations of lead were reported in select shallow groundwater samples and likely attributed to the precipitate from the sediment in the turbid samples and may not represent lead concentrations in groundwater.

Historical soil and groundwater sampling analytical results are tabulated in the attached Tables 1 and 2, respectively.

Soil vapor sample ACC-SV-1 did not have detections of any target constituents. Elevated leak detection compound 1,1-Difluoroethane (1,1-DFA) was identified in this sample indicating a possible leak of ambient air. Acetone was reported in all vapor samples and chloroform was identified in four soil vapor samples and considered a potential laboratory-introduced compound since acetone and chloroform are not considered target constituents from the former UST releases. Samples ACC-SV-6 and ACC-SV-8 reported detections of constituents of concern including, toluene, MIBK, benzene and xylenes; however, none exceeded their respective RBSLs.

3.0 SUBSURFACE CONDITIONS

The site is located in the East Bay Plain of the Coastal Range physiographic province. The East Bay Plain is an area composed of flat alluvial lowland bay and tidal marshes lying between the bedrock hills of the Diablo Range to the east and San Francisco bay to the west. Geologic material underlying the plain is classified as consolidated and unconsolidated. The presence of consolidated material beneath the site are estimated are estimated to begin at a depth of about 1,000 feet below the ground surface and are not considered to be aquifers. The unconsolidated materials, present from ground surface and to a depth of approximately 1,000 feet below ground surface, contain the groundwater aquifers of the East Bay Plain. These materials consist of a heterogeneous mixture of clay, slit, sand and gravel mainly derived by erosion from the Diablo Range.

Based on the boring and well logs for MW-1, MW-2, MW-3 and MW-4 on the western parcel, the lithology appears to consist of light brown silty-gravel and clayey-gravel (fill) to one foot below ground surface (bgs). Soils below the fill to approximately 15 feet bgs consist of dark greenish grey to black clay characterized as slightly plastic, soft and saturated. Groundwater in the borings was encountered during drilling at approximately 3 to 7 feet bgs.

Groundwater flow at the site was measured during quarterly monitoring events at the Site from 1994-1998 and was typically reported to flow to the west towards San Francisco Bay. Groundwater elevation at the site ranged from -0.27 to 4.71 during monitoring events.

4.0 PROPOSED SCOPE OF WORK

In a July 2011 work plan ACC proposed a two-phased approach to investigate soil and groundwater impacts. The first phase included the 2012 subsurface investigation summarized above in Section 2.0 and the second phase included installation of groundwater monitoring wells. Based on the 2012 subsurface investigation, ACC concluded that additional subsurface characterization is needed to investigate the appropriate locations for groundwater monitoring wells on the eastern parcel. This workplan proposes methodologies to conduct the additional assessment, in addition to addressing technical comments from Alameda County Health Care Services correspondence regarding the 2012 subsurface investigation (Appendix A) and technical comments from Alameda County Health Care Services (Appendix B).

4.1 Technical Comment Response (September 25, 2012)

(1) Leak Detection for Soil Vapor Samples. *The Report indicates that 100% tetrafluoroethane was used as the leak detector tracer gas at each sample location. However, leak detection results are not discussed in the narrative of the Report and tetrafluoroethane does not appear as an analyte in the Analytical Results in Appendix A. The compound 1,1-difluoroethane was detected in two of the soil vapor samples. We request that you provide a discussion of leak detection results and data quality for the soil vapor samples. This discussion and responses to technical comments 1 through 5 can be provided as a separate section of the Work Plan requested below.*

Response: The statement that 100% tetrafluoroethane was used was an error in the site characterization report. The actual leak detection compound was 1,1-Difluoroethane. The Leak detection compound (1,1-Difluoroethane) concentrations in soil vapor samples ranged from less than reporting limit to 6,814 ppbv (18,400 µg/m^3) in ACC-SV-1. The detection limit for SV-1 was increased due to the elevated leak detection compound identified. Based on the elevated leak detection constituent reported, this sample has a probable leak and therefore not valid for the soil vapor evaluation.

Detectable concentration of leak detection chemical was also identified in sample ACC-SV-2 up to 3,520 µg/m3 (1,303.7 ppbv). This concentration indicates an approximately leak of 0.0013% indicating a probable leak of air.

Detectable concentrations of the 1,1-Difluorethane was identified in vapor samples ACC-SV-4, and SV-9 at 5.83 µg/m3 (2.16 ppbv) and 138 µg/m3 (51.11 ppbv), respectively. These concentrations indicated that less than 0.0005% of the sample volume consisted of leaked air; therefore, the reported constituent concentrations are likely representative of in-situ conditions.

Several fuel-related chemicals (including benzene and toluene) were detected in the samples ACC-SV-6 and ACC-SV-8; however, these constituents were reported below agency screening levels (CHHSLs and ESLs). No other fuel-related chemicals were reported above

analytical reporting limits in samples SV-4, and SV-9. Overall, due to the low concentrations of the leak detection gas identified in SV-4 and SV-9, these locations likely indicate that minimal impact from any fuel-related release.

The detection of fuel-related constituents at ACC-SV-6 and SV-8 validate the selection of these locations. The absence of leak detection gas in these soil vapor samples indicates the samples are valid. The sample results indicate concentrations are below residential risk levels. With the exception of SV-1, acetone was reported in the vapor samples collected. It is suspected that acetone is a lab-introduced contaminant and not associated with suspected constituents from a site release since it was reported in 8 of the vapor samples.

Three additional vapor sampling locations are proposed and are discussed in Section 5.3.

(2) ***Dilution Factors.*** *For soil vapor sample SV-1, the analytical results indicate a dilution factor of 50. In the Work Plan requested below, please identify the known or suspected reason for the dilution factor.*

Response: As indicated above, the elevated detection limit in SV-1 is likely due to the increase leak detection chemical in the sample.

(3) ***Analytical Methods for Soil Vapor Samples.*** *In the conditional Work Plan approval letter dated August 15, 2012, ACEH requested that the soil vapor samples be analyzed for Total Petroleum Hydrocarbons as gasoline using Method TO-15 or 8260 and oxygen, methane, and carbon dioxide by ASTM 1946. It does not appear that these analyses were performed. These data would have been useful in helping to evaluate the items described in the technical comments above and would have provided supporting data for consideration of low-threat closure. In the Work Plan requested below, please indicate the reason or rationale for not collecting these data.*

Response: The lack of analysis for TPH as gasoline, oxygen, methane and carbon dioxide was an oversight on ACC's behalf. ACC proposes to collect three additional soil vapor samples (see section 5.3).

(4) ***Sub-Slab Vapor Sampling Methods.*** *The Report indicates that the sub-slab vapor samples were collected in accordance with relevant guidance documents. In the Work Plan requested below, please provide a description of the sampling methods used and data quality*.

Response: The following sampling methods were used at the soil vapor sampling points:

A 2 to 4-inch core was drilled at each of the soil vapor sampling points. A 0.25-inch vapor point consisting of polyethylene tubing with a permeable probe tip was inserted sub-slab, approximately 5-inches below ground surface in each of the cored holes. A Teflon™ disk was used to seal the joint between the tubing and the probe tip. The probe tip was covered with sand

and hydrated bentonite chips were used to seal the annular air space between the probe tip and the ground surface or to the bottom of the building foundation (if possible).

Prior to sampling, each soil vapor point was allowed to equilibrate for approximately 120 minutes. During sample collection at each sampling point, ACC purged vapor from the tubing, probe tip, and sand pack within the soil gas probe . Each sample point was purged for 30 seconds prior to sampling.

At the completion of purging, ACC collected soil vapor samples by opening the vapor-tight valve on each Summa canister, allowing the canister to fill with extracted soil vapor. ACC record the vacuum at the time the valve was opened, monitored, and recorded the vacuum during sample collection. ACC utilized 1,1-Difluorethane as the leak detector tracer gas at each sample location. The tracer compound was gently applied at the surface where air could enter the soil vapor probes (i.e. at the top of the probe) and at all the connections of the sampling train when the sampling starts. ACC ended sample collection when the vacuum within the sample canister reached approximately -5-inches Hg. All soil vapor sample containers were labeled and stored at ambient temperature in laboratory-supplied containers. All Soil Vapor Samples were submitted to Torrent Laboratories for volatile organic compound analysis (VOCs) via EPA method TO-15 Analysis.

Upon completion of the sampling program each location was decommissioned by grouting and sealing with concrete.

Although, the Leak detection compound (1,1-Difluoroethane) concentrations in soil vapor samples. The concentrations of leak detection compound indicated that less than 0.0005% of the sample volume consisted of leaked air in samples SV-4 and SV-9; therefore, the reported constituent concentrations are representative of in-situ conditions. Elevated concentrations leak-detect chemical was reported in Samples SV-1 and SV-2 indicating a probable leak of air in these samples. Several fuel-related chemicals were detected in the samples ACC-SV-6 and ACC-SV-8; however, these were below the CHHSLs and ESLs. No other detections on VOCs related to petroleum constituents were detected in any of the soil vapor samples collected. Based on this information ACC does not believe additional soil vapor sampling for TO-15 analysis is necessary at the site, with the exception of SV-1 and SV-2. A probable leak of SV-1 and SV-2 make the results of these samples suspect. Therefore, resampling in these locations is recommended.

(5) Grab Groundwater Sampling Methods. *In the Work Plan requested below, please provide clarification that grab groundwater samples were not filtered in the field using a 0.45 micron filter.*

Response: None of the grab groundwater samples collected from the site during the 2012-sampling event were filtered in the field.

4.2 Technical Comment Response (April 29, 2013)

(1) Proposed Soil Boring Locations. *The Work Plan proposes five soil borings in the area of existing boring ACC-B-14 and four soil borings in the area of existing borings ACC-B-16 and ACC-B-17. There is no scale shown on the map; however, based on a comparison to other base maps, it appears that the borings are up to 380 feet away from the existing ACC borings. It appears that several of the borings are too far away from the likely source and/or are in cross gradient locations to assess the site. Some of the proposed locations may duplicate previous results from the 1993 investigation. No background information, previous data, or the likely locations of the suspected source(s) are presented to help evaluate the proposed locations. We request the following information be presented in the Revised Work Plan to develop and illustrate proposed soil boring locations:*

- *Base map to include a scale*
- *Base map to include previous boring locations and results from the "Site Investigation Report," dated September 21, 1992 and prepared by Environ*
- *Potential sources identified from previous historical documents are to be shown on the base map and discussed in the text.*

Response: A scaled site map (Figure 5) has been prepared and includes the previous borings conducted by Environ and ACC along with the proposed additional borings and available groundwater data for select petroleum hydrocarbons.

The version of the 1992 Environ Site Investigation Report available to ACC did not contain Figures 1, 2 and 3, which depict the potential sources of the subsurface impacts. Based on the narrative, the area of boring ACC-B-14 was formerly a truck service station and the area of ACC-B-16 and ACC-B-17 was formerly a service station and municipal equipment garages. The groundwater impacts at ACC-B-16 and ACC-B-17 are referred to as Plume B.

(2) Number of Soil Samples for Laboratory Analyses. *It is unclear how many soil samples will be collected for laboratory analyses. Section 2.2.2 on page 11 indicates that up to "thirty (54)" soil samples will be collected from the nine soil borings in the eastern parcel. In the Revised Work Plan requested below, please clarify the number of soil samples to be collected from each boring. We request that soil samples collected within the upper ten feet be analyzed for napthalene in addition to the proposed analytes.*

Response: This revised work plan clarifies the number of samples proposed. Samples collected within the upper ten feet of the subsurface will be analyzed for naphthalene in addition to the proposed analytes.

(3) Soil Vapor Sampling. *Section 3.3 includes references to soil vapor sampling and sub-slab sampling. The depth of the proposed soil vapor samples is not discussed. Please revise this section to discuss only the proposed soil vapor sampling methods. Please discuss purging in terms of purge volumes in which one purge volume equals the internal*

volume of the tubing, the void space of the sand pack around the probe tip, and volume of dry bentonite in the annular space. Please provide a diagram showing the proposed construction of the vapor probes. Please also clarify whether a shut in test will be performed.

Response: Soil vapor sampling is discussed in Section 5.3, below. Included in the discussion are depths, purging volumes and the proposed shut-in test methodology. A diagram showing the proposed construction of the vapor probes is attached as Figure 6.

(4) Ambient Air Sample. *Please describe the purpose and rationale for the proposed collection of an ambient air sample.*

Response: Ambient air samples are typically collected and analyzed for indoor air sampling events. The collection of ambient air samples is not proposed at this time.

(5) GeoTracker Requirements. *A review of the State Water Resources Control Board's GeoTracker database indicates that the "Additional Soil and Groundwater Characterization Work Plan," dated March 27, 2013 was not uploaded by you to the GeoTracker database. Pursuant to CCR Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). In order for your site to be in compliance with these requirements, you are required to electronically transmit reports and other site data, as required. Failure to upload the required documents may result in ineligibility of site investigation and corrective action costs incurred at the site from the Underground Storage Tank Clean-Up Fund. Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting). Future documents will not be reviewed and will be considered late if they are not uploaded to the GeoTracker database.*

Response: The *Additional Soil and Groundwater Characterization Work Plan*, dated March 27, 2013, and subsequent submittals, including this revised work plan, will be uploaded to GeoTracker.

5.0 PROPOSED ASSESSMENT

5.1 Plume B (Former Service Station and Municipal Equipment Garages) and Boring ACC-B-14 (the Area of Former Truck Service Station)

The southern extent of Plume B is defined as boring ACC-B-16 and historic borings B-12 and B-16. To further delineate the approximate west, north and east extent of Plume B, six soil borings

will be advanced to an approximate depth of 24 feet bgs. The proposed boring locations are presented in Figure 5 and are based on the documented westerly groundwater flow direction. No soil borings are proposed within the baseball diamond. It should be noted that the Bart Train tunnel trends under the eastern parcel and that the sample locations may be adjusted based on the presence of subsurface utilities/structures.

To further delineate the area of boring ACC-B-14 (the area of the former truck service station), seven soil borings will be advanced to an approximate depth of 24 feet bgs. The proposed sample locations are presented on Figure 5 and are based on the documented westerly groundwater flow direction. The boring locations are configured to investigate the lateral extent of the ACC-B-14 impact north of East 8th Street to evaluate if up-gradient sources exist east of 5th Avenue, and whether the impacts extend south across East 8th Street towards previously documented impacts south of East 8th Street).

5.2 Soil Sampling Methodology

A total of thirteen soil borings will be advanced at the Site using a direct-push, hydraulic rig equipped with dual-wall, four-foot long, stainless-steel Geoprobe macro-core sampling rods containing two-inch-diameter acetate liners. ACC will obtain a drilling permit from Alameda County Public Works.

Prior to conducting all invasive work, ACC will contact Underground Service Alert, underground utility locator to mark all utilities at the subject property. In addition, ACC will hire a private utility locator to clear the individual soil boring locations prior to drilling.

Soil impacts have been identified from below the ground surface to 19.5 ft bgs at the Site. Soil borings will be advanced to approximately 24 ft bgs or drill refusal to evaluate the vertical extent of impact. Pending site conditions, borings will be advanced deeper if obvious soil impacts are encountered (odor, discoloration) extending beyond 24 ft bgs. The ground surface immediately adjacent to the boring will serve as a datum to measure sample depth. The horizontal location of each boring will be measured from a permanent site fixture with a measuring tape/wheel.

Soil samples will be collected at four-foot intervals (4, 8, 12 ft bgs, etc.) by removing the lower six to eight-inch interval of the recovered soil cores and covering both ends of the sample with Teflon sheeting and tight-fitting plastic caps. Additional samples will be collected if impacts are observed.

Three samples from each soil boring, for a total of 39 samples, will be submitted to a California-certified laboratory. The approximate vertical extent of potential soil impacts will be noted in the field.

Grab water samples will be collected as encountered from each boring (up to 13 samples).

Subsequent to removing the portion of the soil core to be sampled, the acetate liners will be split and the soil core will be logged. Additional samples may be collected in stainless steel liners capped with Teflon septa and tight-fitting plastic caps (head space will be minimized) based on field evaluations.

ACC will utilize a sample numbering system to identify sample locations and depths. Each sample will be designated with the following: 1) Unique boring number – "B11"; and 2) maximum depth – "B11-7.5". A sample designated B11-7.5 is therefore a soil sample collected at soil boring location B11 at approximately 7.0 to 7.5 feet bgs. Each respective sample designation will be placed at the top of the sample label and on each line of the chain of custody form.

All samples proposed for analysis will be labeled, placed in re-sealable plastic bags and placed in a pre-chilled insulated container to be transported to a California-certified laboratory following standard chain-of-custody protocol.

Soils will be logged based on the Unified Soil Classification System (visual method). Boring logs will include potential depths at which groundwater was encountered and approximate groundwater equilibrium levels.

PID readings will be collected from soil sample intervals by placing approximately three inches of the soil core in a plastic bag, disturbing the soil, waiting a minimum of one minute, and then recording the PID reading after the PID sensor has been placed in the bag for approximately 20 seconds. Additional PID readings will be collected if soil impacts are observed.

Following soil and groundwater sampling, the soil borings will be tremie-grouted with neat cement slurry consisting of approximately six gallons of water mixed with 94 pounds of Portland cement. All cuttings shall be containerized pending characterization and hauled off-site. The containers shall be clearly labeled to the ownership of the container and labeled appropriately.

5.3 Grab Groundwater Sampling Methodology

Grab groundwater samples will be collected with the use of a PVC schedule 40, one-inch-diameter, temporary monitoring wells or by use of the dual-wall rods, pending groundwater conditions. A peristaltic pump with dedicated tubing will be used to collect grab water samples in order to collect low-turbidity samples. Groundwater will be purged until clear, if possible. Pending the depth to groundwater (if greater than ~15 ft bgs) dedicated tubing and a foot-valve may be needed to collect the samples. The amount of sediment and turbidity observed in the water samples will be noted on field logs. Grab groundwater samples will be collected into laboratory-supplied 40-milliliter VOAs preserved with HCL (no headspace), 1-liter amber bottles preserved with HCL, and plastic bottles preserved with HNO_3. Groundwater will be filtered in the field using 0.4 micron filters and prior to analyses.

Subsequent to collection, samples will be stored in a pre-chilled, insulated container pending ACC transport to a state-certified analytical laboratory.

5.4 Soil Vapor Sampling Methodology

To further characterize previously investigated impacts at the west portion of the Site and address data gaps associated with the previous soil vapor sampling results, ACC will collect three additional soil vapor samples. The proposed sample locations are provided on the attached Figure 4A - Proposed Sample Location Map.

Soil vapor sampling methodology will be based on the DTSC guidance document, Advisory – Active Soil Investigations (April 2012). A diagram showing the proposed construction of the vapor probes is attached as Figure 6.

At each of the soil vapor sampling points a 2-inch-diameter boring will be advanced to a depth of five feet below surface grade utilizing a Geoprobe direct-push rig. A minimum depth of five feet is recommended to negate barometric pressure effects and breakthrough of ambient air through the soil column; however, if shallow groundwater is encountered the soil vapor samples will be collected just above the saturated horizon.

Subsequent to probe placemnt a six-inch sand pack will be placed at the base of the boring. During this process a probe tip attached to 0.25-inch, new, dedicated polyethylene tubing will be installed at the approximate vertical middle of the sand pack interval. Six inches of dry bentonite chips will be placed above the sand pack interval, and the boring will be backfilled to grade with hydrated bentonite chips.

Each soil vapor point will be allowed to equilibrate for a minimum of two hours. A shut-in test will be conducted for 1 minute to check for leaks in the sample train. After setting up the sample manifold and the fittings have been secured, a valve at the down-hole end of the sample manifold will be closed and the purge canister at the opposite end of the sample manifold will be kept open for a minimum of one minute after the pressure gauges equilibrate. If there is any noticeable loss of vacuum within the one-minute time frame the fittings will be adjusted. The sample canister will be attached in-line, but remain closed for the shut-in test.

Following successful shut-in testing, each sample location will be purged prior to sampling. To avoid excessive purging ACC recommends a total of three purge volumes be extracted into the purge canister; each purge volume will consist of the internal volume of the tubing, and the void space of the sand pack and dry bentonite chips (at this time an estimate of 30% effective porosity will be used for the sand and dry bentonite). In-line flow controllers will be set to 150 ml/min by the laboratory. ACC will additionally request in-line flow meters for the sample manifolds.

At the completion of purging, ACC will collect the soil vapor samples by opening the vapor-tight valve on the one-liter SUMMA canisters and allowing the canister to fill with extracted soil vapor. ACC will record the vacuum at the time the valve is opened and monitor and record the

vacuum during sample collection. ACC will utilize Isopropyl Alcohol at each sample location as the leak detector tracer gas. ACC will end sample collection when the vacuum within the sample canister is approximately -5 in Hg. Soil vapor sample containers will be labeled and stored at ambient temperature in laboratory-supplied containers. Soil vapor samples will be submitted to a California-certified lab for volatile organic compound analysis (VOCs + TPH-g) by EPA method TO-15 Analysis. The VOC analysis will include analyzing for leak-detect constituent.

Upon completion, the soil vapor sampling point will be grouted and sealed with concrete.

5.5 Analytical Methods

Soil and groundwater samples will be submitted to a California-certified analytical laboratory to be analyzed for the following:

- MTBE, Benzene, Toluene, Ethylbenzene, and Total Xylenes (MBTEX) by EPA Method 8260B,
- Gasoline-range total petroleum hydrocarbons (TPH-g) by EPA Method 8015B,
- Diesel and motor oil-range TPH (TPH-d and TPH-mo) by EPA Method 8015B with silica gel cleanup,
- Total lead by EPA Method 6010B (soil) or E200.8 (groundwater), and
- Naphthalene by EPA Method 8270C

Soil vapor samples will be submitted to a California-certified analytical laboratory to be analyzed for the following:

- TPH-g and volatile organic compounds (VOCs) by method TO-15, and
- Oxygen, methane, and carbon dioxide by ASTM 1946.

5.6 Decontamination

All sampling equipment will be either new disposable equipment or pre-cleaned, stainless steel sampling equipment. Decontamination of drilling and sampling equipment will be performed between sample locations by washing the equipment with a tap water and Alconox cleaning solution, rinsing the equipment with clean tap water, and a final rinse with tap water.

New clean nitrile surgical gloves will be worn at each new sample location and after handling impacted soils or groundwater.

6.0 GEOTRACKER COMPLIANCE

The site will be claimed in GeoTracker and all available reports will be electronically uploaded to GeoTracker and the Alameda County Environmental Cleanup Oversight Program FTP site.

7.0 TECHNICAL REPORTS

A technical report discussing fieldwork, observations and findings, analytical results, conclusions, and recommendations will be prepared for Peralta and for submission to ACEH.

8.0 PERJURY STATEMENT

ACC Environmental Consultant's declares, under penalty and perjury, that the information and/or recommendations contained in this document are true to the best of our knowledge.

FIGURES 1 - 6

Source: Google Earth, 2010

Title ***Site Location Map 501 5th Avenue Oakland, California***	
Figure Number: 1	Scale: None
Project Number: 6045-019.01	Drawn By: JS
A·C·C ENVIRONMENTAL CONSULTANTS An Employee Owned Company	Date: 6/27/11 N W E S

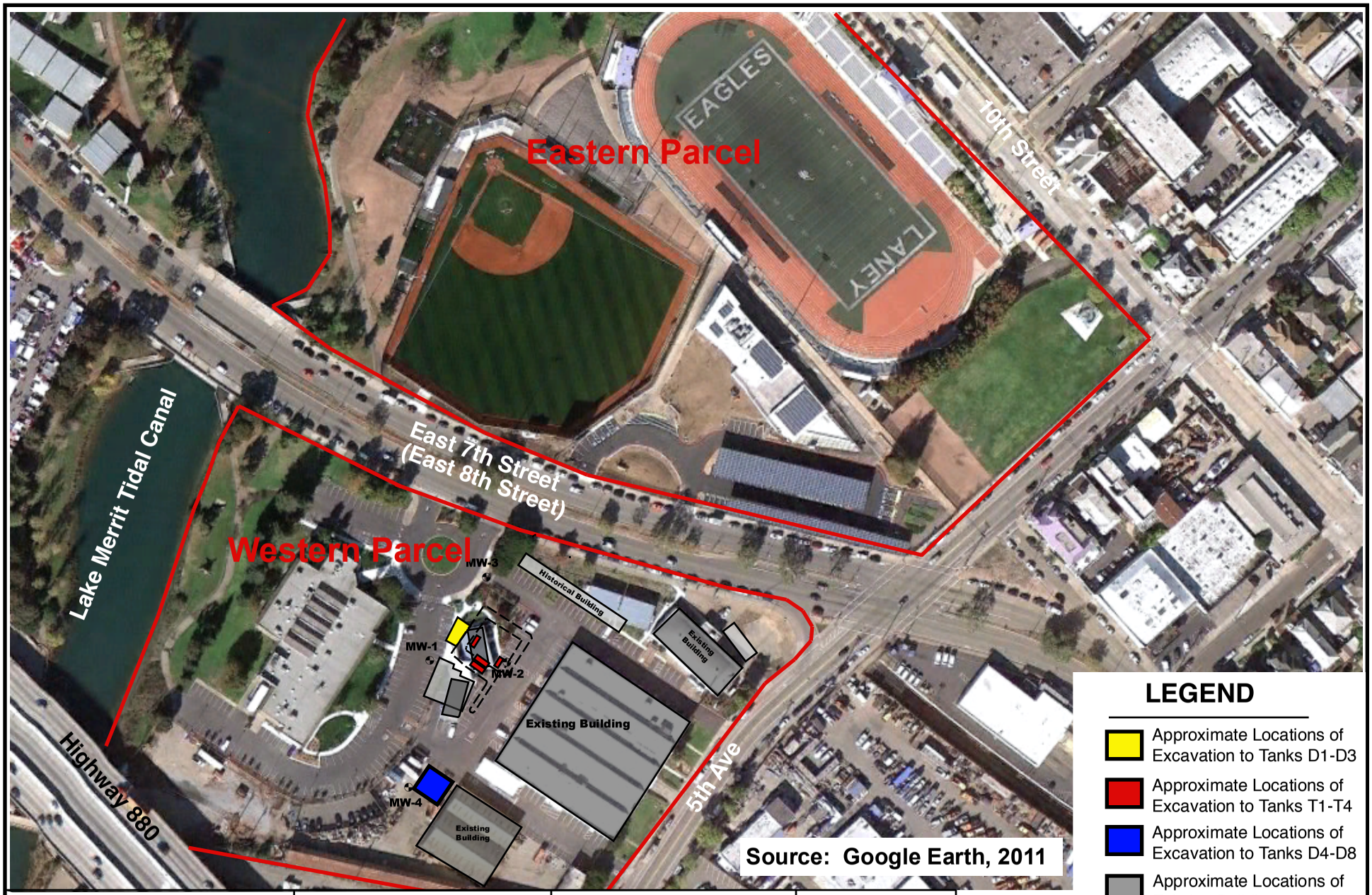

Figure Number: 2

Title **Site Plan**
501 5th Avenue
Oakland, California

A·C·C ENVIRONMENTAL CONSULTANTS
An Employee Owned Company

Project Number: 6045-019.01

Drawn By: JS/GS

Date: 6/26/12

Scale
0 100 200

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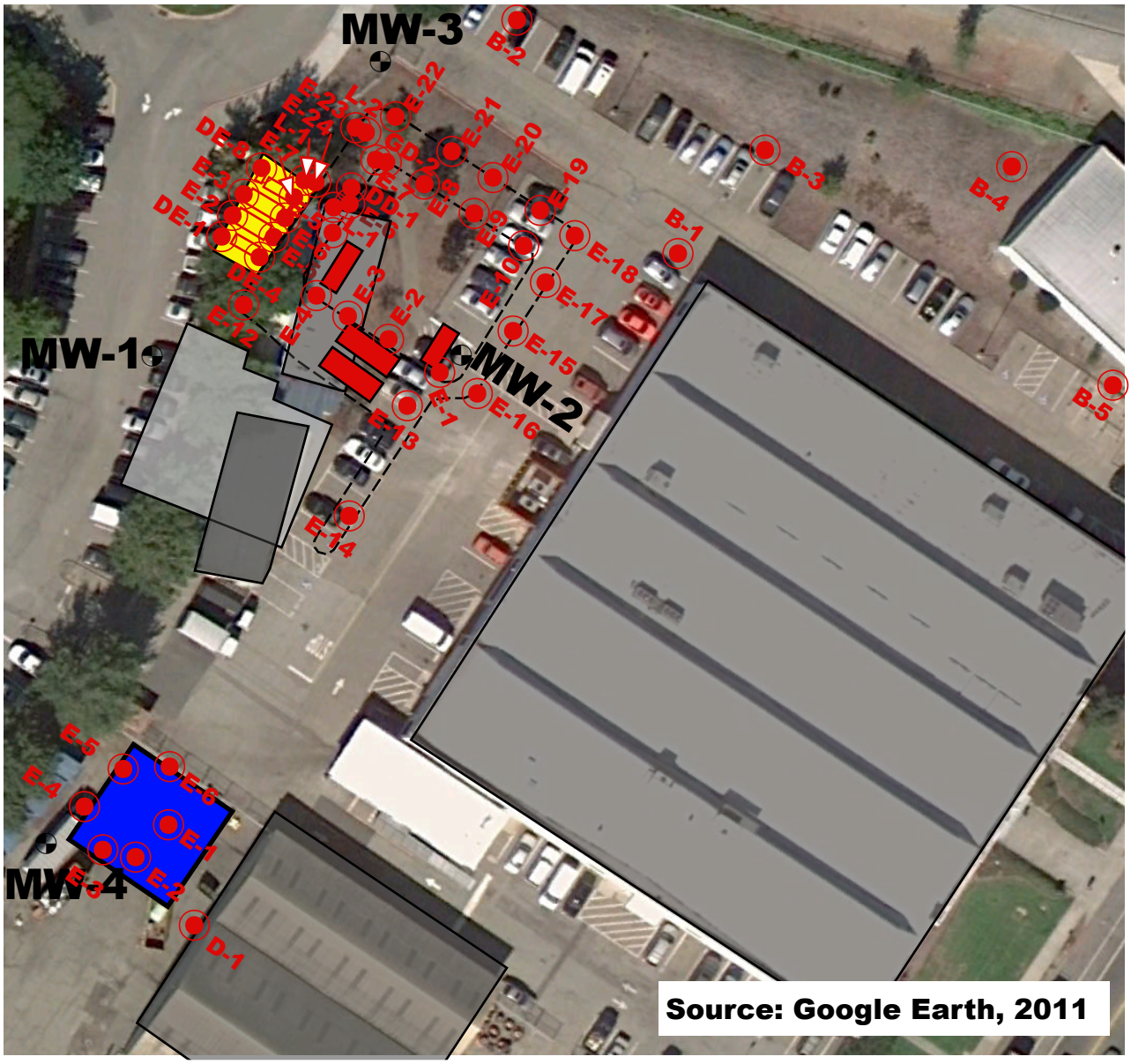

LEGEND

- Approximate Locations of Excavation to Tanks D1-D3
- Approximate Locations of Excavation to Tanks T1-T4
- Approximate Locations of Excavation to Tanks D4-D8
- Approximate Locations of Existing Building
- Approximate Locations of Historical Building
- Approximate Location of Historical Over-Excavation
- Approximate Location of Historical Monitoring Wells
- Approximate Location of Historical Soil Samples

Title ***Historical Sample Location Map***
501 5th Avenue
Oakland, California

Figure Number: 3	Scale: None
Project Number: 6045-019.01	Drawn By: JS
	Date: 6/27/11

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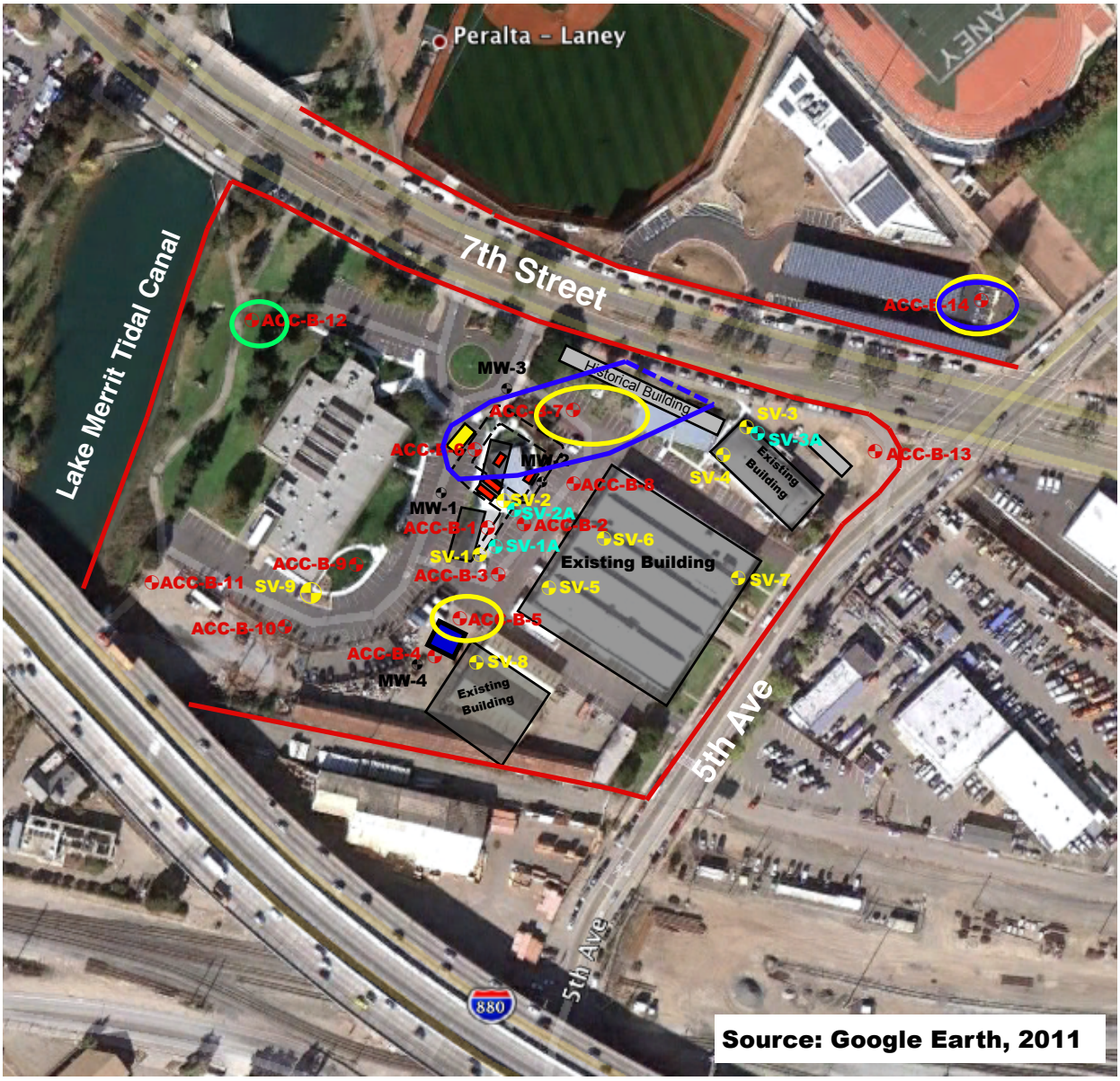

APPROXIMATE SCALE (FEET)

0 100 200

LEGEND

- Approximate Locations of Excavation to Tanks D1-D3
- Approximate Locations of Excavation to Tanks T1-T4
- Approximate Locations of Excavation to Tanks D4-D8
- Approximate Locations of Existing Building
- Approximate Locations of Historical Building
- Approximate Location of Historical Over-Excavation
- Approximate Location of Historical Monitoring Wells
- Historical Soil Vapor Sample Locations
- Historical Soil Boring Locations (Soil and GW Samples)
- Proposed Soil Vapor Sample Locations

Plumes - Based on 2012 Investigation Data

- Approximate TPHg (gasoline range organics) Plume
- Approximate TPHd (diesel range organics) Plume
- Approximate TPHmo (motor oil range organics) Plume
- Undefined edge of TPHd (diesel range organics) Plume

Title: ***Sample Location Map***
501 5th Avenue
Oakland, California

Figure Number: 4A

Project Number: 6045-019.01

Drawn By: JS/GS

Date: 6/26/12

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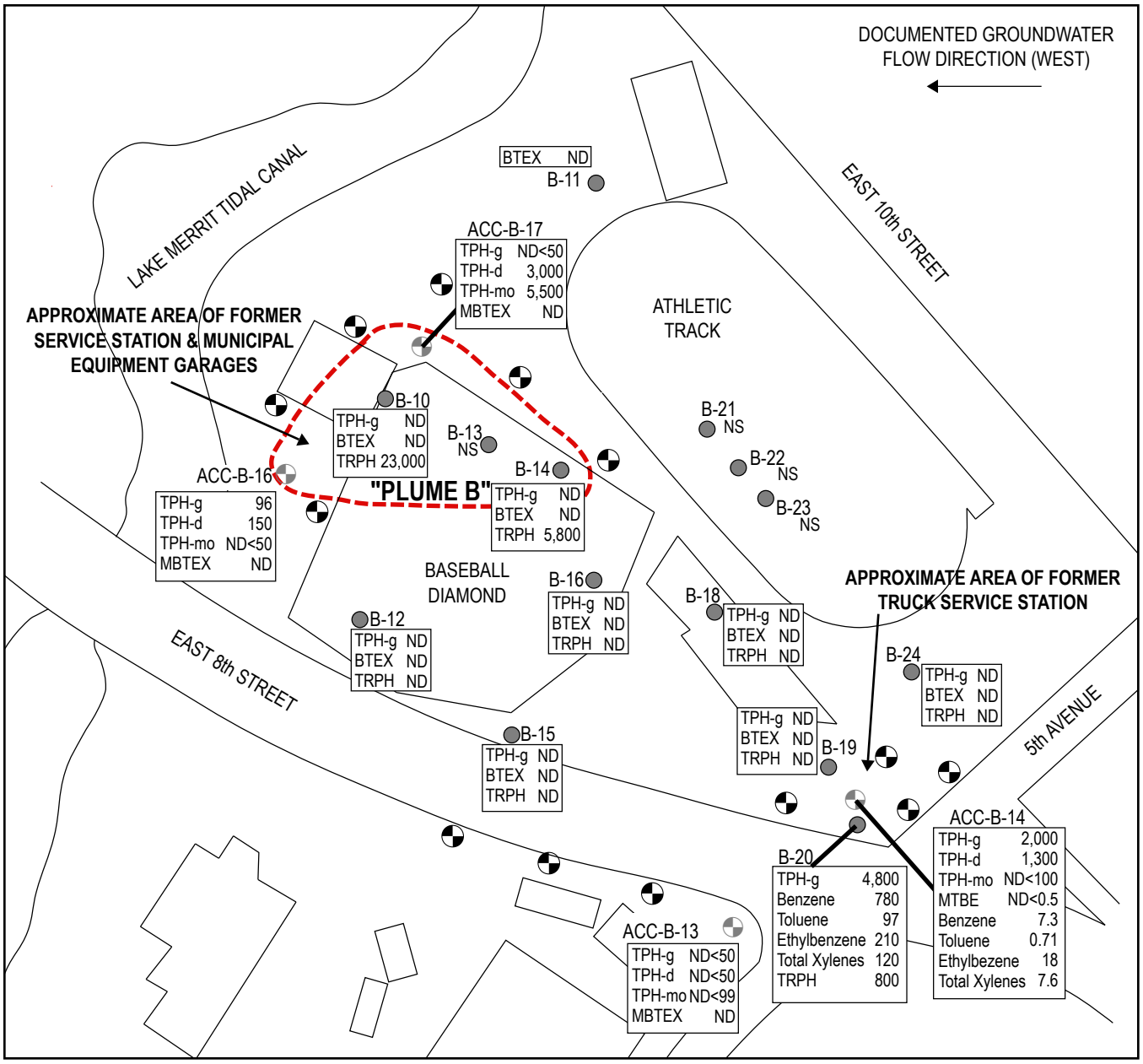
N W E S



● = PREVIOUS SOIL BORING LOCATION (ENVIRON, 1992)

◔ = PREVIOUS SOIL BORING LOCATION (ACC, 2012)

◓ = PROPOSED SOIL BORING LOCATION

= APPROXIMATE EXTENT OF HYDROCARBON PLUME BASED ON PREVIOUS RESULTS

MBTEX = MTBE, BENZENE, TOLUENE, ETHYLBENZENE & TOTAL XYLENES

ND = NOT DETECTED

ug/L = MICROGRAMS PER LITER

APPROXIMATE SCALE (FEET)

0 100 200

(ONE INCH = 200 FEET)

Historical Soil Borings with Groundwater Analytical Results &
Current Proposed Soil Boring Locations
North of East 8th Street (ug/L)
501 5th Avenue, Oakland, California

Figure Number: 5	1" = 200'
Project Number: 6045-019.01	Drawn By: IS
	Date: 6/10/12

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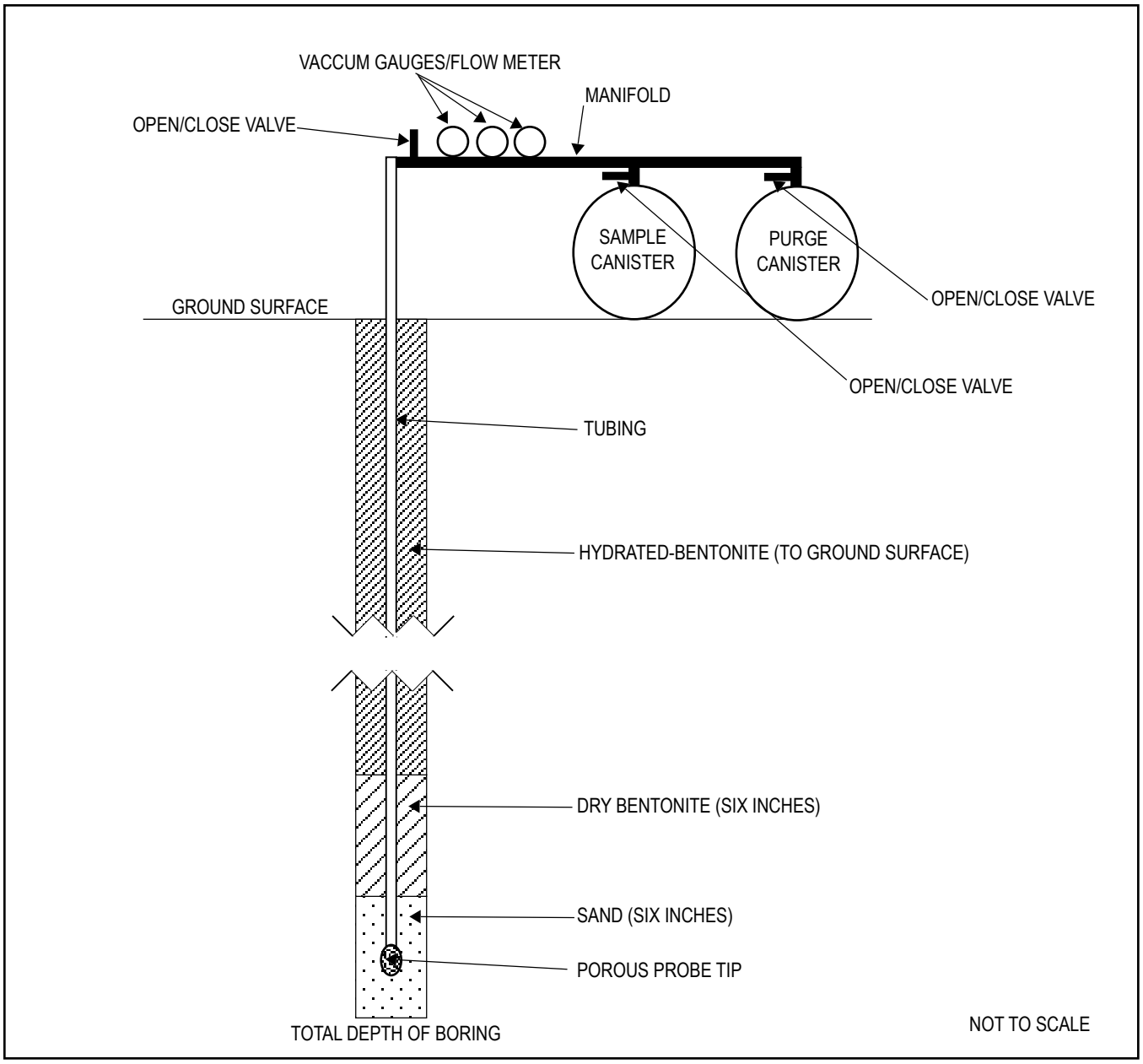


Proposed Soil Vapor Probe Construction
501 5th Avenue
Oakland, California

Figure Number: 6	
Project Number: 6045-019.01	Drawn By: IS
A·C·C ENVIRONMENTAL CONSULTANTS An Employee Owned Company	Date: 6/10/12

TABLES 1-3

Table 1-Soil Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

					Constituents and Concentrations (mg/kg)												
					TEPH	TPHg	TPHd	TPHmo	B	T	E	X	MtBE	Lead	Lead Scavengers		O&G
Sample Number	Sample Depth Feet Below Ground Surface (bgs)	Source of Data	Sampling Date	Matrix	Total Extractable Petroleum Hydrocarbons	Total Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons- Diesel (with Silica Gel Cleanup)	Total Petroleum Hydrocarbons-Motor Oil (With Silica Gel Cleanup)	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Lead	EDB	1,2-DCA	Total Oil and Grease
ACC-B-1 (3-4')	4	ACC Environmental Consultants	4/24/12	Soil	---	<0.25	15	89	<0.005	<0.005	<0.005	<0.01	<0.005	<2	<0.005	<0.005	---
ACC-B-1 (12-13')	13		4/24/12	Soil	---	<0.24	21	<50	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	16	<0.0048	<0.0048	---
ACC-B-2 (3-4')	4		4/24/12	Soil	---	<0.25	11	66	<0.005	<0.005	<0.005	<0.01	<0.005	5.6	<0.005	<0.005	---
ACC-B-2 (14-15')	15		4/24/12	Soil	---	<0.23	47	79	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	55	<0.0046	<0.0046	---
ACC-B-3 (2-3')	3		4/24/12	Soil	---	<0.24	37	120	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	6.9	<0.0048	<0.0048	---
ACC-B-3 (15-16')	16		4/24/12	Soil	---	<0.24	61	100	<0.0049	<0.0049	<0.0049	<0.0097	<0.0049	47	<0.0049	<0.0049	---
ACC-B-4 (2.5-3.5')	3.5		4/24/12	Soil	---	<0.24	5.8	<50	<0.0049	<0.0049	<0.0049	<0.0097	<0.0049	9.4	<0.0049	<0.0049	---
ACC-B-4 (5-6')	6		4/24/12	Soil	---	<0.24	26	93	<0.0047	<0.0047	<0.0047	<0.0095	<0.0047	11	<0.0047	<0.0047	---
ACC-B-5 (5-6')	6		4/25/12	Soil	---	5.6	3.5	<49	0.021	0.0054	0.057	0.28	<0.005	6.9	<0.005	<0.005	---
ACC-B-5 (23-24')	24		4/25/12	Soil	---	<0.25	2.3	<50	<0.005	<0.005	<0.005	<0.01	<0.005	5.7	<0.005	<0.005	---
ACC-B-6 (2-3')	3		4/25/12	Soil	---	1.7	<50	**6,000**	<0.0049	<0.0049	<0.0049	0.058	<0.0049	15	<0.0049	<0.0049	---
ACC-B-6 (23-24')	24		4/25/12	Soil	---	<0.25	1.5	<49	<0.005	<0.005	<0.005	<0.0099	<0.005	4.8	<0.005	<0.005	---
ACC-B-7 (3-4')	4		4/25/12	Soil	---	5.2	2.5	<50	<0.005	<0.005	<0.005	<0.01	<0.005	9.7	<0.005	<0.005	---
ACC-B-7 (11-12')	12		4/25/12	Soil	---	5.9	8.1	<50	<0.005	<0.005	<0.005	<0.0099	<0.005	11	<0.005	<0.005	---
ACC-B-8 (7-8')	8		4/25/12	Soil	---	<0.25	<1	<50	<0.005	<0.005	<0.005	<0.01	<0.005	4.3	<0.005	<0.005	---
ACC-B-8 (15-16')	16		4/25/12	Soil	---	<0.25	30	52	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	14	<0.0049	<0.0049	---
ACC-B-9 (7-8')	8		4/25/12	Soil	---	<0.25	3.5	<50	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	73	<0.0049	<0.0049	---
ACC-B-9 (15-16')	16		4/25/12	Soil	---	<0.25	4.7	<50	<0.005	<0.005	<0.005	<0.0099	<0.005	17	<0.005	<0.005	---
ACC-B-10 (6-7')	7		4/25/12	Soil	---	<0.25	<0.99	<49	<0.005	<0.005	<0.005	<0.01	<0.005	9.5	<0.005	<0.005	---
ACC-B-10 (23-24')	24		4/25/12	Soil	---	<0.25	1.2	<50	<0.0049	<0.0049	<0.0049	<0.0099	<0.0049	3.7	<0.0049	<0.0049	---
ACC-B-11 (5.5-6.5')	6.5		4/27/12	Soil	---	<0.25	4.3	<50	<0.005	<0.005	<0.005	<0.0099	<0.005	43	<0.005	<0.005	---
ACC-B-11 (11.5-12')	12		4/27/12	Soil	---	<0.24	13	51	<0.0047	<0.0047	<0.0047	<0.0095	<0.0047	16	<0.0047	<0.0047	---
ACC-B-12 (3-4')	4		4/26/12	Soil	---	<0.25	**710**	**1,300**	<0.005	<0.005	<0.005	<0.0099	<0.005	15	<0.005	<0.005	---
ACC-B-12 (23-24')	24		4/26/12	Soil	---	<0.24	4.9	<50	<0.0049	<0.0049	<0.0049	<0.0097	<0.0049	11	<0.0049	<0.0049	---
ACC-B-13 (3-4')	4		4/26/12	Soil	---	<0.25	<1	<50	<0.005	<0.005	<0.005	<0.0099	<0.005	2.5	<0.005	<0.005	---
ACC-B-13 (15-16')	16		4/26/12	Soil	---	<0.24	<1	<50	<0.0048	<0.0048	<0.0048	<0.0095	<0.0048	4.4	<0.0048	<0.0048	---
ACC-B-14 (3-4')	4		4/26/12	Soil	---	<0.25	2	<49	<0.0049	<0.0049	<0.0049	<0.0099	<0.0049	3.9	<0.0049	<0.0049	---
ACC-B-14 (6-7')	7		4/26/12	Soil	---	37	56	<50	<0.025	<0.025	<0.025	<0.05	<0.025	3.2	<0.025	<0.025	---

Table 1-Soil Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

					Constituents and Concentrations (mg/kg)												
					TEPH	TPHg	TPHd	TPHmo	B	T	E	X	MtBE	Lead	Lead Scavengers		O&G
Sample Number	Sample Depth Feet Below Ground Surface (bgs)	Source of Data	Sampling Date	Matrix	Total Extractable Petroleum Hydrocarbons	Total Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons- Diesel (with Silica Gel Cleanup)	Total Petroleum Hydrocarbons-Motor Oil (With Silica Gel Cleanup)	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Lead	EDB	1,2-DCA	Total Oil and Grease
ACC-B-14 (17-18')	18		4/26/12	Soil	---	**200**	65	<50	<0.025	<0.025	**140**	**84**	<0.025	4.3	<0.025	<0.025	---
ACC-B-16 (7-8')	8		4/27/12	Soil	---	<0.24	**96**	240	<0.0049	<0.0049	<0.0049	<0.0099	<0.0049	**180**	<0.0049	<0.0049	---
ACC-B-16 (14-15')	15		4/27/12	Soil	---	<0.25	**430**	**1,000**	<0.005	<0.005	<0.005	<0.01	<0.005	**480**	<0.005	<0.005	---
ACC-B-17 (2-3')	3		4/27/12	Soil	---	<0.24	8.7	52	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	60	<0.0048	<0.0048	---
ACC-B-17 (18.5-19.5')	19.5		4/27/12	Soil	---	2.2	**630**	**1,200**	<0.025	<0.025	<0.025	<0.05	<0.025	**270**	<0.025	<0.025	---
ACC-B-17 (23-24')	24		4/27/12	Soil	---	<0.25	2.8	<50	<0.005	<0.005	<0.005	<0.0099	<0.005	10	<0.005	<0.005	---
Historical Summary																	
DE-1	9	ACC UST Closure Report October 9, 1992	03-Sep-92	Soil	---	NA	ND	---	**1.3785**	**0.4158**	**0.7429**	**1.3655**	---	NA	---	---	---
E-2	9		03-Sep-92	Soil	---	**4.0**	NA	---	**0.126**	**0.8860**	**0.9860**	**0.3286**	---	ND	---	---	---
E-3	9		03-Sep-92	Soil	---	**4.8**	NA	---	**0.527**	**0.1627**	**0.1197**	**0.6574**	---	ND	---	---	---
DE-4	9		03-Sep-92	Soil	---	NA	ND	---	**2.4078**	**0.6909**	**1.5720**	**2.2922**	---	NA	---	---	---
E-5	9		03-Sep-92	Soil	---	**5.0**	NA	---	**0.0015**	**0.0047**	**0.0470**	**0.2530**	---	**1.0**	---	---	---
E-6	9		03-Sep-92	Soil	---	**134.70**	NA	---	**1.4695**	**4.6177**	**7.1701**	**6.1470**	---	ND	---	---	---
E-7	9		03-Sep-92	Soil	---	**30.11**	NA	---	**0.255**	**0.5766**	**1.3976**	**2.7334**	---	2.0	---	---	---
E-8	9		03-Sep-92	Soil	---	**3.78**	**228.37**	**---**	**0.0110**	**0.0510**	**0.0350**	**0.1890**	---	40.0	---	---	---
L-1	4		03-Sep-92	Soil	---	**243.21**	**11.40**	**---**	**4.4851**	**7.2284**	ND	**10.2210**	---	5.0	---	---	---
L-2	4		03-Sep-92	Soil	---	**612.57**	NA	---	**5.9124**	**14.7240**	**10.4810**	**32.3530**	---	4.0	---	---	---
L-3	4		03-Sep-92	Soil	---	**78.82**	**449.19**	**---**	**0.8865**	**1.3992**	ND	**8.1775**	---	4.0	---	---	---
DD-1	3		04-Sep-92	Soil	---	ND	ND	---	ND	ND	ND	ND	---	42.0	---	---	---
GD-2	3		04-Sep-92	Soil	---	ND	ND	---	ND	ND	ND	ND	---	NA	---	---	---
E-1	7	ACC Tank Closure Report December 22, 1993	04-Nov-92	soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	---	6.1	**---**	**---**	---
E-2	7		04-Nov-92	soil	---	<1.0	---	---	**0.19**	**0.0069**	<0.005	<0.005	---	5.8	**---**	**---**	---
E-3	7		04-Nov-92	soil	---	<1.0	---	---	**0.0089**	<0.005	<0.005	<0.005	---	3.8	**---**	**---**	---
E-4	7		04-Nov-92	soil	---	<1.0	---	---	**0.041**	**0.018**	<0.005	<0.005	---	6.3	**---**	**---**	---
E-5	7		04-Nov-92	soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	---	8.8	**---**	**---**	---
E-6	7		04-Nov-92	soil	---	**1.3**	---	---	<0.005	<0.005	<0.005	<0.005	---	8.0	**---**	**---**	---
D-1	3		04-Nov-92	soil	---	<1.0	---	---	<0.005	<0.005	<0.005	**0.047**	---	4.5	**---**	**---**	---

Table 1-Soil Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

					Constituents and Concentrations (mg/kg)												
					TEPH	TPHg	TPHd	TPHmo	B	T	E	X	MtBE	Lead	Lead Scavengers		O&G
Sample Number	Sample Depth Feet Below Ground Surface (bgs)	Source of Data	Sampling Date	Matrix	Total Extractable Petroleum Hydrocarbons	Total Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons- Diesel (with Silica Gel Cleanup)	Total Petroleum Hydrocarbons-Motor Oil (With Silica Gel Cleanup)	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Lead	EDB	1,2-DCA	Total Oil and Grease
B-1	3	ACC Additional Subsurface Investigation June 1994	09-May-94	soil	<1.0/**31** (k/m)	<1.0	**6.8**	**---**	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-2	6		09-May-94	soil	<1.0/**51** (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-3	5		09-May-94	soil	<1.0/**24** (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-3	6.5		09-May-94	soil	<1.0/**43** (k/m)	<1.0	**11**	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-4	5		09-May-94	soil	<1.0/<10 (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-4	6.5		09-May-94	soil	<1.0/<10 (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-5	5		09-May-94	soil	<1.0/**100** (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
B-5	6.5		09-May-94	soil	<1.0/<10 (k/m)	<1.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---
MW-1 6-1/2	6.5	ACC Soil and Groundwater Investigation March 1994	7-Feb-94	soil	---	<1.0	<1.0	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	<50
MW-1 11	11		7-Feb-94	soil	---	<1.0	<1.0	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	<50
MW-2 6-1/2	6.5		7-Feb-94	soil	---	**680**	**13**	---	<5.0	<5.0	**1,200**	<5.0	---	---	---	---	**150**
MW-2 11-1/2	11.5		7-Feb-94	soil	---	<1.0	<1.0	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	<50
MW-3 6-1/2	6.5		7-Feb-94	soil	---	**1.1**	<1.0	---	<5.0	6.9	<5.0	<5.0	---	---	---	---	<50
MW-3 11-1/2	11.5		7-Feb-94	soil	---	<1.0	<1.0	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	<50
MW-4 6-1/2	6.5		7-Feb-94	soil	---	<1.0	---	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	---
MW-4 11-1/2	11.5		7-Feb-94	soil	---	<1.0	---	---	<5.0	<5.0	<5.0	<5.0	---	---	---	---	---
E-1	7		June-July 1995	soil	**1,600/1,600 (k/m)**	**1,700***	---	---	<0.5	<0.5	**4..6**	**6.5**	---	---	---	---	---
E-2	7		June-July 1995	soil	**3,800.2,000 (k/m)**	**3,100***	---	---	<0.5	<0.5	**6.3**	**8.6**	---	---	---	---	---
E-3	7		June-July 1995	soil	**1,200/1,200 (k/m)**	**1,300***	---	---	<0.5	<5.0	**4.2**	**6**	---	---	---	---	---
E-4	7		June-July 1995	soil	**1,700/2,100**	**2,100***	---	---	<0.5	<0.5	**6.3**	**8.7**	---	---	---	---	---
E-5	7		June-July 1995	soil	<10	<2.0	---	---	<0.01	<0.01	<0.01	<0.01	---	---	---	---	---
E-6	7		June-July 1995	soil	**3,400/1,500 (k/m)**	**1,400***	---	---	<0.5	<0.5	**3.3**	**4.7**	---	---	---	---	---
E-7	7		June-July 1995	soil	**82 (k)**	**1,100***	---	---	<0.5	<0.5	**2.6**	**3.4**	---	---	---	---	---
E-8	7		June-July 1995	soil	**340/120 (k/m)**	**1,700***	---	---	<0.5	<0.5	**3.7**	**4.9**	---	---	---	---	---
E-9	7		June-July 1995	soil	**2,000/420 (k/m)**	**3,400***	---	---	<0.5	<0.5	**6.3**	**8.2**	---	---	---	---	---
E-10	7		June-July 1995	soil	<10	**4.2**	---	---	0.06	0.01	**0.02**	**0.03**	---	---	---	---	---
E-11	7		June-July 1995	soil	This Sample Does Not Exist												

Table 1-Soil Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

					Constituents and Concentrations (mg/kg)												
					TEPH	TPHg	TPHd	TPHmo	B	T	E	X	MtBE	Lead	Lead Scavengers		O&G
Sample Number	Sample Depth Feet Below Ground Surface (bgs)	Source of Data	Sampling Date	Matrix	Total Extractable Petroleum Hydrocarbons	Total Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons- Diesel (with Silica Gel Cleanup)	Total Petroleum Hydrocarbons-Motor Oil (With Silica Gel Cleanup)	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Lead	EDB	1,2-DCA	Total Oil and Grease
E-12	7	Remedial Action and UST Removal Report May 9, 1996	June-July 1995	soil	**52 (m)**	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	**110**
E-13	7		June-July 1995	soil	**400/670 (k/m)**	**1,800**	---	---	<5.0	<5.0	**7**	**11**	---	---	---	---	**1,300**
E-14	7		June-July 1995	soil	**300/290 (k/m)**	**1,800**	---	---	<0.5	<0.5	<5.0	**13**	---	---	---	---	**660**
E-15	7		June-July 1995	soil	**280/860 (k/m)**	**910**	---	---	<0.5	<0.5	**2.3**	**3**	---	---	---	---	**1,000**
E-16	7		June-July 1995	soil	**15 (m)**	**22**	---	---	<0.1	<0.1	<0.1	<0.1	---	---	---	---	<50
E-17	7		June-July 1995	soil	**1,200 (m)**	**35**	---	---	<0.1	<0.1	**0.12**	**0.17**	---	---	---	---	**2,000**
E-18	7		June-July 1995	soil	**86 (m)**	**12**	---	---	<0.05	<0.05	<0.05	<0.05	---	---	---	---	<50
E-19	7		June-July 1995	soil	**380/280 (k/m)**	**1,300**	---	---	<5.0	<5.0	<5.0	**6**	---	---	---	---	**960**
E-20	7		June-July 1995	soil	**9.5/12/14 (k/d/m)**	**320**	---	---	<5.0	<5.0	**0.8**	**1.2**	---	---	---	---	**110**
E-21	7		June-July 1995	soil	**230/230 (k/m)**	**2,400**	---	---	<5.0	<5.0	**5.9**	**8.0**	---	---	---	---	**280**
E-22	7		June-July 1995	soil	**550/590 (k/m)**	**2,200**	---	---	<5.0	<5.0	**5.8**	**7.5**	---	---	---	---	**860**
E-23	7		June-July 1995	soil	**810/1,00 (k/m)**	**3,100**	---	---	<5.0	<5.0	**7.2**	**9.7**	---	---	---	---	**1,100**
E-24	7		June-July 1995	soil	**840/1,100 (k/m)**	**5,200**	---	---	<5.0	<5.0	**12.0**	**17.0**	---	---	---	---	**3,200**
1X98N7.5	7.5	ACC UST Removal and Remedial Action Report June 10, 1999	3-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
1X98S7.5	7.5		3-Sep-98	Soil	---	<20	---	---	**4.0**	**10**	**4.1**	**19**	<1.2	---	---	---	---
1X98W7.5	7.5		3-Sep-98	Soil	---	<10	---	---	<0.62	<0.62	<0.62	<0.62	<0.62	---	---	---	---
2X98W7.0TANK	7.5		4-Sep-98	Soil	---	<10	---	---	<0.62	**1.0**	**7.5**	**5.0**	<0.62	---	---	---	---
2X98N7.0TANK	7.5		4-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
2X98E7.0TANK	7.5		4-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
2X98S7.0TANK	7.5		4-Sep-98	Soil	---	<10	---	---	<0.62	**2.3**	**2.2**	**8.8**	<0.62	---	---	---	---
1X98W8.0A	7.5		8-Sep-98	Soil	---	<1.2	---	---	<0.005	**0.012**	**0.007**	**0.0062**	<0.005	---	---	---	---
2X98W7.0PIT	7.5		8-Sep-98	Soil	---	<1.2	---	---	<0.005	**0.008**	**0.0051**	<0.005	<0.005	---	---	---	---
2X98N7.0a	7.5		9-Sep-98	Soil	---	<1.1	---	---	<0.005	**0.038**	**1.0**	**1.2**	<0.005	---	---	---	---
2X98S7.0a	7.5		9-Sep-98	Soil	---	<1.1	---	---	<0.005	0.0057	<0.005	<0.005	<0.005	---	---	---	---
2X98W7.0C4	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
2X98S7.0C4	7.5		10-Sep-98	Soil	---	<100	---	---	<6.2	**22**	**18**	**62**	<6.2	---	---	---	---
2X98W7.0C3	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	**0.0084**	<0.005	---	---	---	---
2X98S7.0C2	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	**0.0180**	<0.005	---	---	---	---

Table 1-Soil Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

Sample Number	Sample Depth Feet Below Ground Surface (bgs)	Source of Data	Sampling Date	Matrix	Constituents and Concentrations (mg/kg)												
					TEPH	TPHg	TPHd	TPHmo	B	T	E	X	MtBE	Lead	Lead Scavengers		O&G
					Total Extractable Petroleum Hydrocarbons	Total Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons- Diesel (with Silica Gel Cleanup)	Total Petroleum Hydrocarbons-Motor Oil (With Silica Gel Cleanup)	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Lead	EDB	1,2-DCA	Total Oil and Grease
2X98W7.0C2	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	**0.006**	<0.005	**0.039**	<0.005	---	---	---	---
2X98W7.0C1	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
2X98S7.0C1	7.5		10-Sep-98	Soil	---	<50	---	---	<3.1	**5.2**	**7.2**	**20**	<3.1	---	---	---	---
2X98W7.0C5	7.5		10-Sep-98	Soil	---	<40	---	---	4	**9.3**	**4.8**	**20**	<2.5	---	---	---	---
2X98N7.0C3	7.5		10-Sep-98	Soil	---	<20	---	---	<1.2	<1.2	<1.2	<1.2	<1.2	---	---	---	---
2X98S7.0C3	7.5		10-Sep-98	Soil	---	<40	---	---	<2.5	2.8	<2.5	**6**	<2.5	---	---	---	---
2X98N7.0C1	7.5		10-Sep-98	Soil	---	<20	---	---	<1.2	<1.2	<1.2	**2**	<1.2	---	---	---	---
2X98N7.0C2	7.5		10-Sep-98	Soil	---	<1.0	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---
2X98N7.0C4	7.5		10-Sep-98	Soil	---	<20	---	---	<1.2	**4.6**	**4.7**	**14**	<1.2	---	---	---	---
****ESLs - Residential (unrestricted site usage)**			**Shallow Soil (≤ 3 m)**	**Soil (mg/kg)**	**370**	**83**	**83**	**370**	**0.044**	**2.9**	**2.3**	**2.3**	**0.023**	**200**	**NA**	**0.0045**	**---**
			Deep Soil (>3 m)	**Soil (mg/kg)**	**5,000**	**83**	**83**	**5,000**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**750**	**NA**	**0.0045**	**---**
****ESLs - Commercial site usage**			**Shallow Soil (≤ 3 m)**	**Soil (mg/kg)**	**370**	**83**	**83**	**370**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**750**	**NA**	**0.0045**	**---**
			Deep Soil (>3 m)	**Soil (mg/kg)**	**5,000**	**83**	**83**	**5,000**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**750**	**NA**	**0.0045**	**---**
RSL's			**Residential**	**Soil (mg/kg)**	**NA**	**NA**	**NA**	**NA**	**1.1**	**5,000**	**5.4**	**630**	**43**	**400**	**NA**	**0.43**	**---**
			Commercial	**Soil (mg/kg)**	**NA**	**NA**	**NA**	**NA**	**5.4**	**45,000**	**27**	**2,700**	**220**	**800**	**NA**	**2.2**	**---**
California Human Health Screening Levels (CHHSLS)			**Residential**	**Soil (mg/kg)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**80**	**NA**	**NA**	**---**
			Commercial	**Soil (mg/kg)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**320**	**NA**	**NA**	**---**

Notes

***ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Drinking Water*

RSLs=EPA Region 9 Regional Screening Levels May 2012)

DTW: ;Depth to water (ft.) measured from top of casing (TOC).

NT: Not Tested; NM: Not Measured; NS: Not Sampled

**--- No Data*

Bolded Values Exceed Their Respective Criteria

TPHg = Total Petroleum Hydrocarbons as Gasoline

TPHd= Total Petroleum Hydrocarbons as Diesel

ppm = parts per million

ppb = parts per billion

Table 2-Groundwater Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

Sample Number and Well Elevation	Sampling Date	Matrix	DTW (ft)	Groundwater Elevation (ft)	Constituents and Concentrations (µg/L)											
					TVPHg	TPHg	TEPH			B	T	E	X	MtBE	TBA	
					Total Volatile Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons as Gasoline	Total Extractable Petroleum Hydrocarbons as Diesel (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons as Motor Oil (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Tert-butyl Alcohol	Total Lead
ACC-B-1 (DEEP)	4/27/12	Water	---	---	---	<50	---	---	---	<0.5	<0.5	<0.5	<1	<0.5	6.9	---
ACC-B-2 (DEEP)	4/24/12	Water	---	---	---	<50	<51	<100	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**47**
ACC-B-3 (GW)	4/24/12	Water	---	---	---	<50	<51	<100	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**30**
ACC-B-4 (SHALLOW)	4/24/12	Water	---	---	---	<50	<51	**250**	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**350**
ACC-B-4 (DEEP)	4/26/12	Water	---	---	---	<50	<58	<120	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**59**
ACC-B-5 (SHALLOW)	4/25/12	Water	---	---	---	**440**	**310**	**360**	---	1.5	<0.5	0.96	5.7	<0.5	<4	**32**
ACC-B-6 (SHALLOW)	4/25/12	Water	---	---	---	54	100	**270**	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**1,200**
ACC-B-7 (GW)	4/25/12	Water	---	---	---	**5,300**	**1,300**	**3,300**	---	<10	<10	<10	<20	<10	<80	**21**
ACC-B-8 (SHALLOW)	4/25/12	Water	---	---	---	<50	<52	<100	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**110**
ACC-B-9 (SHALLOW)	4/25/12	Water	---	---	---	<50	<50	120	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**270**
ACC-B-10 (GW)	4/25/12	Water	---	---	---	<50	52	**250**	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**1,500**
ACC-B-11 (GW)	4/27/12	Water	---	---	---	<50	95	<110	---	<0.5	<0.5	<0.5	<1	<0.5	<4	1.2
ACC-B-12 (GW)	4/26/12	Water	---	---	---	<50	<51	130	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**160**
ACC-B-13 (GW)	4/26/12	Water	---	---	---	<50	<50	<99	---	<0.5	<0.5	<0.5	<1	<0.5	<4	<5
ACC-B-14 (GW)	4/26/12	Water	---	---	---	**2,000**	**1,300**	<100	---	7.3	0.71	18	7.6	<0.5	<4	**11**
ACC-B-16 (GW)	4/27/12	Water	---	---	---	96	150	<50	---	<0.5	<0.5	<0.5	<1	<0.5	<4	**95**
ACC-B-17 (GW)	4/27/12	Water	---	---	---	<50	**3,000**	**5,500**	---	<0.5	<0.5	<0.5	<1	<0.5	5.1	**1,200**
MW-1 6.78	02/14/94	Water	3.69	3.09	<50	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/16/94	Water	6.80	-0.02	---	---	---	---	---	---	---	---	---	---	---	---
	05/23/94	Water	---	---	<50	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	08/25/94	Water	7.05	-0.27	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/16/94	Water	3.50	3.28	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	02/14/95	Water	3.91	2.87	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/18/95	Water	6.46	0.32	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/27/96	Water	4.32	2.46	<50	---	---	---	120(d)	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/08/96	Water	6.96	-0.18	<50	---	---	---	570(d)/670(m)*	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/13/97	Water	3.36	3.42	<50	---	---	---	720(d)/1,000(m)*	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/17/97	Water	6.21	0.57	<50	---	---	---	500(d)*/760(m)	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	01/19/98	Water	3.41	3.37	<50	---	---	---	340(d)*/740(m)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	07/21/98	Water	5.58	1.20	<50	---	---	---	54(d)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	01/25/99	Water	4.78	2.00	<50	---	---	---	170(d)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	08/11/99	Water	6.30	0.48	<50	---	---	---	230(d)	<0.5	<0.5	<0.5	<0.5	<0.5	---	---
MW-2 8.70	02/14/94	Water	4.70	4.00	200	---	---	---	<50	1.7	<0.5	1.1	1.1	---	---	---
	05/16/94	Water	4.74	3.96	---	---	---	---	---	---	---	---	---	---	---	---
	05/23/94	Water	---	---	600	---	---	---	<50	1.8	0.9	0.7	2.1	---	---	---

Table 2-Groundwater Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

Sample Number and Well Elevation	Sampling Date	Matrix	DTW (ft)	Groundwater Elevation (ft)	Constituents and Concentrations (µg/L)												
					TVPHg	TPHg	TEPH			B	T	E	X	MtBE	TBA		
					Total Volatile Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons as Gasoline	Total Extractable Petroleum Hydrocarbons as Diesel (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons as Motor Oil (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Tert-butyl Alcohol	Total Lead	
	08/25/94	Water	5.49	3.21	70	---	---	---	---	<50	<0.5	<0.5	0.5	---	---	---
	11/16/94	Water	5.03	3.67	<50	---	---	---	---	<50	<0.5	<0.5	0.6	---	---	---
	02/14/95	Water	4.55	4.15	160	---	---	---	---	0.7	0.6	<0.5	1.0	---	---	---
	05/18/95	Water	4.77	3.93	50	---	---	---	---	<0.5	<0.5	<0.5	0.6	---	---	---
	Destroyed	Water	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-3 8.83	02/14/94	Water	4.57	4.26	780	---	---	---	<50	0.6	0.6	1.7	2.7	---	---	---
	05/16/94	Water	4.78	4.05	---	---	---	---	---	---	---	---	---	---	---	---
	05/23/94	Water	---	---	680	---	---	---	<50	<0.5	<0.5	2.2	2.2	---	---	---
	08/25/94	Water	5.93	2.90	310	---	---	---	---	6.4	2.7	1.9	4.1	---	---	---
	11/16/94	Water	4.04	4.79	650	---	---	---	---	1.6	1.5	<0.5	2.7	---	---	---
	02/14/95	Water	4.55	2.72	70	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/18/95	Water	4.49	4.34	470	---	---	---	---	<0.5	1.1	0.7	0.6	---	---	---
	03/27/96	Water	4.51	4.32	740	---	---	---	390(d)*	7.9	19.0	3.0	8.0	---	---	---
	10/08/96	Water	6.60	2.23	640	---	---	---	640(d)/680(m)	7.6	3.8	3.9	5.6	---	---	---
	01/13/97	Water	4.12	4.71	640	---	---	---	1,300(k)/1,200(m)*	4.4	2.2	2.6	4.0	---	---	---
	07/17/97	Water	6.60	2.23	600	---	---	---	1,400(d)*/1,100(m)	7.3	11.0	3.6	4.8	<5.0	---	---
	01/19/98	Water	4.16	4.67	<50	---	---	---	520(d)*/1,000(m)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	Destroyed	Water	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4 5.45	02/14/94	Water	1.69	3.76	<50	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/16/94	Water	2.36	3.09	---	---	---	---	---	---	---	---	---	---	---	---
	05/23/94	Water	---	---	93	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	08/25/94	Water	3.25	2.20	---	---	---	---	---	---	---	---	---	---	---	---
	08/29/94	Water	---	---	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/16/94	Water	1.01	4.44	100	---	---	---	---	2.7	<0.5	<0.5	1.0	---	---	---
	02/14/95	Water	6.11	2.72	60	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/18/95	Water	2.32	3.13	<50	---	---	---	---	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/27/96	Water	2.35	3.10	<50	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/08/96	Water	3.75	1.70	<50	---	---	---	430(d)*	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/13/97	Water	1.69	3.76	<50	---	---	---	830(d)/950(m)*	0.8	<0.5	<0.5	<0.5	---	---	---
	07/17/97	Water	3.48	1.97	<50	---	---	---	190(d)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	01/19/98	Water	1.73	3.72	53	---	---	---	200(d)*/550(m)*	2.2	<0.5	<0.5	<0.5	<5.0	---	---
	07/21/98	Water	3.08	2.37	<50	---	---	---	53(d)*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---
	01/25/99	Water	1.85	3.60	<50	---	---	---	200(d)*	<0.5	<0.5	<0.5	<0.5	10.0	---	---
	08/11/99	Water	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	---	Water	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2-Groundwater Data (Current and Historical)
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

Sample Number and Well Elevation	Sampling Date	Matrix	DTW (ft)	Groundwater Elevation (ft)	Constituents and Concentrations (µg/L)											
					TVPHg	TPHg	TEPH			B	T	E	X	MtBE	TBA	
					Total Volatile Petroleum Hydrocarbons - Gasoline	Total Petroleum Hydrocarbons as Gasoline	Total Extractable Petroleum Hydrocarbons as Diesel (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons as Motor Oil (with Silica Gel Cleanup)	Total Extractable Petroleum Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylene	Methyl tert-butyl ether	Tert-butyl Alcohol	Total Lead
VPP-1	11/04/92	Water	---	---	27.0	---	---	---	---	1,200	5,100	690	5,700	---	---	---
PP-2	11/04/92	Water	---	---	0.21	---	---	---	---	<0.5	<0.5	<0.5	14.0	---	---	---
B-1	05/09/94	Water	---	---	61.00	---	---	---	<50/<50/<500 (d/k/m)	<0.5	<0.5	<0.5	<500	---	---	---
B-2	05/09/94	Water	---	---	<50	---	---	---	<50/<50/<500 (d/k/m)	<0.5	<0.5	<0.5	<500	---	---	---
B-5	05/09/94	Water	---	---	<50	---	---	---	<50/<50/<500 (d/k/m)	<0.5	<0.5	<0.5	<500	---	---	---
ESL's	**Surface Water Screening Levels (Estuary Habitats)**	**Water**			**210**	**210**	**210**	**210**	**210**	**46**	**40**	**30**	**100**	**180**	**18,000**	**2.5**
RSL's	**MCLs**	**Water**			**N/A**	**NA**	**NA**	**NA**	**N/A**	**5**	**1,000**	**700**	**10,000**	**N/A**	**NA**	**15**

Notes

***ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Drinking Water*

RSLs=EPA Region 9 Regional Screening Levels (May 2012)

DTW: ;Depth to water (ft.) measured from top of casing (TOC).

DTW, Groundwater Elevation, and Well Elevation are reported in feet (ft); Well Elevation measured to top of casing

NT: Not Tested; NM: Not Measured; NS: Not Sampled

--- = No Data

Bolded Values Exceed Their Respective Criteria

µg/L = micrograms per liter (approximately equivalent to ppb)

< = Less than laboratory reporting limit indicated

d = The noted concentration is TEPH as diesel

m = The noted concentration is TEPH as motor oil

k = The noted concentration is TEPH as kerosene

** Hydrocarbons do not match laboratory's standard profile*

TABLE 3 - Soil Vapor Analytical Summary Table
Peralta Maintenance Yard
501 5th Avenue
Oakland, California
6045-019.01

Sample ID	Sampling Date	Matrix	Unit of Measurement µg/m³					
			Benzene	m,p- Xylene	Acetone	Chloroform	Toluene	MIBK
ACC-SV-1	27-Apr-12	Soil Vapor	<34	<81	<44	<62	<48	<42
ACC-SV-2	27-Apr-12	Soil Vapor	<6.9	<16	109	<12	<9.5	<8.5
ACC-SV-3	27-Apr-12	Soil Vapor	<6.9	<16	15	19	<9.5	<8.5
ACC-SV-4	27-Apr-12	Soil Vapor	<0.69	<1.6	10.7	9.85	<0.95	<0.85
ACC-SV-5	27-Apr-12	Soil Vapor	<0.69	<1.6	24	<1.2	<0.95	<0.85
ACC-SV-6	27-Apr-12	Soil Vapor	<0.69	<1.6	20	9.11	4.18	6.19
ACC-SV-7	27-Apr-12	Soil Vapor	<0.69	<1.6	15.6	<1.2	<0.95	<0.85
ACC-SV-8	27-Apr-12	Soil Vapor	2.62	5.93	23.6	<1.5	8.13	6.07
ACC-SV-9	27-Apr-12	Soil Vapor	<0.69	<1.6	12.9	17.7	<0.95	<0.85
Reference Standards								
ESLs**	Residential	Soil Vapor	84	21,000	660,000	460	63,000	NA
	Commercial	Soil Vapor	280	58,000	1,800,000	1,500	180,000	NA
California Human Health Screening Levels (CHHSLS)	Residential	Soil Vapor	36.2	315,000	NA	NA	135,000	NA
	Industrial	Soil Vapor	122	879,000	NA	NA	378,000	NA

Notes

***ESLs = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Drinking Water*

Total Xylenes = m,p-Xylenes + o-Xylenes

CHHSLs = California Human Health Screening Levels for Soil, Cal EPA (January 2005) (Lead Revision September 2009)

N/A = No regulation limits available under ESL, PRG, or CHHSLS

ND = None Detected

MIBK = 4-Methyl-2-Pentanone

Bold Values Exceed Their Respective Criteria

APPENDIX A

September 25, 2012 Alameda County Environmental Health Services Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

September 25, 2012

Mr. Jeffrey Cook (*Sent via E-mail to: jcook@peralta.edu*)
Facilities Program Coordinator
Peralta Community College District
333 East 8th Street
Oakland, CA 94606

Subject: Case File Review for Fuel Leak Case No. RO0000384 and GeoTracker Global ID T0600100983, Peralta College District, 501 5th Avenue, Oakland, CA 94606

Dear Mr. Cook:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted documents entitled, "*Soil and Groundwater Characterization Report/Request for Low Risk Closure Report,*" dated July 12, 2012 (Report) and received by ACEH on July 30, 2012. The Report, which was prepared on behalf of the Peralta Community College District by ACC Environmental, Inc., presents results from soil, soil vapor, and groundwater sampling at various locations within the site.

The Report recommends that the area surrounding the former tank excavations in Plume A be considered for low risk closure. No specific data collected during the April 2012 investigation activities appear to indicate that the former tank excavation area poses potential risks to human health or the environment. However, we request additional information regarding sampling and analytical methods prior to consideration of whether additional action is needed in the former tank excavation area. Therefore, we request that you address technical comments 1 through 5 as a separate section of the Work Plan requested below.

Based on the detections of petroleum hydrocarbons in soil and groundwater, the Report recommends additional investigation upgradient of Plume A and near Plume B. We concur that additional investigation is needed in the area of the former service station and wash rack near boring ACC-B-14. We also concur that additional investigation is needed in the areas of borings ACC-B-16 and ACC-B-17. Please present plans for additional investigation in these areas in the Work Plan requested below.

Given the proximity of the former tank excavation to other areas of detected contamination (upgradient of Plume A and Plume B), case closure for the site would occur after investigation and/or cleanup activities have been concluded for all areas of the site. We envision one case closure document that incorporates each of the separate areas of investigation.

TECHNICAL COMMENTS

1. **Leak Detection for Soil Vapor Samples.** The Report indicates that 100% tetrafluoroethane was used as the leak detector tracer gas at each sample location. However, leak detection results are not discussed in the narrative of the Report and tetrafluoroethane does not appear as an analyte in the Analytical Results in Appendix A. The compound 1,1-difluoroethane was detected in two of the soil vapor samples. We request that you provide a discussion of leak detection results and data quality for the soil vapor samples. This discussion and responses to technical comments 1 through 5 can be provided as a separate section of the Work Plan requested below.

2. **Dilution Factors.** For soil vapor sample SV-1, the analytical results indicate a dilution factor of 50. In the Work Plan requested below, please identify the known or suspected reason for the dilution factor.

3. **Analytical Methods for Soil Vapor Samples.** In the conditional Work Plan approval letter dated August 15, 2012, ACEH requested that the soil vapor samples be analyzed for Total Petroleum Hydrocarbons as gasoline using Method TO-15 or 8260 and oxygen, methane, and carbon dioxide by ASTM 1946. It does not appear that these analyses were performed. These data would have been useful in helping to evaluate the items described in the technical comments above and would have provided supporting data for consideration of low-threat closure. In the Work Plan requested below, please indicate the reason or rationale for not collecting these data.

4. **Sub-Slab Vapor Sampling Methods.** The Report indicates that the sub-slab vapor samples were collected in accordance with relevant guidance documents. In the Work Plan requested below, please provide a description of the sampling methods used and data quality.

5. **Grab Groundwater Sampling Methods.** In the Work Plan requested below, please provide clarification that grab groundwater samples were not filtered in the field using a 0.45 micron filter.

TECHNICAL REPORT REQUEST

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

- **December 31, 2012** – Work Plan
  File to be named: WP_R_yyyy-mm-dd RO384

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.

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

Sincerely,

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

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Gwen Santos, ACC Environmental Consultants, 7977 Capwell Drive, Oakland, CA 94621 (*Sent via E-mail to: gsantos@accenv.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, e-File

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single Portable Document Format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **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)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to .loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to .loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX B

April 29, 2012 Alameda County Environmental Health Services Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

April 29, 2013

Mr. Jeffrey Cook (*Sent via E-mail to: jcook@peralta.edu*)
Facilities Program Coordinator
Peralta Community College District
333 East 8th Street
Oakland, CA 94606

Subject: Work Plan Review for Fuel Leak Case No. RO0000384 and GeoTracker Global ID T0600100983, Peralta College District, 501 5th Avenue, Oakland, CA 94606

Dear Mr. Cook:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted documents entitled, "*Additional Soil and Groundwater Characterization Work Plan,*" dated March 27, 2013 and received by ACEH on April 8, 2013. The Work Plan, which was prepared on behalf of the Peralta Community College District by ACC Environmental, Inc., proposes soil, soil vapor, and groundwater sampling at various locations within the site.

Based on our review of the Work Plan, we request several revisions and clarifications to the Work Plan as discussed in the technical comments below. Therefore, we request that you address the technical comments below a Revised Work Plan to be submitted **no later than June 17, 2013**.

TECHNICAL COMMENTS

1. **Proposed Soil Boring Locations.** The Work Plan proposes five soil borings in the area of existing boring ACC-B-14 and four soil borings in the area of existing borings ACC-B-16 and ACC-B-17. There is no scale shown on the map; however, based on a comparison to other base maps, it appears that the borings are up to 380 feet away from the existing ACC borings. It appears that several of the borings are too far away from the likely source and/or are in cross gradient locations to assess the site. Some of the proposed locations may duplicate previous results from the 1993 investigation. No background information, previous data, or the likely locations of the suspected source(s) are presented to help evaluate the proposed locations. We request the following information be presented in the Revised Work Plan to develop and illustrate proposed soil boring locations:
    - Base map to include a scale
    - Base map to include previous boring locations and results from the "Site Investigation Report," dated September 21, 1992 and prepared by Environ
    - Potential sources identified from previous historical documents are to be shown on the base map and discussed in the text.

2. **Number of Soil Samples for Laboratory Analyses.** It is unclear how many soil samples will be collected for laboratory analyses. Section 2.2.2 on page 11 indicates that up to "thirty (54)" soil samples will be collected from the nine soil borings in the eastern parcel. In the Revised Work Plan requested below, please clarify the number of soil samples to be collected from each boring. We request that soil samples collected within the upper ten feet be analyzed for napthalene in addition to the proposed analytes.

3. **Soil Vapor Sampling.** Section 3.3 includes references to soil vapor sampling and sub-slab sampling. The depth of the proposed soil vapor samples is not discussed. Please revise this section to discuss only the proposed soil vapor sampling methods. Please discuss purging in terms of purge volumes in which one purge volume equals the internal volume of the tubing, the void space of the sand pack around the probe tip, and volume of dry bentonite in the annular space. Please provide a diagram showing the proposed construction of the vapor probes. Please also clarify whether a shut in test will be performed.

4. **Ambient Air Sample.** Please describe the purpose and rationale for the proposed collection of an ambient air sample. .

5. **GeoTracker Requirements.** A review of the State Water Resources Control Board's GeoTracker database indicates that the "*Additional Soil and Groundwater Characterization Work Plan,*" dated March 27, 2013 was not uploaded by you to the GeoTracker database. Pursuant to CCR Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). In order for your site to be in compliance with these requirements, you are required to electronically transmit reports and other site data, as required. Failure to upload the required documents may result in ineligibility of site investigation and corrective action costs incurred at the site from the Underground Storage Tank Clean-Up Fund. Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting). Future documents will not be reviewed and will be considered late if they are not uploaded to the GeoTracker database.

TECHNICAL REPORT REQUEST

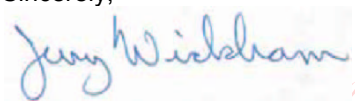
Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **June 17, 2013** – Revised Work Plan
  File to be named: WP_R_yyyy-mm-dd RO384

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.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org. Case files can be reviewed online at the following website: http://www.acgov.org/aceh/index.htm. As your email address does not appear on the cover page of this notification ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,



Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County Environmental Health, ou, email=jerry.wickham@acgov.org, c=US
Date: 2013.04.30 09:24:16 -07'00'

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

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Dr. Sadiq B. Ikharo, Vice Chancellor of General Services, Peralta Community College District, 333 East 8th Street, Oakland, CA 94606

Julia Siudyla, ACC Environmental Consultants, 7977 Capwell Drive, Oakland, CA 94621 (*Sent via E-mail to: jsiudyla@accenv.com*)

Ian Sutherland, ACC Environmental Consultants, 7977 Capwell Drive, Oakland, CA 94621 (*Sent via E-mail to: isutherland@accenv.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, e-File

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single Portable Document Format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **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)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to .loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to .loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX C

Perjury Statement

Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

PERJURY STATEMENT

Name of Document or Report:

Revised Additional Soil and Groundwater Characterization Work Plan (6.14.13)
Peralta Community College District Maintenance Yard, 501 5th Avenue, Oakland, California
Fuel Leak Case No. RO0000384, GeoTracker Global ID T0600100983

I declare, under penalty and perjury, that the information and/or recommendations contained in the above stated document or report is true and correct to the best of my knowledge.

Sadiq B. Ikharo
Signature

DR. SADIQ B. IKHARO.
Company Officer or Legal Representative Name

VICE CHANCELLOR OF GENERAL SERVICES.
Title

JUNE 17, 2013.
Date