

July 25, 2011

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 8<sup>th</sup> Street Oakland, CA 94606

#### RE: Soil Characterization and Groundwater Characterization Work Plan Peralta Community College District Maintenance Yard, 501 5<sup>th</sup> Avenue, Oakland, California Fuel Leak Case No. RO0000384, GeoTracker Global ID T0600100983 ACC Project Number: 6045.014.01

Dear Mr. Cook:

ACC Environmental Consultants, Inc., (ACC) has prepared the enclosed Work Plan for additional site characterization at 501 5<sup>th</sup> Avenue, Oakland, California to support site closure and move the site towards "No Further Action". This Work Plan was designed to obtain additional soil, soil vapor and groundwater characterization to support regulatory closure. This work Plan specifically addresses the Technical Comments in the March 9, 2011 letter from Alameda County Health Care Services (Attached in Appendix A). The field portion of this scope of work will be scheduled once Alameda County Environmental Health (ACEH) has provided approval of the work plan.

If you have any questions regarding this Work Plan, please call me at (510) 638-8400, extension 110 or email me at jsiudyla@accenv.com.

Sincerely,

Julia Siudyla Project Geologist

Enclosures

# RECEIVED

8:33 am, Jul 27, 2011 Alameda County Environmental Health



Additional Soil and Groundwater Site Characterization Work Plan Peralta Community College District Maintenance Yard 501 5<sup>th</sup> Avenue Oakland, California

ACC Project Number 6045-014.01

Prepared for:

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

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

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Julia Siudyla Project Geologist

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

#### **TABLE OF CONTENTS**

| 1.0  | INTRODUCTION  | 2           |
|--|---|-------------|
| 1.<br>1.1  |   |             |
| 2.0  | PROPOSED SCOPE OF WORK- PHASE I                                       | 7           |
| 2.<br>2.<br>2.<br>2.<br>2.                                     | <ul> <li>2 ADDITIONAL SOIL AND GROUNDWATER CHARACTERIZATION</li></ul> | 7<br>8<br>8 |
| 3.0  | SAMPLING METHODS  |             |
| 3.<br>3.<br>3.<br>3.<br>3.<br>3.<br>3.<br>3.<br>3.<br>3.<br>3. | <ul> <li>GRAB GROUNDWATER SAMPLING</li></ul>                          |             |
| 4.0  | TECHNICAL REPORTS   | 12          |
| 5.0  | SCHEDULE  | 12          |
| 6.0  | PERJURY STATEMENT   | 12          |

#### FIGURES

| Figure 1 – | Site Location Map |
|------------|-------------------|
| Eiguro 2   | Site Overview Mon |

Figure 2 – Site Overview Map

Figure 3– Historical Sample Location Map

Figure 4A – Proposed Sample Location Map (Western Parcel)

Figure 4B – Proposed Sample Location Map (Eastern Parcel)

Figure 5- Proposed Geophysical Survey Area Map

#### TABLES

Table 1 – Soil Analytical Summary Table

Table 2 – Groundwater Analytical Summary Table

#### **APPENDICIES**

- A- March 9, 2011 Alameda County Environmental Health Services Letter
- B- Historical Well Logs and Construction Details
- C- Perjury Statement

# **1.0 INTRODUCTION**

At the request of Peralta Community College District (Peralta), ACC Environmental Consultants, Inc. (ACC) has prepared this Work Plan to perform additional soil and groundwater site characterization. This Work Plan was designed to obtain additional soil, soil vapor and groundwater characterization to move the site towards regulatory closure. This work Plan specifically addresses the Technical Comments in the March 9, 2011 letter from Alameda County Health Care Services (Attached in Appendix A).

This investigation 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 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.

#### 1.1 Background

The Site is located at 501 5<sup>th</sup> Avenue in Oakland, California (Figure 1). The Peralta Community College District Maintenance Yard currently occupies the Site. The table below summarizes the known USTs that have been historically located at site (no known USTs currently occupy the site):

| UST # | Size in<br>Gallons | Contents         | Year Installed/Removed<br>From Ground                            | Construction |
|-------|--------------------|------------------|--|--------------|
| D1    | 4,000              | Gasoline         | Installed in 1981/Removed  | Fiberglass   |
| D2    | 6,000              | Gasoline         | from Ground in 1993  | Fiberglass   |
| D3    | 6,000              | Gasoline         |  | Fiberglass   |
| D4    | 2,000              | Diesel           | Installed Prior to 1960/   | Unknown      |
| D5    | 6,000              | Gasoline         | Abandoned in place1981/  | Unknown      |
| D6    | 6,000              | Gasoline         | Removed from Ground in   | Unknown      |
| D7    | 2,000              | Gasoline/Premium | 1992   | Unknown      |
| D8    | 550                | Waste Oil        |  | Unknown      |
| T1    | 1,115              | Motor oil        | Unknown Installation   | Unknown      |
| T2    | 523                | Diesel/Bunker    | Date/Removed from Ground   | Unknown      |
|       |                    | Fuel             | in 1995-1996   |              |
| T3    | 7,000              | Diesel           |  | Unknown      |
| T4    | 7,000              | Gasoline         | Unknown Installation<br>Date/Removed from Ground<br>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 (5) 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-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 by filling with them with water and installed three (3) new fiberglass underground storage tanks. The three (3) new tanks (D1, D2 and D3) consisted of two 6,000-gallon and one 4,000-gallon fiberglass tanks to store gasoline fuel. The new tanks were installed approximately 150 feet from the original tanks.

In September 1992 (ACC Tank Closure Report dated October 9, 1992), the five original (D4, D5, D6, D7, and D8) underground storage tanks were removed. During the excavation a floating brown liquid was observed on the groundwater within the excavation. Approximately 2,400-gallons of water was 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, 134 ppm of TPH as gasoline, 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 ppm TPH as diesel, 15 ppm TPH as gasoline, 286 ppb benzene, 698 ppb toluene, 300 ppb ethylbenzene, 808 ppb total xylenes and 284 ppm oil and grease.

In September 1992, a preliminary study was performed by Environ of Emeryville to evaluate the soil and groundwater conditions on the site and on neighboring sites. This study indicated that hydrocarbons constituents were found in the soil and grab groundwater samples conducted at the site. This report indicates that two possible groundwater plumes impacted by BTEX and petroleum hydrocarbon constituents are located beneath the maintenance yard portion (western parcel) of the site located to the west of 7<sup>th</sup> Street and beneath the athletic field (eastern parcel) located to the east of 7<sup>th</sup> Street (see Figure 2). This study indicated that the hydrocarbon constituents are present beyond the tank excavation and may have resulted from alternate, unknown sources.

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 gasoline and motor oil were detected in the soil and groundwater samples collected from the borings. Laboratory analysis of the soil indicated up to 370 ppm of TPH as gasoline, 12 ppm TPH as diesel, 5,342 ppm motor oil, 76.94 ppm benzene, 73.9 ppm toluene, 30.4 ppm ethylbenzene, and 95.41 ppm xylenes.

In November 1993, three additional 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 as gasoline, 190 ppb benzene, and 18 ppb toluene. Initial groundwater samples collected from the excavation indicated 27 ppm TPH as gasoline, 1,200 ppb benzene, 5,100 ppb toluene, 690 ppb ethylbenzene and 5,700 ppb xylenes. Approximately 3,500 gallons of water was removed from the excavation. Analysis of subsequent groundwater samples form the excavation indicated 210 ppb TPH as gasoline, and 14 ppb 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 levels of the constituents evaluated. The groundwater results from monitoring well MW-1 indicated a down-gradient extent of groundwater impact. Laboratory analysis of groundwater collected from monitoring wells MW-2 and MW-3 (upgradient of the former tank excavations) indicated detectable levels of constituents. Samples collected from boring MW-2 and MW-3 indicated detectable levels of TPH as diesel, TPH as gasoline with BTEX. Motor oil was reported in the soil from boring MW-2. TPH as diesel 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 Dated 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 indicated detectable levels of diesel up to 11 ppm and motor oil up to 100 ppm. Below detectable levels of TPH as gasoline and BTEX were reported in the soil samples analyzed. Groundwater was encountered approximately 5 to 6 feet below ground surface (bgs) during the additional investigation. Laboratory analysis of grab groundwater samples collected from the boreholes indicated below detectable levels of diesel, motor oil, and BTEX. TPH as gasoline at 61 parts per billion (ppb) was reported in one grab groundwater sample collected from a boring. Motor oil was not detected in the groundwater samples collected from the borings and monitoring wells, therefore motor oil does not appear to currently impact the groundwater. Results of the analytical data from previous investigations indicate that up-gradient sources of TPH and motor oil exist. 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 4, 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 9, 1996 ACC Remedial Action and Underground Storage Tank Closure Report indicated that over excavation in and around the former tank excavation was recommended as a cost effective means to remediate the source of impact remaining at the Site. In addition, three previously unknown USTs were removed from the Site. One previously unknown UST was left

in place due to its proximity to onsite buildings. Based on the soil sampling preformed during this remedial action, impact to shallow soil and groundwater was evident. Soil not removed during this remedial action was left in place due to subsurface utilities and buildings within the area. Remedial activates during this event included the removal of approximately 2,250 cubic yards of impacted soil, removal of approximately 14,900 gallons of pit water and the removal of three (3) previously unknown USTs. ACC indicated that with the removal of the USTs and the soils in the adjacent vicinity, the bulk of the source of impact to the soil and groundwater had been successfully removed. Quarterly groundwater monitoring was reinstated after this event.

May 20, 1996 ACC Quarterly Groundwater Monitoring event, this event documents the initial groundwater monitoring event conducted after interim remedial action was preformed in 1995. Results of the groundwater monitoring indicated detectable concentrations of petroleum hydrocarbons in MW-1 and MW-3. The concentrations of TPHg have increased since the previous sampling event conducted prior to remedial action. It appeared that the removal of preferential pathways and replacement of subsurface material with fill material allows more consistent groundwater movement and may have aided in the migration of constituents ACC believes that the groundwater flow will be restricted beyond the boundaries of the former excavation due to the fine-grained material in the subject surface.

November 8, 1996 Biannual Groundwater Monitoring event indicated that groundwater flow direction is consistent with previous sampling event and the groundwater gradient has become slight steeper compared with previous events. The concentrations of petroleum hydrocarbons as diesel and motor oil have increased since the previous sampling event. Remedial actions conducted appeared to have influenced groundwater flow and constituents movements. It appeared that the removal of preferential pathways and replacement of subsurface material with fill material allows more consistent groundwater movement and may have aided in the migration of constituents to down gradient well MW-1. ACC believes that the groundwater flow will be restricted beyond the boundaries of the former excavation due to the fine-grained material in the subject surface.

January 29, 1997 ACC Groundwater Monitoring Report indicated that groundwater flow direction is consistent with previous sampling events (to the west) and the groundwater gradient has slightly decreased compared with previous sampling events. The concentrations of petroleum hydrocarbons as diesel and motor oil have increased since the previous sampling event. It appeared that the removal of preferential pathways and replacement of subsurface material with fill material allows more consistent groundwater movement and may have aided in the migration of constituents ACC believes that the groundwater flow will be restricted beyond the boundaries of the former excavation due to the fine-grained material in the subject surface.

February 12, 1998 ACC Groundwater Monitoring Report indicated that groundwater flow and gradient are consistent with previous sampling events. The concentrations of petroleum hydrocarbons as diesel and motor oil have decreased in wells MW-1 and MW-3 since the most recent sampling event. The concentrations of petroleum hydrocarbons as diesel and motor oil have increased slightly in MW-4. No TPHg, BTEX or MtBE were detected above the reporting limits in MW-1.

On March 30, 1998 ACC (Monitoring Well Destruction Report) destroyed monitoring well MW-3 in preparation for additional over-excavation and removal of the last known remaining UST. This well was destroyed by over drilling and removing all well materials and backfilling the hole with bentonite.

June 10, 1999 ACC UST and Remedial Action Report indicated that interim remedial action included the removal of the last remaining UST, source removal and excavation of approximately 2,209 tons of impacted soil and treatment of approximately 100,000 gallons of groundwater. ACC concludes that with the removal of the last known UST and impacted soil and groundwater all recoverable sources have been removed. Petroleum hydrocarbons residues not removed though excavation should degrade naturally over time. Based on the findings, observations and analytical results of verification samples, no further investigation with regards to the extent of soil impact was recommended. ACC anticipated that residual groundwater impact should also degrade over time. ACC requested regulatory site case closure.

August 23, 1999 ACC Groundwater Monitoring Report indicated that minor concentrations of TPH as diesel were detected in MW-1. The concentrations of motor oil we no longer present above laboratory detection limits. No TPHg, BTEX or MtBE were detected above the reporting limits in MW-1. No groundwater flow or gradient could be calculated as only two wells remain at the site. ACC requested regulatory site case closure.

Previous sample locations are provided on Figure 3- Historical Sample Location Map.

All historical soil sampling data is provided on Table 1-Historical Soil Data.

All historical groundwater sampling data is provided on Table 2-Historical groundwater Data.

# **1.2** 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 san 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 are 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 from 0-1 foot below ground surface (bgs). From approximately 1-foot bgs to approximately 15 feet bgs soils consist of dark greenish grey to black clay, slightly plastic, soft and saturated. Groundwater in these borings was encounter 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 to the west towards San Francisco Bay. Groundwater elevation at the site ranged from -0.27 to 4.71 during quarterly monitoring events at the Site from 1994-1998.

The historical monitoring well boring logs and construction details are provided in Appendix B.

# 2.0 PROPOSED SCOPE OF WORK- PHASE I

At the request of Peralta Community College District (Peralta), ACC Environmental Consultants, Inc. (ACC) has prepared this Work Plan to perform additional soil and groundwater site characterization. This Work Plan was designed to obtain additional soil, soil vapor and groundwater characterization to move the site towards regulatory closure. This work Plan specifically addresses the Technical Comments in the March 9, 2011 letter from Alameda County Health Care Services (Attached in Appendix A). ACC proposes to do a two-phased approach to delineate the site. The first phase of the proposed scope of work is outlined in this proposal and includes a geophysical survey of the site, a soil boring investigation to collect soil samples and grab groundwater samples, a soil vapor survey, a well survey/sensitive site receptor survey and bringing the site into GeoTracker compliance. The second Phase of the scope will include the submission of an additional work plan to install three (3) to five (5) monitoring wells at the Site. The location and installation of the monitoring wells will be dependent on the in information obtained from Phase I.

# 2.1 Conduct a Geophysical Survey of the Site

The Site has been historically utilized by Peralta as their Maintenance Yard and by the City of Oakland as a Vehicle and Equipment Maintenance Yard. In addition to these uses the historical Sanborn Maps identify the subject property as the City of Oakland Gas Station/Oil Depot. ACC has removed twelve (12) USTs from the site. Of these twelve (12) USTs only eight (8) of them were known be located at the Site. ACC proposes to conduct a Ground Penetrating Radar (GPR) Survey and/or a Magnetometer Survey of the Site to identify and locate any potential additional unknown USTs.

# 2.2 Additional Soil and Groundwater Characterization

# 2.2.1 Delineation of Plume A (Western Parcel)

To further delineate Plume A horizontally, vertically, and to obtain current data ACC proposes to conduct thirteen (13) exploratory soil borings. These soil borings will be advanced with Geoprobe<sup>™</sup> equipment to depths of 25 feet bgs. If the bottom of the soil boing has obvious signs of impact ACC will continue the boring until signs of impact are no longer present.

ACC proposes to collect up to forty (40) soil samples from the thirteen (13) soil boring locations on Parcel. The soil samples will either be collected at 5-foot intervals, at the water table, lithologic changes, or areas depicting field impact. ACC will collect enough soil samples to define the extent of soil impacts both vertically and horizontally.

Proposed sample locations are provided on Figure 4A-Proposed Sample Location Map.

2.2.2 Delineation of Plume B (Eastern Parcel)

To further delineate Plume B horizontally, vertically, and to obtain current data ACC proposes to conduct two (2) exploratory soil borings will be advanced with Geoprobe<sup>TM</sup> equipment to depths of 25 feet bgs. If the bottom of the soil boing has obvious signs of impact ACC will continue the boring until signs of impact are no longer present.

ACC proposes to collect up to ten (10) soil samples from the two (2) soil boring locations on Parcel. The soil samples will either be collected at 5-foot intervals, at the water table, lithologic changes, or areas depicting field impact.

Proposed sample locations are provided on Figure 4B-Proposed Sample Location Map.

# 2.3 Soil Vapor Sampling

ACC proposes to collect nine (9) shallow soil vapor samples in and around the immediate vicinity of the former UST basins on the Western Parcel to determine if a potential vapor intrusion condition exists at the Site.

# 2.4 Well Survey and Sensitive Site Receptor Survey

ACC will conduct a well survey that will identify all water supply wells within 1,000 feet of the subject site. Information from Alameda County and the State of California Department of Water Resources will be obtained. As part of the well survey, ACC will perform a background study of the historical land uses of the site and properties in the vicinity of the site. This background study will aid in determining the existence of unrecorded/unknown (abandoned) wells, which can act as pathways for migration of contamination at and/or from the site. ACC will also identify any potential sensitive site receptors within 500 feet of the Site.

# 2.4 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.

# **3.0 SAMPLING METHODS**

# 3.1 Soil Sampling Standard Procedures for Geoprobe<sup>™</sup> Drilling and Sampling

A total of fifteen (15) soil borings will be conducted at the Site with a Portable Geoprobe<sup>TM</sup> Sampling Rig. The Geoprobe Rig is equipped with a four-foot long, stainless steel Geoprobe<sup>®</sup> macro-core sampling tool and 2-inch inside-diameter clear acetate liners. The soil borings will be conducted to a max depth of 25 feet bgs or to where no evident signs of field impact are observed (within the capabilities of the Geoprobe equipment). The ground surface immediately adjacent to the boring will 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

intervals saved for analysis will be immediately placed in plastic sampling tubes with polyethylene sheeting and tight-fitting plastic caps, collected and placed in glass jars, or filed preserved via EPA Method 5035, labeled, placed in resealable plastic bags, and placed in a prechilled insulated container and prepared for transport and analysis using standard chain of custody protocol. Soil samples collected for analysis will be sealed and cooled as soon as feasible to minimize potential volatilization. All samples will be in a locked vehicle or in direct observation at all times. All soils will be logged using the Unified Soil Classification System (USCS), field screened with a PID meter, or prepared for analysis.

Prior to conducting all invasive work, ACC will contact Underground Service Alert, underground utility locator to mark all utilities at the subject property. ACC will obtain a drilling permit from Alameda County Public Works this scope of work.

# 3.2 Grab Groundwater Sampling

Grab groundwater samples will be collected with the use of a PVC schedule 40, 1-inch, temporary monitoring wells. Each soil boring will be conducted to the respective depth of interest (25 feet bgs or five(5) feet below the first depth in which groundwater is first encountered) and the temporary monitoring well will be set with a 5-foot long screen which will be exposed to the formation. Grab water samples will be collected using low-flow, low-turbidity techniques and field filtered using 0.45 micron filters. 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 sample vials without headspace, and 1-liter amber bottles, labeled and immediately sealed and cooled to minimize potential volatilization.

All samples collected will be stored in a pre-chilled, insulated container pending ACC transport to TestAmerica, a state-certified analytical laboratory. Every effort will be made to minimize disturbance of the groundwater samples prior to placement in the sample containers and maintaining the samples at four degrees Celsius prior to analysis. Standard turnaround time for analytical results is 5 working days. However, an expedited turn around time may be elected for the proposed work.

# 3.3 Soil Vapor Sampling

At each of the soil vapor sampling points a 1- to 1.25-inch hole will be drilled to 5' and 10' intervals into the sub slab material beneath the immediate vicinity of the former dry cleaning machine utilizing a Geoprobe<sup>®</sup>, and 0.25-inch vapor points consisting of polyethylene tubing with a permeable probe tip will be installed in the cored holes. A Teflon<sup>TM</sup> disk will be used to seal the joint between the tubing and the probe tip. The probe tip as covered with sand and hydrated bentonite chips will be used to seal the annular air space between the probe tip and the bottom of the building foundation.

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

At the completion of purging, ACC will collect the soil vapor samples by opening the vapor-tight valve on the Summa canister 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 100% tetrafluoroethance 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. All soil vapor sample containers will be labeled and stored at ambient temperature in laboratory-supplied containers. All Soil Vapor Samples will be submitted to Torrent Laboratories for volatile organic compound analysis (VOCs) via EPA method TO-15 Analysis.

Upon completion of the sampling program grouting, sealing with concrete, and resurfacing the floor surface to match its original condition decommissioned the subslab soil gas sampling points.

Subslab sampling will be conducted following guidance criteria for the evaluation and mitigation of subsurface Vapor Intrusion to Indoor Air (Interim Final), published by the Department of Toxic Substance Control of the California Environmental Protection Agency (December 15, 2004, revised February 7, 2005) (DTSC 2005), Advisory-Active Soil Gas Investigations, jointly issued by the Department of Toxic Substances Control of the California Environmental Protection Agency and the California Regional Water Quality Control Board, Los Angeles Region (CRWQCB-LA, 2003), Quality Assurance Project Plan (QAPP) for the San Fernando Valley/San Gabriel Valley Cleanup Program (CH2MHill 2008), and ASTM E2600-08.

# **3.3** Sample Containers and Preservation

Soil samples collected will be either collected in plastic sampling tubes which will be immediately capped with polyethylene sheeting and tight-fitting plastic caps, collected and placed in glass jars, or filed preserved via EPA Method 5035. Grab groundwater samples will be collected in laboratory-supplied new glass 40-milliliter glass vials, plastic containers, or 1 liter amber bottles provided by TestAmerica.

Samples will be labeled with pre-printed laboratory-supplied labels, placed in new resealable plastic bags, and immediately placed in a pre-chilled, insulated container maintained at four degrees Celsius pending transport to the analytical laboratory. Each sample cooler will be chilled with ice and no blue ice containers will be used.

# 3.4 Sample Packaging and Shipment

All samples will be handled according to ACC sampling protocols. Soil samples will be covered at each open end with new polyethylene (Teflon®) sheeting, fitted with tight-fitting plastic caps, or collected in glass jars labeled, placed in resealable plastic bags, placed in a pre-chilled, insulated container pending transport to ACC's Oakland office. ACC will properly refrigerate the samples until they are picked up by the analytical laboratory courier or delivered directly to the lab. Standard chain of custody documentation will be maintained at all times. Samples will be submitted to the laboratory within 24 hours of collection.

# **3.5** Sample Documentation

ACC will utilize a unique 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 7.0-7.5 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.

Soil samples will be logged and fully described on pre-printed ACC log forms. These log forms are designed to facilitate preparing boring logs for the final report of findings and prompt the ACC field geologist to obtain and document specific types of information.

#### **3.6** Analytical Methods

An EPA certified analytical laboratory will analyze all samples. Select samples will be analyzed for the following:

- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), MtBE, and the five fuel by EPA Method 5035/8260B,
- Total Petroleum Hydrocarbons purgeable (as gasoline) (TPHg) by EPA Method 5035/8015B,
- Total Petroleum Hydrocarbon as Diesel and Motor Oil (TPHd and TPHmo) and Total Extractable Petroleum Hydrocarbons (all other) (TEPH) by EPA Method 8015B,
- Ethylene dibromide (EDB) and Ethylene dichloride (EDC; also known as 1,2dichloroethane or 1,2-DCA) (lead scavengers) by EPA Method 8260
- Methyl tert-butyl ether (MTBE) by EPA Method 8260
- Tert-amyl methyl ether (TAME), Disopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Tert-butyl alcohol (TBA) (five fuel oxygenates) by EPA Method 8260
- Total lead by EPA Method 6010B.

# **3.7** Decontamination

All sampling equipment will be either new disposable equipment or pre-cleaned, stainless steel sampling equipment. Decontamination of the 6-inch hollow stem augers, hand auger (if utilized), and slide-hammer (if utilized) sampler 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 at each new depth at each sample location. Gloves will be replaced before the collection and/or handling of every sample.

#### **3.8 Backfilling Soil Borings**

The soil borings will be backfilled by tremie with cement grout or cement grout/sand mixture (cement slurry consisting of approximately six gallons of water mixed with 94 pounds of Portland cement). The cement slurry will be prepared with an electric mixing rod to minimize cement lumps in the slurry mix. The surface of the soil boring will be covered with approximately 3 to 6 inches of concrete and colored to match the existing surface.

All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

# 4.0 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.

#### 5.0 SCHEDULE

ACC will perform and complete the work within two weeks upon authorization to proceed from the Client and approval from ACEH.

#### 6.0 PERJURY STATEMENT

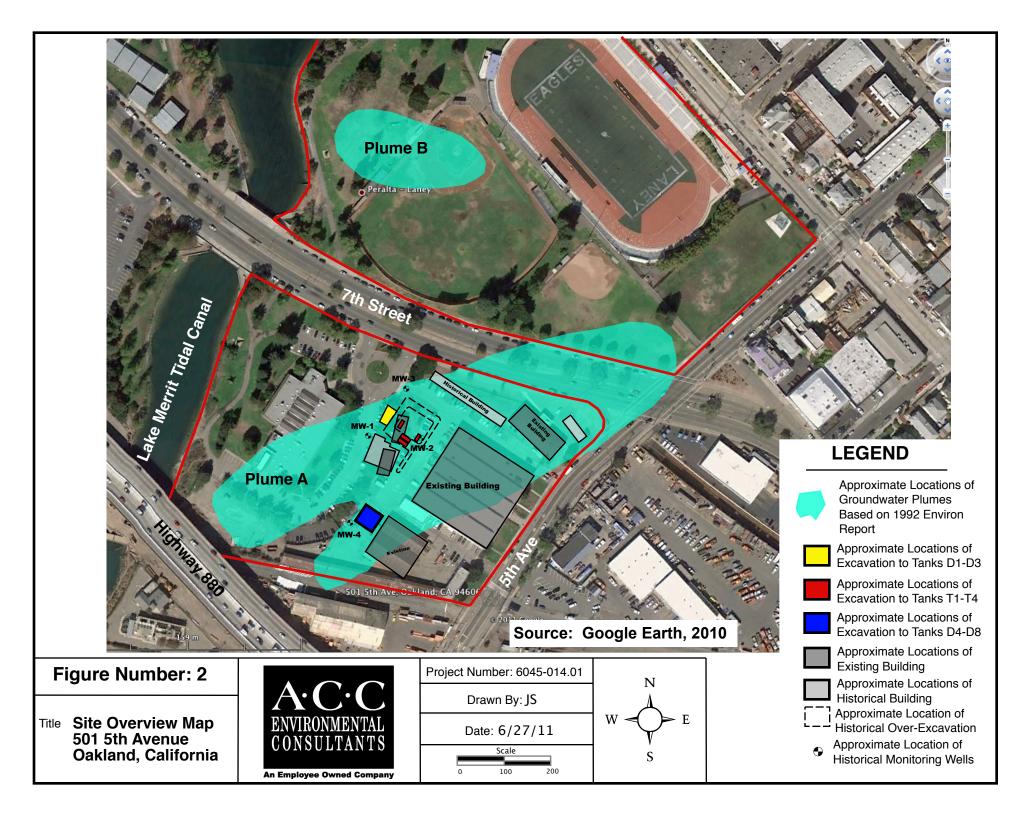
ACC Environmental Consultant's declares, under penalty and perjury, that the information and/or recommendations contained in this document are true to the best of our knowledge.

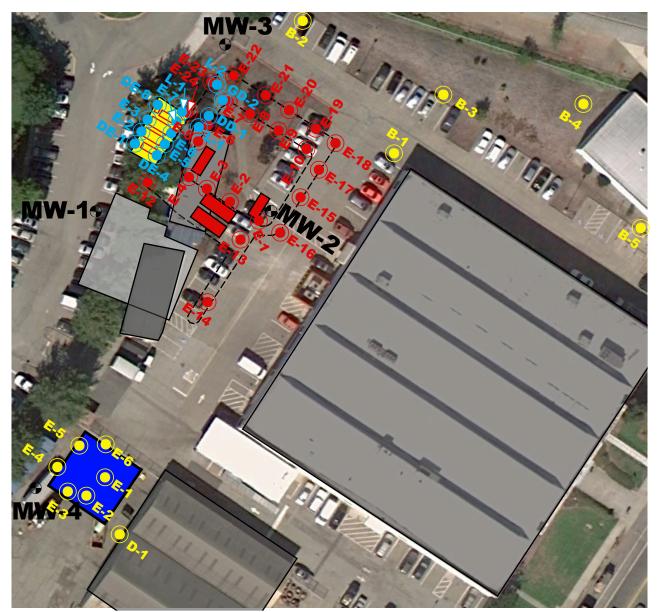


Source: Google Earth, 2010

| Title | Site Location Map   |  |  |
|-------|---------------------|--|--|
|       | 501 5th Avenue      |  |  |
|       | Oakland, California |  |  |
|       |                     |  |  |

| Figure Number: 1  | Scale: None           |
|---|-----------------------|
| Project Number: 6045-014.01                               | Drawn By: JS          |
|   | Date: 6/27/11         |
| ENVIRONMENTAL<br>CONSULTANTS<br>An Employee Owned Company | $W \xrightarrow{N} E$ |



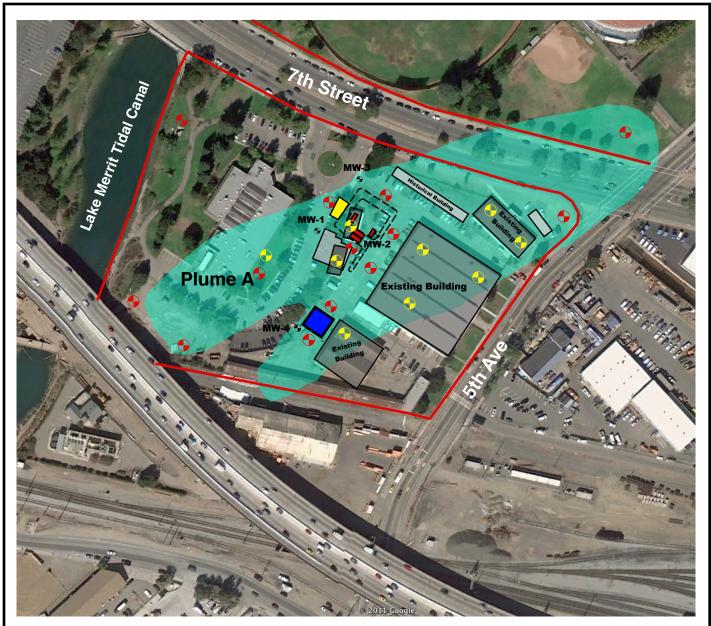


| LEGEND |
|--------|
|--------|

Approximate Locations of Groundwater Plumes Based on 1992 Environ Report 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 0 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: 6045-014.01                               | Drawn By: JS          |
|   | Date: 6/27/11         |
| ENVIRONMENTAL<br>CONSULTANTS<br>An Employee Owned Company | $W \xrightarrow{N} E$ |

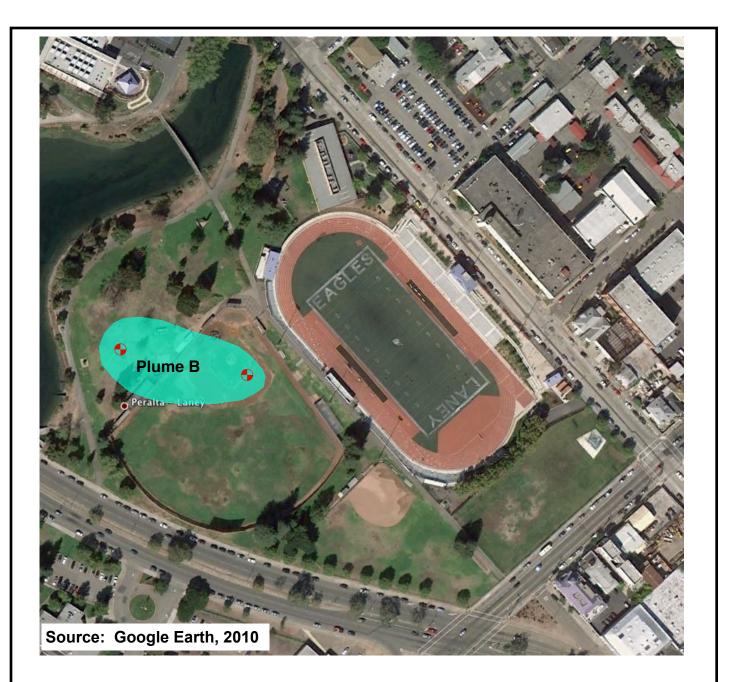


# LEGEND

| Approximate Locations of                              |
|---|
| Groundwater Plumes                                    |
| Based on 1992 Environ                                 |
| Report imate 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<br>Approximate Location of |
| Historical Monitoring Wells                           |
| <ul> <li>Proposed Soil Vapor Sample</li> </ul>        |
| Locations   |
| <ul> <li>Proposed Soil Boring Locations</li> </ul>    |
| (Soil and GW Samples)                                 |
| · · · · /   |

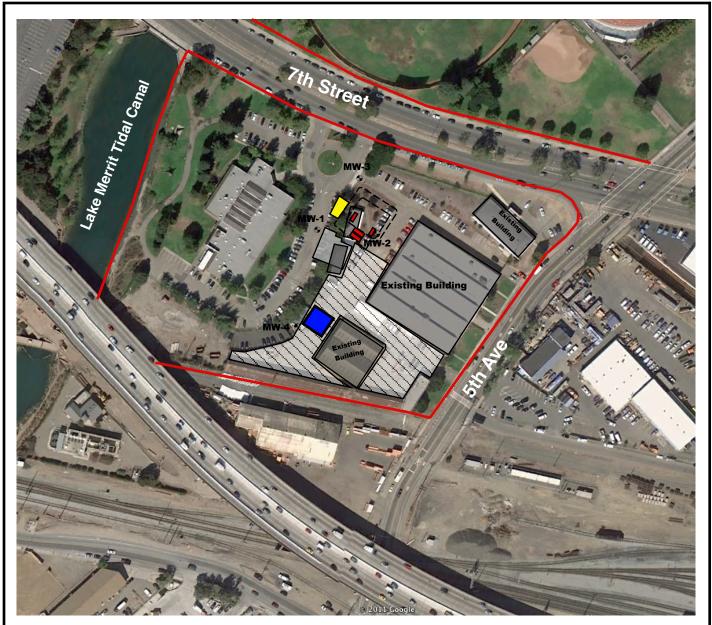
# Title Proposed Sample Location Map 501 5th Avenue Oakland, California

| Figure Number: 4A  | Scale: None           |
|--|-----------------------|
| Project Number: 6045-014.01  | Drawn By: JS          |
|  | Date: 6/27/11         |
| A.C. C.<br>ENVIRONMENTAL<br>CONSULTANTS<br>An Employee Owned Company | $W \xrightarrow{N} E$ |

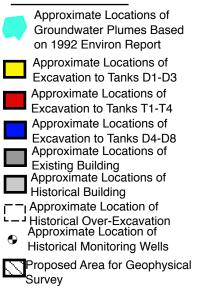


| Title | Proposed Sample Location Map |
|-------|------------------------------|
|       | 501 5th Avenue               |
|       | Oakland, California          |
|       |                              |

| Figure Number: 4B   | Scale: None           |
|---|-----------------------|
| Project Number: 6045-014.01                                       | Drawn By: <b>JS</b>   |
|   | Date: 7/14/11         |
| A.C.<br>ENVIRONMENTAL<br>CONSULTANTS<br>An Employee Owned Company | $W \xrightarrow{N} E$ |



# LEGEND



#### Title:Proposed Geophysical Survey Area Map 501 5th Avenue Oakland, California

| Figure Number: 5                     | Scale: None           |
|--------------------------------------|-----------------------|
| Project Number: 6045-014.01          | Drawn By: JS          |
|                                      | Date: 6/27/11         |
| A.C.<br>ENVIRONMENTAL<br>CONSULTANTS | $W \xrightarrow{N} E$ |

Table 1-Historical Soil Data Peralta Maintenance Yard 501 5th Avenue Oakland, California

|                                    |   |   |                                    |               |   |   |   |             |         | and Conce    | ntrations (m | g/kg) |               |                        |
|------------------------------------|---|---|------------------------------------|---------------|---|---|---|-------------|---------|--------------|--------------|-------|---------------|------------------------|
| Samule Number                      | Sample Depth<br>Feet Below<br>Ground Surface<br>(bgs) | Source of Data                                  | Sampling Date                      | Matrix        | Total Extractable Petroleum Hydrocabons | Total Petroleum<br>Hydrocarbons -<br>Gasoline | Total Petroleum<br>Hydrocarbons- Diesel | Ben zene    | Totuene | Estylberaane | Xylene       | M4BE  | Lead (program | Total OI and Grease 50 |
| DE-1                               | 9   |   | 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-6                                | 9   |   | 03-Sep-92                          | Soil          |   | 5.0   | NA                                      | 0.0015      | 0.0047  | 0.0470       | 0.2530       |       | 1.0           |                        |
| E-6                                | 9   | 1   | 03-Sep-92                          | Soil          |   | 134.70  | NA                                      | 1.4695      | 4.6177  | 7.1701       | 6.1470       |       | ND            |                        |
| E-7                                | 9   | ACC UST Closure<br>Report October 9,            | 03-Sep-92                          | Soil          |   | 30.11   | NA                                      | 0.255       | 0.5766  | 1.3976       | 2.7334       |       | 2.0           |                        |
| E-8                                | 9   | 1992  | 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   | 1   | 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            |                        |
|                                    | l   |   | ·                                  | L             | J                                       | ι   | L                                       | J           | l       | L            | J            | ۱     | L             |                        |
|                                    |   |   |                                    |               |   |   |   | · · · · · · |         |              |              |       |               |                        |
| E-1                                | 7   |   | 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   | ACC Tank Closure<br>Report December<br>22, 1993 | 04-Nov-92                          | soil          |   | <1.0  |   | 0.041       | 0.018   | <0.005       | <0.005       |       | 6.3           |                        |
| E-6                                | 7   | 22, 1993  | 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        | L     | 4.5           |                        |
|                                    |   |   |                                    |               |   |   |   | ,           |         |              |              |       |               |                        |
| B-1                                | 3   |   | 09-May-94                          | soil          | <1.0/ <b>31</b> (k/m)                   | <1.0  | 6.8                                     | <0.005      | <0.005  | <0.005       | <0.005       |       |               |                        |
| B-2                                | 6   | 1   | 09-May-94                          | soil          | <1.0/ <b>51</b> (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   | ACC Additional                                  | 09-May-94                          | soil          | <1.0/43 (k/m)                           | <1.0  |   | <0.005      | <0.005  | <0.005       | <0.005       |       |               |                        |
|                                    |   | Subsurface<br>Investiagtion June                |                                    |               |   |   |   | ·····       |         |              |              |       |               |                        |
| B-4                                | 5   | 1994  | 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       |       |               | -                      |
|                                    |   | L   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
| MW-1 6-1/2                         | 6.5   | l   | 7-Feb-94                           | soil          | Г                                       | <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  | ACC Soil and<br>Groundwater                     | 7-Feb-94                           | soil          |   | <1.0  | <1.0                                    | <5.0        | <5.0    | <5.0         | <5.0         |       |               | <50                    |
| MW-3 6-1/2                         | 6.5   | Investigation March<br>1994                     | 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   | 1   | 7-Feb-94                           | soil          |   | <1.0  |   | <5.0        | <5.0    | <5.0         | <5.0         |       |               |                        |
|                                    |   |   |                                    |               |   |   |   | h           |         |              |              |       |               |                        |
| MW-4 11-1/2                        | 11.5  | l   | 7-Feb-94                           | soil          | l                                       | <1.0  |   | <5.0        | <5.0    | <5.0         | <5.0         |       |               | L                      |
|                                    |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
|                                    |   |   | Shallow Soil<br>( <u>&lt;</u> 3 m) | Soil (mg/kg)  |   |   |   | 0.044       |         |              |              | 0.023 | 200           |                        |
| **ECI - D.                         | at late d a la  |   | ( <u>-</u> 5 m)                    |               |   |   |   |             |         |              |              |       |               |                        |
| **ESLs - Residential (unre         | stricted site usage)                                  |   |                                    |               |   |   |   |             |         |              | •••••        |       |               |                        |
|                                    |   |   | Deep Soil<br>(>3 m)                | Soil (mg/kg)  |   |   |   | 0.044       |         |              |              | 0.023 |               |                        |
|                                    |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
|                                    |   |   | Shallow Soil<br>( <u>&lt; 3</u> m) | Call (mailes) |   | 83  | 83                                      | 0.044       | 2.9     | 3.3          |              | 0.023 | 750           |                        |
|                                    |   |   | ( <u>≤</u> 3 m)                    | Soil (mg/kg)  |   |   |   | 0.044       |         |              |              | 0.025 |               |                        |
| **ESLs - Commerci                  | al site usage   |   |                                    |               |   |   |   |             |         |              |              |       |               | •                      |
|                                    |   |   | Deep Soil<br>(>3 m)                | Soil (mg/kg)  |   |   |   | 0.044       |         |              |              | 0.023 |               |                        |
|                                    |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
|                                    |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
| PRG's                              |   |   | Residential                        | Soil (mg/kg)  |   |   |   |             | 5,000   |              | 600          |       | 400           |                        |
|                                    |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |
|                                    |   |   | Commercial                         | Soil (mg/kg)  |   | NA  | NA                                      | 5.6         | 46,000  |              | 2,600        | 190   | 800           |                        |
| California Human Health<br>(CHHSL: | Screening Levels<br>S)                                |   | Residential                        | Soil (mg/kg)  |   | NA  | NA                                      | NA          | NA      | NA           | NA           | NA    | 80            |                        |
|                                    |   |   | Commercial                         | Soil (mg/kg)  |   | NA  | NA                                      | NA          | NA      | NA           | NA           | NA    | 320           |                        |
| Notes                              |   |   |                                    |               |   |   |   |             |         |              |              |       |               |                        |

tal Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Drinking Water

# Table 1-Historical Soil Data Peralta Maintenance Yard 501 5th Avenue Oakland, California

| Constituents and Concentrations (mg/kg)     |  |                                    |                                    |              |  |   |  | j/kg)   |             |              |        |                         |        |                      |
|---|--|------------------------------------|------------------------------------|--------------|--|---|--|---------|-------------|--------------|--------|-------------------------|--------|----------------------|
|   |  |                                    |                                    |              | TEPH                                       | TPHg  | TPHd                                     | В       | т           | E            | ×      | MtBE                    | Lead   | 0&G                  |
|   | Sample Depth<br>Feet Below<br>Ground Surface |                                    |                                    |              | Total Extractable Petroleum<br>Hydrocabons | Total Petroleum<br>Hydrocarbons -<br>Gasoline | Total Petroleum<br>Hydrocarbons - Diesel | Benzene | Toluene     | Ethylbenzene | Xylene | Methyl tert-butyl ether | Lead ) | Total Oil and Grease |
| Sample Number                               | (bgs)  | Source of Data                     | Sampling Date                      | Matrix       |  |   |  |         |             |              |        |                         |        |                      |
| E-1   | 7  |                                    | June-July 1995                     | soil         | 1,600/1,600<br>(k/m)                       | 1,700*  |  | <0.5    | <0.5        | 46           | 6.5    |                         |        |                      |
| E-2   | 7  |                                    | June-July 1995                     | soil         | 3,800.2,000<br>(k/m)<br>1,200/1,200        | 3,100*  |  | <0.5    | <0.5        | 6.3          | 8.6    |                         |        |                      |
| E-3   | 7  |                                    | June-July 1995                     | soil         | (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<br>(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<br>(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 Exi | st     |                         |        |                      |
| E-12  | 7  | Remedial Action<br>and UST Removal | June-July 1995                     | soil         | 52 (m)                                     | <1.0  |  | <0.005  | <0.005      | <0.005       | <0.005 |                         |        | 110                  |
| E-13  | 7  | Report May 9, 1996                 | 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<br>(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<br>(k/m)                         | 5,200   |  | <5.0    | <5.0        | 12.0         | 17.0   |                         |        | 3,200                |
| **ESLs - Residential (unre                  | stricted site usage)                         |                                    | Shallow Soil<br>( <u>&lt;</u> 3 m) | Soil (mg/kg) |  | 83  | 83                                       | 0.044   | 2.9         | 2.3          | 2.3    | 0.023                   | 200    |                      |
|   |  |                                    | Deep Soil<br>(>3 m)                | Soil (mg/kg) |  | 83  | 83                                       | 0.044   | 2.9         | 3.3          | 2.3    | 0.023                   | 750    |                      |
| **ESLs - Commerci                           | al site usage                                |                                    | Shallow Soil<br>( <u>&lt;</u> 3 m) | Soil (mg/kg) |  | 83  | 83                                       | 0.044   | 2.9         | 3.3          | 2.3    | 0.023                   | 750    |                      |
|   |  |                                    | Deep Soil<br>(>3 m)                | Soil (mg/kg) |  | 83  | 83                                       | 0.044   | 2.9         | 3.3          | 2.3    | 0.023                   | 750    |                      |
| PRG's                                       |  |                                    | Residential                        | Soil (mg/kg) |  | NA  | NA                                       | 1.10    | 5,000       |              | 600    | 39                      | 400    |                      |
|   |  |                                    | Commercial                         | Soil (mg/kg) |  | NA  | NA                                       | 5.6     | 46,000      | 29           | 2,600  | 190                     | 800    |                      |
| California Human Health<br>(CHHSL:          | Screening Levels                             |                                    | Residential                        | Soil (mg/kg) |  | NA  | NA                                       | NA      | NA          | NA           | NA     | NA                      | 80     |                      |
|   |  |                                    | Commercial                         | Soil (mg/kg) |  | NA  | NA                                       | NA      | NA          | NA           | NA     | NA                      | 320    |                      |
| Notes<br>**ESLs = Rev Area Regional Water O | -fit. Caster/ David Facility                 |                                    | arim Final May 2008) wher          |              | ource of Drinking Wate                     |   |  |         |             |              |        |                         |        |                      |

Notes
"ESLI = Bay Area Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Dirkking Water
PRGsrEPA Region 9 Proliminary Remediation Gool November 2009)
DTW: begin to water (I) measured from top of casing (TOC).
NT: Not Tenks: MK-Not Measured: NS: Not Sampled
"- No Data
Scheded Values Exceed Their Respective Criteria
Thyle - Total Petroleum Hydrocarbons as Classifie
TPHGs-Total Petroleum Hydrocarbons as Diesel
"-

--- = No Data ppm = parts per million ppb = parts per billion

Table 1-Historical Soil Data Peralta Maintenance Yard 501 5th Avenue Oakland, California

| Is = Bay Ana Regional Water Quality Control Board Environmental Screening Levels (Interim Final May 2008), where groundwater is NOT a source of Dirkking Water<br>IIII-DRA for Net (III) measured from top of casing (TOC).<br>IVE Standy Mit Net Materia, Yas Media Sampid<br>IVE Standy Mit Net Materia, Yas Media Sampid<br>Value<br>Second Their Respective Criteria<br>IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII   |  | 1   |                                |                     |              |  |   |  |         | Constituents | and Conce      | ntrations (m | g/kg)                   |        |                      |
|--|--|---|--------------------------------|---------------------|--------------|--|---|--|---------|--------------|----------------|--------------|-------------------------|--------|----------------------|
| NomeNomeNomeNo <th< th=""><th></th><th></th><th></th><th></th><th></th><th>TEPH</th><th>TPHg</th><th>TPHd</th><th></th><th></th><th></th><th></th><th></th><th>Lead</th><th>0&amp;G</th></th<>   |  |   |                                |                     |              | TEPH                                       | TPHg  | TPHd                                   |         |              |                |              |                         | Lead   | 0&G                  |
| Marta 1 And 1 <p< th=""><th></th><th>Feet Below</th><th></th><th></th><th></th><th>ttal Extra ctable Petroleum<br/>Hydrocabons</th><th>Total Petroleum<br/>Hydrocarbons -<br/>Gasoline</th><th>Total Petroleum<br/>Hydrocarbons-Diesel</th><th>Benzene</th><th>Toluene</th><th>Ethylben ze ne</th><th>Xylene</th><th>Methyl tert-butyl ether</th><th>Lead )</th><th>Total Oil and Grease</th></p<>   |  | Feet Below  |                                |                     |              | ttal Extra ctable Petroleum<br>Hydrocabons | Total Petroleum<br>Hydrocarbons -<br>Gasoline | Total Petroleum<br>Hydrocarbons-Diesel | Benzene | Toluene      | Ethylben ze ne | Xylene       | Methyl tert-butyl ether | Lead ) | Total Oil and Grease |
| 1 Sold i no series in the series is the  |  |   | Source of Data                 |                     |              | Ĕ  |   |  |         |              |                |              |                         |        |                      |
| Sindicity <td>1X98N7.5</td> <td>7.5</td> <td>-</td> <td>3-Sep-98</td> <td>Soil</td> <td></td> <td>&lt;1.0</td> <td></td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td></td> <td></td>  | 1X98N7.5   | 7.5   | -                              | 3-Sep-98            | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       | <0.005                  |        |                      |
| Image: state in the   | 1X98S7.5   | 7.5   |                                | 3-Sep-98            | Soil         |  | <20   |  | 4.0     | 10           | 4.1            | 19           | <1.2                    |        |                      |
| Image: Second secon   | 1X98W7.5   | 7.5   |                                | 3-Sep-98            | Soil         |  | <10   |  | <0.62   | <0.62        | <0.62          | <0.62        | <0.62                   |        | -                    |
| Take 1   |  | 7.5   |                                | 4-Sep-98            | Soil         |  | <10   | -                                      | <0.62   | 1.0          | 7.5            | 5.0          | <0.62                   |        |                      |
| Add the set of the se   |  | 7.5   |                                | 4-Sep-98            | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       | <0.005                  |        |                      |
| 1     1 </td <td></td> <td>7.5</td> <td></td> <td>4-Sep-98</td> <td>Soil</td> <td></td> <td>&lt;1.0</td> <td></td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td></td> <td></td> <td></td>   |  | 7.5   |                                | 4-Sep-98            | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       |                         |        |                      |
| Mondial is a serie of the series of   |  | 7.5   |                                | 4-Sep-98            | Soil         |  | <10   |  | <0.62   | 2.3          | 2.2            | 8.8          | <0.62                   |        |                      |
| Image: state in the state in there and the state in the state in the state in the state in the st   | 1X98W8 04  | 7.5   |                                |                     | Soil         |  | <12   |  | <0.005  | 0.012        | 0.007          | 0.0062       | <0.005                  |        |                      |
| 1<br>2007 /0<br>2008 /0<br>2008 /0<br>2008 /0<br>7.07.0<br>0.00<br>7.09.00<br>0.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>4.00<br>   |  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| ScaterialTotalStaterial <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>   |  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| Norm   | 2X98N7.0a  | 7.5   |                                | 9-Sep-98            | Soil         |  | <1.1  |  | <0.005  | 0.038        | 1.0            | 1.2          | <0.005                  |        |                      |
| Image: state in the state in therestate in the state in the state in the state in the   |  | 7.5   |                                | 9-Sep-98            | Soil         |  | <1.1  |  | <0.005  | 0.0057       | <0.005         | <0.005       | <0.005                  |        |                      |
| DispersionThe set of the set  | 2X98W7.0C4   | 7.5   | and Remedial                   | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       | <0.005                  |        |                      |
| $ \frac{1}{10007} \frac{1}{1000} \frac{1}{10$ | 2X98S7.0C4   | 7.5   | Action Report June<br>10, 1999 | 10-Sep-98           | Soil         |  | <100  |  | <6.2    | 22           | 18             | 62           | <6.2                    |        |                      |
| 1       1       1       1       1       1       1       0       1       0       0       0.00 <td>2X98W7.0C3</td> <td>7.5</td> <td>1</td> <td>10-Sep-98</td> <td>Soil</td> <td></td> <td>&lt;1.0</td> <td></td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>&lt;0.005</td> <td>0.0084</td> <td>&lt;0.005</td> <td></td> <td></td>  | 2X98W7.0C3   | 7.5   | 1                              | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | 0.0084       | <0.005                  |        |                      |
| 1       7       1       1       1       1       1       1       0       1       0  | 2X98S7.0C2   | 7.5   | 1                              | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | 0.0180       | <0.005                  |        |                      |
| 1        | 2X98W7.0C2   | 7.5   | -                              | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | 0.006        | <0.005         | 0.039        | <0.005                  |        |                      |
| $ \frac{1}{10000} \frac{1}{10000} \frac{1}{10000} \frac{1}{100000} \frac{1}{1000000} \frac{1}{10000000000000000000000000000000000$   | 2X98W7.0C1   | 7.5   | -                              | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       | <0.005                  |        |                      |
| 10     <   | 2X98S7.0C1   | 7.5   | -                              | 10-Sep-98           | Soil         |  | <50   |  | <3.1    | 5.2          | 7.2            | 20           | <3.1                    |        |                      |
| 2080 70 00       75       10 Sep 08       Sel       -       40       -       112   |  | 7.5   |                                | 10-Sep-98           | Soil         |  | <40   |  | 4       | 9.3          | 4.8            | 20           | <2.5                    |        |                      |
| 20085703       7.5         20085703       7.5         20087031       7.5         20087032       7.5         20087032       7.5         20087032       7.5         20087034       7.5         20087032       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087034       7.5         20087044       7.5         20087044       7.5         20087044       7.5         20087044       7.5         20197044       7.5         20197044       7.5         20197044       7.5         20197044       7.5         20197044       7.5         20197045       7.5 <td></td>   |  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| 2008/07 001       15       10   |  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| 200807 000         7.5         10.8ep 08         Sal         -         4.0         -         0.005         4.00  | 2X98S7.0C3   | 7.5   |                                | 10-Sep-98           | Soil         |  | <40   |  | <2.5    | 2.8          | <2.5           | 6            | <2.5                    |        |                      |
| 22887 0C4       7.5       10-sep-se       Soli        400        412       4.6       4.7       14       4.12           SLS - Residential (un-untrivided albu usas)       Soli (mg/k)   | 2X98N7.0C1   | 7.5   |                                | 10-Sep-98           | Soil         |  | <20   |  | <1.2    | <1.2         | <1.2           | 2            | <1.2                    |        |                      |
| SL3 - Residential (unrestricted site usage)       Solit (mg/kg)       63       63       63       0.44       2.9       2.3       0.023       200         SL3 - Residential (unrestricted site usage)       Deeg Solit<br>(>3 m)       Solit (mg/kg)       63       63       0.044       2.9       2.3       2.3       0.023       750         **ESLs - Commercial site usage       Shallow Solit<br>(>3 m)       Solit (mg/kg)       63       63       0.044       2.9       3.3       2.3       0.023       750         **ESLs - Commercial site usage       Shallow Solit<br>(<2 m)   | 2X98N7.0C2   | 7.5   |                                | 10-Sep-98           | Soil         |  | <1.0  |  | <0.005  | <0.005       | <0.005         | <0.005       | <0.005                  |        |                      |
| Image: Sease definition (unrestricted alte usage)       (c.3 m)       Soil (mg/kg)   | 2X98N7.0C4   | 7.5   |                                | 10-Sep-98           | Soil         |  | <20   |  | <1.2    | 4.6          | 4.7            | 14           | <1.2                    |        |                      |
| Image: Part of the state o  | ESLs - Residential (unre   | estricted site usage)   |                                |                     | Soil (mg/kg) |  | 83  | 83                                     | 0.044   | 2.9          | 2.3            | 2.3          | 0.023                   | 200    |                      |
| **ESLS - Commercial site usage          (c.3 m)         (c.m)         (c.m   |  |   |                                | Deep Soil<br>(>3 m) | Soil (mg/kg) |  | 83  | 83                                     | 0.044   | 2.9          | 3.3            | 2.3          | 0.023                   | 750    |                      |
| PRG's       Residential       Soil (mg/kg)       So   | **ESLs - Commerci  | ial site usage  |                                |                     | Soil (mg/kg) |  | 83  | 83                                     | 0.044   | 2.9          | 3.3            | 2.3          | 0.023                   | 750    |                      |
| PRG's       Image: Commercial soli (mg/kg)       NA       NA       NA       Soli (mg/kg)       NA       NA       Soli (mg/kg)       Soli (mg/kg)       NA  |  |   |                                |                     | Soil (mg/kg) |  | 83  | 83                                     | 0.044   | 2.9          | 3.3            | 2.3          | 0.023                   | 750    |                      |
| Residential       Soli (mg/kg)       NA       NA <t< td=""><td>PRG's</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  | PRG's  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| Commercial       Soil (mg/kg)       NA       NA <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>  |  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
| Commercial     Soil (mg/kg)     NA  | California Human Health<br>(CHHSL  | Screening Levels  |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |
|  | Gs=EPA Region 9 Preliminary Ren<br>W: ;Depth to water (ft.) measured I<br>: Not Tested; NM: Not Measured; N<br>No Data<br>naded Values Exceed Their<br>YHg = Total Petroleum Hydro | nediation Goal November 20<br>from top of casing (TOC).<br>IS: Not Sampled<br><b>Respective Criteria</b><br>carbons as Gasoline |                                |                     |              | purce of Drinking Wat                      |   |  |         |              |                |              |                         |        |                      |
| No Data  | = No Data  |   |                                |                     |              |  |   |  |         |              |                |              |                         |        |                      |

--- = No Data ppm = parts per million ppb = parts per billion

#### Table 2-Historical Groundwater Data Peralta Maintenance Yard 501 5th Avenue Oakland, California

|                                     |               |        |          |                      |   |   |         | Concentrati |              |        |                         |
|-------------------------------------|---------------|--------|----------|----------------------|---|---|---------|-------------|--------------|--------|-------------------------|
|                                     |               |        |          | water Elevation (ft) | GH4AA<br>Total Volatile Petroleum<br>Hydrocarbons -<br>Gasoline | Hdat<br>Tota: Extractable Petroleum<br>Hydrocarbons | Benzene | Toluene     | Ethylbenzene | Xylene | Methyl tert-butyl ether |
| Sample Number and Well<br>Elevation | Sampling Date | Matrix | DTW (ft) | Groundwater          | Total V<br>Hy   | Tota; Ext<br>H                                      |         |             | ш            |        | Methy                   |
| MW-1<br>6.78                        | 02/14/94      | Water  | 3.69     | 3.09                 | <50   | <50   | <0.5    | <0.5        | <0.5         | <0.5   |                         |
| 0.70                                | 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<br>8.70                        | 02/14/94      | Water  | 4.70     | 4.00                 | 200   | <50   | 1.7     | <0.5        | 1.1          | 1.1    |                         |
| 0.70                                | 05/16/94      | Water  | 4.74     | 3.96                 |   |   |         |             |              |        |                         |
|                                     | 05/23/94      | Water  |          |                      | 600   | <50   | 1.8     | 0.9         | 0.7          | 2.1    |                         |
|                                     | 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                                | 02/14/94      | Water  | 4.57     | 4.26                 | 780   | <50   | 0.6     | 0.6         | 1.7          | 2.7    |                         |
| 8.83                                | 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    |                         |
| l                                   | 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  |          |                      |   |   |         |             |              |        |                         |

#### Table 2-Historical Groundwater Data Peralta Maintenance Yard 501 5th Avenue Oakland, California

|                                     |   |        |          |                         | Constituents and Concentrations (µg/L)                 |   |         |         |              |        |                         |  |
|-------------------------------------|---|--------|----------|-------------------------|--|---|---------|---------|--------------|--------|-------------------------|--|
|                                     | E TVPHg   |        |          |                         | ТЕРН   | В   | т       | E       | ×            | MtBE   |                         |  |
| Sample Number and Well<br>Elevation | Sampling Date   | Matrix | DTW (ft) | Groundwater Elevation ( | Total Volatile Petroleum<br>Hydrocarbons -<br>Gasoline | Tota; Extractable Petroleum<br>Hydrocarbons | Benzene | Toluene | Ethylbenzene | Xylene | Methyl tert-butyl ether |  |
| MW-4<br>5.45                        | 02/14/94  | Water  | 1.69     | 3.76                    | <50  | <50   | <0.5    | <0.5    | <0.5         | <0.5   |                         |  |
| 0.40                                | 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  |          |                         |  |   |         |         |              |        |                         |  |
| 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   |                         |  |
| **ESLs                              | Groundwater is a<br>Current or<br>Potential Source<br>of Drinking Water     |        | Water    |                         | 100  | 100   | 1       | 40      | 30           | 20     | 5                       |  |
| ESLS                                | Groundwater is<br>not a Current or<br>Potential Source<br>of Drinking Water |        | Water    |                         | 210  | 100   | 46      | 130     | 43           | 100    | 1,800                   |  |
| PRG's                               | MCLs  |        | Water    | _                       | N/A  | N/A   | 5       | 1,000   | 700          | 10,000 | N/A                     |  |

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

PRGs=EPA Region 9 Preliminary Remediation Goal November 2009)

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

DTW, Goundwater 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

#### Shaded Values Exceed Their Respective Criteria

 $\mu g/L$  = 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

ALAMEDA COUNTY HEALTH CARE SERVICES

ALEX BRISCOE, Director

AGENCY



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

March 9, 2011

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

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

Dear Dr. Ikharo:

The above referenced site remains as an open fuel leak case. Based on our review of the case files, tank removals, soil and groundwater sampling, interim soil excavation, and groundwater monitoring took place at various times between 1992 and 1999. No site investigation, cleanup, or monitoring activities related to the former underground storage tanks (USTs) appear to have taken place after 1999 although additional actions were requested by Alameda County Environmental Health (ACEH) staff in 2001.

Releases of petroleum hydrocarbons occurred from USTs in at least two areas of the site. In 1992, five USTs were removed from an area west of the Main Warehouse Building at 501 5<sup>th</sup> Avenue and east of the Peralta Community College District Administration Building. During excavation and removal of the five USTs, a brown liquid was observed floating on groundwater in the excavation. Soil and groundwater samples collected from the UST excavation in September 1992 contained petroleum hydrocarbons as gasoline and diesel. In May and June 1995, soil excavation was initiated in the area of the five former USTs. During the course of the soil removal action, an additional four unknown abandoned USTs were encountered. One of the four unknown USTs was left in place to avoid damaging a nearby portable structure. The extent of excavation was apparently also limited by the presence of utilities. Soil confirmation samples collected at the sidewalls of the final excavation. No confirmation soil samples appear to have been collected at the base of the excavation to indicate what was left in place below the excavation. In 1998, the portable structures were moved and the fourth UST was removed. Additional soil was excavated around the UST and monitoring well MW-3.

In November 1993, three fiberglass gasoline USTs were removed from the site from an area southwest of the Main Warehouse Building and southeast of the Peralta Community College District Administration Building. Petroleum hydrocarbons were detected in soil and groundwater samples collected from the excavation.

I have been assigned the case worker for this fuel leak case. Please send all future correspondence to my attention. Based on recent review of the case files by ACEH staff, several issues, which are identified in the technical comments below, have not been fully addressed. We request that you prepare a Work Plan that addresses the technical comments below.

Peralta Community College District RO0000384 March 9, 2011 Page 2

#### **TECHNICAL COMMENTS**

- 1. Potential for Additional Abandoned USTs to Remain in Place. Prior to use by Peralta Community College District, the site was previously a City of Oakland Vehicle and Equipment Maintenance Yard. A facility labeled on Sanborn maps as the City of Oakland Gas Station/Oil Depot was present from the 1936 to the 1960s in the area of the former USTs. The Main Warehouse Building at 501 5<sup>th</sup> Avenue was apparently the Oakland Vehicle Maintenance Garage. Four abandoned USTs were encountered in this area during a soil removal action in 1995. It is not clear whether attempts were made to locate possible additional abandoned USTs outside the area of the 1995 excavation. We request that you provide additional information regarding previous attempts to locate possible abandoned USTs in this area or conduct a geophysical survey in the area. Please include this information or plans for geophysical surveys in the Work Plan requested below.
- 2. Residual Petroleum Hydrocarbons in Area of USTs. The 1995 soil removal action uncovered various concrete pillars, dikes, sumps, layers of buried asphalt, and "oil-coated baserock". Soil confirmation samples collected from the sidewalls of the 1995 excavation contained up to 5,200 milligrams per kilogram of TPH as gasoline (E24). The extent of the potentially impacted area outside the former UST excavation does not appear to have been fully defined. In addition, no confirmation soil samples appear to have been collected at the base of the excavation to indicate what was left in place below the excavation. We request that you include plans to complete definition of the extent of contamination in the Work Plan requested below. Please see technical comments 3, 4, 5, and 6 below regarding other areas where residual contamination was detected and/or likely remains in place.
- 3. Unknown Hydrocarbons in Groundwater from Soil Boring B-8. In 1992, a Phase II Site Investigation was conducted throughout a portion of Laney College by Environ Corporation on behalf of Kaiser Permanente (*Site Investigation Report*, Environ Corporation, September 21, 1992). A total of 24 soil borings were advanced throughout an area bordered by 10th Street, 5th Avenue, the Nimitz Freeway, and Lake Merritt Tidal Canal. Soil boring B-8 was advanced adjacent to the Main Warehouse Building at 501 5<sup>th</sup> Avenue at a location which is south of the former USTs removed in 1992 and 1995. A groundwater sample collected from boring B-8 contained 730,000 micrograms per liter of "unknown hydrocarbons." Total Recoverable Petroleum Hydrocarbons (TRPH) were detected in a soil sample from boring B-8 at a concentration of 20,000 milligrams per kilogram. The source of the TRPH and "unknown hydrocarbons," is unknown and does not appear to have been investigated. We request that you include plans to identify the source and nature of the "unknown hydrocarbons," detected in soil and groundwater in boring B-8.
- 4. Petroleum Hydrocarbons Detected in Boring B-20 (Plume A). Petroleum hydrocarbons were detected in a groundwater sample collected from boring B-20, which is located near the intersection of East 8<sup>th</sup> Street towards the Lake Merritt Tidal Canal (see attached Plate 6). Boring B-20 was advanced as part of a Phase II Site Investigation that was conducted throughout a portion of Laney College by Environ Corporation on behalf of Kaiser Permanente (*Site Investigation Report*, Environ Corporation, September 21, 1992). Boring B-20 was apparently advanced at this location to investigate a truck service station that was present at this location from 1947 to 1969. A plume (Plume A on attached Plate 6) appears to originate from this area. No follow-up investigation to boring B-20 appears to have taken place. We request that you include plans in the Work Plan

Peralta Community College District RO0000384 March 9, 2011 Page 3

requested below to investigate the former truck service station area and also to investigate the potential for Plume A to discharge to the Lake Merritt Tidal Canal.

- 5. Petroleum Hydrocarbons Detected in Borings B-10 and B-14 (Plume B). Petroleum hydrocarbons were detected in a groundwater samples collected from borings B-10 and B-14, which are located near the baseball field at Laney College (see attached Plate 6). Borings B-10 and B-14 were advanced as part of a Phase II Site Investigation that was conducted throughout a portion of Laney College by Environ Corporation on behalf of Kaiser Permanente (*Site Investigation Report*, Environ Corporation, September 21, 1992). Borings B-10 and B-14 were apparently advanced at this location to investigate a former service station that was present at this location from 1959 to 1969. A plume (Plume B on attached Plate 6) appears to originate from this area. No follow-up investigation to borings B-10 and B-14 appear to have taken place in this area. We request that you include plans in the Work Plan requested below to investigate the former service station area and also to investigate the potential for Plume B to discharge to the Lake Merritt Tidal Canal.
- 6. Potential Discharge to Lake Merritt Tidal Canal near B-1. Petroleum hydrocarbons were detected in a groundwater sample collected from boring B-1, which is located adjacent to the Lake Merritt Tidal Canal. Boring B-1 was advanced as part of a Phase II Site Investigation that was conducted throughout a portion of Laney College by Environ Corporation on behalf of Kaiser Permanente (*Site Investigation Report*, Environ Corporation, September 21, 1992). Boring B-1 was advanced at this location to investigate an area of stained soils. No follow-up investigation to boring B-1 appears to have taken place in this area. We request that you include plans in the Work Plan requested below to investigate the area of Boring B-1 and the potential for discharges of petroleum hydrocarbons to the Lake Merritt Tidal Canal.
- 7. **Potential Vapor Intrusion to Indoor Air.** No soil vapor sampling or an assessment of the potential for vapor intrusion to indoor air has been conducted in the areas affected and potentially affected by releases from the former USTs. Please include plans to conduct soil vapor sampling in the Work Plan requested below.
- 8. **Sensitive Receptors.** We request that you include a sensitive receptor survey in the Work Plan requested below to identify any sensitive receptors or water supply wells that currently and potentially could be affected by releases from the former USTs and the petroleum hydrocarbon plumes described in the technical comments above.
- 9. GeoTracker Requirements. A review of the State Water Resources Control Board's GeoTracker database indicates that your site still has not been "claimed," and documents have not been uploaded 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 claim your site and subsequently electronically transmit reports and other site data, as required. Failure to claim the site an 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

Peralta Community College District RO0000384 March 9, 2011 Page 4

requirements (<u>http://www.swrcb.ca.gov/ust/cleanup/electronic\_reporting</u>). To "claim" your site, you or your consultant are required to obtain a password by logging on to the State Water Board Web site at <u>http://geotracker.swrcb.ca.gov</u> and then clicking on Electronic Submittal of Information. The password is used by you or your consultant to upload the required analytical data into the GeoTracker database.

#### TECHNICAL REPORT REQUEST

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

• June 9, 2011 – Site Investigation Work Plan

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

Sincerely,

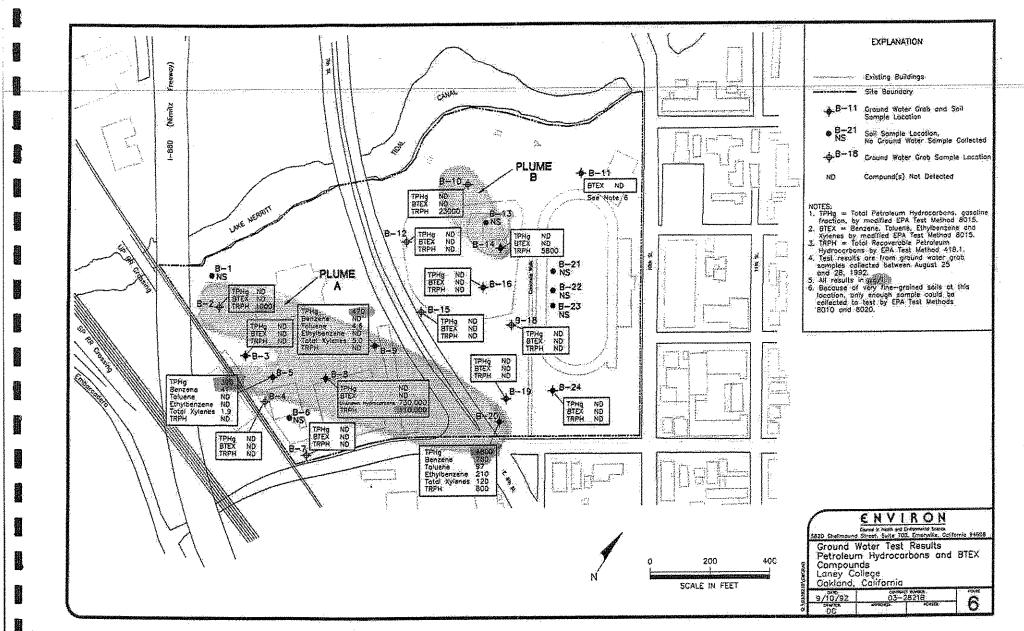
Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

- Attachments: Plate 6 from *Site Investigation Report*, Environ Corporation, September 21, 1992 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: <u>lgriffin@oaklandnet.com</u>)

Robert Mibach, Peralta Community College District, 333 East 8<sup>th</sup> Street, Oakland, CA 94606

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

GeoTracker, e-File



#### Attachment 1

#### Responsible Party(ies) Legal Requirements / Obligations

#### REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please SWRCB website on these visit the for more information 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, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### UNDERGROUND STORAGE TANK CLEANUP FUND

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

#### AGENCY OVERSIGHT

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

| Alameda County Environmental Cleanup                      | REVISION DATE: July 20, 2010   |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Oversight Programs  | ISSUE DATE: July 5, 2005   |  |  |  |  |  |
|   | PREVIOUS REVISIONS: October 31, 2005;<br>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 (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### REQUIREMENTS

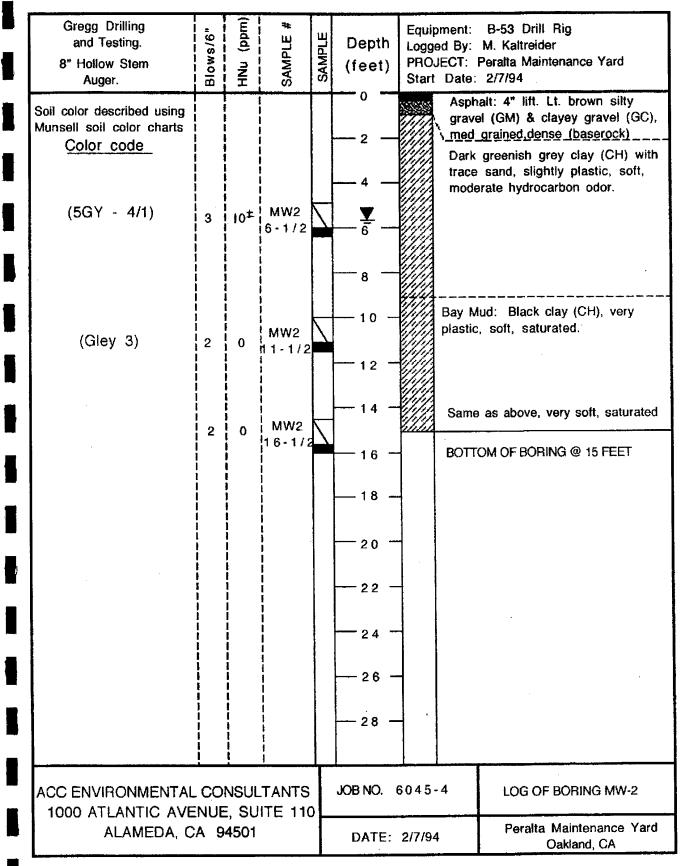
- Please <u>do not</u> submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a single portable document format (PDF) with no password protection.
- It is preferable that reports be converted to PDF format from their original format,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

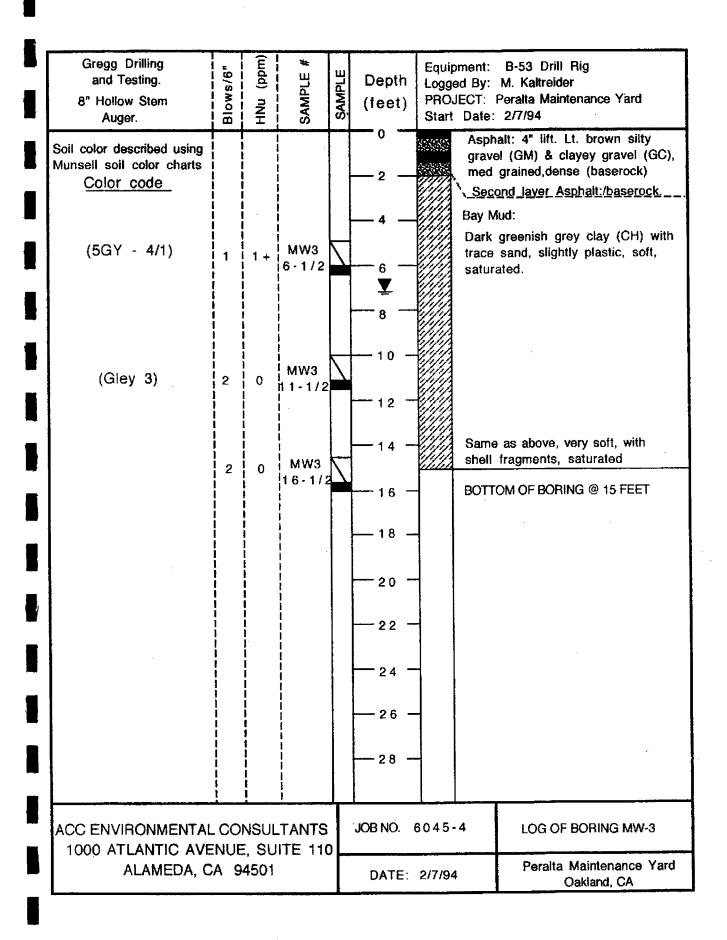
RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

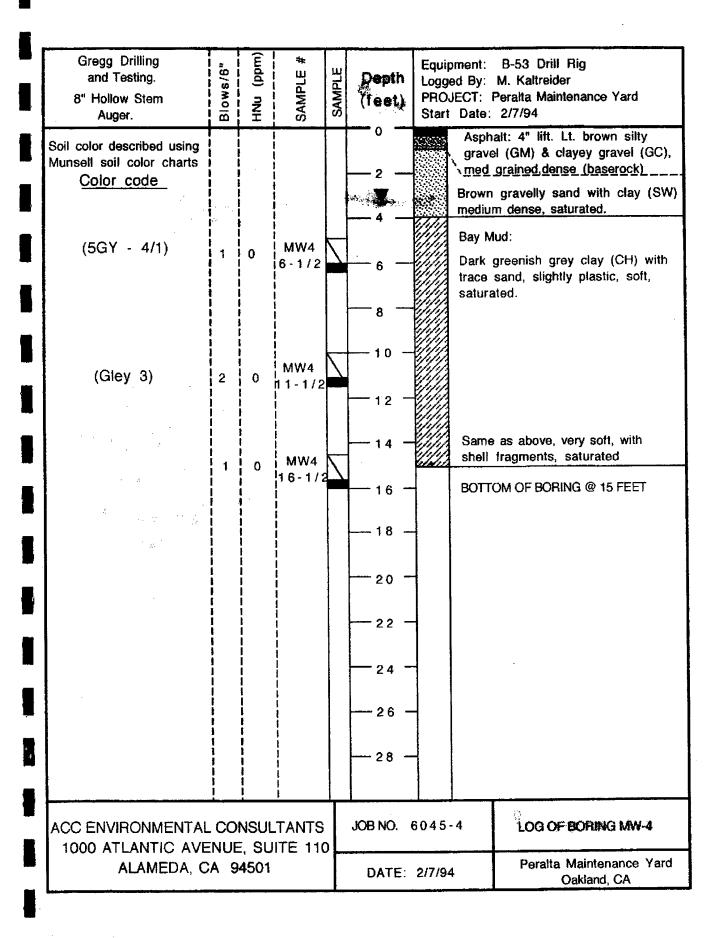
#### Submission Instructions

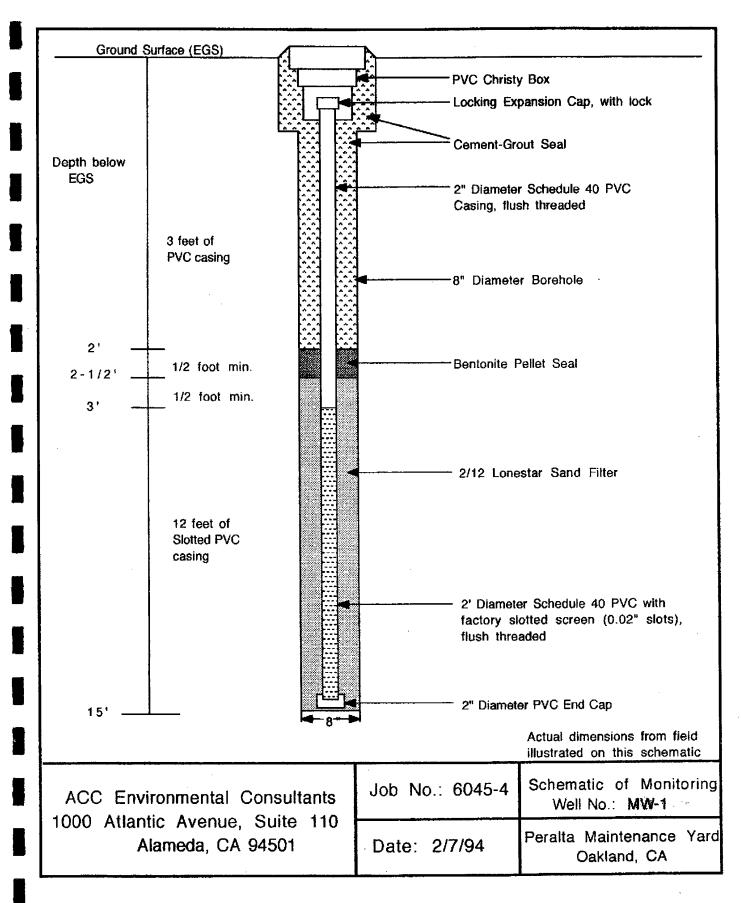
- 1) Obtain User Name and Password
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to <u>dehloptoxic@acgov.org</u>
  - b) In the subject line of your request, be sure to include "ftp PASSWORD 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 <a href="http://alcoftp1.acgov.org">ftp://alcoftp1.acgov.org</a>
    - (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 <u>dehloptoxic@acgov.org</u> 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.

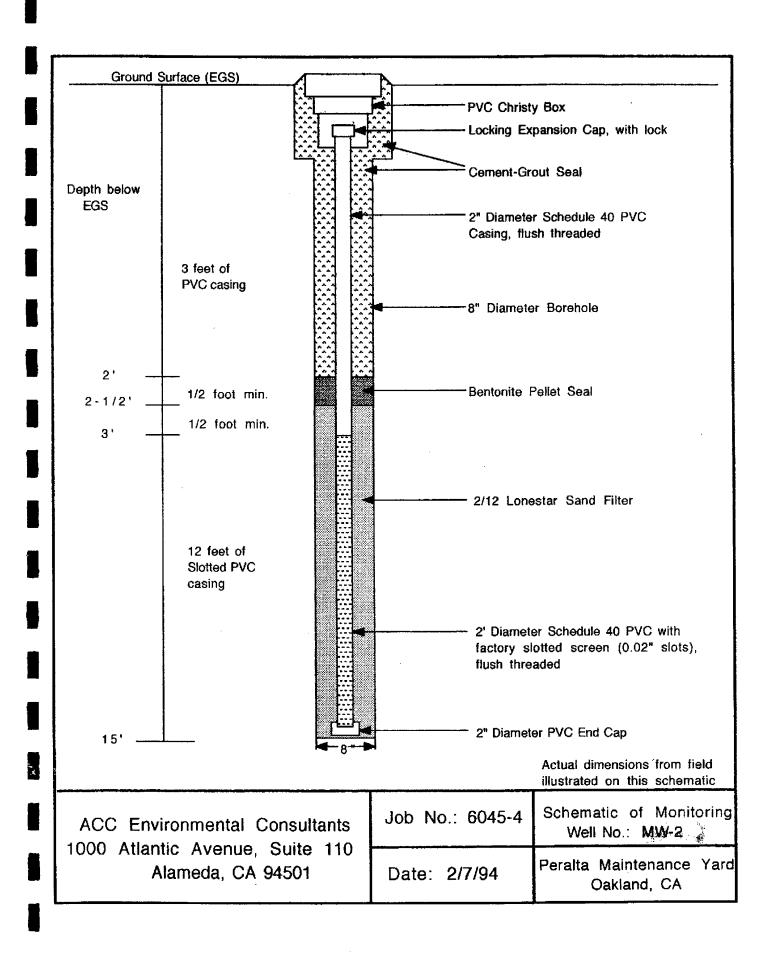
| Gregg Drilling<br>and Testing.<br>8" Hollow Stem<br>Auger.                   | Blows/6"                                | (mqq) uNH  | SAMPLE #          | SAMPLE | Depth<br>(feet) | Logged By<br>PROJECT                    | t: B-53 Drill Rig<br>/: M. Kaltreider<br>: Peralta Maintenance Yard<br>e: 2/7/94  |
|--|---|--|-------------------|--------|-----------------|---|---|
| Soil color described using<br>Munsell soil color charts<br><u>Color code</u> |   |  |                   |        | 0<br>2          | gra<br><u>m</u> e<br>Bay                | phalt: 4" lift. Lt. brown silty<br>avel (GM) & clayey gravel (GC),<br>ad grained.dense (baserock)<br>Mud: Black clay (CH), with<br>y fine sand lamini, (<1" thick), |
| (Gley 3)   | <br> <br> <br> <br> <br>                | 0  | MW1<br>6-1/2      |        | <u> </u>        |   | n silt very plastic, medium stiff,  |
|  | <br> <br> <br> <br> <br> <br> <br> <br> |  |                   |        |                 | Si                                      | ame as above, with wood pieces.   |
|  | 2                                       | 0  | MW1<br>1 1 1<br>1 |        |                 |   |   |
|  |   | 0  | MW1<br>16         |        |                 |   | ne as above, very soft, saturated   |
|  |   | <br> <br> <br> <br> <br> <br> <br>   |                   |        |                 |   |   |
|  |   | 2<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5 |                   |        |                 |   |   |
|  |   |  |                   |        | 26 -            |   |   |
| ACC ENVIRONMENTAL  |   |  |                   |        | JOB NO. (       | <u> </u>                                | LOG OF BORING MW-1  |
| 1000 ATLANTIC AVE<br>ALAMEDA, C  | E, SU                                   |  |                   | DATE:  |                 | Peralta Maintenance Yard<br>Oakland, CA |   |

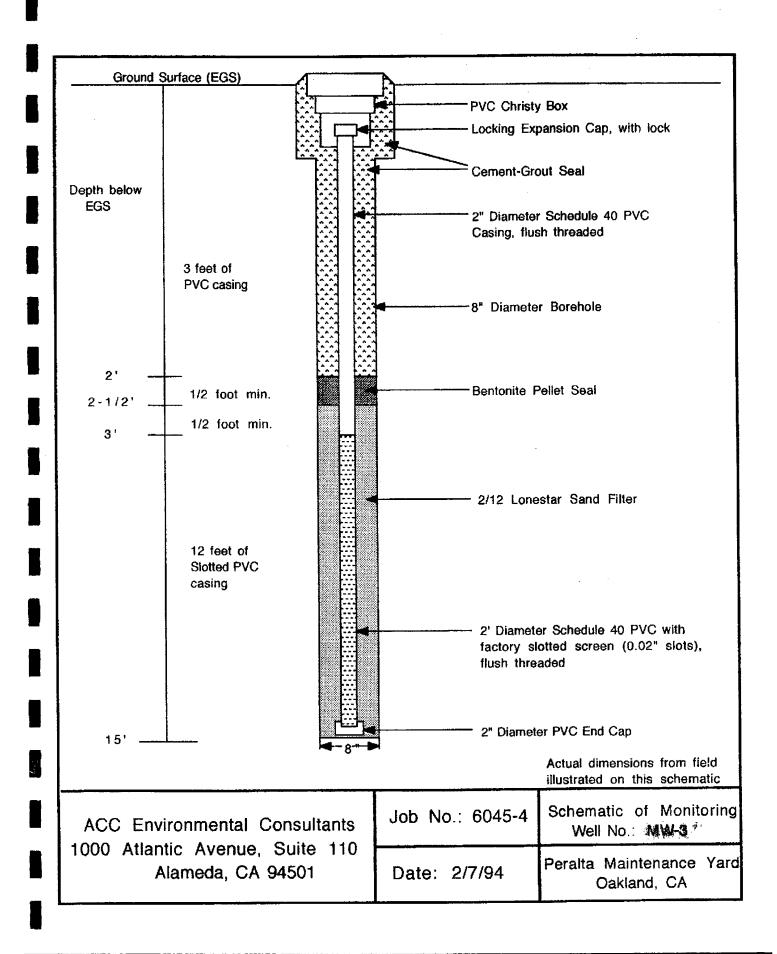


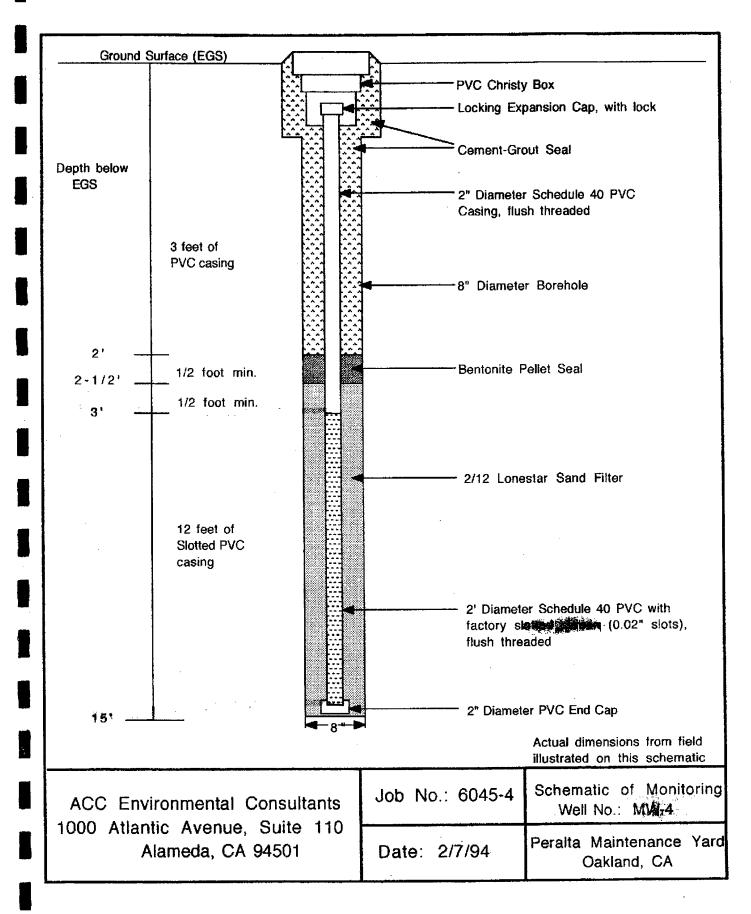












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# Peralta Community College District

333 East Eighth Street • Oakland, California 94606 • (510) 466-7200

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

#### PERJURY STATEMENT

Name of Document or Report:

Soil Characterization and Groundwater Characterization Work Plan Peralta Community College District Maintenance Yard, 501 5th Avenue, **Oakland**, California Fuel Leak Case No. RO0000384, Geo Tracker 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.

2. Alvernat

Signature

DR · SADIQ B · IKIMRO. Company Officer or Legal Representative Name

VICE CHANCELLOR OF GENERAL SERVICES. Title

JULY 20, 2011

Berkeley City College

College of Alameda

Laney College

Merritt College