DREISBACH
2530 East Eleventh Street P.O. Box 7509 Oakland, CA 94601-0509
Voice 510.533.6600 Fax 510.534.2316 www.dreisbach.com info@dreisbach.com

October 12, 2005

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: **Response to Agency Comments and Workplan Addendum**
23rd Avenue Partners
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018D
Fuel Case Leak No. RO0000294

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location I have reviewed the attached report prepared by my consultant of record, Clearwater Group, Inc. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document are true and correct to the best of my knowledge.

Sincerely,

Mr. Allen Pelton

CLEARWATER
GROUP
Environmental Services

October 12, 2005

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: **Response to Agency Comments and Workplan Addendum**
23rd Avenue Partners
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018D
Fuel Case Leak No. RO0000294

Dear Mr. Wickham,

The Clearwater Group, Inc. (Clearwater) on behalf of Mr. Allen Pelton is pleased to present this addendum to the *Workplan* prepared by Environmental Bio-Systems (EBS) dated January 26, 2004. The addendum has been prepared in response to the request of the Alameda County Health Care Services Agency Environmental Health Services (ACEH) in a letter dated August 31, 2005 and to the results of the discussion of the September 7, 2005 agency meeting. See **Attachment A** for a copy of the ACEH letter and Clearwater's September 7, 2005 meeting summary notes. The initial *Workplan* addressed the ACEH's request for additional investigation. The project site is located at 1125 Miller Avenue, Oakland, Alameda County, California (**Figure 1**).

Purpose of Response to Agency Comments and Workplan Addendum

The purpose of this *Workplan Addendum* is to address recommendations, requests and comments made by staff at ACEH both to the *Workplan* and during the September 7th meeting. An integration of ACEH's recommendations, requests and comments are as follows:

- Confirm that the two former underground storage tanks which stored diesel fuel did or did not contain MTBE. Confirm that MTBE has or has not been detected (and is not suspected to be present at this site).
- Move boring location MW-1 (re-named S-5) approximately 10 feet south of TW-2.
- For each soil boring, have the soils continuously logged and collect soil samples at 5-foot intervals beginning at a depth of 3 feet below ground surface (bgs) and/or at any elevated PID readings.
- Grab groundwater samples are to be collected from the proposed borings instead of installing monitoring wells.
- An additional boring is to be installed inside the building to rule out historic leakage beneath the former dispenser island. The 1999 UST removal report did not provide either visual reporting or any sampling in the areas of the product piping runs or the dispenser.

Scope of Work re: MTBE (Item 1)

In the January 26, 2004 *Workplan*, the scope of work was "to evaluate the extent of ground water impact by MTBE and near the former site UST and dispenser locations." Clearwater has been requested to reduce this scope of work to evaluate the extent of soil and groundwater impacted only by total petroleum hydrocarbons as diesel (TPHd) and benzene, toluene, ethylbenzene and total xylenes (BTEX).

As noted in the *UST Excavation* report prepared by EBS on April 21, 1999 and on the permit to remove the two USTs on November 2, 1999, both fuel tanks contained diesel (**Attachment B**). Four soil samples were taken at the time of removal and were analyzed for TPHd, BTEX, and MTBE and none of these soil samples had concentrations of MTBE above the laboratory reporting limit of 0.005 parts per million (ppm).

On October 24, 2000 EBS supervised the installation of four soil borings (TW1, TW2, TW3 and D1) and the installation of two pre-packed temporary well points in TW2 and TW3. Four soil

samples (TW2-16.5', TW3-17', D1-3' and D1-8') and two groundwater samples (TW2-H_20 and TW3-H_20) were submitted to Analytical Sciences of Petaluma, California for analysis of TPHd, BTEX and MTBE. Boring TW3 was abandoned at approximately 3 feet bgs due to subsurface obstructions without collection of soil or groundwater samples for analysis.

Concentrations of MTBE were not detected above the laboratory reporting limit of 2.0 milligrams per Kilogram (mg/Kg) for the soil samples identified as TW2-16.5', TW3-17' and D1-3' or 0.025 mg/Kg for the soil sample identified as D1-8'. The laboratory did not report concentrations of MTBE above the reporting limit of 2.5 micrograms per liter (µg/L) for the water samples identified as TW2-H_20 and TW3-H_20. The laboratory did report that the soil samples contained detectable concentrations of TPHd ranging in value from 34 mg/Kg (D1-8') to 4,200 mg/Kg (TW2-16.5'). The laboratory reporting limits for MTBE were elevated due to the dilution factor necessary to accommodate the concentrations of TPHd present in the samples submitted for analysis. The results of the subsurface investigation event were presented in the *Subsurface Exploration Report* prepared by EBS dated December 31, 2001.

Although it has consistently been analyzed for since the UST removals, MTBE has not been detected above the laboratory-reporting limits used in the analysis of the samples collected during the UST removal and the subsurface investigation events. Based on past results and since MTBE is not associated with diesel fuel, it is not recommended for analyses and is now removed from the scope of work.

Placement of Proposed Boring Locations (Item 2)

The 2004 W*orkplan* submitted by EBS proposed the installation of three groundwater monitoring wells (MW-1 to MW-3) to evaluate the impact of the petroleum related hydrocarbon release beneath the project site. (See EBS Figure 2 included as **Attachment C**). As per ACEH request, three soil borings are proposed to be drilled at the site. From the regulatory meeting discussion the proposed location of MW-2 (renamed S6) shall be moved approximately 10 feet south of TW-2,

instead of MW-1 (renamed S5). Also, an additional hand augured boring (S8) to approximately 4 feet bgs will be conducted to sample soils beneath the abandoned pipes at the former dispenser island inside the building **(Figure 2a)**.

Proposed Soil Sample Method: Borings versus Monitoring Well Installation (Item 3)

A benefit to direct push technology over monitoring well installation is that soil cuttings are not generated during the procedure. The working components of the rig near the borehole, as well as the driven casing and sampling equipment will be thoroughly decontaminated between each boring by either steam cleaning or washing with an Alconox™ solution. Investigation derived wastes (purge and rinseate water) is handled in one of three ways: 1) Purge and rinseate water is sealed, labeled, and stored on site in D.O.T.-approved 55-gallon drums. After being chemically profiled, the water is removed to an appropriate disposal facility. 2) Purge and rinseate water is collected into a 250-gallon portable holding tank and transported to the Clearwater equipment yard in Point Richmond, CA. At the yard the investigation derived waste is then transferred to 55-gallon drums pending disposal at an appropriate disposal facility, or 3) Purge and rinseate water is collected in a 250-gallon portable holding tank and transported to the appropriate disposal facility. The applicable method will be indicated in the field log sheets and the corresponding technical report.

Standard Operating Procedure for Drilling, Soil Sampling, and Analysis

Prior to conducting field activities, appropriate boring permits for drilling will be obtained from the ACEH and a site specific Health and Safety Plan will be written. All field personnel on-site will review and sign the site Health and Safety plan, prepared in accordance with OSHA 1910.120, at the start of each field day. All fieldwork will be conducted in accordance with Clearwater's Field Procedures.

Four soil borings are proposed and the locations are shown on **Figure 2a**. Under supervision of a Clearwater geologist, a C-57 licensed drilling contractor will advance each soil boring (S5-S7) using Direct Push Technology with a Macro-Core® Soil Sampler, which is a single rod system

used for soil sampling. Three of the four soil borings (S5, S6 and S7) will be advanced to a target depth to encounter water estimated at approximately 15 to 20 feet bgs. Soil samples will be collected continuously and sampled at five-foot depth intervals, starting at 3-feet, ending at the soil/water interface, and retained for laboratory analysis. Portions of each soil sample will be retained for visual classification according to the Unified Soil Classification System as well as field screened with a photo-ionization detector (PID). Where staining, odor, or elevated PID readings occur, a soil sample will be collected as well.

A fourth soil boring (S8) located beneath the dispenser will be hand augured to approximately 4 feet bgs and will be logged and sampled the same as the three drilled soil borings.

Soil samples for all four borings submitted for analysis of TPHd by EPA method 8015 will be transferred from the Macro-Core® Soil Sampler sleeve into either a brass sleeve or glass collection jar. The samples will be labeled, documented on a chain of custody form and placed on ice for transport to a certified laboratory. The soil samples to be submitted for analysis of BTEX by EPA method 8260 and will be transferred from the Macro-Core® Soil Sampler sleeve using EPA Method 5035. These samples will be labeled, documented on a chain of custody, and placed on dry ice for transport to the project laboratory. EPA Method 5035 sampling protocols are provided in **Attachment C.**

Groundwater Samples (Item 4)

A groundwater sample will be taken from boreholes S5, S6 and S7 within the upper five feet of the saturated zone, using a disposable or clean stainless steel bailer and then decanting into laboratory supplied containers. Samples will be labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory. The protocol for setting a temporary well and collecting a grab groundwater sample is provided in **Attachment D**. After the collection of grab water samples from each temporary well, the temporary well screen will be removed and each borehole will be sealed to the surface with a neat cement grout. Due to the proposed depth of

S8 (approximately 4 ft bgs), groundwater is not expected to be encountered and therefore no water samples are planned to be collected from this boring.

Kiff Analytical, LLC (Kiff) of Davis, California will analyze all soil and ground water samples. Kiff is certified by the California Department of Health Services (DHS) environmental laboratory accreditation program (ELAP). All samples submitted for laboratory analysis will be analyzed for the following:

- Total petroleum hydrocarbons as diesel (TPHd) using the Environmental Protection Agency (EPA) Method 8015.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the EPA Method 8260.

Dispenser Removal (Item 5)

ACEH is concerned with the potential for shallow soil contamination within the building in the area of the former dispenser. According to the *UST Excavation* report prepared by EBS on April 21, 1999 the dispenser was removed on December 3, 1998. No reference to sampling within the piping runs or beneath the dispenser was made in the 1999 report. The *Subsurface Exploration Report* prepared by EBS dated December 31, 2001 stated that the soil sample D1-3' collected from the boring installed in the vicinity of the dispenser contained concentrations of TPHd at 3,400 mg/Kg. Clearwater proposes boring S8 in the former dispenser area to either confirm or rule out any historic dispenser leakage.

Proposed Reporting

Following completion of investigative activities, Clearwater will prepare a report describing the results. The report will summarize investigation/analytical methods and results. The report will provide conclusions and recommendations for additional action, if warranted. The report will also include supporting tables and figures. The report will be reviewed and signed by a California Professional Geologist at Clearwater. The results will also be uploaded onto the Geotracker™ database as required by the State Water Quality Control Board.

CLEARWATER
GROUP
Environmental Services

Certification

This report was prepared under the supervision of a Professional Geologist in the state of California. All statements, conclusions and recommendations are based solely upon published results from previous consultants, field observations by Clearwater and laboratory analysis performed by a California state-certified laboratory related to the work performed by Clearwater.

Information and interpretation presented herein are for the sole use of the client and regulating agency. A third party should not rely upon the information and interpretation contained in this document.

The service provided by Clearwater has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

Sincerely,
Clearwater Group

Jeannette Popp
Project Scientist

James A. Jacobs, P.G. #4815, C.H.G. #88
Chief Hydrogeologist

PROFESSIONAL GEOLOGIST
JAMES ALAN JACOBS
NO. 88
CERTIFIED HYDROGEOLOGIST
STATE OF CALIFORNIA

Jessica Chiaro-Moreno
Project Manager

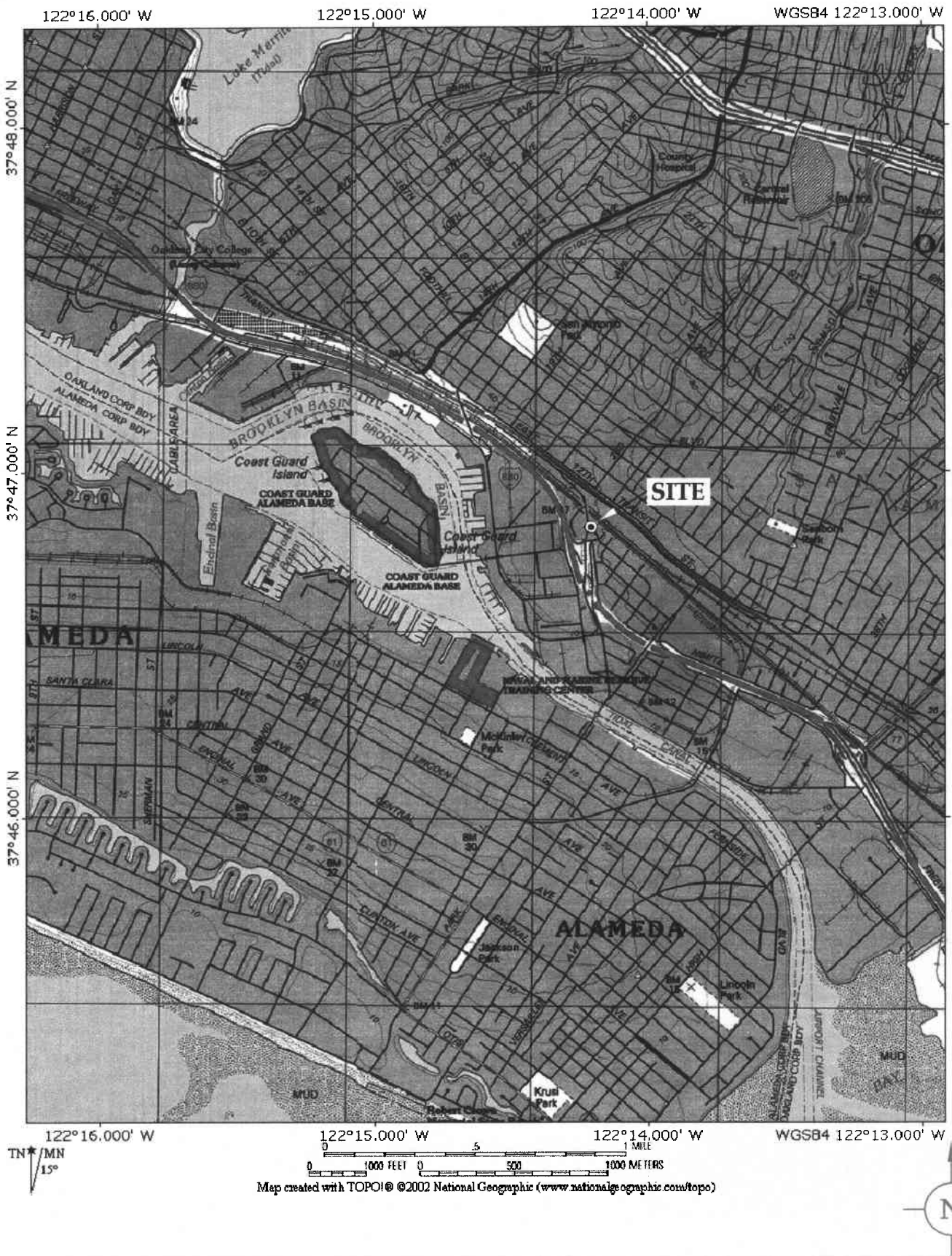
CLEARWATER
GROUP
Environmental Services

FIGURES:
Figure 1: Site Location Map
Figure 2a: Proposed Soil Boring Locations

ATTACHMENTS:
Attachment A: August 31, 2005 ACEH letter and September 7, 2005 meeting notes
Attachment B: *UST Excavation* report by EBS dated April 21, 1999
Attachment C: EBS' *Workplan* Figure 2
Attachment D: Clearwater Group's Protocols

Cc: Mr. Allen Pelton
23rd Avenue Partners
P.O. Box 7509
Oakland, CA 94601

FIGURES

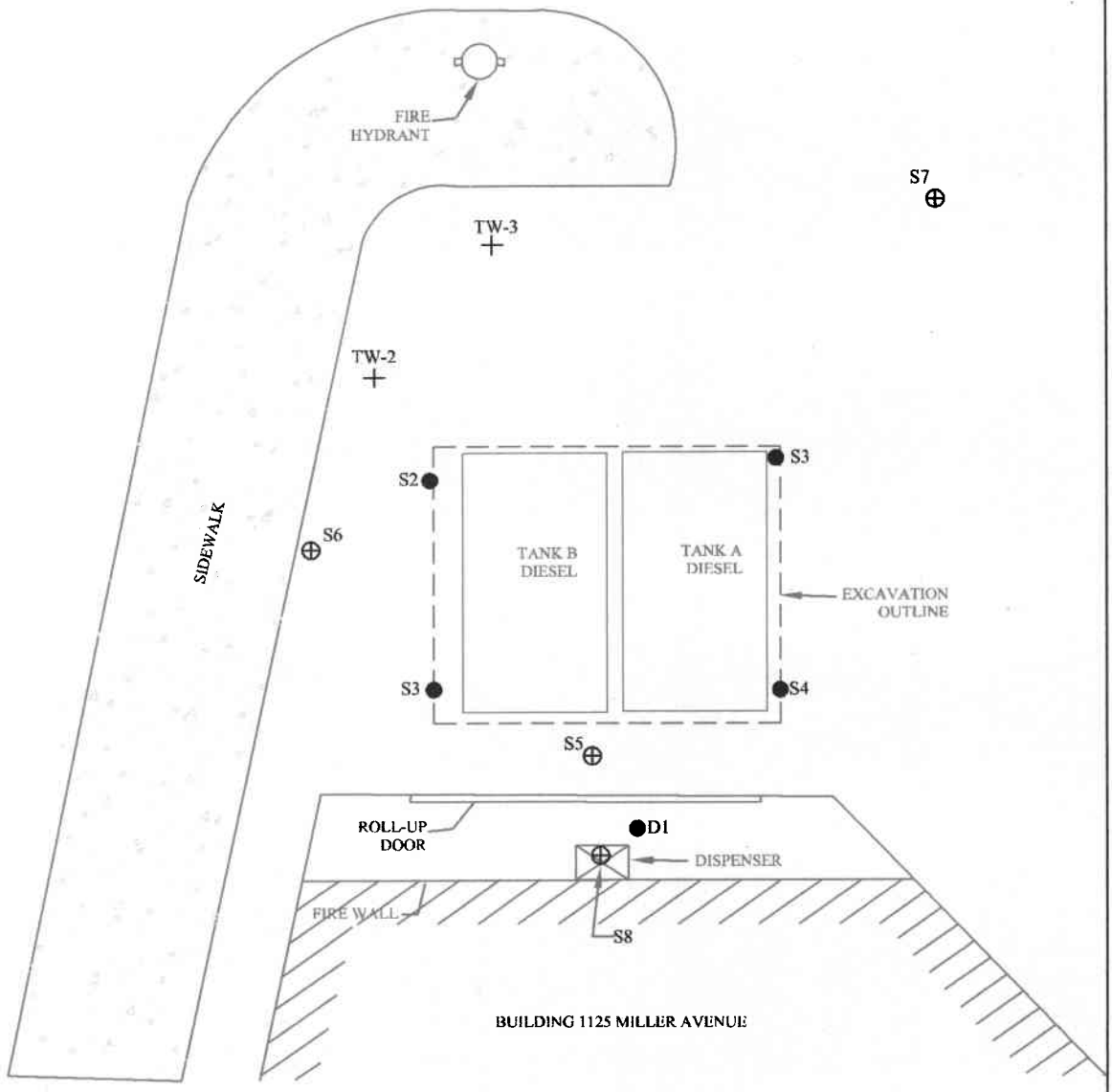


Site Vicinity Map

1125 Miller Avenue
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
CB018	9/05	1



LEGEND

S5 ⊕ Proposed Soil Sample Location

D1 ● Previous Soil Sample Location

TW-3 + Temporary Well

0 10 20

Approximate Scale (feet)

SITE MAP	CLEARWATER GROUP		
1125 Miller Avenue Oakland, California	Project No. **CB018D**	Figure Date **9/05**	Figure **2a**

ATTACHMENT A

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

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

August 31, 2005

Allen Pelton
23rd Avenue Partners
P.O. Box 7509
Oakland, CA 94601

Subject: Fuel Leak Case No. RO0000294, 1125 Miller Avenue, Oakland, CA – Work Plan Comments

Dear Mr. Pelton:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the work plan entitled, "Work Plan: Groundwater Monitoring Well Installation," dated January 26, 2004, prepared on your behalf by Environmental Bio-Systems, Inc. The work plan proposes a scope of work to advance three soil borings and to complete each of the borings as monitoring wells. **ACEH requests that a Response to Agency Comments and Work Plan Addendum be submitted by October 14, 2005 to address the technical comments below.**

We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to jerry.wickham@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Scope of Work (Section 4).** The Work Plan indicates that, "the scope of work is to evaluate the extent of ground water impact by MTBE." Please confirm that the two former underground storage tanks stored diesel fuel and that MTBE has not been detected and is not suspected to be present at the site. Please provide this confirmation in the Response to Agency Comments and Work Plan Addendum requested below.

2. **Proposed Boring Locations.** Proposed boring location MW-1 is less than 10 feet from previous sampling location TW-2. We request that proposed boring location MW-1 be moved further south to a location approximately 10 feet south of TW-2. Please provide a revised Site Plan showing the proposed boring locations in the Response to Agency Comments and Work Plan Addendum requested below.

3. **Soil Samples.** ACEH requests that soils be continuously logged in each of the soil borings. Soil samples are to be collected for laboratory analyses in each soil boring at minimum five-foot intervals, beginning at a depth of 3 feet below ground surface. Soil samples are also to be collected where staining, odor, or elevated photoionization readings are detected. One soil sample is also to be collected at the soil/groundwater interface as proposed in Section 4.1.1 of the Work Plan.

4. **Groundwater Samples.** Based on the levels of petroleum hydrocarbons previously detected in groundwater at the site, monitoring wells may not be required at the site. Therefore, we request that grab groundwater samples be collected from the three proposed borings rather than installing monitoring wells in each of the borings. The grab groundwater samples are to be collected within the upper five feet of the saturated zone. Please describe the method for collection of grab groundwater samples in the Response to Agency Comments and Work Plan Addendum requested below.

5. **Dispenser Removal.** ACEH is concerned with the potential for shallow soil contamination within the building in the area of the dispenser. Please provide any further background information available regarding soil excavation and observed soil conditions beneath the product piping and the dispenser inside the building. This information is to be presented in the Response to Agency Comments and Work Plan Addendum requested below.

TECHNICAL REPORT REQUEST

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

- **October 14, 2005** – Response to Agency Comments and Work Plan Addendum
- **120 days after ACEH approval of Work Plan Addendum** – Soil and Groundwater Investigation Report

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy 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 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, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

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

Sincerely,

Jerry Wickham

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Jim Ho
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

CLEARWATER GROUP
www.clearwatergroup.com Since 1990; Lic. 799370
229 Tewksbury Ave., Point Richmond, CA 94801
Tel: 510-307-9943 Fax: 510-232-2823

Date: September 7, 2005

To: File

From: Jim Jacobs

Re: Mr. Al Pelton
UST Fuel Leak Case RO0000294
23rd Avenue Partners
1125 Miller Ave.
Oakland, California

ACTIVITY

Jim Jacobs, P.G. and Jim Ho, P.E. of Clearwater Group had a meeting with Mr. Russell Chaplan, Assistant Facilities Manager on-site to discuss the proposed Workplan for a Subsurface Investigation. The on-site meeting lasted 0.75 hours.

Earlier, Jim Jacobs and Jim Ho visited the Alameda County Environmental Health (ACEH) in Alameda, the lead regulatory agency on the case. We met with Ms. Donna Dragos, P.E., Supervisor and Mr. Jerry Wickham, P.G., C.H.G., project regulator. The meeting associated with this site lasted 0.5 hours with the meeting prep (0.25 hr.), travel associated with this site was 1.0 hour. File documentation (1.0 hr.)

We discussed the approved Workplan for a Subsurface Investigation. Clearwater shared recent photographs of the pump island, now built into the building structure. The pump island was not removed due to the structural footing of the building. Pipes from the removed pump are still visible in a 1' X 1' by 6" deep cut in the concrete pump island which exposed the 2 pipes. ACHA requested an additional hand boring to about 3-4 feet to sample soils beneath the abandoned pipes at the former pump island. ACHA also requested moving MW-2 closer toward the pump island and away from boring T-2. The three wells will be temporary; grab groundwater and soil samples will be collected. Once the chemical data becomes available, the site can be evaluated for site closure.

ATTACHMENT B

UST EXCAVATION
Project #079-507A

23RD AVENUE PARTNERS
1125 MILLER AVENUE ~~1080 23rd~~
OAKLAND, CALIFORNIA

PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.
FOR
23rd AVENUE PARTNERS

Timothy M. Babcock
Project Manager, Registered Environmental Assessor No. 05184
~~tmbatebs@aol.com~~
~~attmb~~
tmbatebs@aol.com

21 April 1999

- Need URL ✓sent
- SWI/PSA
- SS under dispenser
- where is stockpiled soil

STID 1445

P.O. Box 7509
Oakland, CA. 94601
510 533 6600
fax 510 534 2316

23RD AVENUE PARTNERS

5/28/99 MSg to Herman to see if they would ACDEH to handle this case as LOP.

May 4, 1999

Steve Crawford
238-7758

Inspector Steve Crawford
Oakland Fire Department
505 - 14th Street, Suite 510
Oakland, CA. 94612

Regarding: Underground Storage Tank Removal at 1125 Miller Ave., Oakland, CA.

Inspector Crawford:

This letter accompanies our report of UST removal at the above listed site. The report ("UST Replacement, Project #079-507A", dated 21 April 1999) was prepared on our behalf by our consultant/contractor, Environmental Bio-Systems, Inc. I have read the report and certify that the material presented within it is true and accurate to the best of my knowledge.

Sincerely,

Allen E. Pelton, Jr.

TABLE OF CONTENTS

TABLES

APPENDICES

Environmental Bio-Systems, Inc.
Innovative Solutions for a Better Environment
Contractor's License A-Haz 687236

1. INTRODUCTION

Environmental Bio-Systems, Inc. (EBS) performed the scope of services described within this document on behalf of 23rd Avenue Partners (the Client) The project took place at 1125 Miller Avenue, Oakland, California (the Site). Tasks included in the project were undertaken to comply with Federal regulations requiring the removal, replacement or retrofit of all underground fuel storage tanks by 22 December 1998. All work was performed in accordance with EBS proposal/contract #98024A, executed by the Client on 5 October 1998.

The principal project contacts are:

Principal Client Contact - Mr. Allen Pelton, 23rd Avenue Partners, P.O. Box 7509, Oakland, California (510) 533-6600.

Consultant - Environmental Bio-Systems, Inc., P.O. Box 7171, San Jose, CA 95150-7171, (408) 979-8600, Timothy M. Babcock - Project Manager.

2. SCOPE OF WORK

The project encompassed excavation and removal of two 5,000 gallon diesel underground storage tanks (USTs), a fuel dispenser and associated product and vent piping from the subject site. Appendix A contains a site location map (Figure 1), site map (Figure 2), and a map depicting sample locations and data (Figure 3).

Major tasks carried out during this project included:

- Excavation, removal, and disposal of two 5,000 gallon USTs, fuel dispenser pump, and associated product piping per Oakland Fire Department (OFD) guidelines.
- Collection of soil samples from beneath or adjacent to the ends of the tanks and from the stockpile of overburden soil.
- Backfill and resurfacing of the excavation area.
- Interpretation of field and laboratory data.
- Preparation of this report.

3. SITE LOCATION AND DESCRIPTION

The Site contains a single two-story building currently housing apartments and studio space. It is located at 1125 Miller Avenue, in the City of Oakland, County of Alameda, California. The United States Geological Survey Oakland East Quadrangle Map shows the site to be located in Section 6, Township 2 south, Range 3 west of the Mount Diablo Base and Meridian.

The Site is bounded from the southwest to north by Miller Avenue. Another apartment building lies across a small parking lot to the northeast. A fenced parking and storage lot abuts the southeast end of the building.

4. PERMITS

A UST removal permit was procured from OFD prior to work progression. A copy of the OFD permit is included in Appendix B.

5. PROCEDURES

The USTs were uncovered and evacuated on 1 December 1998. The USTs and underground piping were removed from the site on 2 December 1998. The fuel dispenser was removed on 3 December 1998.

5.1. Excavation

Excavation was performed by Zaccor Companies, Inc. (ZCI) of Alameda, California (Contractor's License # A478799). Residual fuel within the tanks was removed and disposed of by Artesian Oil Recovery Company, Inc. (Artesian) of Oakland, California (EPA ID# CAL000161741). Transportation of the tank was performed by Ecology Control Industries (ECI) of Richmond, California (EPA transporter/facility numbers CAD982030173/CAD009466392).

Approximately 100 cubic yards of soil were subsequently dug from above and around the USTs. Observation of excavated soil from the northwest corner of the pit showed slight greenish staining and a typical hydrocarbon odor.

All soil was transported to client owned property approximately one city block to the east of the excavation site. All excavated soil was stockpiled on top of visqueen sheeting on asphalt paved surface. The resulting soil pile was also

covered with visqueen at the conclusion of excavation to prevent uncontrolled aeration and rainwater intrusion.

5.2. UST Removal

The contents of the UST were evacuated prior to removal. Approximately 55-gallons of product were vacuumed from the tanks and removed from the Site by Artesian. A copy of Uniform Hazardous Waste Manifests (UHWM) under which the product was transported is included in Appendix C.

The UST interiors were inerted with dry ice. The atmosphere of each UST was subsequently measured for oxygen content and lower explosive limit using a GasTech™ meter. Inspectors Steve Crawford and Keith Mathews of the OFD were present to witness the removal of the USTs.

Observations of the exposed tanks showed two 5,000 gallon vessels of single walled steel construction. The tanks appeared to be in very good condition with only minor rust and corrosion visible on their outer surfaces.

The USTs were removed from the excavation, loaded onto a flatbed truck and transported by ECI under UHWM for recycling at their Richmond facility. Appendix C also includes a copy of the UHWM (#93137327) which accompanied the excavated USTs.

5.3. Soil Sampling

Sampling was performed in the presence of Inspectors Crawford and Mathews. Soil sample locations were dictated by Inspector Crawford.

Soil samples were taken from adjacent to the ends of the USTs. Due to impending threat of pit wall collapse in proximity to the City sidewalk and street, samples taken from below Tank A were collected adjacent to the west side of the ends of this tank. Samples taken from beneath Tank B were collected immediately off the ends of the UST. Soil sample locations are depicted on Figure 3.

Sample S1 was collected from the south wall of the pit at a depth of approximately 9 feet bgs, adjacent to the west end of Tank A.

Sample S2 was collected from the south wall of the pit at a depth of approximately 9 feet bgs adjacent to the east end of Tank A.

Sample S3 was collected from the west wall of the pit at a depth of approximately 9 feet bgs adjacent to the west end of Tank B.

Sample S4 was collected from the north wall of the pit at a depth of approximately 9 feet bgs adjacent to the east end of Tank B.

5.3.1. Soil Stockpile Sampling

Composite soil sample SP1 A-D was collected from the accumulated stockpile of overburden soil. Each sample consisted of four individual samples which were laboratory composited prior to analysis.

5.3.1.1. Sampling Methods

Samples were collected from the excavation by inserting clean stainless steel sample tubes into freshly exposed soil brought up from the pit in a back-hoe bucket. A plastic mallet was used to drive a tube into the soil, packing it full to exclude head-space.

Composite stockpile samples consisted of four stainless steel tubes filled with soil. A plastic mallet was used to drive clean stainless steel sample tubes into freshly exposed soil approximately six inches to two feet beneath the pile surface.

The ends of all tubes submitted to the laboratory were covered with Teflon™ sheets and sealed with plastic end caps. The sample tubes were then labeled with a designation unique to the project and stored in a cooler on top of crushed ice. A chain of custody was initiated at the site and accompanied all samples through reception by the analytical laboratory.

6. LABORATORY ANALYSES

All samples were transported to Mobile Chem Labs, Inc. of Lafayette, California (MCL). MCL is accredited through the California State Department of Toxic Substances Control environmental laboratory accreditation program (ELAP) to perform the indicated analyses (certification #3141).

Samples S1, S2, S3, S4, and SP1 A-D were analyzed for total petroleum hydrocarbons calculated as diesel (TPHd) and the constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tert-butyl ether (MTBE).

6.1. Analytical Methods

The following are methods used by the laboratory for each of the selected analytes:

TPHd	EPA Method 3550 and 8015 (modified)
BTEX/MTBE-	EPA Method 3550 and 8020

6.2. Sample Results

The results of soil sample analyses are summarized below and in Table 1. Chain of custody forms and certified laboratory analytical reports are presented in Appendix F.

Samples S1, S3 and S4 were not found to contain detectable concentrations of TPHd, BTEX or MTBE.

Sample S2 was found to contain 1,800 milligrams per kilogram (mg/kg) TPHd and 0.051 mg/kg total xylenes.

Sample SP1 A-D was found to contain 290 mg/kg TPHd.

7. SUMMARY

1. Approximately 55-gallons of product were purged from the USTs and removed from the Site for disposal.

2. Two 5,000-gallon diesel USTs of single walled steel construction and associated product piping were removed from the site and disposed of at ECI in Richmond, California on 2 December 1998. The fuel dispenser and vent piping were removed subsequent to the USTs and disposed of at ECI.

3. The tanks were observed to be in very good condition with only minor rust or corrosion visible on their outer surfaces. Staining and typical hydrocarbon odor were noted in the southwest corner of the excavation as well as in stockpiled overburden soil.

4. Approximately 100 cubic yards of soil were excavated from above and around the USTs. All excavated overburden soil was transported to nearby Client owned property and placed on asphalt paved surface on top of and covered with Visqueen plastic.

Anywhere etc.

5. All soil samples were analyzed for TPHd, BTEX and MTBE. One of two soil samples collected from beneath Tank A showed 1,800 mg/kg TPHd and 0.051 mg/kg xylenes. Neither of the soil samples collected from beneath Tank B were found to contain any of the chosen analytes. The sample collected from stockpiled overburden soil was found to contain 290 mg/kg TPHd.

6. The pit was backfilled with clean fill and compacted to near surface. The area of the excavation was then paved with four inches of steel wire reinforced concrete.

8. RECOMMENDATIONS

An unauthorized release of petroleum hydrocarbon compounds was found during removal of the existing USTs and reported to the State of California. The guidelines enforced by the local Regional Water Quality Control Board (RWQCB) mandate that an assessment of the extents of impact to surrounding soil and ground water be performed in cases where an unauthorized release of petroleum hydrocarbon compounds has occurred.

We recommend that the Client forward this report in its' entirety to the OFD and the Alameda County Health Care Services Agency (ACHCSA). Whereas the OFD oversees removal of USTs, cases where unauthorized releases of petroleum fuels have occurred are placed under the jurisdiction of the ACHCSA. Following correspondence from the ACHCSA, acting as the local implementing agency (LIA) for the RWQCB, a plan addressing further site characterization will most probably be required. All efforts to remediate existing impact should be initiated in response to LIA request, to maximize the Client's potential reimbursement by the State of California Leaking Underground Storage Tank Fund.

EBS further recommends that the Client forward copies of this report to any and all other regulatory agencies and interested parties as required.

9. LIMITATIONS

The recommendations in this report were developed in accordance with generally accepted standards of current environmental practice in California. These recommendations are time-dependent and should not be considered valid after a 1-year period from the issue of this report. After 1-year from the issue of this report, site conditions and recommendations contained within this report should be reviewed.

This study was performed solely for the purpose of evaluating environmental conditions of the site subsurface relative to hydrocarbon impact at the subject Site. No engineering or geotechnical references are implied or should be inferred.

This study was performed, and the report was prepared for the sole use of our client, 23rd Avenue Partners Systems, Inc. This report and the findings contained herein shall not be disclosed to nor used by any other party without the prior written consent of Environmental Bio-Systems, Inc. It is the responsibility of the client to convey these recommendations to regulatory agencies and other parties, as appropriate.

The recommendations herein are professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding our recommendations

10. REFERENCES

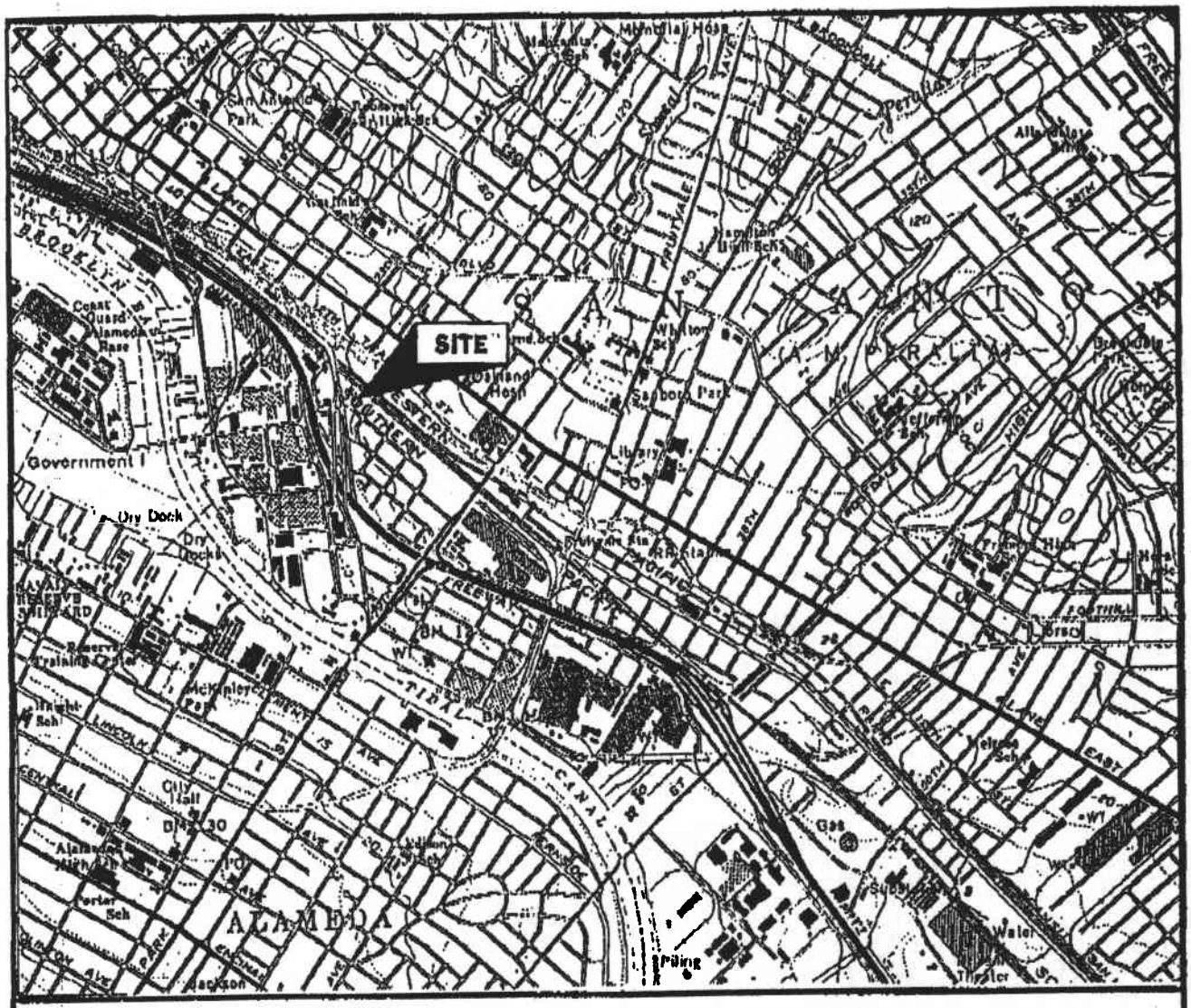
United States Geological Survey (USGS), Oakland East, California Topographic Map, 7.5 minute series with 20 foot contour intervals, 1959, photorevised 1980.

TABLE 1: RESULTS OF SOIL SAMPLE ANALYSES

Sample #	TPHd (mg/kg)	benzene (mg/kg)	toluene (mg/kg)	ethyl-benzene (mg/kg)	xylenes (mg/kg)	MTBE (mg/kg)
S1	[1]ND	ND	ND	ND	ND	ND
S2	**1,800**	ND	ND	ND	**0.051**	ND
S3	ND	ND	ND	ND	ND	ND
S4	ND	ND	ND	ND	ND	ND
SP1 A-D	**290**	ND	ND	ND	ND	ND

[1]ND- Analyte not detected above detection limit as stated on laboratory report.
Note- See laboratory reports for specific analyte detection limits.

APPENDIX A:
FIGURES



SCALE 1:24000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 20 FEET

DOTTED LINES REPRESENT 5-FOOT CONTOURS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

DEPTH CURVES IN FEET---DATUM IS MEAN LOWER LOW WATER

THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF HIGH WATER

THE MEAN RANGE OF TIDE IS APPROXIMATELY 5 FEET

QUADRANGLE LOCATION

Source: USGS Oakland East, California 7.5 Minute Quadrangle Map

ENVIRONMENTAL BIO-SYSTEMS, INC.

DATE: 3/31/99

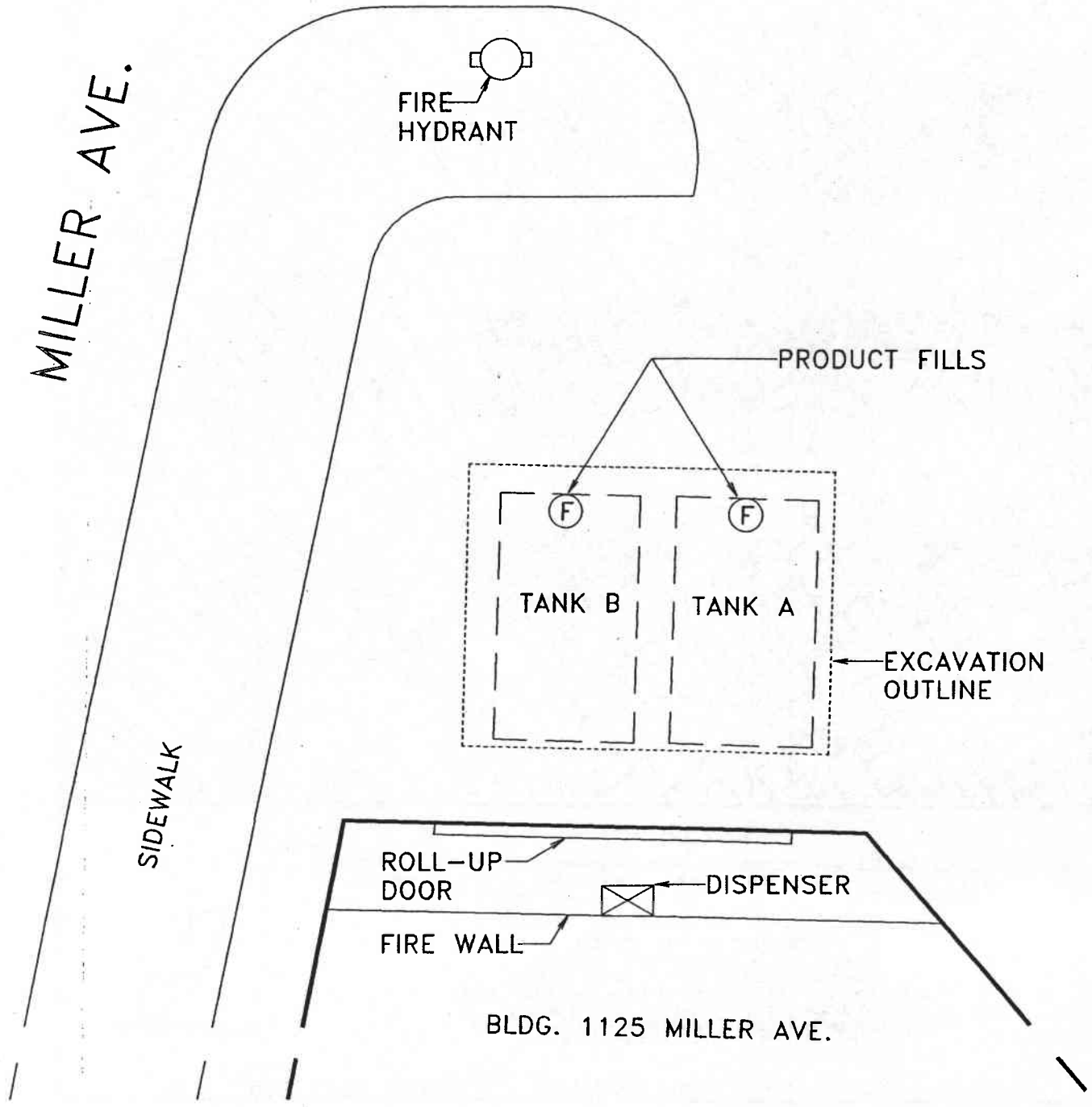
DRAWN BY: DAS

SCALE: 1" =2,000'

FIGURE 1: SITE LOCATION MAP

23rd AVENUE PARTNERS
1125 MILLER AVENUE
OAKLAND, CALIFORNIA

FIGURE 2: SITE MAP

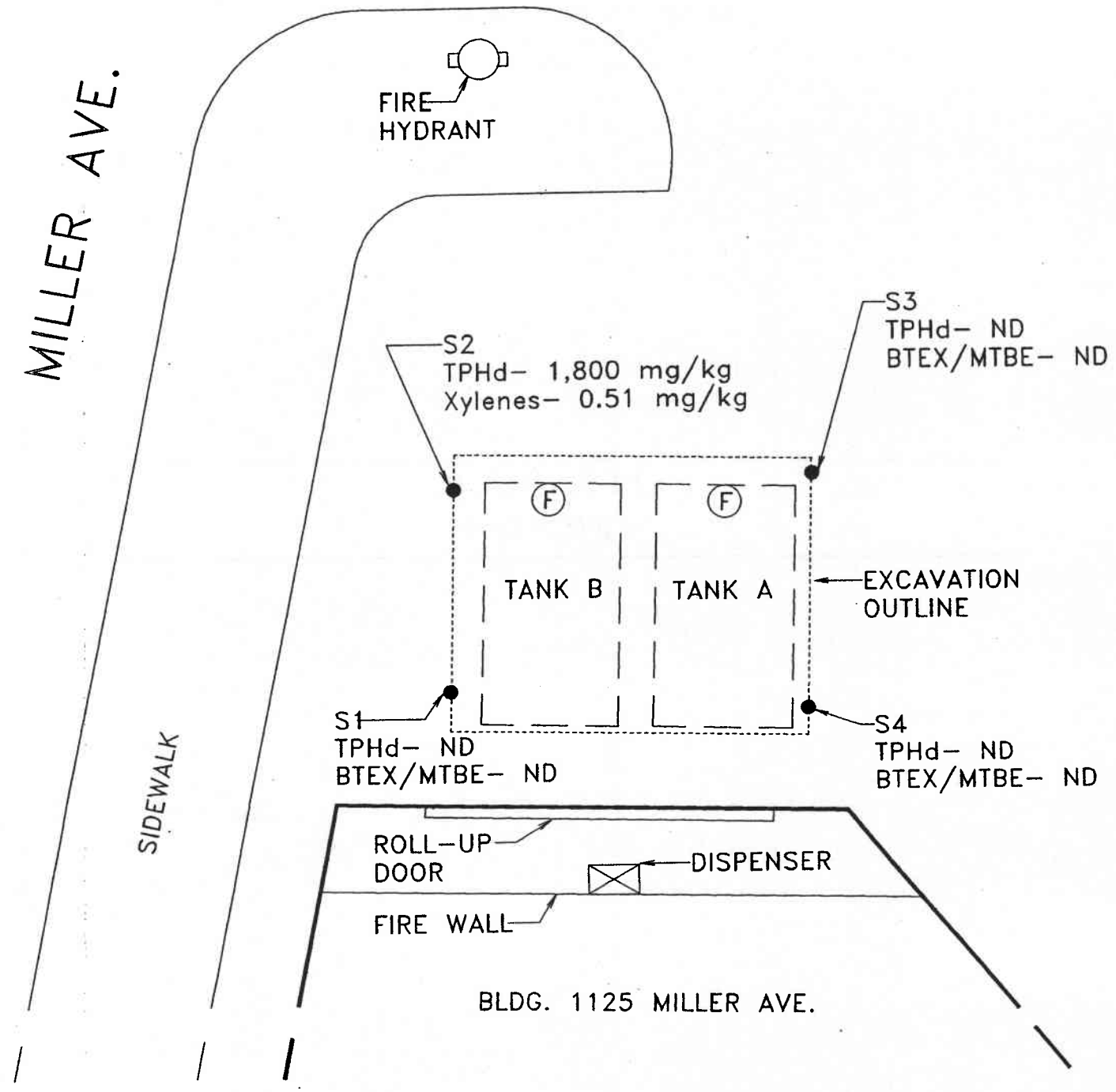


SCALE (in feet)

0 10 20 25

Client: 23rd Avenue Partners
Site: 1125 Miller Ave., Oakland, CA
Project: UST Removal
EBS Project #: 079-507A
Date of Work: 12/2/98

FIGURE 3: SAMPLE DATA MAP



NOTE: Sample results expressed in milligrams per kilogram (mg/kg).

SCALE (in feet)

0 10 20 25

Client: 23rd Avenue Partners
Site: 1125 Miller Ave., Oakland, CA
Project: UST Removal
EBS Project #: 079-507A
Date of Work: 12/2/98

APPENDIX B:
PERMITS

City Of Oakland

FIRE PREVENTION BUREAU

250 Frank Ogawa Plaza, Ste. 3341
Oakland California 94612-2032
510-238-3851

Permit To Excavate And Install, Repair, Or Remove Inflammable Liquid Tanks

Oakland, California November 2, 1998

Tank Permit Number: 169-98

Permission Is Hereby Granted To:

Remove diesel **Tank And Excavate Commencing:** **Feet Inside:** property **Line.**

On The:

Site Address: 1125 Miller Ave. **Present Storage:**

Owner: 23rd Avenue Partners **Address:** P.O. Box 7509 Oakland, 94601 **Phone:** 533-6600

Applicant: Environmental Bio-Systems **Address:** P.O. Box 7171 San Jose,m 95150-7171 **Phone:** (408) 979-8600

Dimensions Of Street (sidewalk) Surface To Be Disturbed : **X** **No. Of Tanks** 2 **Capacity** 5000 **Gallons, Each**

Remarks

This Permit Is Granted In Accordance With Existing City Ordinances. Owner Hereby Agrees To Remove Tanks On Discontinuance Of Use Or When Notified By The City Authorities When Installing, Removing Or Repairing Tanks, No Open Flame To Be On Or Near Premises.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Type Of Inspection:

Inspected And Passed On:

By:

Approved: JERRY E. BLUEFORD
Fire Marshal

UST/AST Installations/modifications:

Pressure Test: Inspected By: **Date:**

Primary Piping Test: Inspected By: **Date:**

Inspection Fee Paid: $

Received By:

Secondary Containment & Sump Testing:

Inspected By: **Date:**

Final: Inspected By: **Date:**

Before Covering Tanks, Above Certification Must Be Signed When Ready For Inspection Notify Fire Prevention Bureau 238-3851

THIS PERMIT MUST BE LEFT ON THE WORK SITE AS AUTHORITY THEREFORE

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAL000144356 Manifest Document No. 98095467

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
23RD AVENUE PARTNERS
PO BOX 7509 OAKLAND, CA

4. Generator's Phone 510 533-4600 94601

5. Transporter 1 Company Name
ARTESIAN OIL RECOVERY

6. US EPA ID Number CAL000161741

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
ARTESIAN OIL RECOVERY CO, INC.
2306 MAGNOLIA ST.
OAKLAND, CA 94607

10. US EPA ID Number CAL000161741

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID 0513

D. Transporter's Phone 510-839-4234

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID CAL000161741

H. Facility's Phone 510-839-4234

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. OIL & WATER NON RCRA HAZARDOUS WASTE, LIQUID	001	TT	00450	G	State 223 EPA/Other ABOVE RCRA
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above: OIL WATER

K. Handling Codes for Wastes Listed Above: a. 01/4 b. c. d.

15. Special Handling, Instructions and Additional Information

NAERC. # 171

EMERG. # 800-524-3567

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: X ALLEN E. PEHON JR. Signature: x [signature] Month 12 Day 01 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DAVID MCCLAY Signature: [signature] (FOR AOR) Month 12 Day 01 Year 95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Signature: Month Day Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

State of California—Environmental Protection Agency
Form Approved OMB No. 2050–0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Cont
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAC001485736
Manifest Document No.: 54453
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: 98454453

3. Generator's Name and Mailing Address:
23rd Avenue Partners
PO Box 7509

4. Generator's Phone (510) 533-6600

B. State Generator's ID

5. Transporter 1 Company Name: ECOLOGY CONTROL INDUSTRIES
6. US EPA ID Number: CAD982030173

C. State Transporter's ID
D. Transporter's Phone: 510-235-1393

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address:
ERICKSON INC.
255 PARR BLVD
RICHMOND, CA 94801

10. US EPA ID Number: CAD009466392

G. State Facility's ID
H. Facility's Phone: 510-235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. WASTE EMPTY STORAGE TANK Non-RCRA hazardous waste solid	002	TP	9600	P	State 512 / EPA/Other NONE
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
QTY ________ EMPTY STORAGE TANK(S) # ________
________ TANK(S) HAVE BEEN INERTED WITH
15 LBS DRY ICE PER 1000 GALLONS CAPACITY

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Wear appropriate protective clothing when handling.
24 Hour Emergency Telephone Number:
24 Hour Emergency Contact:
SITE LOCATION: 1125 Miller Ave
OAKLAND CA
ERG# 171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Owen E Pelton Jr.	[signature]	12	2	98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
David Yeanalt	[signature]	12	02	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR / TRANSPORTER / FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 3053

CUSTOMER
974832
JOB NO. 972044
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 24879

LOCATION: RICHMOND, CA DATE: 12/2/98 TIME: 2:09:21 PM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 5,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — REPRESENTATIVE

TITLE

Dave Fato — INSPECTOR

CP5

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 3054

CUSTOMER

JOB NO. 974832
ENV. BIO SYSTEMS

FOR: ERICKSON, INC. TANK NO. 24880

LOCATION: RICHMOND, CA DATE: 12/2/98 TIME: 2:12:11 PM

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT UG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 5,000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 0.1% ERICKSON, INC. HERBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY.

ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US FOR PROCESSING.

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Patricia Collins — Dave Sato

REPRESENTATIVE TITLE INSPECTOR

CP56

APPENDIX D:
LABORATORY REPORTS
AND CHAIN OF CUSTODY DOCUMENTATION

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description	Detection Limit	SOIL Total Petroleum Hydrocarbons as Diesel
		ppm	ppm
	23rd. Avenue Partners 1125 Miller Ave. Oakland, CA Project No.: 079-507A		
B128006	S 1	5.0	<5.0
B128007	S 2	5.0	1,800
B128008	S 3	5.0	<5.0
B128009	S 4	5.0	<5.0
B128010	SP1 A-D	5.0	290

QA/QC: Spike Recovery on V128008 is 81 %
Duplicate Deviation on V128007 is 6.1 %

Note: Analysis was performed using EPA method 3550 modified and TPH LUFT.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description
	23rd. Avenue Partners
	1125 Miller Ave.-Oakland
	Project # 079-507A
B128006	S 1 SOIL

ANALYSIS

	Detection Limit ppm	Sample Results ppm
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005
MTBE(Methyl tert-Butyl Ether)	0.005	<0.005

QA/QC: Duplicate Deviation is 7.0 %
Spike Recovery is 99 %

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTEX distinction.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description
	23rd. Avenue Partners
	1125 Miller Ave.-Oakland
	Project # 079-507A
B128007	S 2 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	0.051
Ethylbenzene	0.005	<0.005
MTBE(Methyl tert-Butyl Ether)	0.005	<0.005

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTEX distinction.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description
	23rd. Avenue Partners
	1125 Miller Ave.-Oakland
	Project # 079-507A
B128008	S 3 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005
MTBE(Methyl tert-Butyl Ether)	0.005	<0.005

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTEX distinction.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description
	23rd. Avenue Partners 1125 Miller Ave.-Oakland Project # 079-507A
B128009	S 4 SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005
MTBE(Methyl tert-Butyl Ether)	0.005	<0.005

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTEX distinction.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

1678 Reliez Valley Road • Lafayette, CA 94549
Phone (925) 945-1266 • Fax (925) 943-6884

079-507A\2131\013987

Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
Attn: Tim Babcock
Project Manager

Date Sampled: 12-02-98
Date Received: 12-02-98
Date Analyzed: 12-10-98

Sample Number	Sample Description
B128010	23rd. Avenue Partners 1125 Miller Ave.-Oakland Project # 079-507A SP1 A-D SOIL

ANALYSIS

	Detection Limit	Sample Results
	ppm	ppm
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	<0.005
Ethylbenzene	0.005	<0.005
MTBE(Methyl tert-Butyl Ether)	0.005	<0.005

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 8020 used for BTEX distinction.
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

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CHAIN OF CUSTODY

PROJECT NUMBER: 079-507A
CLIENT: [redacted] 23rd Avenue Partners
SITE: 1125 Miller Ave
Oakland, CA

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION _____ OF THE STATE WATER RESOURCES CONTROL BOARD.

INSTRUCTIONS:
Results Attn: Tim Babcock

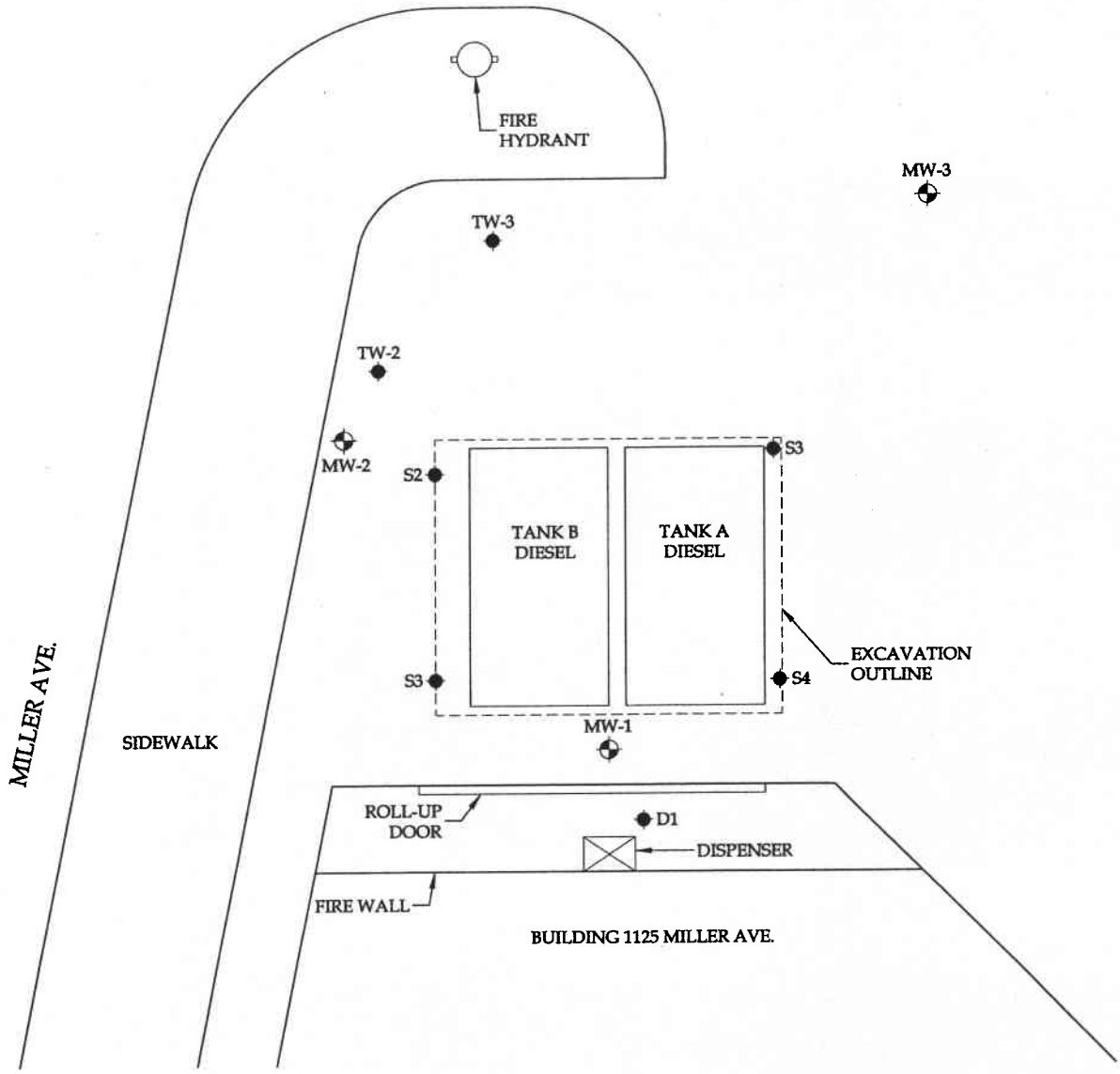
SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS: TPH diesel/BTEX/MTBE	TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
S1	Soil	1		X	Normal		
S2	↓	1		X	↓		
S3		1		X			
S4		1		X			
SP1 A-D		4	X	X			

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY
	12/2/98	11:30	Tim Babcock

RELEASED BY	DATE 12/2/98	TIME 12:09	RECEIVED BY		DATE 12-2-98	TIME 1209
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY		DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

ATTACHMENT C



LEGEND

- MW-1 — MONITORING WELL LOCATION (PROPOSED)
- SOIL SAMPLE

0 10 20

APPROXIMATE SCALE IN FEET

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No.	Figure Date	Figure
707	1/04	2

SITE PLAN
23rd Avenue Partners
1125 Miller Avenue
Oakland, California

ATTACHMENT D

CLEARWATER GROUP

Direct-Push Drilling Investigation Procedures

The direct push method of soil boring has several advantages over hollow-stem auger drill rigs. The direct push method produces no drill cuttings and is capable of 150 to 200 feet of boring or well installation per work day. Direct push can be used for soil gas surveys, soil sampling, groundwater sampling, installation of small-diameter monitoring wells, and components of remediation systems such as air sparge points. The equipment required to perform direct push work is varied ranging from a roto-hammer and operator to a pickup truck-mounted rig capable of substantial static downward force combined with percussive force. This method allows subsurface investigation work to be performed in areas inaccessible to conventional drill rigs such as in basements, beneath canopies, or below power lines. Direct push equipment is ideal at sites with unconsolidated soil or overburden, and for sampling depths of less than 30 feet. This method is not appropriate for boring through bedrock or gravelly soils.

Permitting and Site Preparation

Prior to direct push boring work, Clearwater Group will obtain all necessary permits and locate all underground and above ground utilities through Underground Service Alert (USA) and a thorough site inspection. All drilling equipment will be inspected daily and will be maintained in safe operating condition. All down-hole drilling equipment will be cleaned prior to arriving on-site. Working components of the rig near the borehole, as well as driven casing and sampling equipment will be thoroughly decontaminated between each boring location by either steam cleaning or washing with an Alconox® solution. All drilling and sampling methods will be consistent with ASTM Method D-1452-80 and county, state and federal regulations.

Boring Installation and Soil Sampling

Direct push uses a 1.5-inch outer barrel with an inner rod held in place during pushing. Soil samples are collected by penetrating to the desired depth, retracting the inner rod and attaching a spoon sampler. The sampler is then thrust beyond the outer barrel into native soil. Soil samples are recovered in brass or stainless containers lining the spoon.

Soil removed from the upper tube section is used for lithologic descriptions (according to the unified soil classification system) and for organic vapor field analysis. If organic vapors will be analyzed in the field, a portion of each soil sample will be placed in a plastic zip-lock bag. The bag will be sealed and warmed for approximately 10 minutes to allow vapors to be released from the soil sample and diffuse into the head space of the bag. The bag is then pierced with the probe of a calibrated organic vapor detector. The results of the field testing will be noted with the lithologic descriptions on the field exploratory soil boring log. Soil samples selected for laboratory analysis will be covered on both ends with Teflon™ tape and plastic end caps. The samples will then be labeled, documented on a chain-of-custody form and placed in a cooler for transport to a state certified analytical laboratory.

Temporary Well Installation and Groundwater Sampling

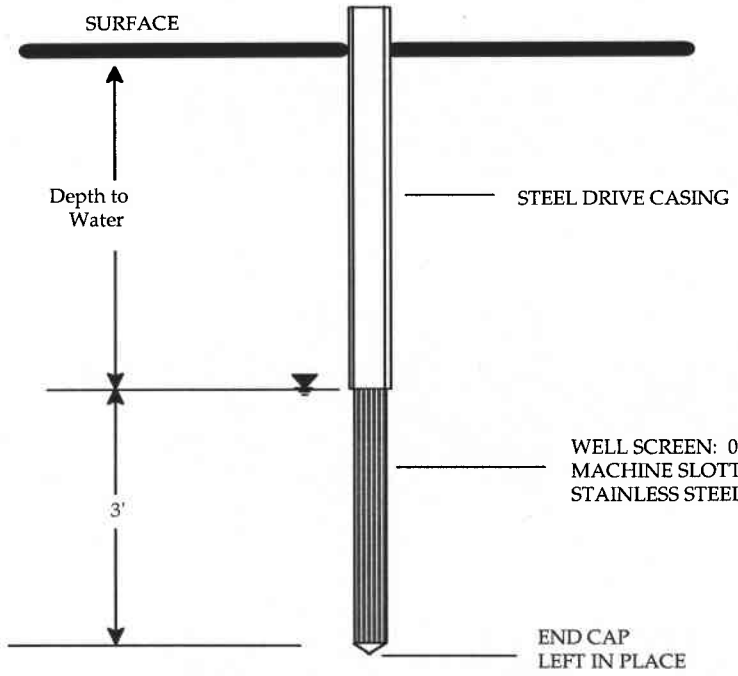


Figure 1

Groundwater samples are collected by removing the inner rod and attaching a 4-foot stainless steel screen with a drive point at the end (Figure 1). The screen and rod are then inserted in the outer barrel and driven to the desired depth where the outer rod is retracted to expose the screen. If enough water for sampling is not produced through the stainless well screen, a 1-inch PVC screen can be installed in the boring and the outer rod retracted to leave a temporary well point for collecting groundwater samples or water levels.

Monitoring Well Installation and Development

Permanent small-diameter monitoring wells are installed by driving the outer barrel and inner rod as described above. Upon reaching the desired depth the system is removed and 2-inch OD (1/2-inch ID) pre-packed PVC piping is installed. The well plug is created using granular bentonite. The well seal is constructed of cement and sealed at the surface with a conventional "Christy® Box" or similar vault. Monitoring wells are developed by surging the well with a small diameter bailer and removing 3 to 5 casing volumes of water until the produced water is clear.

Groundwater Sample Collection and Water Level Measurement

Prior to collecting groundwater from the wells the water levels are measured in all wells using an electronic water level gauge. Monitoring wells are prepared for sampling by purging three well bore volumes of water. Water is removed using small diameter bailers, a peristaltic pump, or manually using tubing with a check valve at the bottom. During removal of each volume, the temperature, pH and conductivity are measured and recorded on the field sampling form. Successive well volumes are removed until the parameters have stabilized or the well has gone dry. Prior to sampling, the well is allowed to recover to within 90% of the stabilized water levels.

Groundwater samples[1] are collected using small diameter bailers. The samples are decanted into laboratory supplied containers, labeled, recorded on a chain-of-custody form and placed on ice for transport to a certified laboratory.

[1] Small diameter wells often produce small sample quantities and are appropriate for analysis of volatile and aromatic compounds and dissolved metals analysis using VOA vials. Obtaining liter-size samples can be difficult and time consuming. Monitoring wells installed by the direct push method are most effective at sites where the subsurface soils are more coarse than silt, gasoline components are the key contaminants of concern, and water levels are not more than 25 feet below ground surface.

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5035SC™ Soil Core Sampler and Procedures

The purpose of the EPA Method 5035 is to reduce volatilization of soil samples prior to laboratory analyses. Other methods, notably ASTM (D4547-98) have also been developed to minimize losses in volatile organic compounds (VOC) and semi-volatile organic compound (SVOC) during soil sample collection and storage. Soil piles or even soil tubes from trenches or borings can use EPA Method 5035.

The United States Environmental Protection Agency (USEPA) developed EPA Method 5035, Closed-System Purge-and-Trap Extraction for Volatile Organics in Soil and Waste Samples in June 1997 in SW-846, Test Methods for Evaluating Solid Waste, Physical / Chemical Methods, Update III (Method 5035). In July 2002, USEPA updated the Method within SW-846 as Method 5035A. (USEPA, 2003). The 5035SC™ Sampler is a zero-headspace, multi-functional sampling device (MFSD) designed to meet the EPA Method 5035 and Florida Department of Environmental Protection FS 3000 approved methods. The MFSD act as both the coring tool and airtight storage container (USEPA, 2003).

5035SC™ SAMPLER

The 5035SC™ Sampler is a pre-cleaned syringe subcore sampler and storage device. The USEPA (2003) approves the use of the disposable plastic syringes that have been converted into subcoring devices. The syringe "needle end" has been cut off neatly, creating a blunt, even coring end. The 5035SC™ Sampler was designed to meet the description of the EPA, by being disposable, inexpensive, and to have zero headspace. The 5035SC™ Sampler requires no in-field weighing and no preservative. The 5035SC™ Sampler features a patented "plunger stop" sleeve which prevents the plunger from exiting the open end of the syringe. Each 5035SC™ Sampler comes with an airtight plastic cap. The disposable samplers may be used once per sampling location and should not be reused.

APPROVAL FOR USE

The California Regional Water Quality Control Board, Region 1 (North Coast) has approved the 5035SC™ Sampler for fuel related sites as both a coring and as a transportation device. The Department of Toxic Substances Control (DTSC) and the U.S. EPA (Region 9) have approved the 5035SC™ Sampler for use for the soil coring and preservation in the field at DTSC and EPA sites, respectively. Using the 5035SC™ Sampler as a transportation device for DTSC or EPA sites has not yet been approved.

COLLECTING THE SOIL

All sampling activities are to be performed using sanitary, industrial grade, chemically resistant gloves. The soil sample is collected using the 5035SC™ Sampler by removing the pre-cleaned plastic cap. The plunger is shipped in the forward position. Holding the wingtips on either side of the sampler body, the 5035SC™ Sampler is pushed into the soil to be sampled. The 4.5 to 5.5 grams of dry to semi-dry soils will pack tightly into the

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body of the 5035SC™ Sampler, pushing the plunger back to its rear position. The patented plunger stop of the 5035SC™ Sampler sleeve prevents the plunger from exiting the body of the sampler. The filled soil sampler containing 5 grams of soil is then removed from the soil and the airtight plastic cap is pushed over the open end of the sampler.

The soil sample is then either placed into specially prepared 40 ml glass VOAs for chemical preservation (see below) or placed into a hermetically sealed reclosable polyethylene-shipping bag. Once the 5035SC™ Sampler is placed in the sampler-shipping bag and is tagged with the waterproof label, it is ready to be placed into the cooler with the dry ice to be kept at <-7° C. Chain-of-custody procedures are used to accompany the samples to the laboratory.

SCREENING OF SOIL SAMPLES

In order to provide valuable soil analysis data, lithologic variations and heterogeneity, both vertically and laterally must be well characterized and understood so that representative soil samples are collected. Soil samples should be screened in the field with a meter that measures organic vapors, such as a photoionization detector (PID). Field screening gives a rough estimate of VOC concentration and other factors such as visual staining, soil discoloration and professional judgment should be used to pick the samples for EPA Method 5035.

FIELD PRESERVATION METHODS

There are several field preservation methods using a variety of procedures and chemicals. The preservation concepts are described below. For field preservation methods using chemicals, the 5035SC™ Sampler is then removed from the syringe and extruded into the glass VOA vial using the syringe's plunger if other field preservation methods are to be used. Please refer to USEPA, 2003 for more detailed preservation descriptions.

U.S. EPA and the California DTSC have approved the 5035SC TM Sampler for use as a soil-coring device. Field preservation methods are to be used with the 5035SC™ Sampler for EPA and DTSC sites. Many laboratories will supply consultants with the glass 40 ml VOAs with the preservation chemicals, as described below.

CHEMICAL PRESERVATION FOR LOW LEVEL ANALYSIS

Low Level Analysis uses a hermetically sealed sampling container, such as the 5035SC™ Sampler, and analysis of the sample in the laboratory by a closed-system purge-and-trap process. The Low Level Analysis method uses a direct purging of the VOCs from the liquid inserted into the soil sample in the field. The liquid can be either sodium bisulfate or reagent water, the former acts as both preservative and extractant medium, while the water acts only as an extractant medium. No sample dilution is involved, giving detection limits of approximately 0.5 µg/kg.

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The 5035SC™ Sampler has been approved for use as a coring device by U.S. EPA and the California DTSC. Field preservation methods are to be used with the 5035SC™ Sampler for EPA and DTSC sites.

CHEMICAL PRESERVATION FOR HIGH LEVEL ANALYSIS

The procedures for High Level Analysis use the same procedures outlined above, except methanol is the liquid used for both preservative and extractant medium. The samples are diluted with methanol yielding detection limits of greater than 200 µg/kg.

FIELD PRESERVATION BY FREEZING

The 5035SC™ Sampler can be used with field freezing with dry ice as the preservation method. Freezing the sample in its storage device immediately after collection preserves VOC concentrations in all samples matrices (including biologically active soils that would tend to degrade BTEX compounds) and for both types of VOC analytes for up to 14 days of storage. In one study, sample integrity was maintained with less than a 5% loss of analyte concentrations even after a 14-day holding time. Freezing can be initiated in the field through the use of dry ice in well-insulated coolers. Alternatively, bags of water ice mixed with table salt may be used to achieve cooler temperatures between -12 and -4°C (Hewitt, 1999). Dry ice is recommended as being the easiest method of field freezing and preservation. The disadvantage of using ice (4°C +/- 2°C) is that the samples would be required to be analyzed within 48 hours in the laboratory, instead of the 7 days for dry ice freezing.

After collecting the 4.5 to 5.5 grams of soil samples in the pre-cleaned 5035SC™ Sampler, the sampler is sealed with an airtight inert plastic cap. The 5035SC™ Sampler is then placed into a hermetically-sealed reclosable polyethylene shipping bag, with a waterproof label with date, time, sampler's name, sample number, site location, compounds of interest, chemical preservation techniques (if any), and laboratory equipment specifications or laboratory methods.

The 5035SC Samplers are then placed in a cooler with dry ice to ensure freezing of the 5035SC™ Samplers. There must be adequate dry ice to cool the samples to <-7° C and that the temperature is maintained in the cooler during transport to the laboratory. The samples are labeled and shipped under chain-of-custody procedures to the state-approved laboratory for the requested analysis. The 5035SC™ Samplers should not be frozen below –20° C. A temperature blank should be included with the samples so that the laboratory can verify the temperature upon receipt and the arrival temperature of the samples should be noted on the chain-of-custody forms. Because the entire sampling device is to be submitted to the laboratory, a visual inspection of the seals is required to be noted on the chain-of-custody by the receiving person at the laboratory to verify that the 5035SC™ Sampler is intact and sample volatilization has not occurred.

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LABORATORY HOLD TIME

The 5035SC™ Samplers preserved with dry ice the samples can be held at <-7° C for up to seven days prior to analysis from the sample collection date, providing the laboratory places the samples in a refrigerated environment or uses a chemical preservation method.

TEMPERATURE BLANK

Method 5035 requires and many laboratories expect three 5035SC™ Samplers for each soil sampling point. For example, if a soil boring has 2 samples, one at 5 feet and one at 10 feet below ground surface, three 5035SC™ Samplers are needed for each soil sampling point, with a total of six 5035SC™ Samplers required for the two sampling points. On the receiving end, an infrared thermometer should be used to measure the temperature blank when the samples arrive at the laboratory.

REFERENCES

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United States Environmental Protection Agency (US EPA), 2003, Guidance Document for the Implementation of United States Environmental Protection Agency Method 5035: Methodologies for Collection, Preservation, Storage, and Preparation of Soils to be Analyzed for Volatile Organic Compounds, Final Interim (Version 4,0), October, 35 p.

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PHOTOS SHOWING THE 5035SC™ SAMPLER

1) The soil sample is collected using the 5035SC™ Sampler by removing the pre-cleaned plastic cap. The plunger will be in the forward position.

2) Holding the wingtips on either side of the sampler body, push the 5035SC™ Sampler into the soil to be sampled. The soil will pack tightly into the body of the 5035SC™ Sampler, pushing the plunger back to its rear position. The patented plunger stop of the 5035SC™ Sampler sleeve prevents the plunger from exiting the body of the sampler.

3) Remove the filled soil sampler from the soil and press the airtight plastic cap over the open end of the sampler. The soil sample is placed into a hermetically sealed reclosable polyethylene-shipping bag.

4) Once the 5035SC™ Sampler is placed in the sampler shipping bag and is tagged with the waterproof label, it is ready to be placed into the cooler with the dry ice to be kept at <-7° C (7-days) or ice cooled to 4° C (48-hour preservation).

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