A·C·C
ENVIRONMENTAL
CONSULTANTS

March 4, 1998

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STID 3292

Mr. Thomas Peacock
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502

RE: Work Plan for Monitoring Well Destruction
501 Fifth Avenue, Oakland, California
ACC Project No. 98-6045-014.01

Dear Mr. Peacock:

On behalf of the Peralta Community College District, ACC Environmental Consultants, Inc., (ACC) presents this well destruction work plan for the Peralta Community College District Maintenance Yard, located at 501 Fifth Avenue, Oakland, California (Figure 1).

BACKGROUND

Five underground storage tanks (USTs) were installed at the site prior to the 1960s for fuel storage for the City of Oakland Corporation Yard. In 1980, the Peralta Community College District acquired the property, abandoned the five USTs by filling them with water, and installed three new fiberglass USTs. In 1992, the five original USTs were removed. Laboratory analysis of soil samples collected during UST removal indicated concentrations up to 228 parts per million (ppm) total petroleum hydrocarbons as diesel (TPHd), 134 ppm total petroleum hydrocarbons as gasoline (TPHg), and 5,477 ppm oil and grease. Laboratory analysis of the water sample collected from the excavation indicated concentrations of 170,000 parts per billion (ppb) TPHd, 15,000 ppb TPHg, and 284,000 ppb oil and grease.

In November 1992, ACC performed a subsurface investigation of the soil around the former tank excavation. Concentrations of TPHg and motor oil were detected in the soil and groundwater samples collected from the borings. In November 1993, the three fiberglass gasoline USTs were removed from the property. Soil samples collected from the excavation indicated low concentrations of TPHg. Initial groundwater samples collected indicated concentrations up to 27,000 ppb TPHg. During removal of the tanks, approximately 3,500 gallons of water were removed from the excavation. Analysis of subsequent groundwater samples from the excavation indicated concentrations of up to 210 ppb TPHg. A groundwater investigation was conducted in 1994 as required by the Alameda County Health Care Services Agency (ACHCSA). The groundwater investigation included installation of four monitoring wells on site.

Based on the findings of the subsurface investigation, elevated concentrations of petroleum hydrocarbons in the soil and groundwater indicated that a source of impact still existed on site. To remediate the source, overexcavation of the area around the former tank excavation was recommended as a cost-effective means. Overexcavation included removal of the impacted soil in the vicinity of the former tank excavation, actively purging the groundwater during excavation, and

destroying well MW-2 during excavation activity. Interim remedial work was performed in the summer of 1995 and included source removal of approximately 2,250 cubic yards of impacted soil, three previously unknown USTs, and approximately 14,888 gallons of impacted water. During soil removal, four previously unknown USTs were discovered and three were removed. One UST still exists at the site. In order to protect the adjacent building's integrity, the UST was not removed at the time of remedial action. The existing UST is proposed to be removed during remedial action planned for summer 1998. The remedial action will include UST removal, overexcavation in two areas where impacted soil was not previously obtained, groundwater removal, and excavation closure.

SCOPE OF WORK

The remedial action at the site will include overexcavation in the area around well MW-3 and is scheduled to be performed in summer 1998. In preparation for this work, ACC proposes to destroy monitoring well MW-3 which has a total depth of 15 feet below ground surface (bgs). A site plan illustrating the monitoring well location is attached as Figure 2.

Well Destruction Procedures

Upon acceptance of this work plan by the Alameda County Health Care Services Agency (ACHCSA), ACC will destroy well MW-3. As required by the Occupational Health and Safety Administration, 29 Code of Federal regulations 1910.120, ACC has prepared a site specific Health and Safety Plan, attached, for the proposed work.

One 2-inch-diameter monitoring wells (MW-3) with a total depth of 15 feet bgs is proposed to be destroyed by Gregg Drilling and Testing of Martinez, California (license C57-485165). A permit for well destruction will be obtained from the Alameda County Public Works Agency prior to scheduling field activities. The work is tentatively scheduled for March 18, 1998.

The well will be destroyed by overdrilling and removing all well construction materials within the original borehole. Using a tremie pipe, the created hole will be filled from the bottom upward to the original ground surface with a neat cement grout containing 5 percent bentonite by weight.

The following procedures will be followed for the well to be destroyed:

- Prior to destruction, the well will be investigated to determine its condition and the details of construction. The depth, casing diameter, and construction and sealing design of the well will be ascertained. The well will be sounded immediately before destruction to determine whether any obstructions would interfere with destruction.

- All downhole equipment will be precleaned prior to drilling the boring.

- The well will be destroyed by removing all materials within the original borehole (including the well casing, screen, filter pack, and annular seal). This will be accomplished by overdrilling the

borehole with 8-inch outside-diameter, hollow-stem augers. Annular well materials will be removed from the augers as they advance and will be drummed appropriately.

- Overdrilling will be completed to the total depth of the boring.

- The reamed boring will then be backfilled with a neat cement grout containing 5 percent bentonite by weight after the augers are removed from the boring. The grout will be placed into the boring from the bottom of the hole to a depth of approximately 1 foot bgs via a tremie pipe. The boring will be filled to existing grade with concrete and finished to match the surrounding surface.

The polyvinyl chloride well screen, christy box, and well completion materials will be placed in a labeled drum and stored temporarily on site. Samples will be collected from the drum and submitted to a state-certified laboratory for profiling pending disposal. No waste water will be generated during grouting of the borehole.

After completion of destruction, a letter report documenting procedures will be submitted to regulatory agencies.

Additional Remedial Action

As part of the proposed remedial action, ACC will oversee removal of the remaining UST and overexcavation of two areas consisting of approximately 2,000 cubic yards of material. The areas will consist of the soil 80 feet by 80 feet by 7 feet deep around the existing UST and the soil 25 feet by 25 feet by 7 feet deep around monitoring well MW-3. Figure 2 illustrates the proposed excavations. Soil and groundwater samples will be collected upon completion of excavation to verify remedial action.

During excavation, groundwater is anticipated to be encountered. The water from the excavation will be removed and treated on site through a treatment system utilizing carbon filters. The treated water will be discharged into the sanitary sewer under East Bay Municipal Utility District permit. ACC will acquire the discharge permit and oversee the water removal and discharge. Samples of the groundwater will be collected in accordance with permit requirements.

After removal, soil will be transported to an accepting landfill for disposal or recycling. ACC will coordinate all excavation, soil removal, disposal, and backfilling performed.

After completion of remedial action, one additional groundwater monitoring well will be installed to verify groundwater remedial action and in accordance with ACHCSA guidelines. The well will be developed and a groundwater monitoring program will be initiated with the existing monitoring wells on site.

Upon completion of the work, ACC will prepare a report documenting the work completed to date and submit the report to the ACHCSA for review and acknowledgement.

If you have any questions or comments regarding this work plan, please call me at (510) 638-8400.

Sincerely,

Misty C. Kaltreider
Senior Project Geologist

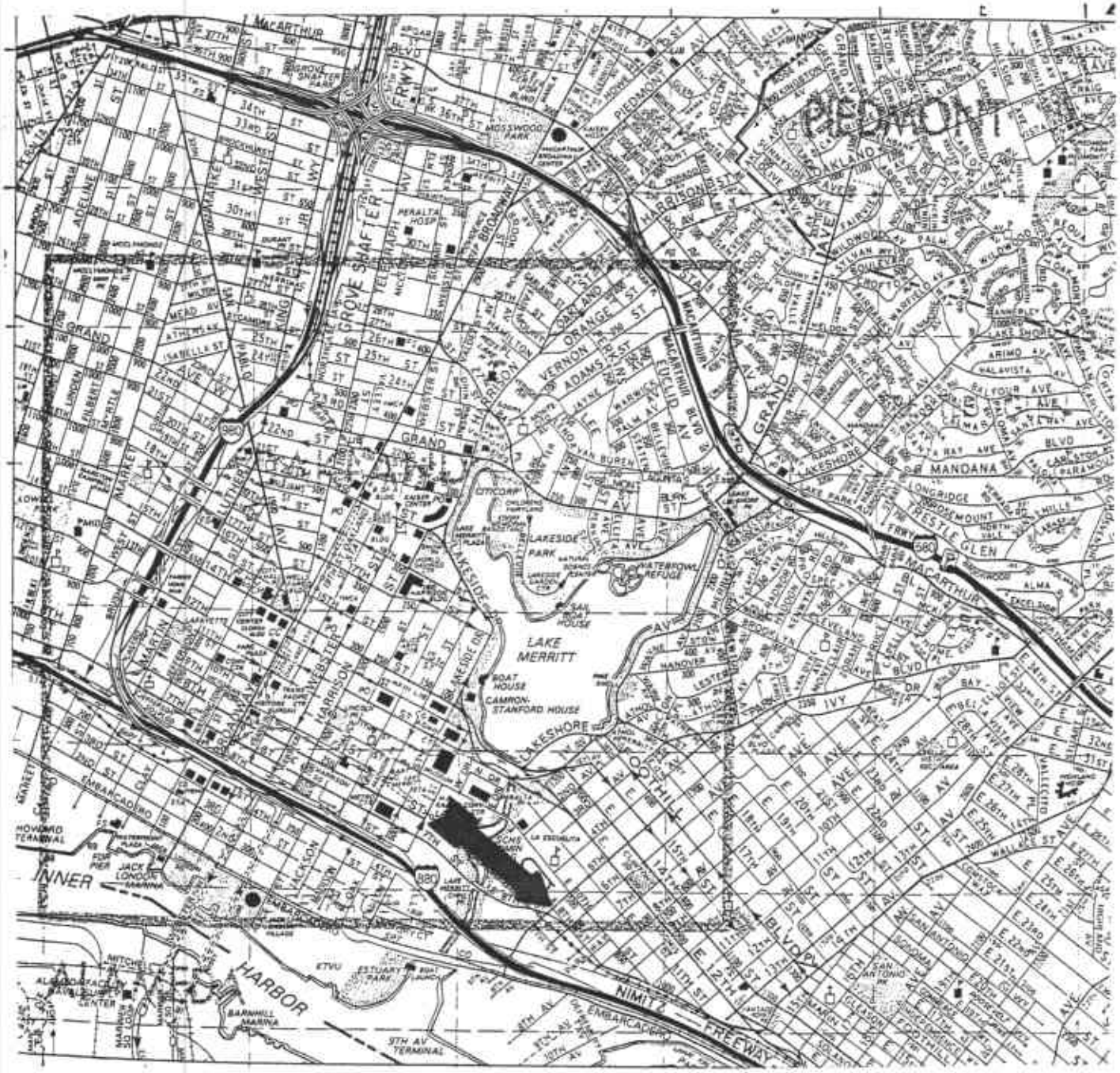
Ashley Pahlmann
638-8400

/clm:mck

Attachments

cc: Mr. Robert Mibach, Peralta Community College District

18 Mar 98 for well destruction



SOURCE: Thomas Bros. Guide, 1994

Title: **Location Map**
Peralta Community College District
Maintenance Yard
501 5th Avenue, Oakland, California

Figure Number: 1	Scale: 1" = 1/4 mi
Drawn By: CLM	Date: 2/6/98
Project Number: 6045-14	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

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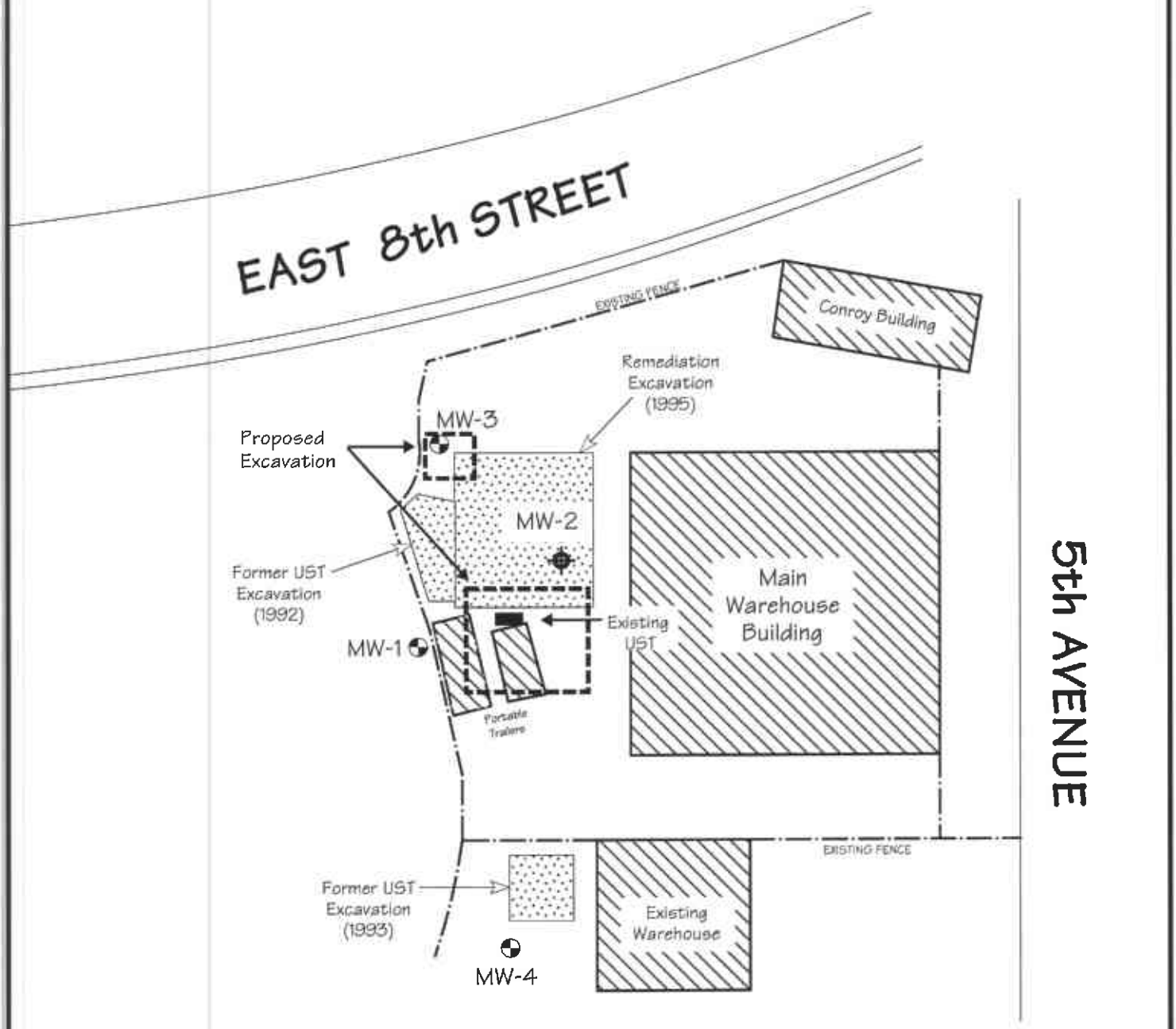

Scale In Feet

0 50 100 150

Legend

MW-3 - Existing Groundwater Monitoring Well

MW-2 - Former Groundwater Monitoring Well (destroyed)

Proposed Excavation Plan
Peralta Community College District
Maintenance Yard
501 5th Avenue, Oakland, California

Figure Number: 2	Scale: 1" = 100'
Drawn By: MCK	Date: 1/27/98
Project Number: 6045-14	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

N E S W

ACC - SITE SAFETY PLAN

A. GENERAL INFORMATION

Project Title: **501 5th Avenue, Oakland, California**
Project No.: **98-6045-014.01**
Project Manager: **Misty Kaltreider**
Location: **501 5th Avenue, Oakland, California**
Prepared by/date: **Misty Kaltreider/ 3/2/98**

Approved by/date: _____

Scope of Work/Objective(s): **Well Destruction**

Proposed Date of Field Activities: **March 1998**

Documentation/Summary:

Overall Chemical Hazard: Serious [ ] Moderate [ ]
Low [X] Unknown [ ]

Overall Physical Hazard: Serious [ ] Moderate [X]
Low [ ] Unknown [ ]

B. SITE/WASTE CHARACTERISTICS

Waste Types(s):
Liquid [ ] Solid [X] Sludge [ ] Gas/Vapor [ ]

Characteristics:
Flammable/Ignitable [ ] Volatile [X] Corrosive [ ] Acutely Toxic [X]
Explosive [ ] Reactive [ ] Carcinogen [ ] Radioactive [ ]

Other: _____

Physical Hazards:
Overhead [ ] Confined Space [ ] Below Grade [ ] Trip/Fall [X]
Puncture [ ] Burn [ ] Cut [ ] Splash [X]
Noise [X]

Other: **Well destruction**

Site History/Description and Unusual Features:

Locations of Chemicals/Waste: **In soil, groundwater**

Estimated Volume of Chemicals/Waste: **None**

Site Currently in Operation: Yes [X] No [ ]

C. HAZARD EVALUATION

List and Evaluate Hazards By Task (e.g., sampling/drilling)

Task	Physical Hazard	Level of Protection
1	Well Destruction	D

Chemical Hazard Evaluation:

Compound	PEL/TWA	Route of Exposure	Acute Symptoms	Odor Threshold/Desc.
Gasoline	**300 ppm**	**Inhalation, dermal, ingestion**	**Skin Blisters, Nausea, Central Nervous System Disorder**	**Characteristic Odor**

D. SITE SAFETY AND WORK PLAN

Perimeter identified? [Y] Site secured? [Y] Work areas identified? [Y]
Zone(s) of contamination identified? [N]

Air Monitoring:
Contaminant of Interest: **Gasoline**
Type of Monitoring: **Air**
Frequency: **Continuous - As needed**
Equipment: **HNu**

Decontamination procedures and solutions: **Trisodium phosphate and water, triple rinsed**

Special Site Equipment: (Sanitary facilities, lighting, etc.) **None anticipated**

Site Entry Procedures and Special Considerations: **None**

Work Limitations (time of day, weather conditions, etc.): **None**

General Spill Control, if applicable: **N/A**

Investigation-Derived Material Disposal (expendables, cuttings, etc.) **Soil cuttings will be drummed and temporarily left on site pending proper disposal.**

Sample Handling Procedures: **Soil samples will be sealed with Teflon® sheeting, capped, labeled, and placed in an insulated, pre-chilled container, and delivered to a state certified analytical laboratory.**

E. EMERGENCY INFORMATION

Ambulance **911**

Hospital Emergency Room **(510) 451-4900**

Directions to Hospital (see attached map): **Peralta Hospital, 450 30th Street; proceed northwest on 8th Street to Broadway, turn right on Broadway and continue north, turn left on Telegraph Avenue, continue north to 30th Street.**

Poison Control Center **911**
Police **911**
Fire Department **911**
Laboratory **Chromalab, Inc.**
UPS/Fed. Express **N/A**

Client Contact **Mr. Robert Mibach (510) 466-7336**

SITE RESOURCES

Water Supply Source **On-site**
Telephone **On-site**
Cellular Phone, if available **---**
Other **---**

EQUIPMENT CHECKLIST

Protective Gear	Quantity	Equipment	Quantity	Equipment	Quantity
Respirator	1	PID (HNu)	1	Baggies	1 box
Organic Cartridges	2	Liter bottles	10	Chain of Custody Forms	1 set
Tyvek	1	VOA Vials	20	Labels	1 set
Gloves, Nitrile	1 pair	Surveyors Tape	1	Paper Towels	1 roll
Steel Toed Boots	1 pair	Rope	100 feet	Trash Bags	1
First Aid Kit	1	Camera/Film	1	Buckets	3
Safety Glasses	1 pair	Bailers	5	Brushes	2
Portable eye wash	1	Cooler	1	TSP	1 box
Ear Plugs	1 pair	Teflon Tape	1 roll	Boring Logs	1 set

SITE SAFETY REVIEW

General Information

Date _____ **1998** **Time** _____ **Project No. 98-6045-014.01**

Site: **501 5th Avenue, Oakland, California**

Client Contact: **Mr. Robert Mibach (510) 466-7336**

Objectives: **Well destruction**

Types of Chemicals Anticipated: **None**

Topics Discussed:

Physical Hazards: **Typical Hazards associated with drilling**

Personal Protection: **Level D, modified as required**

Decontamination: **None**

Special Site Considerations: **None**

ATTENDEES

Name Printed	Signature

HOSPITAL LOCATION MAP