



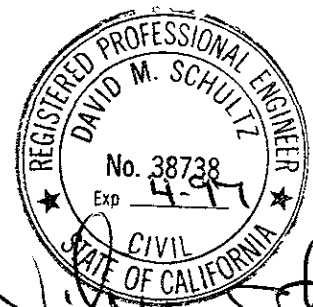
*Reviewed by
ASH 1/9/97*

January 6, 1997

1997

WORKPLAN
for a
SOIL AND GROUNDWATER ASSESSMENT
at
Geo M. Martin Company
1308 - 67th Street
Emeryville, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391



David M. Schultz

INTRODUCTION

This submittal outlines Aqua Science Engineer's, Inc. (ASE) workplan for a soil and groundwater assessment at the Geo M. Martin Company property located at 1308 67th Street in Emeryville, California (Figure 1). The proposed site assessment activities were initiated by Mr. David Goodearl of Geo M. Martin Company as required in a letter from the Alameda County Health Care Services Agency (ACHCSA) dated November 5, 1996 (Appendix A).

BACKGROUND INFORMATION

On September 20, 1996, ASE removed one (1) 700-gallon underground diesel storage tank (UST) from the site. 7.5 tons of contaminated soil were excavated from around the UST at the time of its removal and were transported to Forward Landfill in Manteca, California as non-hazardous waste. Up to 3,400 parts per million (ppm) total petroleum hydrocarbons as diesel (TPH-D), 6.0 ppm ethylbenzene and 44 ppm total xylenes were detected in the soil samples collected from beneath the UST. No halogenated volatile organic compounds (HVOCs) were detected in the soil samples, and no cadmium, chromium, lead, nickel or zinc were detected at concentrations above regulatory concern. On November 5, 1996, Ms. Amy Leech of the Alameda County Health Care Services Agency (ACHCSA) issued a letter requesting a soil and groundwater assessment.

PROPOSED SCOPE OF WORK (SOW)

Based on the November 5, 1996 letter and a conversation between Mr. Scott Ferriman of ASE and Ms. Amy Leech of the ACHCSA on November 13, 1996, ASE's proposed scope of work is to:

- 1) Prepare a workplan for approval by the ACHCSA.
- 2) Obtain a drilling permit from the Alameda County Flood Control and Water Conservation District (Zone 7).
- 3) Drill three soil borings at the site with a Geoprobe drill rig. Collect soil samples every 5-feet and screen the soil samples for volatile compounds with an organic vapor meter (OVM).
- 4) Analyze at least one soil sample from each boring at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 3510/8015, benzene,

toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8020, MTBE by EPA Method 8020 and polynuclear aromatic hydrocarbons (PNAs) by EPA Method 8310.

- 5) Collect groundwater samples from each boring. Analyze the groundwater samples at a CAL-EPA certified analytical laboratory for TPH-D by modified EPA Method 3510/8015, BTEX by EPA Method 8020, MTBE by EPA Method 8020 and PNAs by EPA Method 8310.
- 6) Backfill the borings with neat cement.
- 7) Prepare a report outlining the methods and findings of this assessment.

Details of the assessment are presented below.

TASK 1 - PREPARE A WORKPLAN AND HEALTH AND SAFETY PLAN

Based on the site history and the analytical results of the soil samples collected during the underground storage tank removal, ASE has prepared a site-specific health and safety plan. A nearby hospital is designated in the site safety plan as the emergency medical facility of first choice. A copy of the site specific Health and Safety Plan is appended to this report (Appendix B).

TASK 2 - OBTAIN NECESSARY PERMITS

ASE will obtain a drilling permit from the Alameda County Flood Control and Water Conservation District (Zone 7). ASE will also notify Underground Service Alert (USA) to have underground utility lines marked in the site vicinity.

TASK 3 - DRILL THREE SOIL BORINGS AT THE SITE AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS

ASE will drill three soil borings at the locations shown on Figure 2. The borings will be drilled using a Geoprobe or similar type drill rig. The drilling will be directed by a qualified ASE geologist. Undisturbed soil samples will be collected at least every 5-feet, at lithographic changes, and from just above the water table for subsurface hydrogeologic description and possible chemical analysis. The samples will be described by the ASE geologist according to the Unified Soil Classification System. The samples will be collected in brass or acetate tubes using a drive sampler advanced

ahead of the boring as the boring progresses. Each sample will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA certified analytical laboratory.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with an organic vapor meter (OVM). The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the OVM will measure the vapor through a small hole, punched in the bag. These OVM readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

All sampling equipment will be cleaned in buckets with brushes and a TSP or Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon DOT 17H drums for future disposal by the client.

TASK 4 - ANALYZE THE SOIL SAMPLES

At least one soil sample from each boring will be analyzed at a CAL-EPA certified analytical laboratory for TPH-D by modified EPA Method 3510/8015, BTEX and MTBE by EPA Method 8020 and PNAs by EPA Method 8310. The soil samples analyzed will be chosen based on field observations such as odors, staining and OVM readings. If no field indications of contamination are present, the unsaturated sample closest to the water table will be analyzed.

TASK 5 - COLLECT GROUNDWATER SAMPLES FROM EACH BORING AND ANALYZE THE SAMPLES AT A CAL-EPA CERTIFIED ANALYTICAL LABORATORY

A groundwater sample will be collected from each boring. Drilling will be halted at the water table and a Powerpunch or similar type device will be utilized to collect groundwater samples from the borings. The groundwater samples will be contained in 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. The VOA vials will be preserved with hydrochloric acid and sealed without headspace. All of the

samples will be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples, placed in protective foam sleeves, and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

Each groundwater sample will be analyzed at a CAL-EPA certified analytical laboratory for TPH-D by modified EPA Method 3510/8015, BTEX and MTBE by EPA Method 8020 and PNAs by EPA Method 8310.

TASK 6 - BACKFILL THE BORINGS WITH NEAT CEMENT

Following collection of the soil and groundwater samples, the boreholes will be backfilled with neat cement placed by tremie pipe.

TASK 7 - PREPARE A SUBSURFACE ASSESSMENT REPORT

ASE will submit a report outlining the methods and findings of this assessment. The report will be submitted under the seal of state registered civil engineer or geologist. This report will include a summary of all work completed during this assessment including tabulated soil and groundwater analytical results, conclusions and recommendations. Copies of the analytical report and chain of custody will be included as appendices.

SCHEDULE

ASE plans to begin field activities at the site immediately following approval of this workplan by the ACHCSA. Drilling is tentatively scheduled for January 18, 1997.

*Final report due w/in 45 days of
field work*

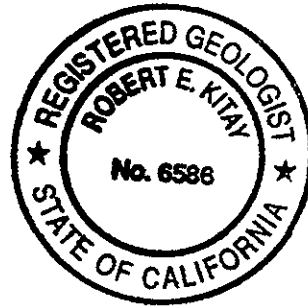
Should you have any questions or comments, please call us at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



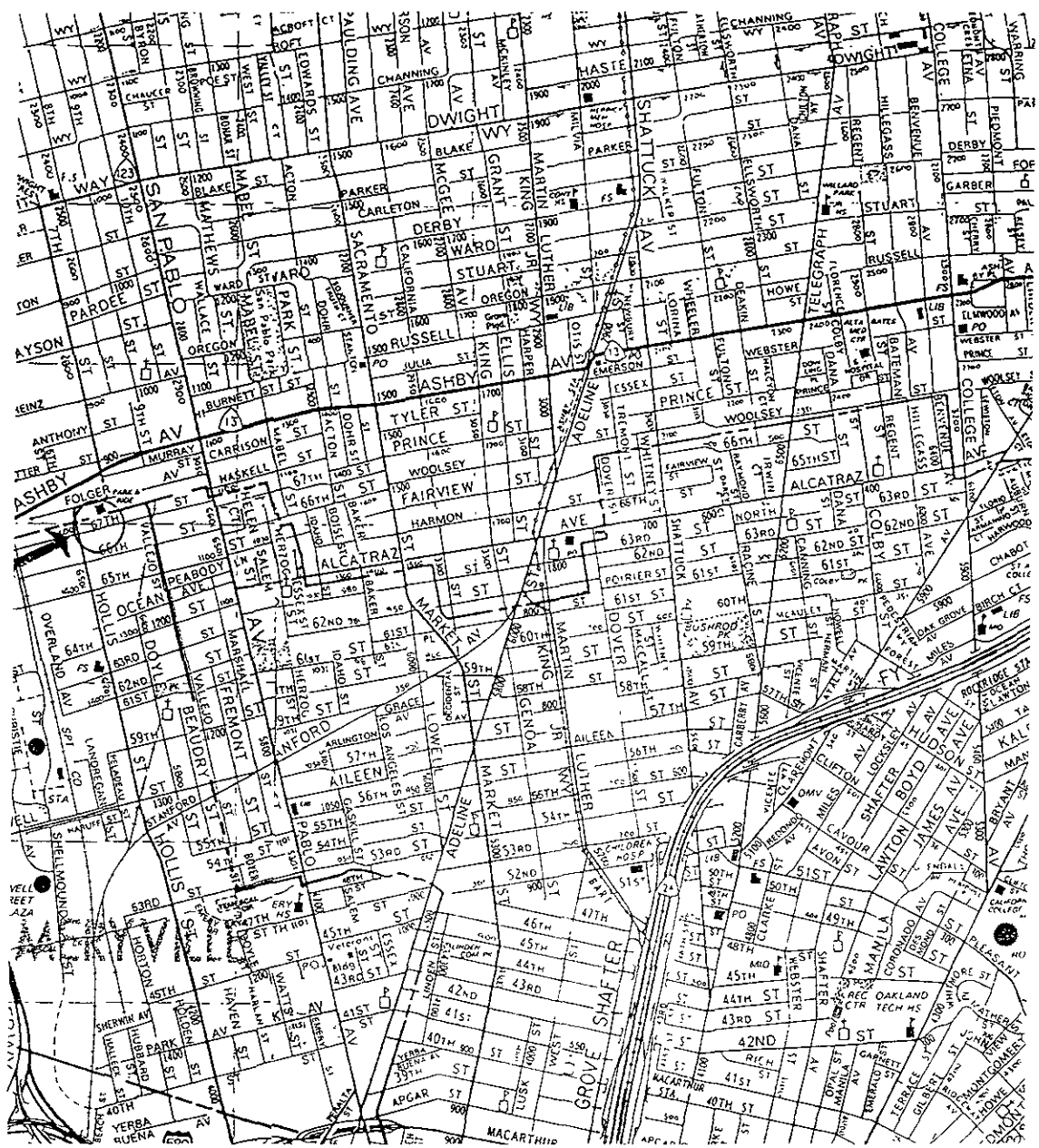
Robert E. Kitay, R.G., R.E.A.
Project Geologist



cc: David Goodearl, Geo M. Martin Company, 1250 - 67th Street,
Emeryville, CA 94608

Ms. Amy Leech, Alameda County Health Care Services Agency, 1131
Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577

Mr. Kevin Graves, California Regional Water Quality Control Board,
San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland,
CA 94612



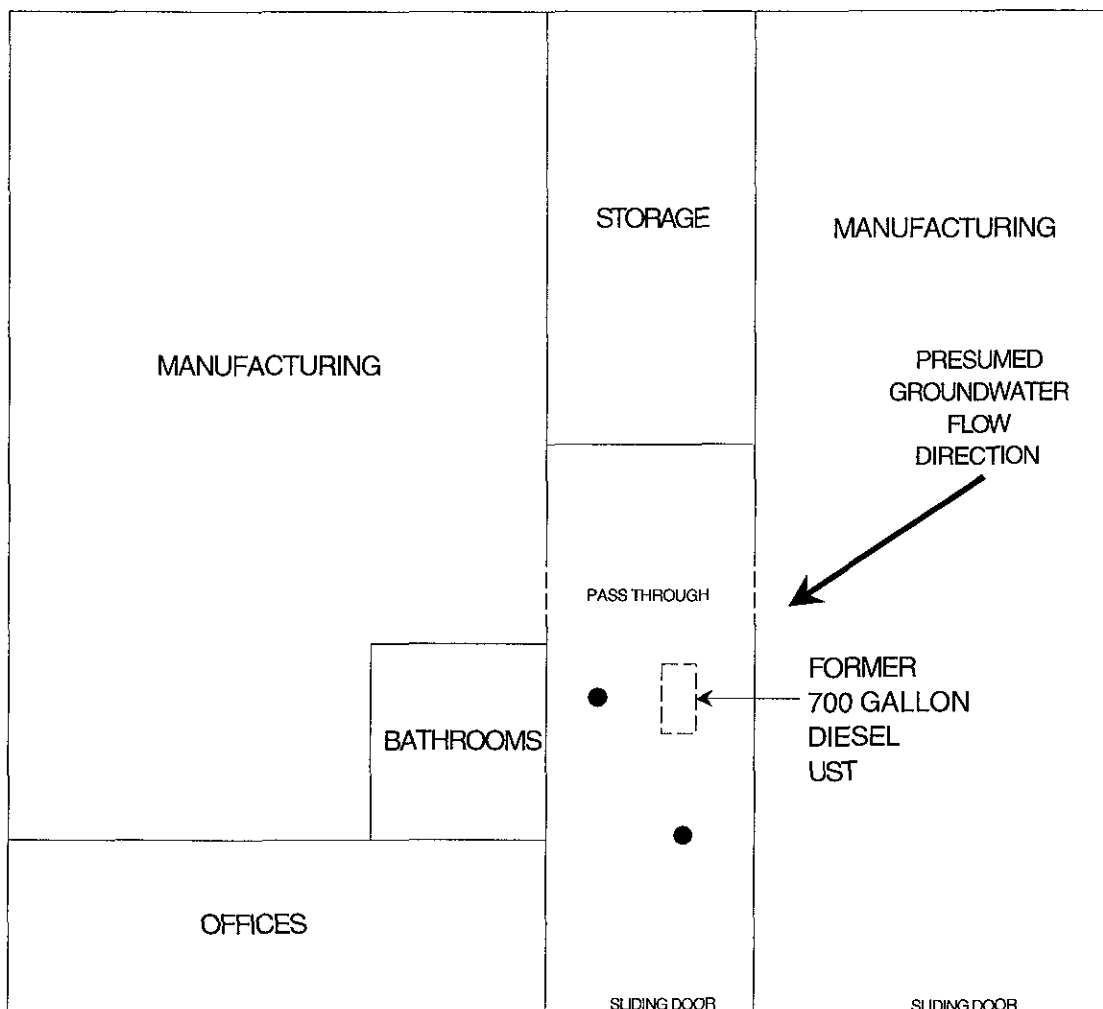
SITE LOCATION MAP
GEO M. MARTIN COMPANY
1308 67th STREET
EMERYVILLE, CALIFORNIA

Aqua Science Engineers, Inc. | Figure 1



NORTH

Scale: 1" = 20'



EXPLANATION

- Proposed Boring Location
- ▭ Former Underground Storage Tank

**PROPOSED BORING
LOCATION MAP**

GEO M. MARTIN COMPANY
1308 67th Street
Emeryville, California

Aqua Science Engineers, Inc. | Figure 2

APPENDIX A

Alameda County Health Care Services Agency Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



StId 318

November 5, 1996

Attn: David Goodearl
Geo M. Martin Company
1250 - 67th St
Emeryville CA 94608

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

Subject: Required Investigations at 1308 - 67th St., Emeryville CA 94608

Dear Mr. Goodearl:

This office has completed a review of Aqua Science Engineers Inc.'s *Underground Storage Tank Removal Report*, dated October 21, 1996, for the subject site. This report documents tank closure and soil excavation activities.

On September 20, 1996, one 700-gallon diesel underground storage tank (UST) was removed from the subject site. Laboratory analyses of the soil sample collected at the bottom of the UST pit at five feet below ground surface (bgs) identified contaminant levels as high as 3,400 parts per million (ppm) Total Petroleum Hydrocarbons as diesel (TPH-D), 6.0 ppm ethylbenzene, and 44 ppm xylenes. Approximately 7.5 tons of contaminated soil was excavated from the tank pit; however, confirmatory soil samples were not collected to verify the lateral extent of soil contamination. Overexcavation reportedly did not occur vertically beneath the former UST (past 5 feet bgs) due to structural limitations.

Guidelines established by the California Regional Water Quality Control Board (RWQCB) require that soil and ground water investigations be conducted when there is evidence to indicate that a release from an UST will impact or may have impacted the groundwater. Therefore, you are required to conduct a **Soil and Water Investigation (SWI)** to determine the lateral and vertical extent and severity of **both soil and groundwater** contamination resulting from the release at the site. The information gathered by the SWI will be used to determine an appropriate course of action (Corrective Action Plan) to remediate the site, if deemed necessary. The SWI must be conducted in accordance with the RWQCB's Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks, and be consistent with requirements set forth in Article 11 of Title 23, California Code of Regulations. The major elements of such an investigation are summarized in the attached **Appendix A**. In addition, the San Francisco Bay RWQCB's *Interim Guidance on Required Cleanup at Low-Risk Fuel Sites* (copy attached) and the ASTM E1739-95 document entitled *Standard Guide for Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites* should be used to evaluate this site.

This Department will oversee the assessment and remediation of your site. Our oversight will include the review of and comment on work proposals and technical guidance on appropriate investigative approaches and monitoring schedules. The issuance of well drilling permits, however, will be through the Alameda County Flood Control and Water Conservation District, Zone 7, in Pleasanton. The RWQCB may choose to take over as lead agency if it is determined that there has been a substantial impact to ground water.

Goodearl
Re: 1250 - 67th St.
November 5, 1996
Page 2 of 2

In order to properly conduct a site investigation, you are required to obtain professional services of a reputable environmental consultant. **All reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil Engineer.**

The SWI proposal (work plan) is due within 60 days of the date of this letter or by January 7, 1997. Once the proposal is approved, field work should commence within 30 days. A report must be submitted within 45 days after the completion of this phase of work at the site.

Please be advised that this is a formal request for a work plan pursuant to **Section 2722 (c)(d) of Title 23 California Code of Regulations.** Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or RWQCB.

If you have any questions or comments, please contact me at (510) 567-6755.

Sincerely,



Amy Leech
Hazardous Materials Specialist

ATTACHMENTS

c: Aqua Science Engineers Inc., 2411 Old Crow Canyon Rd., Suite 4, San Ramon CA 94583
File (ALL)

APPENDIX B

Health and Safety Plan



HEALTH & SAFETY PLAN

for:

**GEO M. MARTIN COMPANY
1308 67th STREET
EMERYVILLE, CA 94608**

prepared by:

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4
San Ramon, California 94583
(510) 820-9391

AQUA SCIENCE ENGINEERS, INC.
HEALTH & SAFETY PLAN
for the
GEO M. MARTIN COMPANY

A. GENERAL DESCRIPTION

Site: 1308 - 67th Street, Emeryville, CA 94608

Work Scope:

AQUA SCIENCE ENGINEERS WILL DRILL THREE SOIL BORINGS AT THE SITE AND WILL COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS.

SAFETY POLICY:

This Health and Safety Plan is written specifically for the Geo M. Martin jobsite located at 1308 - 67th Street, Emeryville, California. All persons on site will follow OSHA safe operating practices as outlined in 29 CFR 1910 and 1926, as well as established guidelines from their respective companies or organizations.

Plan Prepared by: Scott T. Ferriman Date: 01-06-97

Plan Approved by: David Schultz, P.E. Date: 01-06-97

Proposed Start Date: January 1997

Background Review Done? Complete: 01-06-97
Preliminary:

Overall Hazard Level: Serious: Low: XXX
Moderate: Unknown:

Project Organization:

Site Manager for A.S.E.: Scott T. Ferriman
A.S.E. Safety Officer: David Allen
Other A.S.E Personnel: Robert E. Kitay

B. SITE/WASTE CHARACTERISTICS

Waste Type(s): Solid: XXX Sludge: Liquid: XXX Gas:

Characteristics: HYDROCARBON RESIDUALS, TOXIC

Site Parameter:

A MINIMUM BOUNDARY OF THREE FEET SURROUNDING THE BORING LOCATIONS IS TO BE MAINTAINED IN AS MUCH AS IS POSSIBLE.

C. HAZARD EVALUATION

CHEMICAL HAZARDS

Potential chemical hazards include skin and eye contact or inhalation exposure to potentially toxic concentrations of hydrocarbon vapors. The potential toxic compounds that may exist at the site are listed below, with descriptions of specific health effects of each. The list includes the primary potential toxic constituents of diesel known to be on site. Exposure levels and symptoms are taken from the NIOSH Pocket Guide to Chemical Hazards.

1. BENZENE

- a. Colorless, clear, highly flammable liquid with characteristic odor.
- b. High exposure levels may cause acute restlessness, convulsions, depression, respiratory failure. BENZENE IS A KNOWN CARCINOGEN.
- c. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

2. TOLUENE

- a. Colorless liquid with a benzene-like odor.
- b. High exposure levels may cause fatigue, euphoria, confusion, dizziness. TOLUENE IS LESS TOXIC THEN BENZENE.
- c. PEL for a ten hour TWA is 100 ppm.

3. XYLENE

- a. Colorless, flammable liquid with aromatic odors.
- b. high exposure levels may case dizziness, drowsiness, narcosis.
- c. PEL for a ten hour TWA is 100 ppm.

4. ETHYLBENZENE

- a. Clear, colorless, highly flammable liquid with characteristic odor.
- b. High exposure levels may cause irritation to skin, nose and throat, dizziness, constriction in chest, loss of consciousness, respiratory failure.
- c. PEL for an eight hour TWA is 100 ppm.

ALL SUBSTANCES AS THEY EXIST ON SITE ARE EXPECTED TO BE STABLE.
PHYSICAL HAZARDS

Personnel shall maintain the maximum distance possible from the borings while performing their activities. Other on-site hazards include physical injuries due to the proximity of workers to engine-driven heavy equipment and tools. Heavy equipment used during drilling may include a drill rig. Only trained personnel will operate machines, tools and equipment; all will be kept clean and in good repair. Minimum safety apparel required around heavy equipment will include a hardhat, steel-toed boots and hearing conservation devices. ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH OSHA GUIDELINES.

LEVEL OF PROTECTION

A contamination Reduction Zone (CRZ) will be maintained and adjusted as work proceeds and moves around the site. The workers on site will wear level 'D' protective clothing. (This protection level may be upgraded after on-site conclusions of data are completed). THE LEVEL OF PROTECTION FOR PERSONNEL WORKING IN THE AREA WILL BE UPGRADED IF; the organic vapor levels in the operator's breathing zone exceeds 5 ppm above background levels continuously for more than five minutes. **This will be monitored by use of a hand-held Organic Vapor Meter (Gastech 1314 Oxygen/ppm Concentration Meter (PID) calibrated with Hexane).** In this event, personnel protective equipment will include full face respirators with double-cartridge filters for organic vapors and particulates, in addition to hardhat, steel-toed boots and coveralls. If work proceeds in an environment where vapor concentrations exceed 200 ppm, a self contained breathing apparatus or airline respirator will be utilized by the personnel.

Levels of Protective Clothing are defined on the following pages as described in the "EPA Standard Operating Safety Guidelines":

LEVEL A PROTECTION

Components:

- 1) Pressure-demand, supplied air respirator that is MSHA and NIOSH approved. Respirators may be pressure demand, self contained breathing apparatus (SCBA), or pressure demand, airline respirator with an escape bottle for atmospheres with an extreme IDLH.
- 2) Fully encapsulating chemical resistant suit.
- 3) Inner, chemical resistant gloves.
- 4) Disposable gloves and boot covers, worn over the fully encapsulating suit.

5) 2-way radio communications is highly recommended.

LEVEL B PROTECTION

Components:

- 1) Pressure-demand, supplied air respirator that is MSHA and NIOSH approved. Respirators may be pressure demand, self contained breathing apparatus (SCBA), or pressure demand, airline respirator with an escape bottle for atmospheres with an extreme IDLH.
- 2) Chemical resistant clothing which includes overalls and long sleeved jacket or, hooded one or two piece chemical splash suit or disposable chemical resistant one piece suit..
- 3) Outer chemical resistant gloves.
- 4) Inner chemical resistant gloves.
- 5) Chemical resistant, steel toed and shank boots.
- 6) Disposable chemical resistant boot covers.
- 7) Hardhat.
- 8) 2-way radio communications is highly recommended.

LEVEL C PROTECTION

Components:

- 1) Air purifying respirator, full face, with twin cartridge or cannister equipped filters, that are MSHA and NIOSH approved.
- 2) Chemical resistant clothing which includes coveralls or, hooded one-piece or two-piece chemical splash suit or chemical resistant hood and apron; disposable chemical resistant coveralls.
- 3) Outer chemical resistant gloves.
- 4) Inner chemical resistant gloves.
- 5) Chemical resistant, steel toed and shank boots.
- 6) Disposable chemical resistant boot covers.
- 7) Hardhat.

LEVEL D PROTECTION

Components:

- 1) Coveralls.
- 2) Gloves.
- 3) Leather boots, shoes or chemical resistant, with steel toe and shank.
- 4) Safety glasses or chemical splash goggles.
- 5) Hardhat or face shield.

SITE ENTRY PROCEDURES

Any personnel entering the site will observe all conditions set forth by the owners/operators of the property, including vehicle travel speeds, restricted areas and conduct. Eating, drinking, smoking and other practices which increase the probability of hand-to-mouth transfer of contamination is prohibited in the work zone. All field personnel will be instructed to thoroughly wash their hands and face upon leaving the work area for breaks or cessation of day's activities.

DECONTAMINATION PROCEDURES

If required, equipment and personnel decontamination areas will be designated by the Project Manager at the start of the project. To prevent the transfer of contamination from the work site into clean areas, all tools will be cleaned adequately prior to final removal from the work zone. Disposable protective clothing such as Tyvek coveralls, latex gloves, boot covers, etc. will be changed on a daily basis or at the discretion of the Project Manager on site. All disposable protective clothing will be put into plastic bags and disposed of in a proper manner. All respirator cartridges will be discarded and replaced with fresh units on a daily basis, disposal will be in the same manner as the protective clothing. Soil will be stockpiled in an area designated by the Project Manager, to be handled as agreed upon in the scope of work contract with the client.

In the event of a medical emergency, the injured party will be taken through decontamination procedures, if possible. However, the procedures may be omitted when it may aggravate or cause further harm to the injured party. member of the work team will accompany the injured party to the medical facility to advise on matters concerning chemical exposure. The injured person will not transport themselves to the medical facility!

Personnel Protection Level will be Level 'D'. Protective clothing levels may be upgraded in the event that on site conclusions determine a greater than anticipated danger to personnel.

Site Entry: BARRICADES, CONES, OR BANNER GUARD MAY BE ERECTED TO CONTROL FOOT TRAFFIC AWAY FROM THE WORK ACTIVITY.

Decontamination-

Personnel and Equipment: IF REQUIRED, PERSONNEL AND EQUIPMENT WILL BE DECONTAMINATED A PER USEPA STANDARD OPERATING SAFETY GUIDELINES. A SMALLER MODIFIED DECONTAMINATION LINE MAY BE USED DUE TO SPACE RESTRICTIONS.

Work Limitations (time, weather):

NONE ARE ANTICIPATED, HOWEVER, PERSONNEL WORKING ON SITE MAY EXPERIENCE ELEVATED TEMPERATURES DURING THE WORK DAY. IN THE EVENT THAT AMBIENT TEMPERATURES REACH OR EXCEED 80 DEGREES FAHRENHEIT, THE FOLLOWING GUIDELINES ARE RECOMMENDED.

1. Periods of work should be reduced to no less than one hour time frames and separated by breaks intended to reduce personnel stress due to reduced natural ventilation from wearing protective clothing.

2. All personnel wearing level C protective clothing or greater, will be subject to medical monitoring of body temperature after work periods, by the following guidelines;

a. Heart Rate (HR) should be measured by counting the radial pulse rate for 30 seconds and doubling count for the correct pulse rate. This should be done as early as possible in the resting period. The HR at the beginning of the rest period should not exceed 110 beats per minute.

If the HR is higher, the next work period should be shortened by 10 minutes, while the length of the rest period remains the same. If the HR is 100 beats per minute at the beginning of the next rest period, the following work period should be shortened by an additional 10 minutes.

b. Body temperatures should be measured orally with a clinical thermometer as soon as possible in each resting period. Oral Temperatures (OT) should not exceed 99 degrees Fahrenheit. If it does, the next work period should be reduced by 10 minutes while the length of the resting period remains the same. If the OT exceeds 99 degrees Fahrenheit at the beginning of the next work period, the following work period should be reduced by an additional 10 minutes. OT should be

measured at the end of each rest period to ensure that the body's temperature has dropped below 99 degrees Fahrenheit.

Body Water Loss (BWL) from sweating, could result in dehydration and further complications and stress on personnel working in protective clothing under adverse weather conditions. It is strongly recommended that plenty of stress relief beverages be available on site to replace body fluids. Commercial drink mixes that provide electrolyte balancing solutions or water are adequate for replacing body fluids.

Alternate methods of heat stress reduction can be made available such as,

- Portable showers or hose-down facilities,
- Shelter cover to protect against direct sunlight,
- Rotating teams of personnel wearing protective clothing,
- Performing extremely arduous tasks early in the workday.

EMERGENCY INFORMATION

In the event of an injury or suspected chemical exposure, the first responsibility of the Project Manager will be to prevent any further injury. This objective will normally require an immediate stop to work until the situation is remedied. The Project Manager may order the evacuation of the work party. Other primary responsibilities in the event of an accident will be the first aid and decontamination of the injured team member(s). The injured party will be moved to a designated safe area and initial first aid will be rendered.

Employees are asked to make every effort and take personnel responsibility to prevent accidents involving machinery or any other aspect of the job, either by individual action or by notifying the Project Manager immediately of any unsafe condition that may exist.

In the event of an unexpected hazardous material discovery on site, the following actions will be taken by any employee involved;

1. The person having uncovered the unexpected material will notify the Project Manager and other workers of the danger. The site will be cleared of personnel if deemed necessary by the Project Manager. If site evacuation is required, appropriate local agencies such as the Fire Department or Health Department will be notified as well.
2. Immediate action will be taken to contain the hazardous material, provided the workers involved are properly attired with adequate protective clothing to avoid exposure.

3. Proper containment procedures will be determined for the hazardous material encountered prior to cleanup commencing. All personnel involved in the containment effort will be properly protected to prevent exposure. Backup personnel will be similarly protected while monitoring the work being done for any additional dangers.

4. The container(s) will be staged on site, away from the major activity areas and in such a way that if loss of containment occurs, the material will be withheld from further spread by a secondary containment berm or vessel.

5. The owner or agent controller of the property will be notified promptly of the incident and will be apprised as to the options available for proper disposal.

EXPOSURE SYMPTOMS AND FIRST AID

<u>EXPOSURE ROUTE</u>	<u>SYMPTOMS</u>	<u>FIRST AID</u>
Skin	Dermatitis, itching redness, swelling	Wash immediately with soap and water contact ambulance if evacuation is needed.
Eyes	Irritation, watering	Flush with water, transport directly to emergency room, if necessary.
Inhalation	Vertigo, tremors	Move person to fresh air, cover source of exposure.
Ingestion	Nausea, vomiting	Call Poison Control Center, DO NOT <u>INDUCE</u> VOMITING, transport to medical facility.

Local Resources:

HEALTH AND SAFETY CONTACT FOR ASE:

Scott Ferriman
Office: (510) 820-9391
Police | : 911
Fire |

POISON CONTROL: SF (415) 476-6600
SJ (800) 798-0720

ROUTE TO NEAREST HOSPITAL:

Exit site East on 67th Street
Left on San Pablo Avenue
Right on Ashby Avenue

HOSPITAL IS ON THE RIGHT SIDE (see attached Hospital Location Map)

Hospital: Alta-Bates Medical Center
2450 Ashby Avenue, Berkeley, CA 94705
PHONE: 510-204-1303

AQUA SCIENCE ENGINEERS INC.

HAZARDOUS MATERIALS SITE SAFETY PLAN

The below signed personnel have read this plan, understand it's contents and agree to follow the guidelines set forth;

EMPLOYEE NAME (print)

SIGNATURE

DATE