

ENVIRONMENTAL PROTECTION 96 JUL 16 PM 2: 27

Work Plan for Preliminary Site Assessment

for

June 96

3744 Depot Road Hayward, CA

PERFORMED FOR

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PREPARED BY:

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AND

Ms. Amy Leech Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Workplan for Preliminary Site Assessment: Subject: 3744 Depot Road, Hayward, California

Please find attached the Workplan for a Preliminary Site Assessment at 3744 Depct Road, Hayward, California. PIERS Environmental is pleased to be of service to you ch this project. If you have any questions, please do not hesitate to call.

Very *truly* yours, art G.\Solomon Principal

Lawrence D. Pavlak, C.E.G. No 1187



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FIGURES:

- Site Vicinity Map
 Site Plan with Estimated Boring Locations

1.0 INTRODUCTION

This Investigative Workplan has been prepared by PIERS Environmental Services, (PIERS) to further assess soil and/or groundwater contamination at a former Underground Storage Tank (UST) site, located at 3744 Depot Road, Hayward, California. The site is located in a commercial/industrial district of Hayward, California.

2.0 SITE HISTORY AND ENVIRONMENTAL SITUATION

The subject site is currently vacant, and in the process of being leased. A 500 gallon waste oil tank and a 1000 gallon gasoline tank were apparently excavated and removed from the ground in the late 1980's by the previous tenant without a permit. The tanks were subsequently disposed of by the tenant. No soil samples were retrieved at the time of removal, and no tank closure report submitted. Subsequent to the tank removals, the Alameda County Department of Environmental Health (ACDEH) became aware of the situation, and requested that the property owner collect samples from the tank excavations. An environmental consultant apparently collected the required samples, however, a report on the sample results was not forwarded to the agency. The consultant has since closed the business, and no records are available. The previous tenant and property owners (Patricia and Kenneth Hein) are now (assumed) bankrupt, and the property was foreclosed on by the lender (Jack Lotz and Jesse Allen). The property was recently sold to River Bend Properties, Inc.. Both the former and current owners are now considered the Responsible Parties for the environmental requirements at this site.

PIERS Environmental Services performed a "Limited Phase II Environmental Assessment" on the Property in August 1995. The PIERS report on this assessment is dated September 12, 1995, and is on file with the Alameda County Department of Environmental Health (ACDEH). In the PIERS investigation, five exploratory borings were installed at the site. Soil samples were collected from each boring, and groundwater grab samples were collected from the down-gradient boring at each tank pit. A third groundwater grab sample was collected from a well discovered along the western property line by Amy Leech (ACDEH representative) during her site visit. An overview of the <u>significant</u> findings resulting from laboratory analyses of these soil and groundwater samples is as follows:

- Up to 3300 Parts Per Million (PPM) of Oil and Grease, and 2795 Parts Per Billion (PPB) of Semi-Volatile Organic Compounds was discovered in soil sampled from the immediate area of the former waste oil tank. 390 PPM of Oil and Grease, and up to 600 PPB of Volatile Organic Compounds were detected in a sample of groundwater collected from the immediate area down-gradient from the former waste oil tank.
- Groundwater sampled in the immediate area down-gradient from the former gasoline tank was found to contain 43,000 PPB of Gasoline, and 300 PPB of Benzene.

In order to meet the requirements of the ACDEH and the Regional Water Quality Control Board (RWQCB), it will be necessary to delineate and assess the extent of soil and groundwater impact, and to formulate a plan for site closure. This workplan is for performing the preliminary investigation necessary to fufill these requirements.

3.0 PURPOSES AND OBJECTIVES

The objective purposes of the work will be to help delineate the areas of soil and groundwater on site which are impacted by chemical constituents, and to formulate a remedial plan for obtaining site closure.

4.0 INVESTIGATION SCOPE OF WORK

The investigation will include drilling four exploratory borings and converting two of them to groundwater monitoring wells. The scope of work will include soil and groundwater grab sampling from the exploratory borings, installation of the two groundwater monitoring wells, development and sampling of the two new wells and the existing well located on site, and hydraulic gradient characterization.

4.1 Location of E-borings and Monitoring Wells

Approximate locations for the borings are shown on Figure 2. These locations have been selected based on an evaluation of previous investigation data.

4.2 Drilling, Sampling, and Well Installation Methods

Prior to initiating drilling, monitoring well permits will be obtained from Zone 7 Alameda County Flood Control and Water Conservation District.

Prior to mobilization of the drill rig on-site, and prior to leaving the site. all associated equipment and well installation devices will be thoroughly cleaned to remove all sola oil, grease, mud, tar, etc. The cleaning process will consist of high pressure steam cleaning of the drilling equipment and a high pressure hot water final rinse. Before drilling the boring, all drilling equipment will be steam-cleaned.

A nominal 8-inch diameter boring will be advanced using a truck mounted hollow stem auger. Soils will be visually inspected and logged using the Unified Soll Classification System. Soil samples will be collected at minimum 5 foot intervals, beginning at 5 feet below grade surface (ft. BGS) and continued to the depth of groundwater. Olfactory and visual observations of petroleum hydrocarbons will be noted on the logs.

4.2.1 Soil Sampling Procedures

Soil sampling will begin at a depth of approximately 5 feet BGS and continue at minimum 5 foot depth intervals to the saturated zone. Soil amples collected from Borings P-1 and MW-1 will be analyzed for TPHg; and BTEX by EPA Methods 8015/8020. Soil samples collected from Borings P-2 and MW-2 will be analyzed for TPHg, and BTEX by EPA Methods 8015/8020, Oil and Grease by EPA Method 418.1, Semi-Volatile Organic Compounds by EPA Method 8270, and Volatile Organic Compounds (VOC's) by EPA Method 8240.

- 1. Soil sampling will commence at a depth of 5 feet BGS. The samples will be taken at 5 foot increments and at intervals of geologic interest or obvious contamination. Additional sampling and/or continuous coring may be done at the discretion of the supervising geologist. All logging will be done using the Unified Soil Classification System, together with pertinent geologic observations.
- 2. Soil sampling tools (split spoons, liners, etc.) will be disassembled, steam-cleaned or cleaned in soapy (TSP) water, rinsed with clean tap water and finally rinsed with tap or distilled water, and air-dried prior to taking each sample. The cleaned tools will then be reassembled with similarly cleaned, dry brass sample liners and carefully lowered into the hollow stem augers for the collection of the next sample. The drill rig will be decontaminated as needed and at the discretion of the logging geologist.
- 3. The soil in the lowermost of brass liners in the sampling tool (if in good condition) will be retained for chemical testing. The samples will be labeled and sealed in the field in their original liners. Sample liner ends will be covered with Teflon tape or aluminum foil, with clean cap plugs.
- 4. The remaining soil will be extruded from the other liners in the field and lithologically logged. Sampler shoe cuttings, drill rig response and bit penetration rate will also be logged. The cuttings and the soil samples not retained for chemical analysis will be placed in 55-gallon drums until their chemical disposition is determined, and then properly disposed of.
- 5. All samples retained for chemical analysis will be stored on ice in a clean, chilled cooler-box for transport to the Laboratory.

4.2.2 Groundwater Grab Sampling

Borings P-1 and P-2 will be extended to approximately 1 foot below the static leve of groundwater, and grab samples of the groundwater from each boring will be collected. A new disposable bailer will be inserted into each boring, and samples retrieved. The samples will be immediately decanted into clean 40 mil. VOA sample bottles leaving no head space, logged, labeled, and placed on ice for transportation to Entech Analytical Labs - a State Certified Laboratory. Water samples collected from boring P-1 will be analyzed for TPHg, and BTEX by EPA Methods 8015/8020. Water samples collected from boring P-2 will be analyzed for TPHg BTEX by EPA Methods 8015/8020, Oil and Grease by EPA Method 418.1, Semi-Volatile Organic Compounds (SVOC's) by EPA Method 8270, and VOC's by EPA Method 8240.

4.2.3 Conversion to Groundwater Monitoring Wells

Borings MW-1 and MW-2 will be extended to a depth 15 feet below first encountered groundwater or until an aquitard is encountered - which ever comes first.

The final choice of screened interval will be selected by the site geologist on the basis of geologic field observations during drilling. The well casing and screen for the monitor well will be constructed with 2-inch diameter, Schedule 40, flush-joint threaded material. The PVC screens will consist of factory-milled 0.020 inch slots. The screen will be installed at the interval from the bottom of the boring to approximately 5 feet above the static level of groundwater.

A sand pack of clean washed Monterey 2/12 sand will be placed adjacent to the entire screened interval and will be extended a recommended minimum distance of 2 feet above the top of the screen. The sand pack will be placed by carefully pouring sand down the annulus between the hollow stem auger and the well casing. The auger will be raised periodically and an auger flight removed to allow the sand to fill the annulus between the casing and the borehole wall.

A 1 foot thick bentonite pellet seal will be placed above the sand pack. The seal will be placed in the same manner as the sand pack. The bentonite will be hydrated with clean water at the quantity of 1 gallon per pound of bentonite. The bentonite will be hydrated three times and allowed to swell for a minimum of 45 minutes.

The annulus above the bentonite seal will be grouted with a cement/bentonite grout. The bentonite content of the grout will be approximately three percent by weight. The grout will consist of clean water mixed with Portland cement and powdered bentonite. The grout will be placed in the same manner as the sand pack, or after the auger flights are entirely withdrawn from the borehole.

The well will be completed by adding a locking PVC cap and subsurface traffic-rated utility box set at or slightly above grade in concrete.

4.3 Monitoring Well Development and Sampling

4.3.1 Monitor Well Development

After the concrete and cement/bentonite grout have set for a minimum of 24 hours, the new wells will be developed by swabbing, surging, and/or bailing with clean equipment in order to prepare the well for collection of a representative groundwater sample. A minimum of 10 casing volumes will be purged from the well, or until the water is relatively clear. Electrical conductivity (EC), pH, and temperature will be measured periodically to ensure that these parameters stabilize during the course of development. Water generated during development will be stored separately, on-site, in labeled 55 gallon drums pending analytical results.

4.3.2 Sampling Procedure

A groundwater sample will be obtained from each of the new monitoring wells (MW-1 and MW-2), and from the existing well (MW-3). The wells will be sampled after the water levels have re-equilibrated from development. Groundwater samples will be collected as follows:

Each well will be bailed until the volume of water withdrawn is equal to at least four casing volumes. To assure that a representative groundwater sample is collected periodic measurements of the temperature, pH and specific conductance will be made. The sample will be collected only when the temperature, pH, and/or specific conductance reach relatively stable values.

A hand operated bailer or a surface pump will be used for evacuating the well casing (purging) of the monitor well. Water samples will be collected using a new, disposable bailer. An effort will be made to minimize exposure of the sample to air.

Sample containers will be obtained directly from the analytical laboratory or other approved source.

To ensure that the analytical laboratory has a sufficient volume of sample for analyses a duplicate sample will be collected. This sample will not be analyzed except as deemed necessary by the laboratory. The duplicate sample will require that a double volume of water is collected. Both samples will be labeled identically.

Sample containers will be labeled with self-adhesive tags. Field personnel will label each tag, using waterproof ink, with the following information:

Sampling location and number, project name, date and time samples were collected, treatment (preservatives, filtered, etc.) name, or other identifier of the sampler.

Subsequent to collection, the samples will immediately be stored on ice in an appropriate ice chest. Samples will be transported under Chain-of-Custody procedures to Entech Analytical Laboratory, Inc., a State-certified laboratory. A field log book or individual log sheet shall be maintained throughout the sampling operations.

After samples have been collected and labeled, they will be maintained under Chain-of-Custody procedures.

The field sampler will sign and date the Chain-of-Custody Record when custody is transferred. The original imprint of the Chain-of-Custody Record will accompany the sample containers. A duplicate copy will be retained by the consultant's representative.

Sample bottles, bottle caps and septa will be cleaned by the analytical laboratory subcontractor using standard EPA-approved protocols. Sample bottles, bottle caps, and septa will be protected from solvent contact or other contamination between time of receipt and time of actual usage at the sampling site.

Sampling equipment will be cleaned after its use at each sampling location. Thermometers, pH electrodes, and conductivity probes will also be cleaned after the sampling of each well. Cleaning shall be accomplished as follows:

Scrub with a detergent (preferably TSP) water solution; Rinse with potable water,

Care shall be taken to collect all excess water resulting from the sampling and cleaning procedures. The excess water will be contained in a pre-labeled 55-gallcn drum on-site pending receipt of laboratory analyses.

4.3.3 Laboratory Analyses

The following analyses will be performed by State Certified Laboratory congroundwater samples obtained from the monitor wells:

- MW-1: TPHg (EPA Method 8015/8020); BTEX (EPA Method 602)
- MW-2: TPHg, and BTEX by EPA Methods 8015/8020/602, Oil and Grease by EPA Method 418.1, Semi-Volatile Organic Compounds by EPA Method 8270, and Volatile Organic Compounds by EPA Method 8240.
- MW-3: Oil and Grease by EPA Method 418.1.

4.4 Characterization of Horizontal Groundwater Gradient

In order to obtain accurate groundwater elevations, monitoring well head elevations will be surveyed by a California Registered Civil Engineer to an accuracy of 0.01 feet. The elevation for the new wells will be taken from an existing City of Hayward bench mark located off-site. Water levels in each of the monitor wells will be measured within a one hour period. The water surface elevations in the wells will be calculated using the survey data. Then, the horizontal hydraulic gradient will be calculated based on accurately determined well locations. The gradient calculated will include a magnitude and direction.

4.5 Reporting

A report will be prepared which documents this Preliminary Site Assessment including boring logs, well development and sampling field notes, chain-of-custodies, and laboratory reports. The report will include recommendations on additional investigation or interim remedial actions, if applicable. The report will be submitted to the client.

4.6 Quarterly Monitoring

Quarterly monitoring of the monitoring wells will be conducted at the site. Included in quarterly monitoring will be sampling of groundwater from monitoring wells according to the procedure outlined above in sections 4.3.2 and 4.3.3 above. A horizontal hydraulic gradient will be calculated for the site based on the water level measurements in the monitoring wells.

Finally, a report documenting the quarterly sampling will be prepared for submission to and acceptance by both the client and the regulatory agencies (Alameda County Department of Environmental Health and San Francisco Regional Water Quality Control Board).

5.0 SITE SAFETY PLAN

A site specific safety plan will be prepared by the consultant prior to initiation of the field activities. The site safety plan will comply with appropriate federal and state regulations for worker safety and hazardous material handling, transport, and disposal. The site safety plan will consider possible worker exposure during drilling and sampling operations in accordance with applicable OSHA standards. The following *General* Safety Plan will be as follows:

Introduction

The "General Work Site Safety Plan" is to be read by all employees of the contractor who will be working in the field. The safety procedures outlined in the plan are to be followed at all times while on the job site. A site specific supplement will be prepared for each work site for site specific hazards. Additionally, the safety procedures and precautions stated in the CAL/OSHA references listed at the end of this plan are to be implemented on all jobs.

Work Sites - General

Underground tank removals and related remedial work and repairs, soil excavation and remediation, tank installations, groundwater treatment ponds, and service station maintenance and rehabilitation, industrial facility rehabilitation and upgrade, exploratory drilling and groundwater well installations.

Safety Plan Objectives

To provide pertinent knowledge and accepted safe practice standards for working in the environment of underground storage tanks and related industrial facilities.

Hazards

Potential hazards that have the potential to pose an immediate danger to life and health are as follows. The combination of these conditions may not be immediately obvious or identifiable.

Chemical exposure

The following petroleum products and/or potentially hazardous materials may be expected to be encountered at the job site:

diesel fuel gasoline fuel various heating oils waste automobile oil solvents acids

The most likely route of exposure to these materials is through skin contact and/cr air/vapor inhalation. The overall hazard level to chemical exposure is usually low requiring EPA protection level equipment of "D" under normal situations, with leve. "C" equipment available on standby.

Fire and Explosion

Underground storage tanks and their related piping and facilities make a flammable and potentially explosive environment. Sparks from equipment or open flames are direct hazards. The purging of explosive fumes from an underground storage tank is a hazardous procedure that demands careful safety precautions and monitoring of low lying areas.

Oxygen Deficiency

Oxygen deficiency may result from the displacement of oxygen by another gas as during the purging of underground tanks. Confined spaces or low lying areas are particularly vulnerable to oxygen deficiency. At work sites, less than 19% oxygen is considered indicative of oxygen deficiency.

Physical Safety Hazards

Holes or ditches, sharp objects, slippery surfaces, steep grades, unstable surfaces, and precariously positioned objects can create safety hazards. Any excavation is an inherently hazardous area. The edge of excavations are particularly unstable and hazardous. Other hazards may include heat exhaustion and heat stroke, slung and swinging equipment and material, moving machines and vehicles.

Electrical Hazards

Underground work potentially brings workers into the environment of underground gas and aerial and underground electric utilities. An effort must be made to locate all underground gas and electric utilities prior to the start of work. (Call Underground Service Alert Prior to ANY Subsurface Work.)

General Procedure

This General Site Work Safety Plan is company policy and shall be implemented on all jcb sites. This General Plan as well a Site Specific Health and Safety Plan will be included in the field work folder. The safety plan is to be read prior to beginning work, with all safety procedures implemented. At the job site, but prior to the start of work, the project manager is to conduct a brief "tailgate" meeting to discuss the safety plan with all workers. At this time a work zone is established and barricaded as well as posted with signs. Normal protection level "D" equipment is required of all personnel entering the work area.

If the Site Specific Health and Safety Plan requires EPA protection level "C" equipment, then an exclusion zone is additionally established wherein no worker or personnel may enter without level "C" protection, which includes a full-face or half-face respirator. During the course of the job unexpected hazards or chemicals may be encountered. Work is to be halted until the hazard is identified and proper safety precautions are implemented, which may include an upgrading of the protection level equipment required.

Instrumentation

The following instrumentation will be at the site to monitor the air/vapor hazard exposure: Gastechtor Hydrocarbon Surveyor Drager tubes with air pump (BTEX)

The instrumentation is certified "intrinsically safe" by the manufacturers against the initiation of explosion. The components to be monitored may include:

hydrocarbon vapors LEL % oxygen BTEX

Monitoring Procedures

Air in and around the work site will be monitored as needed using the Gastechtor and SKC/Drager Tubes. Initial surveying of the air will commence prior to the removal of the surface materials to monitor for hydrocarbon vapors, using the Gastechtor. Additionally, the air is to be monitored upon the excavation of the surface materials, during the excavation of the tank, upon evidence of soil contamination in the excavation (via visual observation or by instrumentation readings), and when an increase in hydrocarbon odors in the work area is noticed, during any phase of the job.

Air will be additionally monitored for benzene if ambient air hydrocarbon vapors exceed (50) ppm. Toluene, Ethyl-benzene, and Xylenes may also need to be monitored. In addition to the monitoring of ambient air, specified areas are to also be monitored; the bottom of the excavation and/or any other "low-lying" areas where hydrocarbon vapors can accumulate.

Action Levels

PEL = permissible (8) hour exposure limit

hydrocarbon vapor > 300 ppm PEL

LEL > 10%

Oxygen > 19.5%

Benzene > 10 ppm PEL, 50 ppm ceiling

Toluene > 500 ppm ceiling

> 100 ppm PEL,

> 100 ppm PEL

Ethyl-benzene > 100 ppm PEL 150 ppm ceiling

Xylenes 300 ppm ceiling

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Action Procedures

During the normal course of work, EPA protection Level "D" PPE equipment is to be worn. The following procedures are to be taken when PEL's are approached or exceeded:

An exclusion zone is established.

All personnel in the exclusion zone must have a half-face respirator on their person.

Additionally, if Benzene levels exceed (10) ppm, a full-face respirator must be worn in place of the half-face respirator.

If ceiling levels are exceeded, the EPA protection level "C" equipment is required.

All respirators must be NIOSH approved, canister equipped for all organic vapors up to (1000) ppm.

The area is to be continuously monitored while wearing the respirators.

If (1000) ppm levels are exceeded, work must stop and will not commence again until determined safe, or EPA protection level "B" or "A" equipment is utilized.

Chemical-resistant clothing (coveralls and gloves) must also be worn if skin contact of these materials during the job is prevalent. Workers in the immediate work area must at all times wear work clothes, or cotton coveralls, work gloves and boots, and hard hats. Safety goggles are to be worn during all drilling operations, hand coring sampling, and where a reasonable probability that splash hazard eye exposure to product is likely. If LEL% is greater than (10) in and around the tank, work must not commence until determined safe and/or LEL% is less than (10). If oxygen levels in the immediate work area are less than (19.5%), work must stop and not commence until determined safe and/or levels are greater than (19.5%).

Symptoms of Acute Overexposure

Gasoline and diesel fuel, various heating oils, waste automotive oil, and associated hydrocarbon vapors may be irritating to the skin, eyes, and respiratory tract. Fuel vapors may effect the central nervous system and may cause headaches and dizziness. Oxygen deficiency may cause dizziness.

First Aid Procedures - General

All personnel will be trained in general first aid procedures. the following general procedures are incorporated as possible situations which may arise at sites. In all cases, an injury report will be prepared by the Company Safety Officer within 24 hours of the incident.

Eye contact: Flush eye with clear water for (15) minutes or until irritation subsides. See a Physician immediately.

- Skin contact: Wash thoroughly with soap and water.
- Inhalation: Remove from area away from vapor/exposure. Call physician and start resuscitation immediately if breathing has stopped.
- Ingestion: Do not induce vomiting, call physician and emergency medical response immediately.
- Oxygen deficiency: Never enter an enclosed area. Move out of oxygen deficient area into fresh air. Call physician and resuscitate immediately if breathing has stopped.

Cancer Hazard

Benzene is a major component of gasoline fuel and has been identified as a known carcinogen. The American Conference of Government Industrial Hygienists (ACGIH) suspects benzene of having carcinogenic potential for man. The National Institute for Occupational Safety and Health has identified benzene as a chemical that should be treated as an occupational carcinogen.

Site Awareness

Responsiveness to changing site conditions is essential to recognizing and maintaining proper safety procedures. It is impossible to write a safety plan that covers every possible situation that could be encountered during an underground tank removal. Site workers and supervisors must be continuously alert for new conditions that require increased safety protection.

General Physical Site Hazards

Explosive vapors can accumulate in isolated areas of the site and within the tark and excavation. Avoid striking the tank or piping at all times. Do not enter excavations greater than (5') in depth without shoring or sloping at any time.

NEVER horseplay in the work. Any unsafe practice will not be tolerated and may be cause for disciplinary action.

Tank tops and plastic sheeting can be slippery; take care when working on top of the tank or plastic sheeting.

Use the proper tools and use the tools properly. Use tools so as not to create sparks.

Take care in working in and around the tank excavation; beware of tripping hazards. Keep spoil piles and tools greater than (2') away from the edges of excavations. Do not jump onto the top of exposed tanks.

Always look for possible additional unknown underground utilities during the tank excavation and drilling operation. Use USA Underground Service to search for utilities prior to the start of ANY excavation.

Keep a safe distance from heavy equipment/objects during the excavation activities. Always wear a hard hat, steel toed shoes or boots and eye protection on the job site when within the work zone.

Be sure that you are in sight of equipment operators while working around heavy equipment. Conduct non-work-related conversations outside of the work zone.

Do not eat or drink on-site in the work area. Be sure to wash hands prior to eating. No smoking in the work area. Smoking will be done in the designated areas, and eating in the break area.

Limit exposure to noisy equipment or wear ear plugs when working on or near backhoes, pavement breakers, compressors, etc.

Inspect soil stability hazards of the tank excavation. NEVER enter an excavation deeper than five (5) feet. If soil stability appears unstable or if personnel must enter an excavation greater than (5') deep, the excavation will first be stabilized by sloping the edge of the excavation to 1:1, shoring, or other equivalent methods.

Safety/Emergency Equipment List

Site specific health and safety plan. Fire extinguishers (2 minimum). Respirators, full and half face, fitted to employees. Respirator canisters and spare canisters for organic vapors. Safety glasses and/or goggles. Chemical resistant coveralls. Chemical resistant rubber gloves. Chemical resistant rubber gloves. Chemical resistant rubber boots. Hard hats. Steel-toed boots. Gastechtor Hydrocarbon Surveyor. SKC/Drager tube air sampler kit. First aid kit. Eve wash kit.

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Push broom. Square shovel. (3) bags of absorbent material. (1) 55 gallon drum with ring-lock lid. Plastic sheeting. Water hose. 5-gallon bucket. Site Resources- To be made available at each job site are a telephone, electric power, and water.

Emergency Phone Numbers - General

Fire Dept.	911
Ambulance	911
Police	911
Poison control center	415-428-3428
Chem Trac	800-424-9300
EPA emergency response	415-974-7511
Office of emergency services	800-852-7550
Emergency response (Erickson)	415-235-1393

Emergency contacts

Stuart G. Solomon (408) 559-1248 or (408) 286-2154

Eben E. Calder (408) 559-1248 or (408) 257-2526

References Available for Reading By All Employees

- 1) United States Environmental Protection Agency (EPA), 1985 Protecting Health and safety at Hazardous Waste Sites: An Overview, in reference area, read completely.
- California Occupational Safety and Health Program (Cal/OSHA), 1986, Cal/OSHA Guide for the Construction Industry, in reference area, read completely.3) National Institute for Occupational Safety and Health, 1985, NIOSH Pocket Guide to Chemical Hazards, in reference area, learn how to read required safety equipment and procedures for any chemical hazard.

6.0 CERTIFICATION

This project will be managed by either a registered civil engineer or registered geologist in the State of California. The final report of findings will be certified by a registered professional.

If you have any questions regarding this scope of work, or wish to add to or alter the scope of this investigation, please do not hesitate to call Stuart G. Solomon at (408) 559-1248 so I may resubmit any revisions.

Respectfully submitted this 2nd day of July, 1996.





not to scale!