



96 AUG 30 PM 2:41

August 21, 1996

Ms. Ann Marie Holland
1498 Hamrick Lane
Hayward, CA 94544

RE: Response to Alameda County Health Care Services Agency
Letter dated July 25, 1996 - 16301 et al. East 14th St
San Leandro, CA

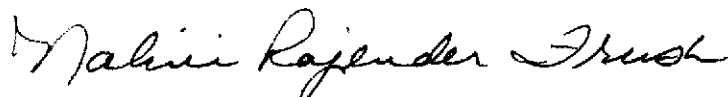
Dear Ms. Holland:

Attached please find a copy of the **Work Plan for Tank Removal and Soil and Groundwater Investigation** for the above-referenced site. Also attached is a proposed schedule of activities. The Work Plan and schedule are in response to the above-referenced letter. As you know, Alameda County is very insistent that the "responsible parties" proceed immediately with the site investigation and remediation activities, including the removal of the storage tanks on the subject property.

Please review the Work Plan and schedule, sign it where indicated and forward it directly to Mr. Scott Seery at the Alameda county Health Care Services Agency.

Please contact us if you have any questions.

Very truly yours,



Nalini Rajender Frush

cc: Mr. Scott Seery, ACHCSA
Ms. Barbara Holland



August 20, 1996

Mr. Scott Seery
Hazardous Materials Division
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94501

RE: Compliance Schedule and Supplemental Information
16301 et al. East 14th Street, San Leandro, CA

Dear Mr. Seery:

This is in response to your letter dated July 25, 1996, addressed to, among others, Ms. Barbara Holland, in which you requested a proposed compliance schedule for the completion of certain environmental tasks at the above-referenced site.

Ms. Barbara Holland has retained Compliance & Closure, Inc. (CCI) to assist her with the environmental issues related to the subject property.

Tasks

① Attached is a Work Plan for Soil and Groundwater Investigation at the subject site and a proposed schedule for the task. The Plan addresses the removal of the underground storage tanks. The aboveground tanks, which currently pose a minimal threat to the environment, will be removed at a later date. The monitoring and reporting activities are continuing and will continue on a quarterly basis until further notice. A copy of the July 1996 Quarterly Report is also attached herewith.

As you know, Ms. Barbara Holland has expended considerable funds (over \$45,000.00) for environmental investigations at the site, despite the fact that she has limited finances. Although she acquired portions of the property through a divorce settlement and at no time was involved with the site activities that contributed to the contamination at the site, Ms. Barbara Holland has been the only party who has been and is acting reasonably and responsibly and is attempting to clean up the site. Ms. B. Holland does expect the Jack Holland Sr. Estate (the Estate) and Ms. Ann Marie Holland to be responsible for and pay its share of all investigation and remediation work at the site, and Ms. Barbara Holland fully intends to collect all monies owed to her by the Estate.

ENVIRONMENTAL
PROTECTION
95 AUG 26 PM 4:10

Holland Work Plan
Page 2

The Work Plan and schedule have been submitted to both Ms. Barbara Holland and Ms. Ann Marie Holland, as is evidenced by the attached copies of transmittal letters. We have already received an acknowledgement of and agreement with the Work Plan and schedule from Ms. Barbara Holland. Ms. Ann Marie Holland is to send her acknowledgement and agreement directly to you.

CCI submitted to your office certain documentation that substantiated Ms. Barbara Holland's position that her sons, Jay and Guy Holland, have no property interest in or to the subject property and are not and should not be considered responsible parties with respect to the environmental investigation and remediation at the subject site. Please remove the names of John M. Holland IV and Guy Holland from the list of responsible parties for this site.

In addition, two other issues were briefly discussed with the Pre-Enforcement Review Panel on July 24, 1996. One issue dealt with the UST Cleanup Fund (Fund) application and whether Ms. Holland intended to apply to the Fund. Please be advised that CCI is continuing to assist Ms. Barbara Holland with the application process. The second issue dealt with the whereabouts of the Gull Wing car and/or its proceeds. The Gull Wing car belonged to Mr. Jack Holland Jr. and was not the part of the estate of Mr. John M. Holland Sr. (Sr.). The car was a gift to Jack Holland Jr. from his wife, Jeanne. It was merely being stored in Sr.'s garage by Jack Jr. Apparently, Jack Sr. was confused about the ownership of the car and mistakenly included it in his will. The current whereabouts of the car and/or any proceeds from the sale of the car are irrelevant to the issues concerning Sr.'s estate and its assets. We hope this lays to rest the recurring questions about the Gull Wing car.

Once again, we appreciate your assistance and patience. Please contact us if you have any questions.

Very truly yours,


Nalini Rajender Prush

cc: Ms. Barbara Holland
Mr. John Holland IV
Mr. Guy Holland

RECEIVED
SECTION
AUG 23 1996 PM 2:47



August 21, 1996

Alameda County Department of Environmental Health
Hazardous Materials Division
1131 Harborbay Parkway
Alameda, California 94501

Attention: ~~Mr.~~ **Scott Seery**

Subject: Work Plan for Tank Removal and
Soil and Groundwater Investigation
Former Jack Holland Sr. Oil Company
16301 East 14th Street, San Leandro, CA
(CCI Project No. 12059-3)

Dear Mr. Seery:

On behalf of and at the request of Ms. Barbara Holland, Compliance & Closure, Inc. (CCI) hereby submits this Work Plan for Tank Removal and Soil and Groundwater Investigation at the former Jack Holland Sr. Oil Company site, located at 16301 East 14th Street, San Leandro, Alameda County, California.

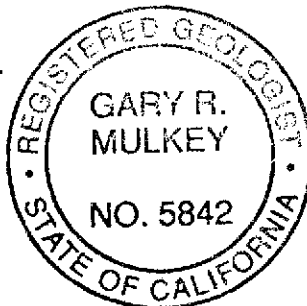
The Work Plan includes a estimated schedule for conducting the various phases of work at the site, including removal of USTs at the site. In addition, CCI proposes to use the Geoprobe Sampling System to conduct a reconnaissance soil and groundwater investigation at locations which should provide additional and more accurate information about the extent of hydrocarbon contamination on and offsite form areas known to have contamination.

CCI is prepared to start work on this project upon approval of this work plan and would appreciate your comments. If you have any questions, please call our office at (510) 426-5395.

Sincerely,
Compliance & Closure, Inc.

A handwritten signature in cursive script that reads 'Gary R. Mulkey'.

Gary R. Mulkey, R.G. 5842



cc: Ms. Barbara Holland
Ms. Ann Maire Holland

WORK PLAN
FOR
TANK REMOVAL AND SOIL AND GROUNDWATER INVESTIGATION
AT
FORMER JACK HOLLAND SR. OIL COMPANY
16301 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

At the request of Alameda County Department of Environmental Health, and on behalf of Ms. Barbara Holland, Compliance & Closure, Inc. (CCI) has prepared this Work Plan for the removal of the fuels tanks at the subject site and to conduct a Soil and Groundwater Investigation at the former Jack Holland Sr. Oil Company property, located at 16301 East 14th Street in the City of San Leandro, Alameda County, California, (Figure 1).

BACKGROUND

The Jack Holland Sr. Oil Company property is comprised of approximately 3.5 acres and was formerly a bulk fuel storage and retail facility. There are several above-ground storage tanks and 3 to 5 underground fuel storage tanks currently on the site. The site is located in a commercial area, bound on the south and west sides by a park and recreation facility and an elementary school and by used car lots on the north and east sides. The facility was in operation from approximately 1960 to the mid-1980s.

In 1990, the firm of Crosby and Overton conducted a limited site investigation around the underground fuel tanks located toward the south end of the property. The investigation involved drilling 5 soil borings. Total petroleum hydrocarbons as diesel (TPHD) was reported in soil samples collected from the fuel tank area. TPHD concentrations were reported as high as 25,000 parts-per-million (ppm). Groundwater was encountered at approximately 15 feet below the surface. Due to the close proximity of the groundwater to the contaminated soil, groundwater at the site may have been impacted by hydrocarbons.

On November 14, 1995, CCI prepared a Work Plan for the Preliminary Site Assessment for the Subject Site. The County approved the Work Plan in December 1995, and CCI began the field work in February 1996, which included conducting a search for underground fuel tanks and completed the installation of three groundwater monitoring wells in April 1996. Alameda County Health Care Services in its letter dated July 25, 1996 is requesting a Work Plan and schedule for removal of the fuel tanks and delineation of soil and groundwater contamination at the site.

TANK REMOVAL

Prior to removal of any underground fuel tanks at the subject site, cost estimates from at least three firms will be obtained. Once this process is completed, and a contractor is selected, all appropriate applications/permits will be obtained from the appropriate agencies (Alameda County Health Care Services and the City of San Leandro Fire Department) for the closure of the underground storage tanks (UST) at the subject site. Prior to the any commencement of field work at the site, a Site Safety Plan will be prepared specifically for the tank removal activities at the site. The removal of the USTs will follow the Regional Water Quality Control Board Guidelines for removal of fuel tanks and include but not be limited to visual inspection of the tanks and excavation, collection of soil and water samples and preparation of a tank closure report. An estimated time schedule of all of the site activities is attached.

Ms. Barbara Holland has agreed to contract for the removal of the USTs that are on parcels of property in which she has a 50% interest. She will also pay 50% of the excavation costs. The 20,000-gallon solvent tank is located on a parcel that is jointly owned by Barbara Holland and the Jack Holland Sr. Estate (the Estate). The remaining USTs are located on parcels owned entirely by the Estate. Ann Marie Holland and the Estate alone will be responsible for removing those USTs that are on the Estate's property. This includes the seven known USTs located in the center of the property near the former fueling rack. It is understood that Ann Marie Holland and the Jack Holland Sr. Estate will be responsible for and pay for its proportionate share of all excavation and remediation work conducted at the subject site.

Soil and Groundwater Investigation Objectives

The purpose of the Soil and Groundwater Investigation is to determine the extent of soil and groundwater contamination beyond areas of known contamination at the subject site. CCI proposes to conduct a reconnaissance soil and groundwater investigation at the subject site using a Geoprobe Sampling System (GSS). CCI proposes to use the GSS because it creates little disturbance to the surface area, and generates no soil cuttings during sampling and is relatively inexpensive when compared to other methods. It must be noted that while this is a reconnaissance technique only, this method is routinely accepted as a legitimate sampling technique for investigating sites.

Based on the GSS data, CCI will install two additional groundwater monitoring wells in the down-gradient and cross-gradient direction on parcels of property in which Ms. Barbara Holland has a property interest (Figure 2). If necessary, additional wells will be installed in appropriate areas depending on the reconnaissance data gathered.

The soil and groundwater samples from the reconnaissance

investigation and monitoring well installations will be sampled for total petroleum hydrocarbons as gasoline (TPHG) and benzene, toluene, ethylbenzene and total xylenes (BTEX) and total petroleum hydrocarbons as diesel (TPHD) and for chlorinated solvents.

SCOPE OF WORK

Reconnaissance Soil and Groundwater Investigation

CCI proposes to conduct a reconnaissance soil and groundwater investigation at the subject site using a GSS to collect soil and groundwater samples from approximately ten sample locations (Figure 2). Prior to starting any field work at the site, CCI will notify Underground Service Alert (USA) and a private line location firm to clear all proposed sample locations.

CCI proposes to collect soil samples from depths of approximately 5 and 10 feet at each sample location. The soil samples will be collected by using a 22-inch long by 1.06-inch diameter, closed piston sampling tube. Unlike split-spoon samplers, the piston sampler remains completely sealed while it is pushed or driven to the desired sampling depth. A piston stop-pin at the top of the sampler is removed by means of extension rods inserted down the inside of the probe rods after the sampler has been pushed or driven to the proposed sampling depth. This enables the piston to retract into the sample tube as it is pushed or driven to recover soil samples inside the sample chamber, using brass liners. Upon retrieval, each sample liner will be sealed with aluminum foil and plastic caps, labeled, logged on a chain-of-custody form and placed into a chilled ice chest for preservation in the field and during transport to a state certified analytical laboratory.

Once the soil samples are collected, the GSS will be pushed or driven to the water table. Groundwater samples will be collected by hydraulically pushing a 2-inch diameter steel probe containing poly vinyl chloride (PVC) screen into the ground. The lower 2-inch diameter chamber is connected to 3/4-inch diameter by 4-foot long, connectable, hollow steel rods, which are advanced by the Geoprobe truck to the desired sample depth. An expandable, stainless steel tip is attached to the end of the 2-inch sampling chamber to prevent soil and groundwater from entering the chamber area as it is being pushed into the ground. After reaching the desired sampling depth, the steel protective casing is pulled up approximately 3 to 4 feet, exposing the PVC screen. Groundwater samples are then collected, using either a parastalic pump with disposable poly tubing to prevent cross contamination or a small 3/8-inch diameter PVC bailer. Upon retrieval of the bailer, the water samples will be transferred to appropriate laboratory-supplied bottles, labeled, logged on a chain-of-custody form and stored in a chilled ice chest for preservation in the field and during transport to a state-certified laboratory. At the conclusion of field activity, all of the borings will be backfilled with portland cement.

Well Installation

Two groundwater monitoring wells will be installed in a down-gradient and cross-gradient locations with a truck-mounted, B-53 drill rig, using 8-inch outside diameter hollow stem augers, which will be cleaned prior to use. Each well will be installed under approved permits of the Alameda County Flood Control and Water Conservation District (Zone 7). The borings will be advanced to the uppermost water bearing stratum, and advanced 10 feet into the aquifer or terminated in an aquitard underlying that stratum. A CCI geologist will log the borehole by collecting samples at 5-foot intervals, lithologic contacts of interest and areas of obvious contamination. Upon retrieval, the sampler will be disassembled into its component parts. One or more of the selected brass liners will be selected for chemical analysis. The ends of the selected liner(s) will be sealed with aluminum foil, capped with plastic caps, labeled, logged on chain-of-custody forms and stored in a chilled chest containing ice for preservation in the field and during transport to the analytical laboratory. If a clay layer is identified, a sample will be collected and a particle analysis run, using ASTM D-422 Test Method. Each boring will be logged using the Unified Soil Classification System. Drill cuttings will be placed on and covered by plastic and left at the site pending laboratory analysis of the soil.

The monitoring wells will be constructed using 2-inch diameter schedule 40 polyvinyl chloride (PVC) well casings. Ten-to-fifteen feet of 0.020 - inch screen will be used. The final well design will depend upon subsurface conditions encountered. The annulus between the casing and the borehole will be backfilled with 2/12 sand to about 2 feet above the screen interval. A bentonite clay spacer 1 foot thick will be placed above the sand pack, and cement grout will be pumped from above the bentonite to the surface. A watertight, locking, vault box will cap each well. The wells will be developed prior to sampling, and sampled according to CCI's Sampling Protocol. The interval between development and sampling will be 24 hours. The well will be developed by manually bailing the well to: (a) remove residual silts and clays left from the drilling and (b) improve the hydraulic conductivity between the wells and natural formation. The well development water will be stored on-site, in sealed, labeled drums (Department of Transportation, 17E), pending laboratory results.

Before groundwater sampling, a CCI sample technician will measure the depth-to-groundwater using an electric sounding tape and will field-check the well for the presence of free-floating product by collecting a sample in a clear acrylic bailer. The well will be purged of stagnant water prior to collection of a sample. Normal field measurements, including pH, conductivity, and water temperature, will be taken periodically and recorded during the purging process. A sample will be collected when these parameters stabilize to within 10% of each other. At least three well casing volumes of groundwater will be purged from each well before sampling. Samples will be (a) collected in a clean Teflon bailer,

(b) transferred to appropriate laboratory-supplied bottles, © labeled, (d) logged on chain-of-custody forms, and (e) placed in a chilled ice chest for transport to a state-certified laboratory.

SURVEYING

A licensed land surveyor will be retained to survey the monitoring wells accurately and will determine the elevation of each well casing. In addition, the underground fuel tanks will also be surveyed to show their location. The survey ensures accuracy so that the plot plans will portray the data in a manner useful for determining groundwater flow direction. The survey will include both horizontal and vertical measurements. Elevation readings will be to the nearest 0.01 feet and corrected to mean sea level.

Laboratory Analysis

It is anticipated that up to twenty four soil and twelve water samples will be analyzed. All samples will be analyzed for total petroleum hydrocarbons as Gasoline (TPHG) and benzene, toluene, ethyl benzene and total xylenes (BTEX) using GCFID 5030 and 8020 for soil and GCFID 5030 and 602 for water and TPHD. CCI will also analyze soil and groundwater samples collected during this Soil and Groundwater Investigation for chlorinated solvent compounds using EPA Method 8010. The samples will be analyzed on a normal (10 working day) turnaround time frame.

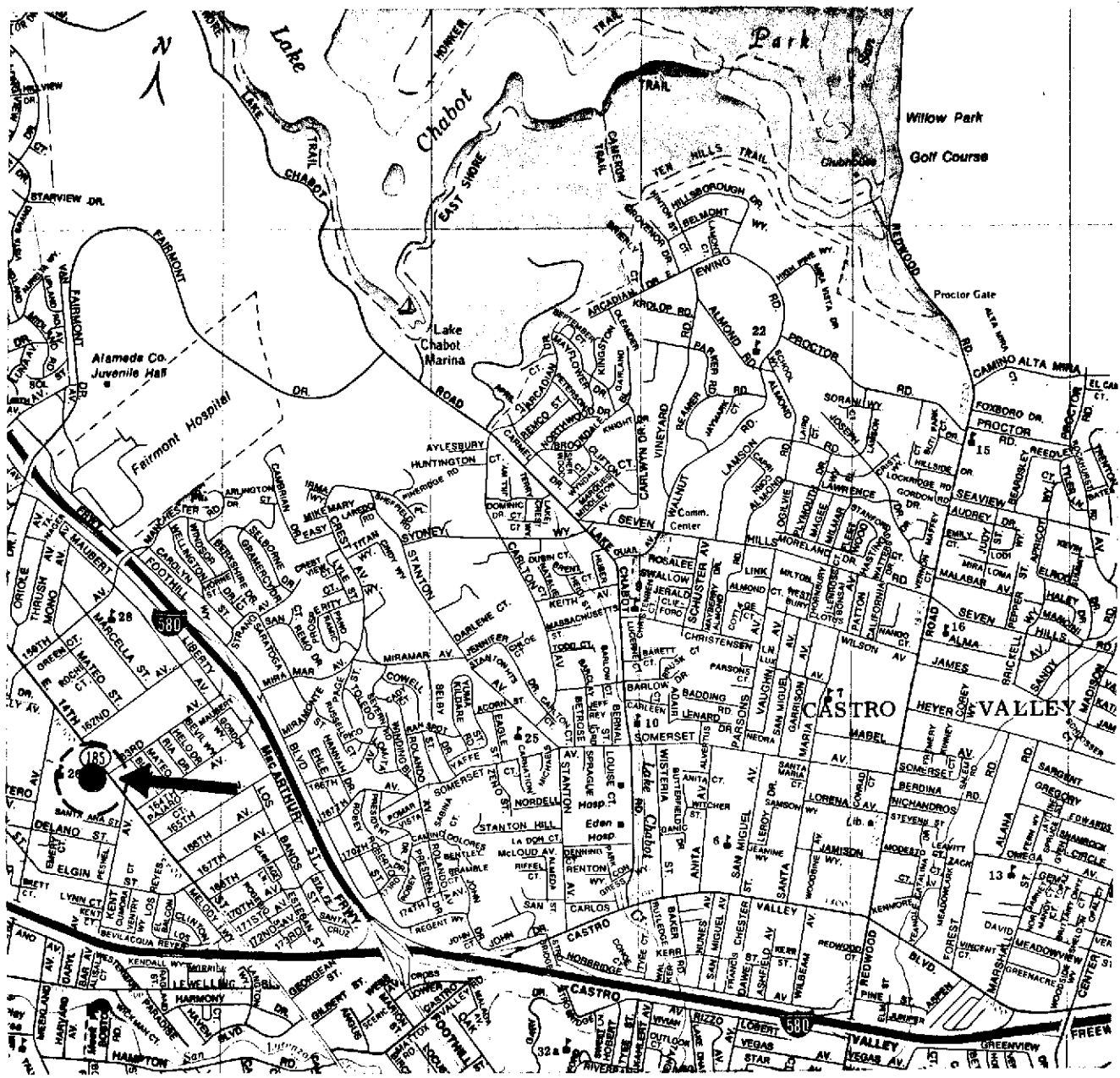
REPORT PREPARATION

A written report on the soil and groundwater investigation will be prepared upon receipt of the analytical test results. The report will include data obtained from the GSS surevy, exploratory boring logs, well construction details, chemical data, site plan, cross-sections and report narrative with conclusions and recommendations for submittal to the Alameda County Health Department.

Read, understood and agreed to by: Barbara Holland

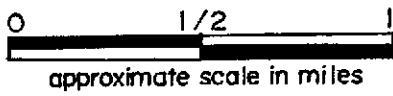
Ms. Barbara Holland


The Estate of Jack Holland Sr.
by Temporary Administrator
Ann Marie Holland
Ms. Ann Marie Holland



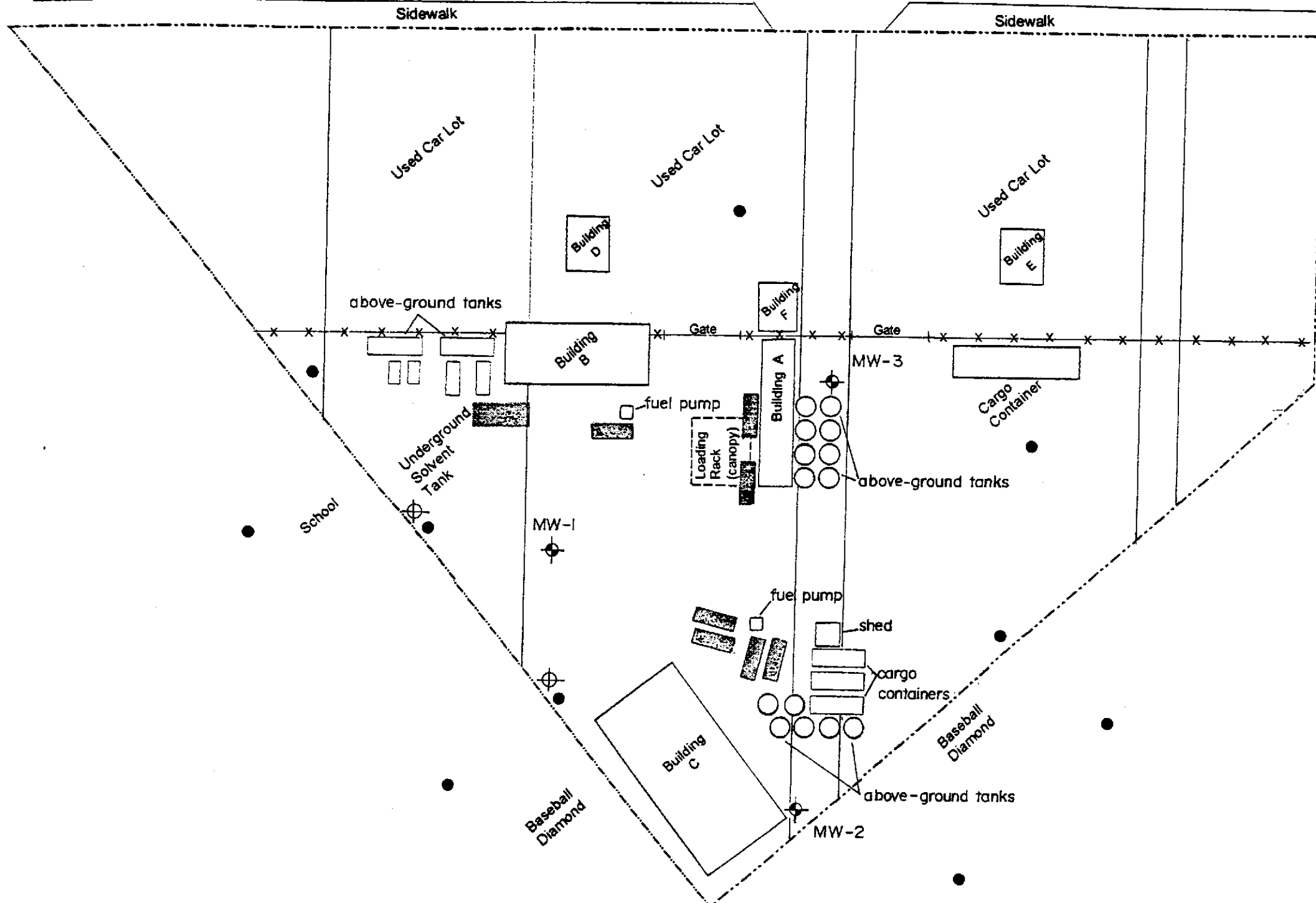
LEGEND

 site location







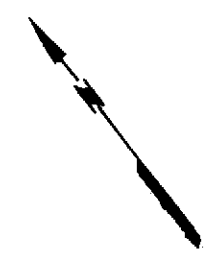
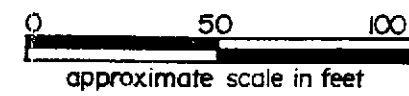
reviewed by:	VICINITY MAP		 Compliance & Closure, Inc.
approved by:			
drawn by: GM	FORMER JACK HOLLAND SR. OIL COMPANY		date: 11/14/95
job no. 12059	16301 EAST 14TH STREET		
	SAN LEANDRO, CALIFORNIA		


EAST 14TH STREET



LEGEND

-  monitoring well
-  underground storage tank
-  proposed geoprobe data point
-  proposed monitoring well



REVIEWED BY:	SITE MAP FORMER JACK HOLLAND SR. OIL COMPANY		 Compliance & Closure, Inc.	
APPROVED BY:				
		JOB #: 12059-3	DRAWN BY: GM	
		DATE: 8/20/96	DRAWING #: FIG. 2	

Base: Cambria Environmental - locations are approximate

PROPOSED SCHEDULE OF TANK REMOVAL AND INVESTIGATION

1996 1997

TASK	1996				1997																																										
	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY				JUNE				JULY				AUGUST		
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
request for bids	_____																																														
permits for tank removal					_____																																										
tank removal safety plan									_____																																						
remove tanks													_____																																		
tank closure report																	_____																														
geoprobe investigation																	_____																														
well installation													_____																																		
soil and groundwater invt. rpt.																					_____																										
quarterly report					_____																																										
corrective action plan																									_____																						

REVIEWED BY:

REMEDATION SCHEDULE

FORMER JACK HOLLAND SR. OIL COMPANY

APPROVED BY:

J

16301 EAST 14TH STREET

SAN LEANDRO, CALIFORNIA



JOB #: 12059-3

DRAWN BY:

DATE: 8/20/96

DRAWING #: FIG. 3

COMPLIANCE & CLOSURE, INC.

SITE SAFETY PLAN

FOR

SOIL AND GROUNDWATER INVESTIGATION

AT

FORMER JACK HOLLAND SR. OIL COMPANY
16301 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Project No. 12059-3
August 1996

C O N T E N T S

Section	Page
Purpose and Scope	1
I. Facility Background/Work Plan	1
Site Description and History	1
II. Key Safety Personnel and Responsibilities	2
III. Job Hazard Analysis	3
Health Hazards of Asbestos	3
Fire Hazards	4
Physical Hazards	4
Heat Stress	4
IV. Job Hazard Summary	6
V. Exposure Monitoring Plan	6
VI. Personnel Protective Equipment	6
VII. Site Control	7
VIII. Decontamination Measures	7
IX. General Safe Work Practices	7
X. Sanitation	8
XI. Emergency Response Plan	8
XII. Training Requirements	9
XIII. Medical Surveillance Program	9
XIV. Documentation	9
Sign-Off Page	10

SITE SAFETY PLAN
FOR
JACK HOLLAND SR. OIL COMPANY

PURPOSE AND SCOPE

This Site Safety Plan (SSP) establishes the basic safety guidelines and requirements for the Soil and Groundwater Investigation at the former Jack Holland Sr. Oil Company located at 16301 East 14th Street in the City of San Leandro, California. The SSP addresses hazards that may be encountered during this project. Field activities are scheduled to begin in October 1996 and are expected to end approximately 4 days after the start date.

The provisions set forth in this SSP shall apply to Compliance & Closure, Inc. (CCI) employees and any subcontractors working for CCI at the job site. All personnel working for CCI must read this SSP and sign the attached Compliance Agreement before entering the work area.

Field personnel may deviate from the safety provisions set forth in this SSP, but only to upgrade or increase the safety requirements. If changes in site or working conditions require changes in safety procedures, appropriate amendments to this SSP will be provided by the CCI Project Manager.

I. FACILITY BACKGROUND/WORK PLAN

Site Description and History

The Jack Holland Sr. Oil Company property is comprised of approximately 3.5 acres and was formerly a bulk fuel storage and retail sublet facility. There are numerous above-ground storage tanks and 3 to 5 underground fuel storage tanks currently on the site. The site is located in a commercial area, bound on the south and west sides by a park and recreation facility and used car lots on the north and east sides. The facility was in operation from approximately 1960 to the mid-1980s.

In 1990, the firm of Crosby & Overton conducted a limited site investigation around the underground fuel tanks located toward the south end of the property. The investigation involved drilling 5 soil borings. Total petroleum hydrocarbons as diesel (TPHD) was reported in soil samples collected from around the fuel tank area. TPHD concentrations were reported as high as 25,000 parts-per-

million (ppm). Groundwater was encountered at approximately 15 feet below the surface.

On November 14, 1995, CCI prepared a Work Plan for conducting a Preliminary Site Assessment for the subject site. The County approved the Work Plan in December 1995, and CCI began the field work in February 1996, which included conducting a search for underground fuel tanks and completed the installation of three groundwater monitoring wells in April 1996.

II. KEY SAFETY PERSONNEL AND RESPONSIBILITIES

All personnel working for CCI at the job site are responsible for project safety. The operational and health and safety responsibilities of pertinent CCI personnel are identified below.

Project Manager: Mr. Gary Mulkey

The Project Manager is responsible for the provisions and submittal of this SSP to the Site Safety Officer and for advising the Site personnel on health and safety matters. He has the authority to provide for the auditing of compliance with the provisions of this SSP, to suspend or modify work practices, and to recommend disciplinary action for individuals whose conduct does not meet the provisions presented in this SSP. The Project Manager reports to the Office Safety Coordinators. Mr. Mulkey can be reached at (510) 426-5395

Site Safety Officer: Mr. Gary Mulkey

The Site Safety Officer is responsible for the dissemination of the information contained in this SSP to all CCI personnel working at the job site and to the responsible representative(s) of each subcontractor firm working for CCI at the job site.

The Site Safety Officer is responsible for ensuring the following items are adequately addressed:

- o Safety Supplies and Equipment Inventory
- o Medical Surveillance Program/Physical Examinations
- o Training Programs/Hazard Communication
- o Accident/Incident Reporting Procedures
- o Decontamination/Contamination Reduction Procedures

The Site Safety Officer has the authority to suspend work anytime he or she determines the safety provisions set forth in this SSP are inadequate to ensure worker safety.

The Site Safety Officer will be present during the field work operations.

III. JOB HAZARD ANALYSIS

The major contaminants that may be encountered are Diesel and Gasoline and their hazardous components.

The primary routes of exposure for the petroleum hazard are inhalation and ingestion. These hazards will be mitigated by air monitoring with an OVM and avoiding dust. If the action level, as noted in the table below, is exceeded, the site will be vacated until the levels are reduced

CHEMICALS AND CHARACTERISTICS

Chemical	Symptoms	UEL/LEL	PEL	CONC.	AL
TPH as Gas	Irritant to eyes, noise, lungs, central nervous system	7.6%-1.4%	N/A	4,400ppm	N/A
Benzene	Irritant to eyes, noise, respiratory system, headaches, Carcinogen	7.1% 1.3%	1ppm	0.83ppm	150ppm
Toluene	Fainting, headaches, dizziness, and dilated pupils.	7.1% 1.3%	100ppm	2.1ppm	150ppm
Ethyl Benzene	Irritant to eyes, nose, throat, skin, constriction of chest.	6.7% 1.0%	100ppm	16ppm	150ppm
Xylenes	Irritant to eyes, nose, throat	6.0% 1.0%	100ppm	74ppm	150ppm
TPH as Diesel	(no toxic data)	N/A		25000ppm	200ppm

UEL = upper Explosive limit, LEL = lower explosive limit
 PEL = permissible exposure limits, Conc = maximum concentration in soil

Fire Hazards

The potential for fire or explosion exists whenever flammable liquids or vapors are present above lower explosion limit (LEL) concentrations and sufficient oxygen is present to support combustion. These potential fire hazards are addressed below:

- o General excavation operations in materials containing flammable substances may pose a fire hazard. A fire extinguisher will be located in the drill rig at the site.

Physical Hazards

The potential physical hazards expected at the job site are addressed below:

- o The potential for physical injury exists from the operation of machinery such as the drill rig. Use of steel-toed boots, hard hats, and safety glasses will be required when in the work area.
- o The potential for noise hazards exists at the site from the operation of the drill rig. It is not expected that noise levels will exceed the acceptable CAL-OSHA permissible exposure level of 90 dB. However, workers should be aware of the presence of these hazards and take steps to avoid them. Ear/noise protection, although not required, shall be available to all personnel within the job site in the event noise levels exceed worker comfort or protection levels.
- o Personnel should be cognizant of the fact that when protective equipment such as respirators, gloves, and protective clothing are worn, visibility, hearing, and manual dexterity are impaired.

Heat Stress

The anticipated weather conditions for the field portion of the project are sunny skies, with moderate temperatures. Though not anticipated, the potential exists for heat stress. Some signs and symptoms of heat stress are presented below:

- o Heat rash may result from continuous exposure to heat or humid air.
- o Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include:
 - muscle spasms
 - heavy sweating
 - dizziness
 - nausea
 - fainting
- o Heat exhaustion occurs from increased stress on various body organs, including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include:
 - pale, cool, moist skin
 - heavy sweating
 - dizziness
 - nausea
 - fainting
- o Heat stroke is the most serious form of heat stress. Temperature regulation fails, and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury or death occur. Competent medical help must be obtained. Signs and symptoms are:
 - red, hot, unusually dry skin
 - lack of or reduced perspiration
 - dizziness and confusion
 - strong, rapid pulse
 - coma

Preventing heat stress is particularly important, because a person who suffers from heat stroke or exhaustion may be predisposed to additional heat injuries.

IV. JOB HAZARD SUMMARY

In summary, the expected potential hazards to personnel in the work area are:

1. fire or explosion from the backhoe.
2. physical injury from equipment operated at the job site.
3. heat stress.

As described in Section III, these potential hazards have been mitigated for the protection of the worker's health and safety. The proposed work does not appear to present any potential health risk to workers, the surrounding community, or the environment if the provisions of this SSP are properly implemented.

V. EXPOSURE MONITORING PLAN

All personnel working for CCI at the job site shall be monitored for heat stress. Because workers at the job site are expected to wear permeable clothing (e.g., standard cotton or synthetic work clothes), monitoring for heat stress will consist of personnel constantly observing each other for any of the heat stress symptoms discussed in Section V.

No dust monitoring shall be performed because none of the tasks in this project are expected to generate large quantities of dust.

No noise monitoring shall be performed because none of the tasks in this project are expected to generate enough noise to exceed 90 dB CAL-OSHA permissible exposure limit or the 85 dB action level for noise monitoring. However, ear and noise protection shall be made available to all personnel at the job site in the event noise levels exceed worker comfort levels.

VI. PERSONAL PROTECTIVE EQUIPMENT

Level D protection will be required for this project. The following lists summarize the personal protective equipment that shall be available to all field personnel in the work area.

Level D Protection

- o Steel-toed boots
- o Safety glasses
- o Hard hat
- o Gloves

VII. SITE CONTROL

The site is predominantly a vacant lot with some maintenance buildings and used car lots along East 14th Street. The work zones shall be marked with caution tape.

VII. DECONTAMINATION MEASURES

Field personnel shall wash hands and face before entering a clean area. Additional decontamination measures are discussed under General Safe Work Practices (Section IX).

IX. GENERAL SAFE WORK PRACTICES

The project operations shall be conducted in accordance with the following minimum safety requirement:

- o Eating, drinking, and smoking shall be restricted to a designated clean area.
- o Gross decontamination and removal of all disposable personal protective equipment shall be performed prior to exiting the facility. Contaminated disposable clothing and other disposable equipment will be removed and collected on-site in a drum for disposal. No contaminated equipment will be removed from the site.
- o Shaking or blowing of potentially contaminated clothing or equipment to remove dust or other materials is not permitted.
- o The Site Safety Officer shall be responsible to take necessary steps to ensure that employees are protected from physical hazards, which could include:
 - Falling objects such as tools or equipment
 - Falls from elevations
 - Tripping over hoses, pipes, tools, or equipment
 - Slipping on wet or oily surfaces
 - Insufficient or faulty protective equipment
 - Insufficient or faulty operations, equipment, or tools
 - Noise
- o All personnel shall wash hands and face before eating, drinking, or smoking.

- o Field personnel shall be cautioned to inform each other of non-visual effects of the presence of toxins, such as:
 - Headaches
 - Dizziness
 - Nausea
 - Blurred vision
 - Cramps
 - Irritation of eyes, skin, or respiratory tract
 - Changes in complexion or skin discoloration
 - Changes in apparent motor coordination
 - Changes in personality or demeanor
 - Excessive salivation or changes in pupillary response
 - Changes in speech ability or pattern

- o Field personnel shall be cautioned to observe each other for any of the symptoms of heat stress. A detailed description of the symptoms of heat stress is presented in Section III.

X. SANITATION

The site contains potable water and washing facilities.

XI. EMERGENCY RESPONSE PLAN

In the event of an accident resulting in physical injury, first aid will be administered and the injured worker will be transported to Memorial Hospital for emergency treatment. A hospital site location map is attached to this safety plan.

In the event of a fire or spill, the Project Manager shall be notified. If necessary, local fire or response agencies will be called by dialing 9-1-1.

Emergency Telephone Numbers:

Fire and Police.....9-1-1

Memorial Hospital.....(510) 357-8300
2800 Benedict Drive
San Leandro, Ca 94577

Directions to Hospital: See attached Site Location and Hospital Location Maps

Fire extinguisher, will be on-site during all field operations.

Additional Contingency Telephone Numbers:

Ms. Barbara Holland(510) 889-0404
Compliance & Closure, Inc.....(510) 426-5395

All cases where an accident has occurred will require filling out an incident/accident report and submitting it to the appropriate agencies and individuals within 48 hours of the accident.

XII. TRAINING REQUIREMENTS

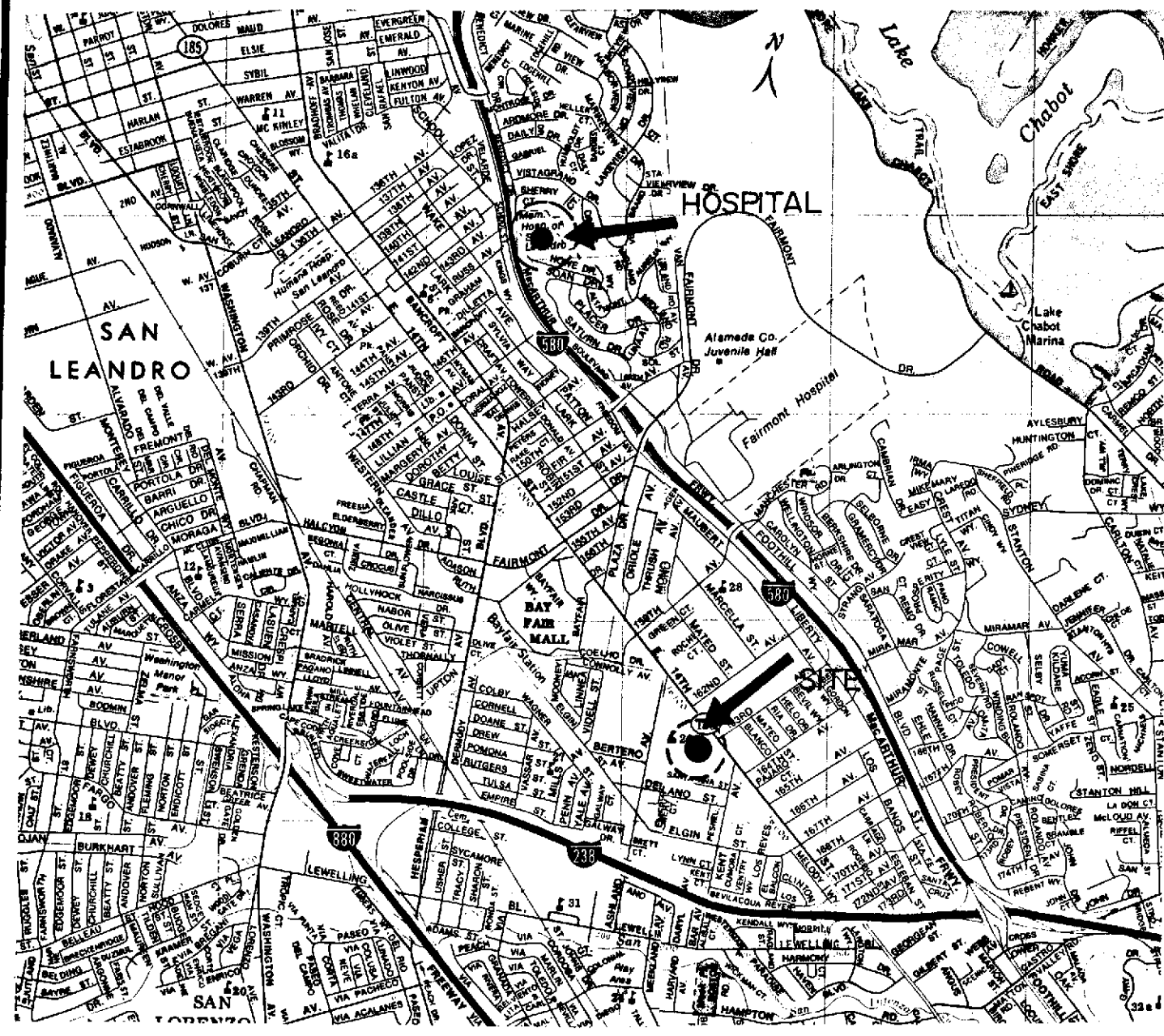
All site personnel will be required to have completed the 40 hours of basic OSHA-SARA training for personnel assigned to hazardous waste sites in compliance with OSHA Standard 29 CFR 1910.120 and GISO 5192, Hazardous Waste Operations and Emergency Response, and all are required to participate in the annual OSHA-SARA 8-hour refresher courses.

XIII. MEDICAL SURVEILLANCE PROGRAM


CCI personnel and subcontractors engaged in field operations shall be participants in the Medical Surveillance Program, and must be cleared by the examining physician(s) to wear respiratory protection devices and protective clothing for working with hazardous materials. The applicable requirements under the California Code of Regulations (CCR) Title 8, Section 5261, which is available at the CCI office for review, shall be observed. No project-specific medical surveillance is required.

XIV. DOCUMENTATION

Daily documentation shall be provided by a daily log, completed by the Site Safety Officer. The Site Safety Officer shall record entry and exit times and dates of all personnel working for CCI and any site visitor(s). Turnover of the Site Safety Officer responsibility shall be noted in the daily log. He or she shall also record accidents, incidents of safety infractions by field personnel, and other safety-related matters.



0 1/2 1
 approximate scale in miles

reviewed by:	HOSPITAL LOCATION MAP		 Compliance & Closure, Inc.
approved by:	MEMORIAL HOSPITAL		
drawn by: GM	2800 BENEDICT DRIVE		date: 11/14/95
job no. 12059	SAN LEANDRO, CALIFORNIA		drawing no. FIG. I

SIGN-OFF PAGE

I have read the Site Safety Plan and fully understand the hazards associated with the excavation project at the former Jack Holland Sr, Oil Company Property located at 16301 East 14th Street in the City of San Leandro, California.

I will comply with the minimum safety requirements set forth in the Site Safety Plan. I agree to notify the responsible employee of CCI should I witness any unsafe acts on this site.

Print Name	Signature	Date

Safety Plan approved by:

Project Manager/Site Safety Officer