J. QUARLE' & ASSOCIATES
620 Marina Boulevard
San Leandro, CA 94577

(510) 895-1474
FAX (510) 895-1477
November 19, 1992

Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
Att: Robert Weston
80 Swan Way, Room 200
Oakland, CA 94621

HANK'S AUTOMOTIVE SERVICE
SAN LEANDRO, CALIFORNIA

Dear Mr. Weston:

On behalf of Hank's Automotive Service (HAS), J. Quarle' & Associates, Inc. (JQ&A) is submitting the above referenced work plan. The work plan presents the technical approach and procedures for soil investigations which are planned to be performed at the HAS facility located in San Leandro, California.

If you have any questions or comments concerning this Work Plan, please contact Jack Quarle' at (510) 895-1474.

Sincerely,

J. QUARLE' & ASSOCIATES, INC.

3/13
Katrina will contact Quarle for SS analytical

Jack Quarle', President

8/14/98
Need another $200-500

JQ/cn

Attachment

SOIL SAMPLING WORK PLAN

HANK'S AUTOMOTIVE SERVICE, INC.
16065 MATEO STREET
SAN LEANDRO, CALIFORNIA 94578

J. Quarle' & Associates, Inc.
November, 1992

J. QUARLE' & ASSOCIATES, INC.
620 MARINA BOULEVARD
SAN LEANDRO, CA 94577

(510) 895-1474
(510) 895-1474 FAX
November 2, 1992

SOIL SAMPLING WORK PLAN

Introduction

This work plan outlines the activities proposed by J. Quarle' & Associates, Inc. (JQ&A) for the initial investigation of soils in the vicinity of the previously existing **550 gallon** underground **gasoline storage** tank.

Background

Hank's Automotive Services Inc. (HAS) is located in an unincorporated area of San Leandro at 16065 Mateo Street, San Leandro, California. It is in an area of light industrial, retail and residential use. The facility consists of a residence and associated buildings, an office building, shop and open storage.

Hank's Automotive Services has operated at this location from 1949 to the present as automotive towing and storage facility.

In 1979 the company installed a 550 gallon underground storage tank and a suction pumping system to supply emergency fuel for its vehicles. The tank was registered with the California State Water Resources Control Board July 11, 1984. In August of 1986 Haynie's Maintenance and Repair tested the tank. **Results of the test are not available at this time.** The owner reports that the system passed the tightness test.

The system was taken out of service in **December 1987 and removed March 1, 1988.** The pumping system is currently stored on site. The tank is now being used to store water at the owners property in Volcano, California. The tank was removal was performed by employees of HAS **without regulatory involvement or sampling of soil or groundwater at the time of removal.**

Scope of Work

The scope of this investigation will include four soil borings to determine the lateral and vertical extent of the potential impact by gasoline to the area in and around the location of the former underground storage tank.

All activities will be performed under the guidelines of JQ&A's Quality Assurance/Quality Control polices (see Appendix IV).

Borings will be located as follows:

#1 In the center of the purported location of the former underground storage tank. This boring will be seven feet in depth with one sample taken. This sample should be representative of the native soil under the tank.

#2 Within five feet south of the southern edge of the former underground storage tank to a depth of four feet and sample in native soil.

#3 Within five feet west of the former underground storage tank to a depth of four feet and sample in native soil.

#4 Within five feet north of the former underground storage tank to a depth of four feet and sample in native soil.

Soil borings will be drilled using a hand auger. All soil sampling performed in conjunction with shallow borehole drilling will be in compliance with JQ&A technical procedures. Drilling will be conducted with a four-inch hand auger. Samples will be collected with a slide hammer sampling device.

Organic vapor monitoring will be conducted continuously during drilling operations with an Organic Vapor Monitor (OVM) equipped with a photoionization detector (PID). the OVM will be used: (1) in a health and safety capacity to monitor the atmosphere for the possible presence of organic vapors, and (2) to screen soil samples for the presence of organic constituents.

Upon sample collection for chemical analysis, the brass sleeve will be sealed with aluminum foil and plastic caps. The sleeve will then be labeled and stored in a cold (4 degrees C), container for transportation to the laboratory.

Samples will be transported to Sequoia Analytical Laboratories, Concord, California for analysis using EPA method 5030/8015/8020 TPH Gas and BTX & E. All samples will be under JQ&A Chain of Custody procedures until and including delivery to the laboratory.

The results of these analyses along with supporting documents (i.e. Chain of Custody, field activities log, OVM readings, etc.) will be submitted to HAS and to Robert Weston, Alameda County Health Agency, Divison of Hazardous Materials, Department of Environmental Health. This information should provide guidance for a decision whether or not further activities are required at this site.

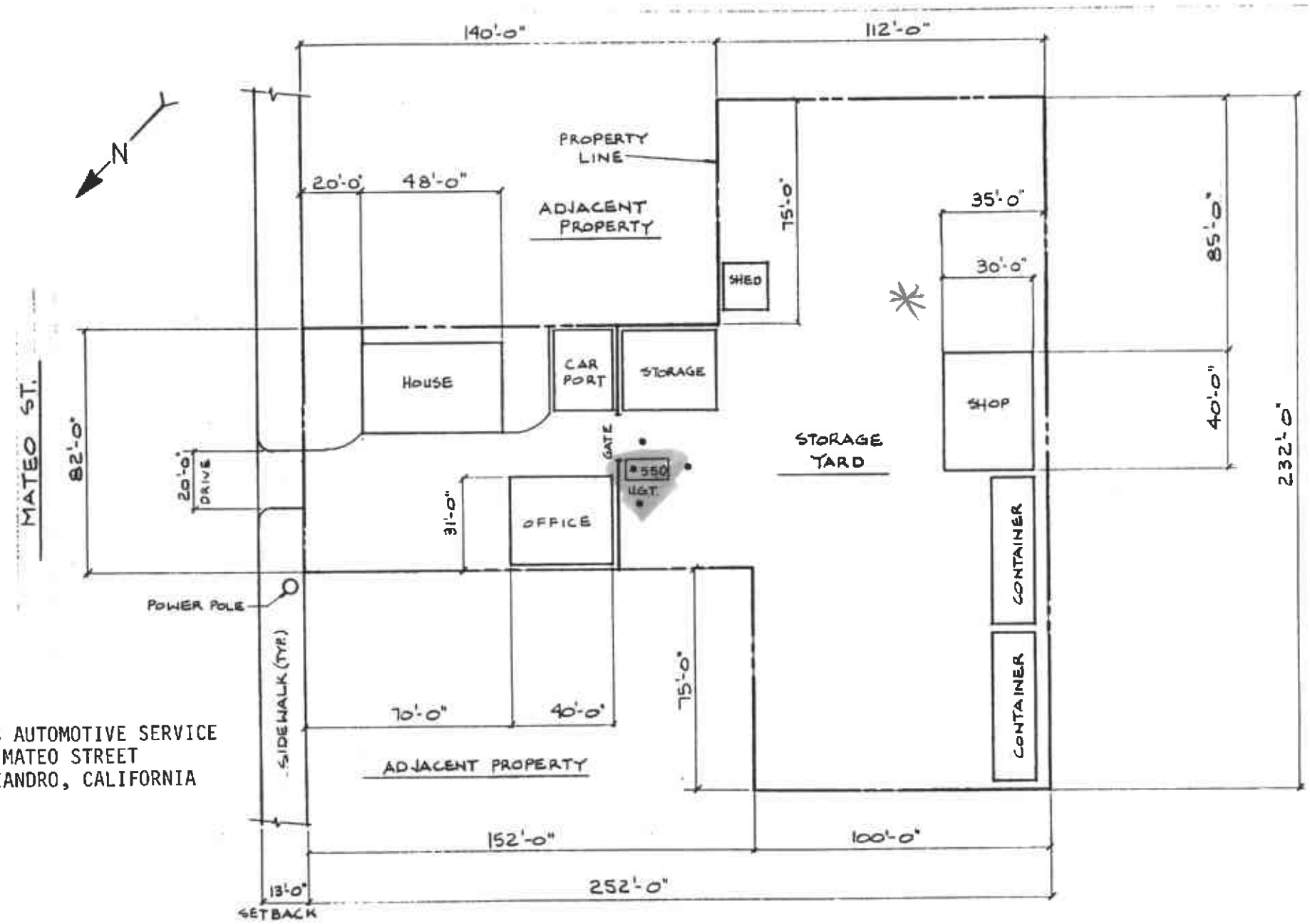
APPENDIX I

SITE MAP & SITE LOCATION MAP

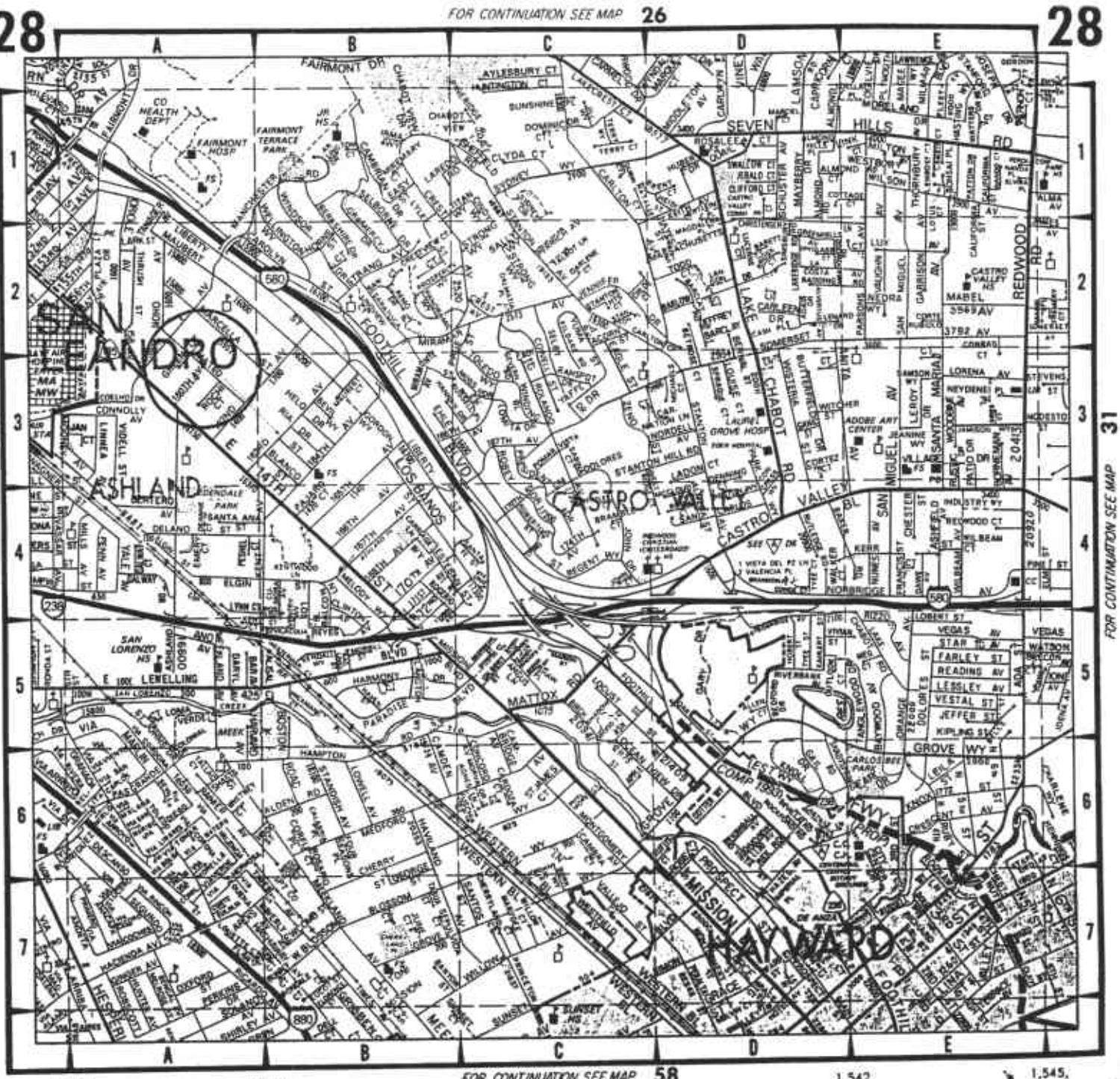
Review 5/5/97
Open case

- need sampling plan implemented
- need analytical results, COC, QA/QC
- need to witness samples being collected in the former ust pit

-



HANK'S AUTOMOTIVE SERVICE
16065 MATEO STREET
SAN LEANDRO, CALIFORNIA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FOR CONTINUATION SEE MAP 26
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C
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SAN LEANDRO
ASHLAND
CASTRO VALLEY
HAYWARD
FOOTHILL
LAKE BLVD
MISSION BLVD
WESTERN BLVD
SEVEN HILLS RD
REDWOOD RD
EL CHABOT RD
FOOTHILL BLVD
MATTOX RD
HESPERIAN BLVD
FOR CONTINUATION SEE MAP 27
FOR CONTINUATION SEE MAP 31
FOR CONTINUATION SEE MAP 58
1,530.
1,533.
1,542.
1,545.
DETAIL

APPENDIX II

TANK REGISTRATION & RECEIPT FOR TANK TIGHTNESS TESTING

INVOICE № 3522

FOR Hanks Automotive UNIT NO. _____ DATE 8-14-96

ACCOUNT NAME _____ INV. NO. _____

ADDRESS 16065 Mateo St. P.O. NO. _____

DESCRIPTION OF WORK PERFORMED (pump, disp. compressor, hoist, a/w, etc.)

testestone 550 gal unleaded tank

400.00

COMPONENT NAME

MANUFACTURER'S NAME MODEL NO.

SERIAL NO. SPEC. NO.

MATERIAL USED	QUAN.	PRICE	AMOUNT

paid
CK# 18530

TOTAL MATERIAL COST $

NAME	ARRIVAL TIME	DEPARTURE TIME	LABOR HOURS	TRAVEL HOURS	TOTAL HOURS	HOURLY RATE	TOTAL

TOTAL LABOR COST $

TOTAL RENTAL CHARGE $

Henry Hernandez
CUSTOMER'S SIGNATURE

TERMS: Net 15 days. All accounts over 30 days old are subject to 1½% per month. 18% per annum service charge.

MATERIAL $ _____
HANDLING CHARGE $ _____
LABOR COST $ _____
RENTAL EQUIPMENT $ _____
MILEAGE $ _____
TAX $ _____

TOTAL $ 400.00

HAYNIE'S MAINTENANCE & REPAIR
4422 Cahill Street
Fremont, California 94538
"LOU" HAYNIE (415) 656-6086
TERRY HAYNIE 851-7089

Official Registration Form

California Water Resources Control Board

Hazardous Substance Storage Statement

Who Must File: Every person storing hazardous substances in any underground container must file this form no later than July 1, 1984 (After October 1, 1984 and no later than January 1, 1985 for tanks used on farms).

Definition of Underground Containers: The law applies to "concrete sumps, hydraulic lifts, tanks or other underground containers." (Water Code section 13173) All containers, including earthen walled pits, ponds, lagoons and sumps that are below the normal ground surface level must register. A tank sitting on the ground is not included. Containers partially beneath the surface are included. Lined or unlined pits, ponds and lagoons are covered if earth has been removed from the storage area to construct the facility. Normal grading is not considered construction below ground level.

Definition of Hazardous Substance: Any substance listed in Section 5232 of the Labor Code or in Section 25316 of the Health and Safety Code. This includes gasoline, diesel fuel, all industrial solvents, pesticides, herbicides and fumigants. If the material must be carried by a registered hauler disposed of as a hazardous waste, or is explosive, generates pressure due to heat or decomposition or would harm humans or wildlife you must register the tank. Wastes are included.

Fee: For each tank registered a $10 fee must be paid except that retail gasoline stations pay $5 per tank.

Penalties: For failure to file, the penalty is $500-$5,000 per day. If you falsify information, you can be fined up to $20,000 for each day the information is incorrect and has not been corrected.

Confidentiality: If you have information protected by trade secret laws, please attach a list of the information on this form that is confidential and the justification for confidentiality, including specific citations of relevant statutory and case law.

Multiple Containers: Fill I and II on one form and leave it blank on all the remaining forms. Attach all forms together securely. If you own more than 50 tanks you can file information on computer tape. Call 916/324-1262 for information.

This is not a Permit Application. All Underground Tanks will be subject to local regulation. Some jurisdictions have already begun programs. Check with your local county government for further information.

NOTE: ALL UNDERGROUND CONTAINERS MUST REGISTER EVEN IF STATE AND/OR LOCAL PERMITS ARE IN FORCE.

I Owner

Name (Corporation, Individual or Public Agency): Hank's Automotive Service, Inc.

Street Address: 16065 Mateo st | City: San Leandro | State: CA | ZIP: 94578

II Facility

Facility Name: Hank's Automotive Service, Inc. | Owner / Manager / Supervisor: Hank

Street Address: 16065 Mateo st | Nearest Cross Street: 162nd ave

City: San Leandro, CA | County: Alameda | ZIP: 94578

Mailing Address: 16065 Mateo st | City: San Leandro | State: CA | ZIP: 94578

Phone Number with Area Code: (415) 357-3880 or 276-5200 | Type of Business: ☐ Motor Vehicle Fuel Station ☒ Other: Tow Service

Number of Tanks: one | Rural Areas Only: | Township: Eden Township | Range: unknown | Section: unknown

III 24 Hour Emergency Contact Person

Owner Name and Phone Number: Hemenez Henry or JoAnn (415) 357-3880

Manager Name and Phone Number: Hemenez Henry or JoAnn (415) 357-3880 or 352-3290

COMPLETE THE FOLLOWING ON A SEPARATE FORM FOR EACH CONTAINER

IV Description

A. ☒ Tank ☐ Sump ☐ Lagoon, Pit or Pond ☐ Other: | Container Number (if more than one): One

B. Manufacturer (if appropriate): | Year of Mfg: | C. Year Installed: ☐ Unknown

D. Container Capacity: [redacted] gallons ☐ Unknown | E. Container Repairs: ☒ None ☐ Unknown ☐ Yes Year:

F. Is Container currently used? ☒ Yes ☐ No If No, year of last use: ☐ Unknown

G. Does the Container Store (Check One): ☐ Waste ☐ Product

H. Does the Container Store Motor Vehicle Fuel or Waste Oil? ☒ Yes ☐ No If Yes, Check appropriate box(es):

☐ Unleaded ☒ Regular ☐ Premium ☐ Diesel ☐ Waste Oil ☐ Other (List):

V Container Construction

A. Thickness of Primary Containment: unknown ☐ Gauge ☐ Inches ☐ cm ☐ Unknown

B. ☐ Vaulted (Located in an underground Vault) ☒ Non-vaulted ☐ Unknown

C. ☐ Double Walled ☐ Single Walled ☐ Lined ☐ Wrapped ☒ Unknown ☐ None

D. ☒ Carbon Steel ☐ Stainless Steel ☐ Fiberglass ☐ Polyvinyl Chloride ☐ Concrete ☐ Aluminum

☐ Steel Clad ☐ Bronze ☐ Composite ☐ Non-metallic ☐ Earthen Walls

☐ Unknown ☐ Other:

E. ☐ Rubber Lined ☐ Alkyd Lining ☐ Epoxy Lining ☐ Phenolic Lining ☐ Glass Lining ☐ Clay Lining

☒ Unknown ☐ Unknown ☐ Other:

F. ☐ Polyethylene Wrap ☐ Vinyl Wrapping ☐ Cathodic Protection ☒ Unknown ☐ None ☐ Other:

Talk to Linda Sandborn Said staff people Said O.K. not to worry it's O.K. that I did not check unknown

VI Piping

A. Associated Piping	☐ a. Above Ground	☒ b. Underground	☐ c. Vaulted	
B. Underground Piping	☐ a. Gravity	☐ b. Pressure	☐ c. Suction	☐ d. Unknown
C. Piping Repairs:	☒ a. None	☐ b. Unknown	☐ c. Yes, Year of most recent repair: _____	

VII Leak Detection

☐ a. Visual ☒ b. Stock Inventory ☐ c. Tile Drain ☐ d. Vapor Sniff Wells ☐ e. Sensor Instrument

☐ f. Ground Water Monitoring Wells ☐ g. Pressure Test ☐ h. Internal Inspection ☐ i. None

☐ j. Other: _____

VIII Chemical Composition of Materials *Currently* or *Previously* Stored in Underground Containers

If you checked yes to IV-H you are not required to complete this section.

currently stored	previously stored	CAS # (if known)	Chemical Or Trade Common Name (Use separate paper for more room)
☐ a.	☐ a.		
☐ b.	☐ b.		
☐ c.	☐ c.		
☐ d.	☐ d.		
☐ e.	☐ e.		
☐ f.	☐ f.		
☐ g.	☐ g.		
☐ h.	☐ h.		
☐ i.	☐ i.		
☐ j.	☐ j.		
☐ k.	☐ k.		
☐ l.	☐ l.		
☐ m.	☐ m.		
☐ n.	☐ n.		

Is Container located on an Agricultural Farm? ☐ a. Yes ☒ b. No

IX IMPORTANT! Read instructions before signing.

Signature: The form must be signed by 1) a principal executive officer at the level of vice-president or by an authorized representative. The representative must be responsible for the overall operation of the facility where the tank(s) are located, 2) a general partner proprietor, or 3) a principal executive officer, ranking elected official or authorized representative of a public agency.

This form has been completed under the penalty of perjury and, to the best of my knowledge, is true and correct.

Signature	Date
X Henry Hemenez	July 11, 1984
Print Name Henry Hemenez	**Title** President
	Phone w/area code (415) 276-5200

Send check to: Hazardous Substance Storage Statement, State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95801-0100

For Tax Filing Statement	Phone w/area code
Myrna Hemenez	(415) 276-5200

For additional forms or more information call 916/324-1262

FOR STATE USE ONLY

ID Number	Accounting Number	County Number
Date Received	mo.	☐ a. ☐ b.

84 11677

APPENDIX III

SITE HEALTH & SAFETY PLAN

SITE HEALTH AND SAFETY PLAN

FOR

SOIL SAMPLING

AT

HANK'S AUTOMOTIVE SERVICE, INC.

16065 MATEO STREET
SAN LEANDRO, CALIFORNIA 94578

NOVEMBER, 1992

TABLE OF CONTENTS

SECTION PAGE

SITE HEALTH AND SAFETY PLAN SUMMARY

SITE NAME : HANK'S AUTOMOTIVE SERVICE, INC.

ADDRESS : 16065 MATEO STREET, SAN LEANDRO, CALIFORNIA 94578

SITE PHONE: (510) 276-5200

SITE SAFETY OFFICER : Norman Herrold

PROJECT MANAGER : Jack Quarle'

TYPE OF INVESTIGATION

[X] Soil Sampling

[ ] Groundwater Sampling

[ ] Site walkthrough

[ ] Remedial Activities

[ ] Subcontractor Supervision

[ ] Other:

POTENTIAL HAZARDS

[X] Organics
[ ] Inorganics
[ ] Heavy Metals
[ ] Solvents
[ ] Pesticides
[ ]
[ ] Acids
[ ] Bases
[ ] Fire

PERSONAL PROTECTIVE EQUIPMENT Level: [ ] A [ ] B [ ] C [X] D

[X] Hard Hat

[ ] Respirator

[X] First Aid Kit

[X] Boots
- [X] Steel Toed
- [ ] Chemical Resistant

[X] Gloves
- [ ] Disposable Inner PVC
- [X] Disposable Outer

[ ] Ear Plugs/Muffs

[ ] Organic Vapor Cartridges

[ ] Organic Vapor Analyzer

[X] Safety Goggles

[ ] Particulate Filters

[ ] Respirator

[ ] Coveralls
- [ ] Cotton
- [ ] Tyveks

[ ] Other

LIST OF EMERGENCY CONTACTS

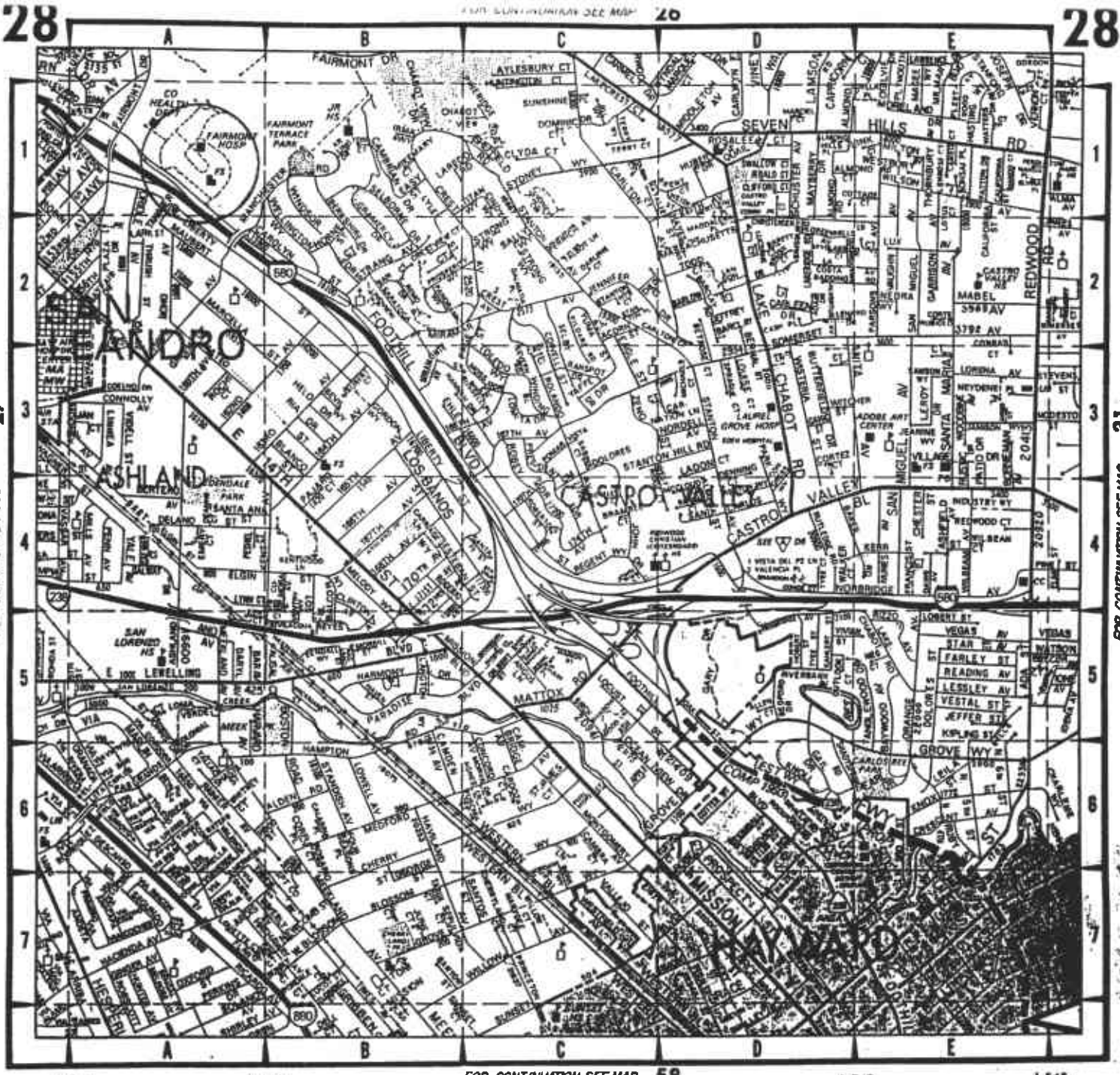
DESIGNATED LOCAL EMERGENCY RESPONDER	911
FIRE DEPARTMENT	911
AMBULANCE	911
DESIGNATED HOSPITAL - FAIRMONT HOSPITAL	(510) 667-7800

J. QUARLE' & ASSOCIATES

SAN LEANDRO OFFICE - JACK QUARLE' PROJECT MANAGER	(510) 895-1474

JOB SITE

HANK'S AUTOMOTIVE SERVICE, INC.	(510 276-5200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FOR CONTINUATION SEE MAP 20
FOR CONTINUATION SEE MAP 27
FOR CONTINUATION SEE MAP 31
FOR CONTINUATION SEE MAP 58
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CASTRO VALLEY
SEVEN HILLS RD
FAIRMONT DR
FOOTHILL BLVD
LOS BANOS BLVD
MATTOX RD
LEWELLING BLVD
CASTRO VALLEY BL
REDWOOD RD
MABEL
LAKE CHABOT RD
EL CHABOT
MISSION
SAN LORENZO
1,530.
1,533.
1,542.
1,545.

HANK'S AUTOMOTIVE SERVICE, INC.
SITE HEALTH AND SAFETY PLAN

1.0 INTRODUCTION AND BACKGROUND

This Health and Safety Plan will govern the safe completion of the site investigation and remediation activities at the subject site, located at 16065 Mateo Street, San Leandro, California.

Hank's Automotive Services Inc. is located in an unincorporated area of San Leandro. It is in an area of light industiral, retail and residental use. The facility consists of a residence and associated buildings, an office building, shop, and open storage.

The site is currently used as an automotive towing and storage business, and has been in operation since 1949.

2.0 RESPONSIBILITIES AND AUTHORITY

2.1 INTRODUCTION

Responsibilities and authority are discussed below as they pertain to the health and safety of personnel on the site, the public and the environment. Additional responsibilities and authority may be exercised by personnel on the site as necessary. For this particular project the Site Supervisor and Site Safety Coordinator will be the same person.

2.2 SITE SUPERVISOR

2.2.1 RESPONSIBILITIES

The Site Supervisor is responsible for the maintenance of a safe working environment at the site. Duties of the Site Supervisor include supervision and direction of all work activities to ensure that they are completed safely and efficiently. The Site Supervisor will also conduct the initial safety briefing before work begins. All on-site workers will be required to attend the briefing. (See Section 6.3).

2.2.2 AUTHORITY

The Site Supervisor may, at any time, order work at the site stopped in order to mitigate a perceived hazard. In addition, the Site Supervisor may deny access to anyone, at any time, to a work area of the entrance of that person into the area would pose a risk to that person or other personnel. The Site Supervisor also has the authority to remove personnel for the site if they conduct themselves in an unsafe manner.

2.3 SITE SAFETY COORDINATOR

The Site Safety Coordinator is responsible for the maintenance of a safe working environment on the site. In addition, the Site Safety Coordinator will monitor all work activities to ascertain that they are conducted safely. The Site Safety Coordinator will conduct daily safety meetings to review the contents of this Plan and to address specific safety violations which have occurred. The work planned for the day will be discussed as it will affect site safety. The proceedings of the safety briefing and the names of those attending will be noted in the site log book. On the first day of work the Site Safety

Coordinator will identify at least two alternate meeting points on the site if an evacuation of the site becomes necessary. These locations will be situated upwind from the site.

2.3.2 AUTHORITY

The Site Safety Coordinator may deny access to a work area to any one, at any time, if entrance to the area would compromise safety. In addition, the Site Safety Coordinator may ask personnel to leave the site if they are found to be working in an unsafe manner.

2.4 STAFF

Additional staff on site will include:

2.4.1 RESPONSIBILITIES

Site staff are responsible for conducting their work in the safest manner possible. They are also responsible for knowing and following the guidelines established by this Plan. Site staff are responsible for reporting unsafe work practices or environments to the Site Supervisor and/or Site Safety Coordinator as soon as possible.

2.4.2 AUTHORITY

Site staff may sound the cease work alarm (three horn blasts or other available alarm) when they perceive a developing hazardous situation. They will then evacuate their work area, making sure that all personnel are accounted for. Site staff will report any potentially dangerous situation to the Site Supervisor and/or the Site Safety Coordinator as soon as possible.

3.0 MEDICAL SCREENING PROGRAM

Because work on the site clean up will not entail prolonged contact with hazardous levels of substances of materials, a medical screening program will not be instituted for workers on the site.

There are not expected to be any environments at the site which will require the use of an air-purifying respirator. Site personnel will therefore not require medical certification in the use of that equipment.

4.0 HAZARD IDENTIFICATION

4.1 INTRODUCTION

This section attempts to identify many of the hazards which may be present at the site during the investigation and remediation activities. It is impossible to consider every potential hazard. This evaluation should only be considered as an overview. Recognition and communication of perceived hazards in the field is the responsibility of the personnel working on the site.

4.2 PHYSICAL HAZARDS

There are no known physical hazards at the site.

4.3 BIOLOGICAL HAZARDS

There are no known biological hazards at the site.

4.4 CHEMICAL HAZARDS

The soil and groundwater at the site are presumed to be contaminated with
The materials are toxic if ingested, but due to the relatively low concentrations, they pose only a slight threat from inhalation or absorption hazards at this site.

4.5 GENERAL SAFETY HAZARDS

General safety hazards include those present in any work environment. These include tripping and falling, areas of low head clearance, etc. All personnel should be aware of these dangers and use common sense to mitigate these hazards.

4.6 HAZARD COMMUNICATION

In order to maintain a safe work environment, all personnel working on the site will have access to a copy of this Plan and will be required to be familiar with its contents. The Site

Safety Coordinator will hold a daily safety briefing to review the contents of the Plan and to address any specific safety violations which may have occurred. These safety briefings will be recorded on site safety briefing sheets with the names of those in attendance. Any visitors to the site will also be given a safety briefing prior to admittance to the site.

5.0 HAZARD MITIGATION

The hazards identified above will be mitigated, as much as possible, though the measures outlined below. Site personnel should avoid creating and/or entering hazardous environments during their work on the site. The best mitigation for potential hazards is the avoidance of situations or actions which may create them.

5.1 PERSONNEL PROTECTIVE EQUIPMENT

Personnel protective equipment (PPE) will be worn by all personnel in order to mitigate both physical and chemical hazards. This equipment will be the equivalent of OSHA "Level D" protection (29 CFR 1910-120). Listed below is the required PPE for site personnel. This equipment will be worn at all times when personnel are on site.

1) Hard Hat

2) Steel-toe shoes or boots

3) Gloves (as necessary) either cotton, leather or nitrile

4) Safety Glasses (as necessary)

5.2 ENVIRONMENTAL MONITORING

Environmental monitoring will be performed with a 'Gastech GX-80 trimeter' during all phases of the clean-up work. This instrument provides simultaneous reading for percent of oxygen (%O_2), percent of the Lower Explosive Limit (%LEL) and concentration of hydrogen sulfide gas (H_2S). The trimeter will be set to alarm at the following levels:

< 19.5% Oxygen, >20% LEL, >10 ppm H_2S

There will also be an HNU photoionization detector (PID) on site to be used in contaminated soil excavation as a sample screening device.

5.3 PERSONNEL TRAINING AND QUALIFICATIONS

Only properly trained personnel will participate in the closure activities. At least one person will be on the site at all times who is trained in the application of first aid. This

will insure that appropriate first aid measures will be performed immediately in an emergency situation. A list of personnel with first aid training is provided below.

Name	Certification	Explaination
Norman Herrold	OSHA-SARA	Hazardous Waste Operations and Emergency Response

6.0 WORKPLAN AND SAFE WORK PRACTICES

6.1 INTRODUCTION

This section of the health and safety plan is to alert people to the clean up activities that will be performed at the site and what safety precautions will be taken.

6.2 GENERAL

This health and safety plan is only a guideline. Site personnel are responsible for conducting their activities in the safest manner possible. At no time should this plan be considered as a substitute for common sense, experience or specific training.

6.3 SITE SAFETY BRIEFINGS

Before work begins on-site, the Site Supervisor will conduct a site safety briefing. All on-site workers will be required to attend this briefing and sign an attendance sheet. The attendance sheet has been provided in the front of this safety plan.

6.4 SITE SECURITY AND ACCESS

Since the clean up work will involve excavation and soil removal and the construction of groundwater monitoring wells, access to the site's work area will be restricted. Visitors will be required to check in with the Site Supervisor to obtain permission to enter the work area. Visitors will receive a safety briefing and will be accompanied at all times be either the site supervisor or the Site Safety Coordinator.

6.5 SAMPLING

The excavations will be sampled by JQ&A personnel. The excavations will be sampled by collecting fresh soil from the excavation side walls in a back-hoe excavator bucket, and using that soil for the sample. Sampling personnel will wear gloves that offer chemical protection from hydrocarbons while conducting the sampling operations. Site personnel will not enter the excavations to collect samples.

During the construction of monitoring wells and other borings samples will be collected from the split spoon sampler operated by the drill rig.

A general sampling protocol, which should be appropriate in this situation, follows.

1. Clean and rinse (with flowing deionized water) all sampling equipment - clean all other equipment.

2. Collect all necessary equipment at location to be sampled.

3. Note site conditions and pertinent information at time of sampling in Sampling Logbook.

    a. Sampling Location.

    b. Meteorology.

    c. Names of members of sampling crew.

    d. Date and time of sampling.

    e. Soil sampling conditions.

4. Collect samples.

    a. Rinse sampling tools and sample containers with flowing deionized water.

    b. For samples that are not to be composited go to step d. For samples to be composited, place the soil liners with soil from the each location into a plastic bag. When all of the samples to be composited are collected, thoroughly homogenize the samples and fill one liner with the homogenized soil.

    c. Immediately cap with 3-mil Teflon^{TM} lined cap or aluminum foil and secure plastic cap with duct tape.

    d. Label appropriately and place in ice chest maintained at 4 degrees C.

    e. Complete chain of custody record.

f. Move to the next sampling location and repeat the protocol.

5. Contact the analytical laboratory to arrange pick-up of the samples or drop them off personally.

6. Place travel blank(s) in ice chest(s) with other samples prior to transport to analytical laboratory.

7. At the end of each work day and at the end of the sampling program all equipment and personnel should be decontaminated, as necessary, prior to leaving the site.

6.6 SOIL EXCAVATION AND DISPOSAL

Only qualified, trained personnel will operate excavation equipment. Operators will not eat, smoke, drink or engage in other distracting activities while operating equipment. Hand signals will be agreed on by the operator and signaller prior to the start of operations. Personnel not involved in excavating will stay well back of the work area.

The soil near the area that is being excavated will be screened with an HNU or other photo-ionization device to verify that enough soil has been excavated. This will be done by JQ&A personnel. The personnel performing the soil screening will remain well back from the excavation equipment while it is operating.

Soil will be stockpiled on plastic until final disposal/remediation options are selected.

7.0 EMERGENCY PROCEDURES

The following procedures serve as guidelines for response to emergency situations on the site. The Site Safety Coordinator is responsible for determining if emergencies can be adequately handled on site or if outside assistance should be called.

7.1 COMMUNICATION AND EMERGENCY ALARM

If an emergency situation develops, the site alarm (three blasts on an air horn) will be sounded and all personnel will assemble at a predetermined location upwind of the site.

7.2 ON-SITE SAFETY EQUIPMENT

The safety equipment to be maintained on site at all times is listed below.

First Aid Kit

Drinking Water

7.3 TRIAGE

The Site Safety Coordinator will evaluate emergency situations to determine the most appropriate response and the best allocation of on-site resources. He will then make a decision to call outside assistance or to handle the situation with on site resources. Injured personnel will be given first aid treatment as necessary.

7.4 ON-SITE RESPONSE

If the Site Safety Coordinator determines that the emergency can be effectively handled with on-site resources, he will direct site personnel to do so. If not, the appropriate emergency responders will be notified immediately.

7.5 NOTIFICATION

Following notification of all necessary emergency responders, and accounting for all personnel and their condition, the Site Safety Coordinator and/or Site Supervisor will notify the JQ&A office in San Leandro as to the situation and the actions taken.

In addition to internal notification of the JQ&A management, 8 CCR, Section 342 requires notification of Cal/OSHA within 24 hours of an on-the-job fatality, serious illness or injury. Serious illness and injury are defined as loss of any member and/or hospitalization for greater than 24 hours (8 CCR, Section 338).

7.6 RETURN TO WORK

Work on the site will resume only after all hazards and emergencies have been completely mitigated and/or resolved. The Site Safety Coordinator will note the extent and type of all emergencies in the site log book and will submit a written report to the JQ&A Health and Safety officer in San Leandro within ten (10) working days of the event.

APPENDIX IV

QUALITY ASSURANCE/QUALITY CONTROL

QUALITY ASSURANCE/QUALITY CONTROL

QA/QC OBJECTIVES

The overall objectives of the field sampling program include the production of reliable data which will support development of a remedial action plan where needed. Field and laboratory QA/QC procedures necessary to assure the generation of reliable data are described in this section.

Field tasks important to the QA/QC process include the following:

1. Ensuring that samples are representative of site conditions and are free of field contaminants.

2. Initiation of Chain of Custody procedures.

3. Preservation and shipping of samples so they arrive, unchanged, at the laboratory.

4. Documenting all field measurements (e.g.: pH, temperature, conductivity, etc.).

5. Collecting additional samples as necessary to fulfill QC requirements.

These activities, in addition to the laboratory QA/QC procedures are described in more detail below.

FIELD INSTRUMENTATION QA/QC

Field analysis is required for those parameters in a sample which are not easily preserved for later laboratory measurement or are needed for real-time decision making in the field. Parameters to be measured in the field include pH, specific conductivity and temperature. QC of such field data involves three components: regular maintenance and cleaning of field measurement equipment according to the manufacturer's specifications, regular calibration of field equipment and duplicate analysis of approximately 10% of samples in the field. Field measurements as well as calibration and maintenance records are entered in the site logbooks. They must correspond to the field identification number at the site or referenced on sample bottles transported to the laboratory. Also in the site log book will be summary entries that organize and/or clarify the data and will be tabulated as soon as possible at the end of each day's activities.

SAMPLE PACKAGING AND SHIPMENT

Samples will be packaged to avoid breakage or contamination, and will be delivered to the laboratory under proper chain of custody at proper storage temperatures. The following sample packaging requirements will be followed:

1. Sample bottle lids will not be mixed. All sample lids will stay with the original containers and have custody seals affixed to them.

2. All samples collected in glass jars will be wrapped in bubble pack and individually sealed in plastic bags. This will ensure that no cross contamination due to leakage or spillage occurs.

3. Samples will be secured in coolers to maintain custody, temperature control and prevent breakage during transportation to the laboratory. The original chain of custody form and one copy will be placed in a plastic bag and taped to the inside of the cooler lid. Ice will be used to keep samples at a constant temperature during transport to the laboratory.

SAMPLE METHODOLOGY/HANDLING

All field personnel will comply with the methods described in this plan of correction report for soil and groundwater sample collection. Prior to sampling, field personnel will ensure that all sample containers are in his/her physical possession or in his/her view at all times, or ensure that the containers are stored in a locked place at all times so as to maintain proper custody. All sample gathering activities will be recorded in the site logbook. All sample transfers will be documented in the chain of custody record. All samples will be identified with JQ&A labels and the lid of each sample bottle secured with a custody seal. All information will be recorded in waterproof ink. JQ&A field personnel are personally responsible for sample collection and the care and custody of collected samples until the samples are transferred or properly dispatched to the laboratory.

Soil samples from the ground will be collected in a thin-walled brass cylinder 6 inches long by 2 inches in diameter that has been decontaminated. About 3 and up to 24 inches of soil should be removed from the immediate surface area where the sample is to be taken and the cylinder then pounded into the soil with a wooden mallet bulk density driver, or other decontaminated pounding device. No headspace should be present in the cylinder once the sample is collected. Once the sample is collected, each end of the cylinder should be covered with aluminum foil and then capped with a polyethylene lid, taped and labeled. Excess aluminum foil is removed and the tape to be used has been tested to confirm that it does not contribute compounds that would be detected in the type of analyses intended for the sample contained inside the brass liner. The brass liner is then labeled with the appropriate identification numbers which specifify the sampling activity designation number, sample collection area, depth, etc. that applies to that particular sample. The samples will then be individually placed in ziplock bags and immediately placed in an ice chest containing frozen blue ice for delivery to the laboratory. Care will be taken to avoid contamination of both the inside and outside of the cylinder and its contents.

Water samples are similarly handled, but placed in decontaminated glass vials.

DECONTAMINATION

Adequate decontamination procedures ensure that samples collected are representative of actual environmental conditions at the sampling locations and that cross-contamination from one sample to another has not occurred. JQ&A observes the decontamination procedures described below.

JQ&A field personnel will decontaminate the split-tube sampler used for obtaining soil samples between each sample and any non-dedicated equipment that might come in contact with sampled soil. The following decontamination procedure will be followed:

1. Washing with a phosphate-free detergent.

2. Rinse with tap water.

3. Rinse with hexane.

4. Rinse with deionized water.

SAMPLE CONTAINERS

Our firm uses new sample containers of the type specified by the EPA for the collection of samples. Soil samples for volatile, semi-volatile and non-volatile analyses are all collected in properly prepared new brass liners which are 2 inches in diameter and 6 inches in length.

SAMPLE DESIGNATIONS

All sample containers are identified with both an activity number and a discrete sample identification.

CHAIN OF CUSTODY

Samples are continuously maintained in either a chilled ice chest, refrigerator or freezer from the time of collection until acceptance by the certified Hazardous Material Testing Laboratory selected to perform the analytical procedures. If the samples are taken charge of by a different party (such as another person from our office a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time , date and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

FIELD LOGBOOKS

The site logbook(s) will be maintained by designated JQ&A personnel. All site logbooks must be bound, contain numbered pages and be waterproof. The following documentation is to be recorded in the site logbooks:

1. Sampling locations, station numbers, dates, times, samplers name.

2. Designation of the sample as a grab or composite.

3. Notation of the type of sample (e.g. groundwater, soil boring, etc.).

4. Preservatives used, on-site measurement data and any other observations or remarks.

Each series in the logbook entries for a particular sampling effort must be initialed by the person recording the information and where appropriate, summary entries that organize and/or clarify data presented in the logbook. After reviewing the entries the field team leader must sign each page of the site logbook on the top and the bottom.

As with all data logbooks, no pages will be removed for any reason. If corrections are necessary, they must be made by drawing a single line through the original entry (in such a manner that the original entry can still be read) and then writing the corrected entry alongside. The correction must be initialed and dated. Most corrected errors will require a footnote explaining the correction.

CUSTODY SEALS

Custody seals are preprinted adhesive-backed seals with security slots designed to break if they are disturbed. Individual sample bottles are sealed over the cap with a custody seal by the sampling technician. Sample shipping containers (coolers) are sealed in as many places as necessary to ensure security. Seals are signed and dated before being used. On receipt at the laboratory the custodian will check and certify that all seals on boxes and bottles are intact.

LABORATORY I.D. NUMBERS

Following receipt of the samples and completion of the chain of custody form the laboratory then will assign their own I.D. numbers to the samples. Different laboratories use different numbering systems and according to their own internal conventions may or may no assign sequential numbers to samples which are placed on temporary "hold" pending the results of other analyses. Laboratory I.D. numbers will be found on the certified analytical report by the laboratory.

CERTIFIED LABORATORY

The outside laboratory must meet EPA guidelines for QA/QC methodology and EPA

requirements. These methods involve analyzing calibration standards and check stands (both independent and EPA certified standards). Internal QC also requires adherence to written methods, procedural documentation, record keeping and the observance of good laboratory practice. The laboratory will retain all samples for 60 days.