

SITE SAFETY PLAN  
FOR  
UNDERGROUND STORAGE TANK REMOVAL/CLOSURE

JOB SITE ADDRESS: 3600 Mac Arthur Avenue., Oakland

JOB NUMBER: 91-0416

PREPARED BY: MILTON TIFFIN, ESTIMATOR

JAMES C. BATEMAN PETROLEUM SERVICES, INC.  
dba SEMCO

TABLE OF CONTENTS

PAGE NO.

TABLE OF CONTENTS.....	2
INTRODUCTION.....	3
1.0 HISTORY & SCOPE of WORK.....	4
2.0 HAZARDS SPECIAL PRECAUTIONS.....	5
3.0 JOBSITE VICINITY MAP.....	6
4.0 SITE MAP.....	7
5.0 PERSONNEL.....	8-9
6.0 EMERGENCY SERVICES.....	10
7.0 HOSPITAL ROUTE MAP.....	11
8.0 CONTINGENCY PLAN.....	12
9.0 SAFETY EQUIPMENT.....	13
10.0 SIGNATURES & ACKNOWLEDGMENTS .....	14

## INTRODUCTION

Page 3

SEMCO has adopted the following Health & Safety Plan and procedures for the removal and/or closure of underground petroleum storage tanks and associated piping. The purpose of this plan is to provide health and safety guidelines to be adhered to while all work is in progress.

All personnel involved with the tank removal or associated activities will have an assigned responsibility. The outlined responsibilities will establish standards for personnel protective wear and safety procedures, and will provide for emergency actions which could arise during project operations.

HISTORY & SCOPE OF WORK

1.0 History & Scope of Work:

1.1 History:

1.2 Scope of Work:

The tanks will be purged of all remaining residues, and these residues will be stored on site in 55 gallon D.O.T. approved drums until they are hauled away for disposal by a certified hazardous materials hauler.

The tanks will be inerted with a minimum of 15 lbs of dry ice per 1,000 gallons of tank capacity. More ice will be added if necessary to displace the oxygen in the tank to a concentration level below the OSHA approved lower explosive limit. When this level is obtained the tanks will be removed, and samples will be collected per the approved work plan.

1.3 Responsibilities of Other Agencies Present:

- a. The Environmental Health Department is responsible for approval and inspection of procedures, including tank removal, sample procurement and integrity of work plan.
- b. The Fire Department is responsible for inspection relative to safe procedures and condition of tank prior to removal.

## HAZARDS, SPECIAL PRECAUTIONS

## 2.0 Hazards, Special Precautions:

## 2.1 Special Precautions:

During the course of underground storage tank removal, workers could be exposed to petroleum hydrocarbon vapors, liquids, or other wastes. The following precautions will be observed by all individuals engaged in the tank removal activity.

## 2.1.1 Toxicity Considerations, Petroleum Substances:

All individuals should be aware of appropriate health precautions. When high concentrations of petroleum hydrocarbon vapors are inhaled, symptoms of intoxication may result. These symptoms, range from simple dizziness to unconsciousness. Care will be exercised to minimize exposure to these substances when they are present. Avoid skin contact with petroleum substances whenever possible. Use soap and water to remove any petroleum product that contacts skin.

## 2.1.2 Flammability and Combustibility Consideration:

Flammable and combustible vapors are likely to be present in the work area. Precautions will be taken to eliminate all potential sources of ignition, to prevent the discharge of static electricity during venting, and to prevent the accumulation of vapors.

## 2.1.3 Physical Considerations:

During the excavation of underground storage tanks, some physical hazards can be present, in the form of large holes, exposed piping, debris piles, and excavation equipment. All workers will be aware of these hazards and take all necessary actions to eliminate accidents, when left unattended the excavated area will be appropriately marked and barricaded at all times.

JOBSITE VICINITY MAP

2.0 Jobsite Vicinity Map



*Jobsite*

**OAKLAND**

**PIEDMONT**

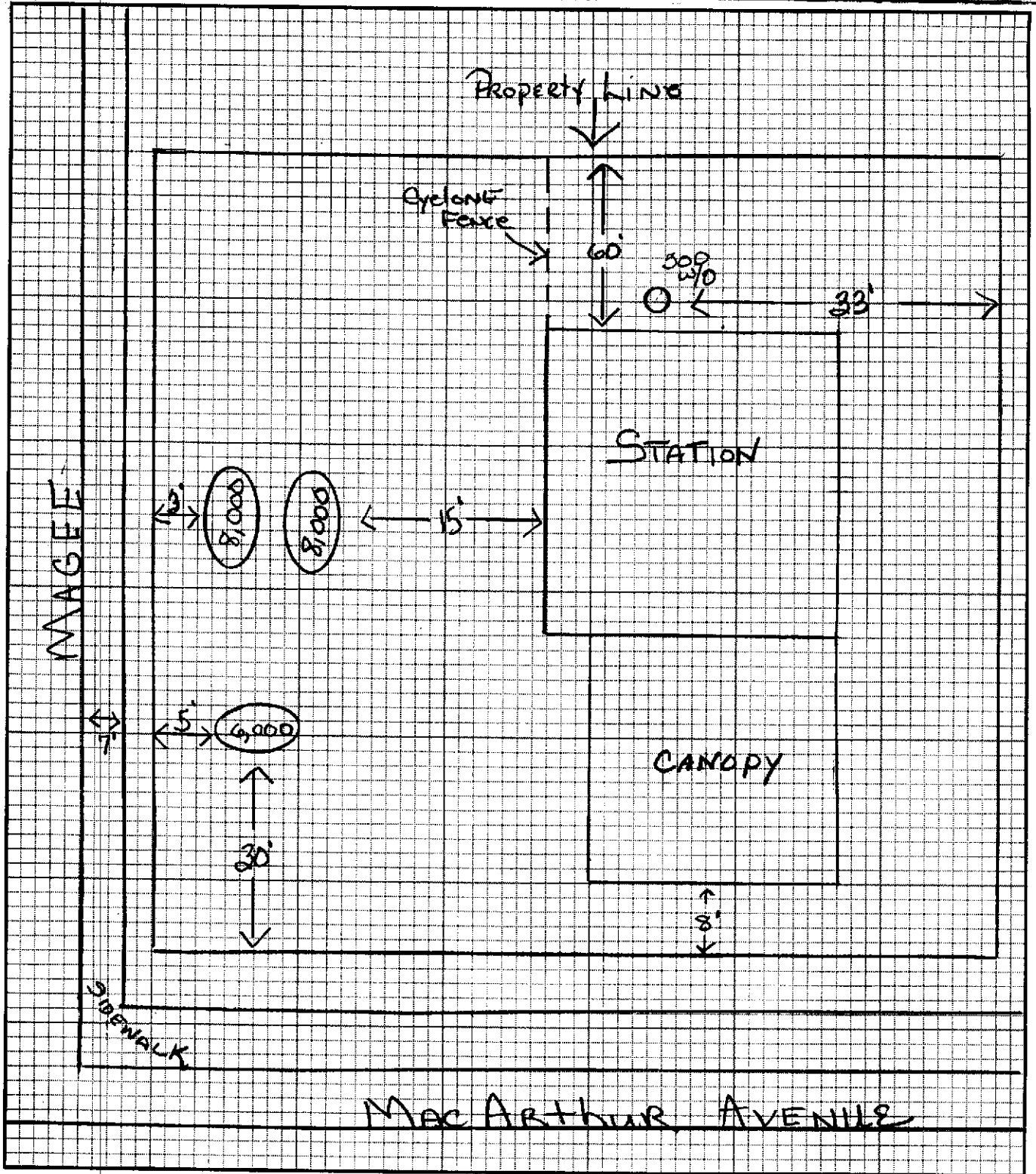
**OAKLAND**

Government Island  
Alameda  
Yacht Harbor  
U.S. Coast Guard  
Oakland Yacht Club  
Alameda Canal

© by North American Map Co. San Francisco, CA

SITE MAP

3.0 Site Map



PERSONNEL

## 4.0 Personnel:

## 4.1 Project Manager

- Manages field operations.
- Ensures the Work Plan is completed on schedule.
- Briefs the field teams on their specific assignments.
- Participates in the preparation of the Site Safety Plan.
- Serves as a liaison with public officials.

## 4.2 Site Safety Officer

- Implements and enforces the SSP.
- Assures that all on-site personnel have received a copy of the SSP, have read it and understand it.
- Conducts frequent inspections of site conditions, facilities, equipment, and activities to determine if the SSP is adequate and being followed.
- Conducts daily "tailgate" meetings to explain the plan of work for the day, mention potential hazards of the site.
- Ensures that protective clothing and equipment are properly stored and maintained.
- Knows emergency procedures, excavation routes, and notifies local emergency services when necessary.
- Notifies the Health and Safety Manager of all accidents and injuries that occur on site.

## 4.3 On-Site Personnel:

- Are required to document their full understanding of the SSP before starting work by signing that they have read the SSP and understand it.
- Complies with the SSP.



PERSONNEL--Continued

- Notifies the SSD of unsafe conditions.
- On-site employees are held responsible to perform only those tasks for which they believe they are qualified and in their opinion are safe.

LEVEL D: Safety Glasses Steel Toe Shoes  
Hard Hats  
Uniform shirt/pants

LEVEL C: Safety Glasses or Goggles w/side Shields  
Hard Hats  
Steel Toe Safety Shoes  
Half of Full Face Respirator with Organic  
Vapor Cartridges  
Tyvek or Poly-Coated Tyvek

## 5.0 Emergency Services

## 5.1 Persons to contact in case of emergency:

- a. PROJECT MANAGER  
Name: Chuck Kiper  
Phone: (415) 572-8033
- b. CLIENT CONTACT  
Name: Henry Hall  
Phone: (415) 533-2249 (B) (415) 532-9499 (H)
- c. SITE CONTACT  
Name: Chuck Kiper  
Phone: (415) 572-8033
- d. SITE SAFETY OFFICER  
Name: Chuck Kiper  
Phone: (415) 572-8033
- e. ALTERNATE SITE SAFETY OFFICER  
Name: Terry Hamilton  
Phone: (209) 524-9653
- f. HEALTH & SAFETY COORDINATOR  
Name: Milton Tiffin  
Phone: (209) 524-9653

5.2 Hospitals In Area:  
Kaiser Hospital  
Phone: (408) 596-1000

5.3 Emergency Routes  
See Hospital Route Map, Page 11

5.4 Ambulance Service:  
Acme Ambulance (415) 653-6622

5.5 Fire Prevention:  
Alameda County Environmental Health Department.

5.6 Fire Department:  
DIAL 911

5.7 A First Aid Kit will be on site:

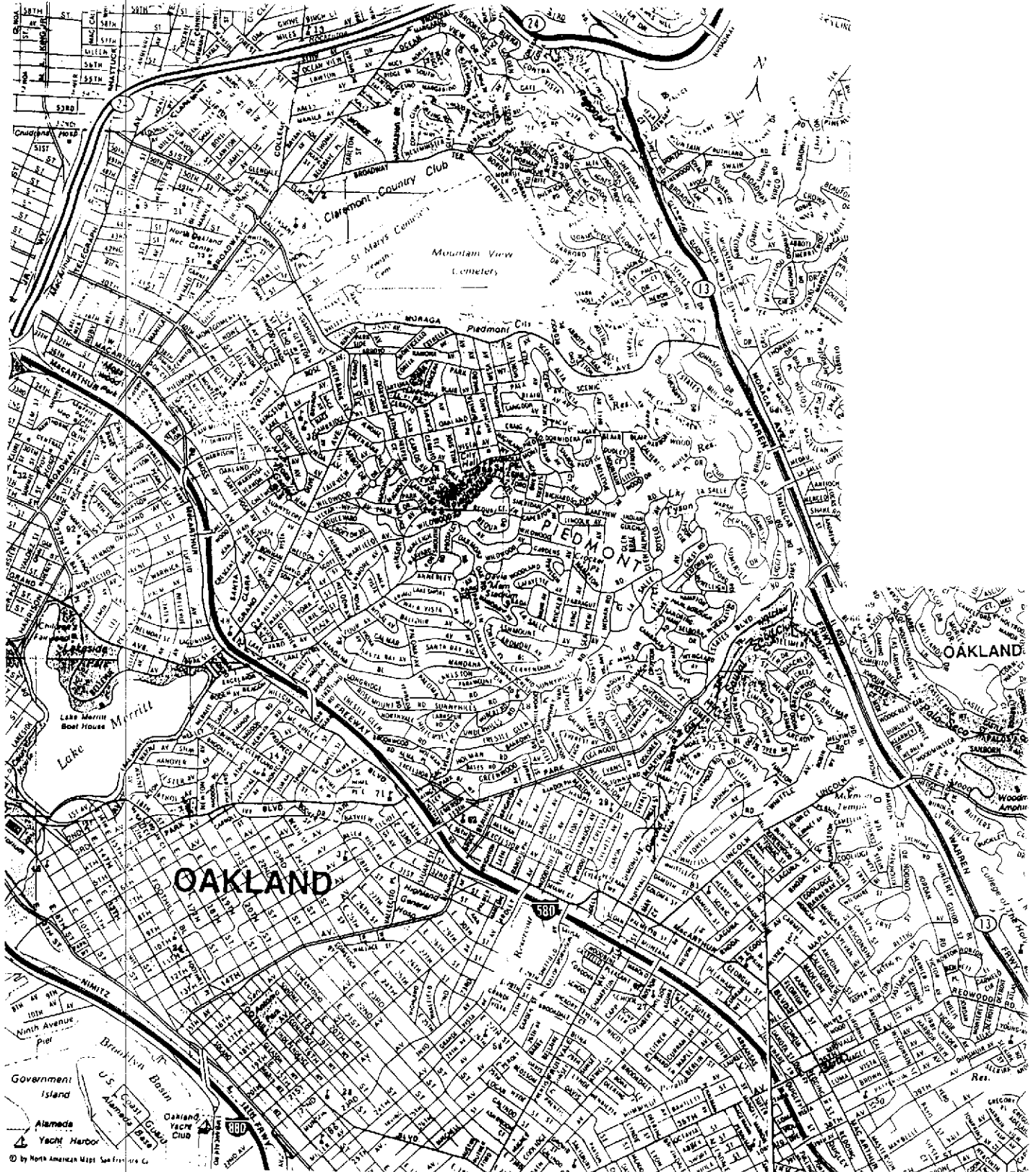
5.8 Barricades:  
Job site will be barricaded off and construction tape will be used around working area, when work area is left unattended.

5.9 Fire Extinguishers will be present on site:

HOSPITAL ROUTE MAP

6.0 Hospital Route Map

*Hospital*



© by North American Map Co. San Francisco, Ca.

CONTINGENCY PLAN

7.0 Contingency Plan:

If an injury occurs, the following action will be taken:

- Medical attention for the injured person immediately.
- Notify the Site Safety Officer.
- Depending on the type and severity of the injury, the occupational physician will be notified.
- The injured person's personnel office will be notified.
- An incident report will be prepared. The Site Safety Officer will be responsible for its preparation and submittal to the Health and Safety Direction and corporate personnel office within 24 hours.
- The Site Safety Officer will assume charge during a medical emergency.
- EMERGENCY ROUTES--see Hospital Route Map, Page 11

SAFETY EQUIPMENT

B.0 Safety Equipment:

B.1 As a minimum, the following equipment will be on site:

LEL meter	40BC Fire Extinguisher
OSHA-Approved First Aid Kit	Half Face Respirator with Organic Vapor Cartridges

9.0 Signatures & Acknowledgments:

I acknowledge having read and understood the preceding Health & Safety Plan:

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

21