



**SITE SAFETY PLAN
UNDERGROUND TANK REMOVAL**

**757 SANTA CLARA AVE.
ALAMEDA, CALIFORNIA 94501**

October 3, 2007

**GOLDEN GATE TANK REMOVAL, INC.
3730 MISSION STREET
SAN FRANCISCO, CALIFORNIA 94110**

PROJECT # 8938

SITE HAZARD INFORMATION

PLEASE PROVIDE THE FOLLOWING INFORMATION FOR THE SITE

Owners Name: Alvin and Aracely Selk
Site Address: 757 Santa Clara Ave.
Alameda, CA 94501
Directions to Site: Cross Street 8th St.

Consultant On Site: Golden Gate Tank Removal, Inc. Phone number: 415/512-1555
Site Safety Officer: Joshua Alexander Phone Number: 415/512-1555
Type of Facility: _____ Mobile Number: 415/559-0499
Site Activities: Drilling construction Tank Excavation Soil Excavation
 Work in Traffic Area Groundwater Extraction Vapor Extraction Above Ground Remediation
 Other: _____

Hazardous Substances

Name (CAS#)	Expected Concentration	Health Affects
<u>Heating Oil</u>	<u>Minimal</u>	<u>Nausea, Dizziness</u>
_____	_____	_____
_____	_____	_____

Physical Hazards

Noise Excavations/Trenches
 Traffic Other: _____
 Underground Hazards _____
 Overhead Lines _____
Potential Explosions and Fire hazards: _____

Level of Protection Equipment

A B C D See Personal Protective Equipment

Personal Protective Equipment

R = Required A = As Needed

<u>R</u> Hard Hat	<u>A</u> Safety Eye wear (Type) _____
<u>A</u> Safety Boots	<u>A</u> Respirator (Type) <u>1/2 Face</u>
<u>R</u> Orange Vest	<u>A</u> Filter (Type) <u>Carbon</u>
<u>A</u> Hearing Protection	<u>A</u> Gloves (Type) <u>Leather</u>
<u>_____</u> Tyvek Coveralls	<u>_____</u> Other _____

757 Santa Clara Ave., Alameda, California 94501 – Job# 8938

SITE HAZARD INFORMATION

Monitoring Equipment On Site

- Organic Vapor Analyzer
- Air Sampling Pump
- Oxygen Meter
- Combustible Gas Meter
- H2S Meter
- Other _____

Site Control Measures Normal Pedestrian, Orange Cones, Traffic Signs

Decontamination Procedures Warm Water Soap

Hospital/Clinic Alameda Hospital Phone 510-522-3700

Hospital Address 2070 Clinton Ave. #4, Alameda

Paramedic 911 Fire Dept. 911 Police Dept. 911

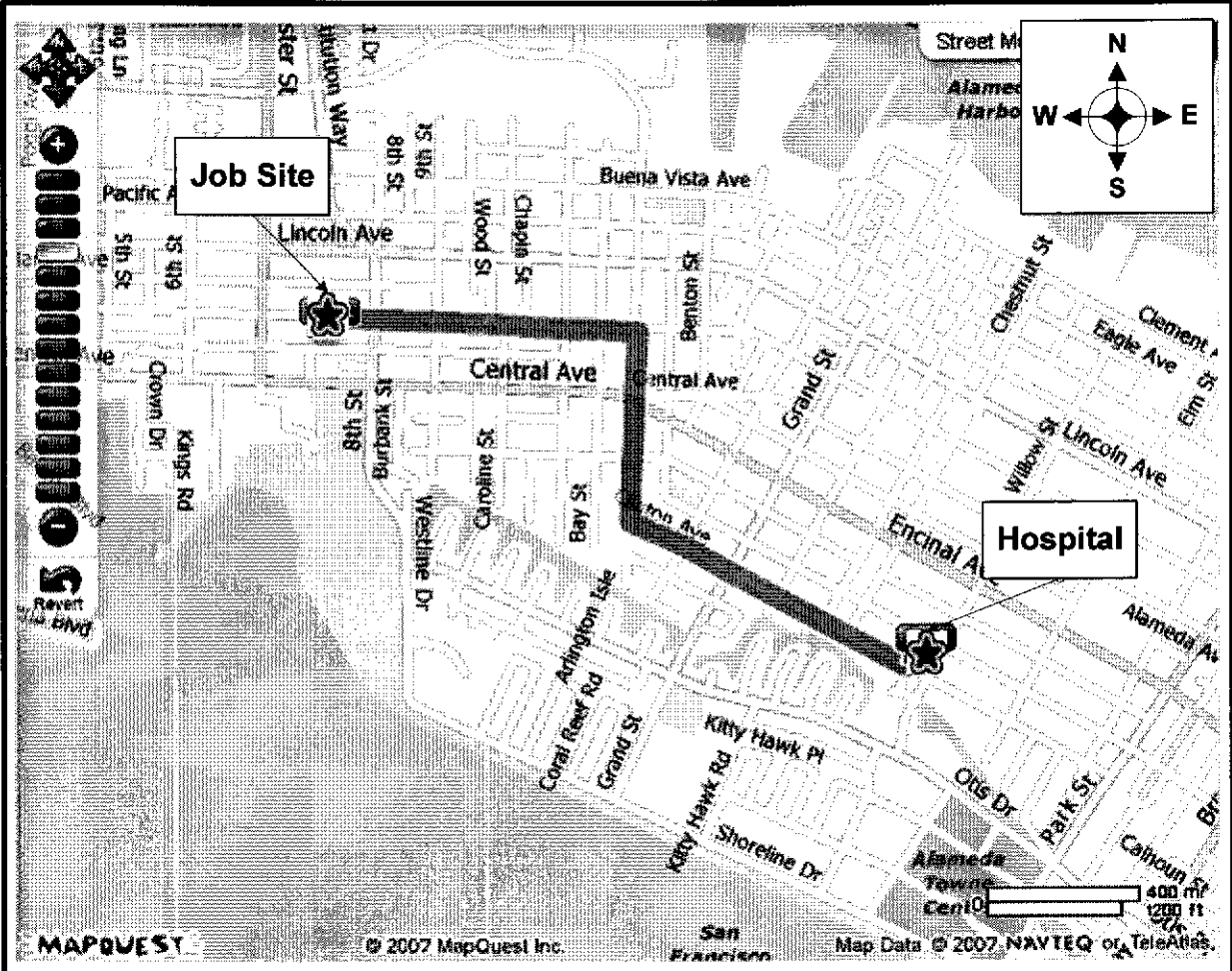
Emergency/Contingency Plans & Procedures See Safety Procedures

Site Hazard Information Provided By: Helen Meneses

Phone: 415/512-1555

Signature: 

Date: 10/2/07



Distance: 1.58 miles Approximate Travel Time: 5 mins

Directions

1. Start out going EAST on SANTA CLARA AVE toward 8TH ST - 0.5mi
2. Turn RIGHT onto SHERMAN ST - 0.3mi
3. Turn LEFT onto CLINTON AVE - 0.6mi
4. End at 2720 Clinton Ave

GOLDEN GATE TANK REMOVAL, INC.
 3730 Mission Street
 San Francisco, CA 94110
 Ph (415) 512-1555 Fx (415) 512-0964

HOSPITAL MAP
 Alameda Hospital
 2070 Clinton Ave. #4
 Alameda, Ca 94501
 (510) 522-3700

1.0 PURPOSE

This operating procedure establishes minimum procedures for protecting personnel against the hazardous properties during the performance of the removal of an underground storage tank and related activities. All employees and subcontractors of Golden Gate Tank Removal shall follow this plan. This plan is developed to work with the California Occupational Safety and Health Code to quickly prepare and issue a site safety plan for the removal of an underground storage tank and the related activities.

2.0 APPLICABILITY

This procedure is applicable to the removal of underground storage tanks and the related activities. Listed below are some of, but not limited to, the activities and substances that may be encountered during the project.

Activities:

The work to be performed will include: the excavation of potentially contaminated soil in order to expose the underground storage tank, the stock piling of soil, the removal and manifested disposal of the tank, the recovery of soil samples from the excavation and stockpiled soil, and the backfill and resurfacing of the excavation.

Substances:

- Diesel Fuel Oil (Home Heating Oil)
- Lead and Unleaded Gasoline
- Diesel Fuel
- Motor Oil (used and unused)

3.0 RESPONSIBILITY AND AUTHORITY

Personnel responsible for project safety are the business unit's Health and Safety Officer (HSO), the Project Manager (PM), and the Site Safety Officer (SSO).

The HSO is responsible for reviewing and approving the site safety plan and advising both the PM and SSO on health and safety matters. The HSO has the authority to audit compliance with the provisions of the site safety plan, suspend work or modify work practices for safety reasons, and to dismiss from the site any individual whose conduct on-site endangers the health and safety of themselves and/or others.

The PM is responsible for having the site safety plan prepared and distributed to all field personnel and to an authorized representative of each firm contracted to assist with the on-site work.

The SSO is responsible for assisting the PM with on-site implementation of site safety plan. The SSO may suspend work anytime he/she determines that the provisions of the site safety plan are inadequate to ensure worker safety and inform the PM and HSO of individuals whose on-site behavior jeopardizes their health and safety or the health and safety of others.

4.0 HAZARD EVALUATION/CRITERIA

Chemical

The general types of chemical hazards associated with this project are exposure to various chemical substances, including but not limited to, petroleum hydrocarbon liquids and vapors, caustic and acidic mists, liquids and solids. Exposure to elevated levels of hydrocarbon vapors presents potential health risks that need to be properly controlled. Work practices and methods will be monitored to limit exposures. Where elevated exposures persist, respiratory protection will be the primary control method to protect personnel from inhalation of hydrocarbon vapors.

Physical

The general types of physical hazards associated with this project are:

- Mechanical hazards: swinging objects, machinery, etc.,
- Physical lifting, shoveling, climbing (ladder), etc.,
- Electrical hazards: buried cables and overhead power lines,
- Thermal hazards: heat stress, and heat exhaustion
- Acoustical hazards: excessive noise created by machinery.

Flammability

The general types of flammable hazards associated with this project are fire hazards: natural gas and product lines, flammable petroleum hydrocarbons, and motor driven equipment.

Petroleum distillate fuels passes two intrinsic hazardous properties, namely, flammability and toxicity. The flammable property of the oil and fuels presents a far greater hazard to field personnel than toxicity because it is difficult to protect against and can result in catastrophic consequences. Being Flammable, the vapors of volatile components of crude oil and the fuels can be explosive when confined.

Eliminating any one of the three factors needed to produce combustion can minimize the probability of fire and explosion. Two of the factors, ignition source and vapor concentration, can be controlled in many cases. Prohibiting open fires and smoking on-site, installing spark arrestors on engines and turning off engines when lcl is approached can control ignition. Introducing dry ice (solid carbon dioxide) in the tank can reduce vapor concentrations in the headspace; the carbon dioxide gas will displace the combustible vapors.

5.0 HEALTH AND SAFETY DIRECTIVES

Site-Specific Safety Briefing

Before fieldwork begins, all field personnel, including subcontractor employees must be briefed on their work assignments and safety procedures contained in this document.

Personal Protective Equipment

Each field team member shall have on-site, before the commencement of work, the following personal protective equipment:

- NIOSH-approved full or half face respirator with organic vapor cartridges (cartridges will be supplied pending the work criteria).
- Hard-hat and safety vest
- Leather work boots, steel toed boots are strongly suggested
- Leather work gloves
- Ear protection, earphone type or ear plugs
- Eye protection, safety glasses and splash proof goggles

Equipment Usage

Hard-hats and safety vests must be worn at all times when on the job site.

Safety goggles must be worn when working within 10 feet of any operating heavy equipment (e.g., jackhammer, and backhoe). Splash-proof goggles or face shields must be worn whenever product quantities of fuel are encountered.

Respirators must be worn whenever total airborne hydrocarbon levels in the breathing zone of field personnel reach or exceed a 15-minute average of 25 ppm. If total airborne hydrocarbons in the breathing zone exceed 100 ppm, work must be suspended, personnel directed to move a safe distance from the source, and the HSO or designee consulted.

Chemical-resistant safety boots must be worn during the performance of work where surface soil is obviously contaminated.

Monitoring

Personal exposure to ambient airborne hazards will be monitored to assure that personnel exposures do not exceed acceptable limits and that appropriate selection of protective equipment items is made. If concentrations approach criteria levels, all personnel will be notified of possible site safety changes. Audits will be conducted by the Safety Officer to insure compliance with the Safety Plan and to provide additional support as required.

Area Control

Access to hazardous and potential hazardous work sites must be controlled to reduce the probability of occurrence of physical injury and chemical exposure of field personnel, visitors and the public. A hazardous or potential hazardous area includes area where a tank removal or related activity is being performed and/or field personnel are required to wear respirators.

Cordons, barricades, and/or emergency traffic cones or posts, depending on conditions must identify the boundaries of hazardous and potentially hazardous areas. If such areas are left unattended, signs warning of the danger and forbidding entry must be placed around the perimeter if the areas are accessible to the public. Trenches and other large holes must be guarded with wooded or metal barricades spaced no further than 20 feet apart and connected with yellow caution tape. The barricades must be placed no less than two feet from the edge of the excavation or hole.

Entry to hazardous areas shall be limited to individuals who must work in those areas. Unofficial visitors must not be permitted to enter hazardous areas while work in those areas is in progress.

Official visitors should be discouraged from entering hazardous areas, but may be allowed to enter only if they agree to abide by the safety officer and are informed of the potential dangers that could be encountered in the areas.

Decontamination

Field decontamination of personnel and equipment is not required except when contamination is obvious (visual or by odor). Recommended de-contamination procedures follow:

Personnel

Gasoline, heating oil, diesel and oil should be removed from skin using a mild detergent and water. Hot water is more effective than cold. Liquid dishwashing detergent is more effective than hand soap. If weathered to an asphaltic condition, mechanics waterless hand cleaner is recommended for initial cleaning followed by detergent and water.

Equipment

Gloves, respirators, hard-hats, boots and goggles should be cleaned as described under personnel. However, if boots do not become clean after washing with detergent and water, they should be cleaned with a strong solution of trisodium phosphate and hot water. If this fails, clean with diesel oil followed by detergent and water to remove diesel oil.

Sampling equipment, augers, vehicle undercarriages, and tires should be steamed cleaned. The steam cleaner is a convenient source of hot water for personnel and protective equipment cleaning.

6.0 SAFETY AND HEALTH TRAINING

Each individual on the job site should have been or is preparing to attend the 40 hr. Hazardous Materials Handling Course as required by the California Occupational Safety and Health Association. In addition, the HSO conducts BI-weekly health and safety meetings.

Each morning before fieldwork begins, all field personnel, including subcontractor employees, must attend the site-specific safety briefing at their work site to receive assignments and safety procedures.

7.0 RECORD KEEPING REQUIREMENT

The following record keeping requirements will be maintained in the program file indefinitely. The particular organization responsible for these records is also listed.

- Copy of this Health and Safety Plan - Golden Gate Tank Removal.
- Health and Safety Training Certification Form for Site Safety Officer -- Golden Gate Tank Removal.
- Any accident/illness report forms -- All Parties.
- Personal sampling results -- Golden Gate Tank Removal.
- Documentation of employee's medical ability to perform work and wear respirators -- All parties.

Prepared By:


Helen Meneses

Golden Gate Tank Removal, Inc.