

December 10, 1993

*Nearst Hospital  
Emergency phone # 372-4270  
Alta Bates Hospital  
2450 Lakeside  
Berkeley  
CA.*

## SITE SAFETY PLAN

for  
Underground Tank Abandonment  
at the  
Facility  
at  
COULTER STEEL & FORGE COMPANY  
1494 - 67th Street  
Emeryville, California

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The following site safety plan has been prepared to address the health and safety requirements for the abandonment of one underground gasoline storage tank at the commercial property at 1494 - 67th Street, Emeryville, California.

### 1.0 BACKGROUND

Located at the COULTER STEEL & FORGE COMPANY owned property at 1494 - 67TH Street, Emeryville is one 1000 gallon underground gasoline storage tank. The tank is located beneath the concrete and asphalt parking area that is adjacent to the building on the property. The tank has been out of service and is empty.

### 2.0 SCOPE OF WORK:

The scope of work to: obtain permits; prepare a site safety plan; break and remove the concrete over to the tank; excavate soil to expose tank, remove the liquids in the tank and wash tank for removal, once tank is inert, the tank will be loaded and properly transported to a approved tank disposal facility, backfill and compact the excavation; resurface to match existing conditions.

### 3.0 KEY PERSONNEL AND RESPONSIBILITIES:

The key personnel and responsibilities for this project are as follows: LeeLand Davis, Project manager, Bay Area Tank & Marine Inc., responsible for safety of public and workers, performance of tasks and adherence to health and safety, property owners representative, contact for regulatory and technical information.

Telephone numbers of key responsible parties:

Bay Area Tank & Marine Inc.: (510) 372-4270

James Wong & Associates: (510) 687-9660

#### 4.0 JOB HAZARD ANALYSIS

The potential chemical and physical hazards at this site are as follows:

##### 4.1 PHYSICAL HAZARDS:

4.1.1 slip, trip, fall hazards due to uneven work area

4.1.2 noise, eye and bodily hazards while operating equipment

4.1.3 hazards to hands and feet when handling heavy or sharp materials or equipment

4.1.4 exposure to heat or cold stress

4.1.5 Moving light equipment

4.1.6 Steps to Minimize Hazards:

- \* Wear proper protective equipment.
- \* Familiarize workers with site conditions.
- \* Monitor for heat and cold stress.
- \* Operate equipment in a safe manner.
- \* Designate restricted work zones before starting work.

##### 4.2 CHEMICAL HAZARDS:

4.2.1 Gasoline fuel contamination may be present at the site. The exposure limits of the petroleum contaminants are as follows:

NAME	WARNING CONC.	TLV	IDLH
Diesel Fuel	.25 ppm	2,500 ppm	NA
Gasoline	.005-10 PPM	300 PPM	2K PPM
Benzene	4.68 PPM	10 PPM	2K PPM

Ethyl Benzene	0.25-200 PPM	100 PPM	2K PPM
Toluene	.17 -40 PPM	100 PPM	2K PPM
Xylene	0.05-200 PPM	100 PPM	10K PPM

#### 4.2.2 ROUTES OF EXPOSURE:

- \* Inhalation
- \* Ingestion
- \* Absorption
- \* Contact

#### 5.0 RISK ASSESSMENT

- 5.1 General Public: The site will be barricaded and restricted from public access.
- 5.2 Other Workers: Any work being performed by others is being conducted outside of the work area and is unrelated to the work being performed.
- 5.3 Surrounding Property: There are no structures in the area that will be impaired by the tank abandonment.
- 5.4 Workers Performing Services: The risks associated with the tank abandonment operation can be minimized by safe work practices and proper protective equipment.

#### 6.0 EXPOSURE MONITORING PLAN:

- 6.1 Hazardous Vapors: The work site and tank will be monitored using a combustible gas meter. Meter readings will be taken and documented before and during the tank abandonment.
- 6.2 Heat and Cold Stress: These will be monitored by measuring the ambient temperature with a thermometer and will be recorded during work at regular times.

#### 7.0 PERSONNEL PROTECTIVE EQUIPMENT:

- 7.1 Laborers and supervisors -- Level D protective equipment:

Hard Hat  
Coveralls or poly-tyvec  
Half-face cartridge respirator if needed

Organic vapor cartridges if needed  
safety glasses  
PVC gloves and steel toe boots  
Goggles

- 7.2 Consultant or Project Manager -- Level D protective equipment:  
Hard Hat  
Coveralls  
Half-face cartridge respirator if needed  
Organic vapor cartridges if needed  
Safety glasses  
PVC gloves and steel toe boots

#### 8.0 WORK ZONES AND SECURITY MEASURES:

Three work zones will be established before proceeding with work:

- 8.1 Support or Security Zone: Will be the sidewalk around the tank, barricades and or other device will be used to to restrict public access.
- 8.2 Contamination Reduction Zone: An area designated at the site will be used to don and doff protective equipment.
- 8.3 Exclusion Zone: Will be the area where work is being conducted. Only workers or authorized persons wearing the proper protective equipment will be allowed into the exclusion zone.

#### 9.0 DECONTAMINATION PROCEDURES:

- 9.1 Personnel will remove protective equipment in the contamination reduction zone. Expendable items such as tyvecs, gloves and respirator cartridges will be placed in drums for disposal with other contaminated materials.
- 9.2 Bathrooms are located at the site and there will be waterless hand cleaner at the site to wash hands when necessary.

10.0 GENERAL SAFE WORK PRACTICES

- No horse play.
- No smoking.
- No eating.
- Operate all equipment properly.
- Plan ahead.
- Follow instruction and adhere to safety guidelines.

11.0 STANDARD OPERATING PROCEDURES:

- 11.1 All personnel will don and doff protective equipment while in the contamination reduction zone.
- 11.2 Remove protective clothing in the following order: Tyvec suit, boots, respirator, gloves.
- 11.3 Hard hat, safety glasses and steel toe boots are to be worn on site at all times.

12.0 CONTINGENCY PLAN:

- 12.1 All hospital, fire and emergency telephone numbers will be posted near the work area with directions to the hospital.
- 12.2 Personnel currently trained in first aid, CPR and 49 CFR 1910.120:

Project Manager; First Aid, CPR, 49 CFR 1910.120  
Work crews; 49 CFR 1910.120  
Consultant; Unknown

- 12.3 Personnel injured in the exclusion zone will be moved to the contamination reduction zone (if possible) where personnel protective equipment will be removed in order to administer first aid.

13.0 TRAINING REQUIREMENTS:

- 13.1 All personnel working in areas considered potentially hazardous will have had, as a minimum, forty hours' training in the hazards and protections associated with handling hazardous waste (per CFR 1910.120).

13.2 Tailgate safety meetings will be conducted at the beginning of each shift, and will highlight the hazards that may be encountered during the shift.

14.0 MEDICAL SURVEILLANCE:

14.1 All personnel working at the site will have had a thorough physical examination within one year of performing work.

14.2 Minimal exposure risk during the project does not merit base-line physicals before and after the project.

15.0 RECORD KEEPING:

All documentation pertaining to this project, e.g., exposure monitoring, temperature, safety meetings, etc., will be recorded and maintained at the office of the general contractor:

Bay Area Tank & Marine, Inc.  
4851 Sunrise Drive, Unit 104  
Martinez, California 94553

Acknowledgment of review of safety plan:

Signing below will acknowledge that the person signing has read and fully understands the contents of the site safety plan and agrees to adhere to all aspects of the site safety plan.

Print Name:

Sign Name:

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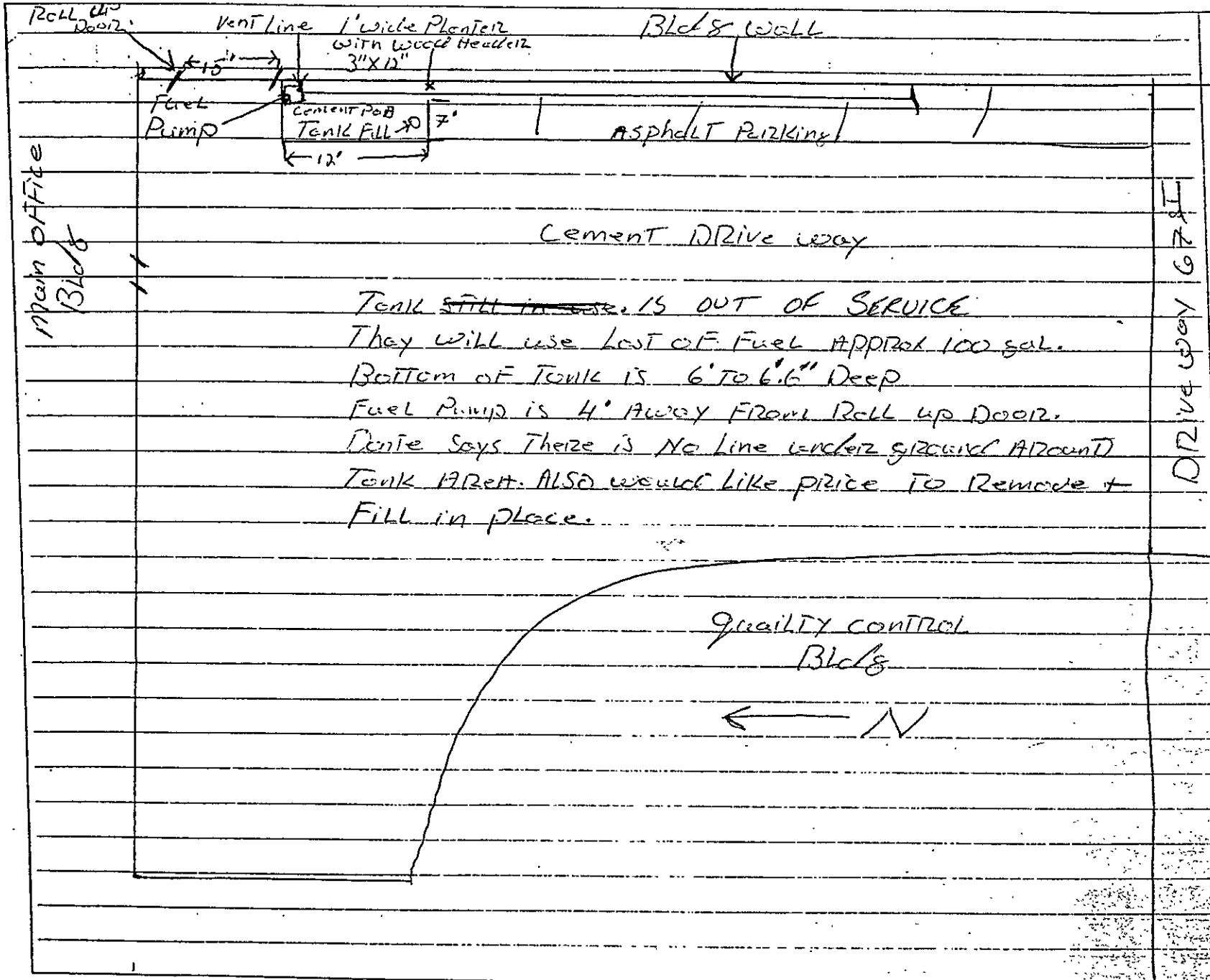
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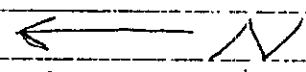
Main Office  
Bldg

Tank still in use. IS OUT OF SERVICE  
 They will use last of fuel approx 100 gal.  
 Bottom of Tank is 6' to 6.6" Deep  
 Fuel Pump is 4' away from Roll up Door.  
 Dente says there is no line under ground around  
 Tank area. Also would like price to remove +  
 fill in place.

Cement Drive way

Asphalt Parking

Quality Control  
Bldg



DRIVE WAY 6 FT

**BAY AREA TANK & MARINE**  
**ENVIRONMENTAL TECHNOLOGIES**

4851-104 SUNRIZE DRIVE  
 MARTINEZ, CALIFORNIA 94553

COLLIER STEEL CO.  
 67th ST EMERYVILLE

PROJECT NO.:

DATE:

1-21-93