## UST HEALTH AND SAFETY PLAN

# For The Southland Corporation

#### 1.0 INTRODUCTION

The purpose of this document is to explain the potential hazards present during the tank removal and the methods of handling these hazards. This document will serve as a policy guideline for safety issues during this field task.

Site Location: 100 Lewelling Blvd., San Lorenzo, California

The format and content of this plan is consistent with the guidelines and requirements presented in the following documents:

OSHA Safety and Health Standards: 29 CFR 1910/1926, U.S. Department of Labor, Occupational Safety and Health Administration, OSHA 2207, 1985.

OSHA Final Standards: 29 CFR 1910.120

Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities: NIOSH/OSHA/EPA/USCG, DHHS (NIOSH) Publication No. 85-115, 1985.

### 1.1 KEY PERSONNEL AND ORGANIZATION

Personnel responsible for the implementation of the Site Health and Safety Plan: Tim Mattson

RDI Project Manager: Mark McNearney
RDI Health and Safety Manager: Mark McNearney

Project Supervisor/On-Site Coordinator: Tim Mattson

The Project Manager is responsible for all on-site operations, and has the authority to stop work to prevent or mitigate actions that potentially threaten worker health or public safety. The On-Site Safety Coordinator or his designated agent must be present during all on-site activities.

Should a need to modify the health and safety procedures detailed in this plan arise due to changes in site conditions or other factors, the On-Site Coordinators shall notify the RDI Health And Safety Officer prior to implementing these modifications.

#### 2.0 HAZARD EVALUATION

#### 2.1 Chemical Hazard

The contaminant of interest at the project site is unleaded gasoline and may include benzene, toluene, xylene and ethylbenzene.

#### Gasoline

Gasoline is a mixture of short to intermediate-chain aliphatic and aromatic hydrocarbons. It is, of course, highly flammable and volatile. Exposure routes include inhalation, ingestion, dermal absorption and dermal contact. Gasoline irritates the skin and mucus membranes, depresses the central nervous system, and may cause intoxication. The TLV for gasoline is listed as 300 ppm in the air.

#### Benzene

Benzene is an aromatic hydrocarbon commonly used as a component of gasoline and other petroleum product materials. It is highly volatile, and inhalation is the primary route of exposure. Acute symptoms at exposure level approaching 250 ppm include drowsiness, dizziness, headaches, and nausea. Benzene is a known carcinogen and long-term exposure causes bone marrow damage and leukemia. The TLV for Benzene is 1 ppm TWA, and 5 ppm ceiling.

#### Toluene

Toluene is a aromatic hydrocarbon used as a solvent and fuel component. Toluene is flammable (Flashpoint = 40 degrees F) and is relatively volatile. Routes of exposure include inhalation, ingestion, and dermal contact. Symptoms of over-exposure include: dermal and mucus membrane irritation, headache, nausea, loss of appetite and impairment of coordination. Generally these symptoms only occur at high exposure levels (>200 ppm). The TLV for toluene is 100 ppm TWA, 150 ppm Short Term Exposure Limit (STEL), and 300 ppm ceiling.

## Xylene

Xylene are aromatic hydrocarbons used as solvents and fuel-components. Xylene are flammable (flashpoint 63 to 82 degrees F) and highly volatile. Exposure routes include inhalation, ingestion, and dermal contact. Xylene exhibit essentially the same symptoms of exposure as Toluene. The TLV for xylene is 100 ppm TWA and 150 STEL.

#### **ETHYLBENZENE**

Irritation to eyes, skin, mucus membranes and is narcotic in high concentrations. The TLV for ethylbenzene is 100 ppm.

## 2.2 Physical Hazardous

Physical hazards are inherently present during field operations. Examples of physical hazards present at the site include the mechanical hazards associated with slip trip and fall hazards, heat stress and noise hazards.

## 2.2.1 Slip-Trip-Fall Hazards

While it is difficult to prevent slip-trip-fall hazards, injuries can be prevented by proper site control measures and by keeping the work area free of obstructions.

## 2.2.2 Lifting Hazards

Field operations often require that physical labor tasks be performed. All employees should be instructed in proper lifting procedures. Additionally, employees should not attempt to lift large or heavy objects without assistance.

### 2.2.3 Open Excavations

An open excavation will be present during the remedial actions at the site. This excavation will be maintained in compliance with 29 CFR 1926. Nevertheless, constant employee safety awareness while working near the excavation will effectively lessen the hazards associated with working near an open pit.

#### 2.2.4 Cold Stress

The adverse stress to the body due to exposure to excess heat or cold can greatly diminish the ability of the body to function properly. Knowing how to recognize such stress and how to prevent it will greatly enhance the employee's ability to function under these conditions.

A. Cold Stress. Significant heat loss resulting hypothermia typically occurs in cold, wet and windy environments. You are more susceptible to hypothermia when you are physically exhausted or in poor condition. Most people think of only sub-zero conditions as dangerous, but hypothermia commonly

occurs at temperatures above freezing (32 F). Although the combination of cold, wet and windy conditions is the most dangerous, simply being cold and tired may bring on hypothermia.

- 1. Frostbite-Frostbite is the most common injury resulting from exposure to cold. The extremities of the body are most often affected. The signs of frostbite are:
  - (a) The skin turns white or grayish-yellow.
  - (b) Pain is sometimes felt early but subsides later. Often there is no pain.
  - (c) The affected part feel intensely cold and numb.
- 2. Hypothermia- Hypothermia is characterized by shivering, numbness, drowsiness, muscular weakness and low internal body temperature when the body feels warm externally. This can lead to unconsciousness and death. With both frostbite and hypothermia, the affected areas need to be warmed quickly. this is best done by immersing in warm, not hot, water. In all cases seek medical assistance.

## 3. Prevention

- (a) Dress for warmth, wind and wet. Clothing may include cotton socks, long underwear, insulated jackets and/or pants; insulated hat and cotton undergloves. Many layers of clothing are better than a single heavy coat. Wear a head covering!
- (b) Maintain a good diet. Because your body will use large amounts of energy staying warm, you will need to replace that energy by eating plenty of food and drinking liquids. Foods high in protein (meat, fish, cheese, mild, ect.) and high in carbohydrates (candy, sweets, ect.) are required.
- (c) Stay active. When you are physically active, your body generates heat. When you are inactive, (standing or sitting) your body's metabolism drops, producing less heat. If your job is to observe, move around a little, swing your arms, tighten your muscles or walk a few steps to stay active. Do not sit or lay directly on cold objects or the ground.

### 2.2.5 HEAT STRESS

The adverse stress to body due to exposure to excess heat can greatly diminish the ability of the body to function properly. Therefore, all personnel involved in work activities will wear personal protective equipment and by the rate of work performed. Because the incidence of heat stress depends on a variety of factors, all workers will be monitored.

- A. Heat Stress: Hazards associated with heat stress include the following:
  - \* Heat Rash may result from continuous exposure too heat or to humid air.
  - \* Heat Cramps caused by heavy sweating with inadequate electrolyte replacement. Heat cramps can cause muscle spasms, pain in the hands, feet and abdomen.
  - \* Heat Exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Heat exhaustion can cause pale, cool, moist skin; heavy sweating; dizziness; and nausea and fainting.
  - \* Heat Stroke the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be take to cool the body before serious injury and death occur. Competent medical help must be obtained. Heat stroke can cause red, hot unusually dry skin. Symptoms include lack of, or reduced perspiration, nausea, dizziness, confusion, and strong rapid pulse and coma.

#### 3.0 SITE CONTROL

## 3.1 Work Zone

An exclusion zone will be maintained around the site by the placement of barricades and barricade tape. The size and shape of the exclusion zone will be determined by the conditions at the site. This area should be large enough to encompass the hazardous zone around the work site.

#### 4.0 PERSONNEL PROTECTION

## 4.1 Personal Protective Equipment (PPE)

The equipment necessary for each EPA-designated level of protection is detailed below.

## Level D:

Level D will consist of the "basic work uniform":

- 1. Hard Hat.
- 2. Safety Glasses.
- 3. Steel-toed, Steel shank chemical resistant boots.
- 4. Disposable Coveralls.
- 5. Latex or vinyl, surgical type gloves.
- 6. Cloth and/or leather gloves for equipment operators.
- 7. An immediately available half-face, dual chemical cartridge, air-purifying respirator with NIOSH/MSHA approved combination organic vapor/high efficiency (HEPA) cartridges.

### 5.0 EMERGENCY PROCEDURES

#### 5.1 Potential Incidents

Situations which could occur, but are considered unlikely to occur, requiring an emergency response action are listed below:

- A. A sudden release of hazardous vapors/combustible, gasses during excavation or contaminated soil handling operations.
- B. An explosion or fire occurring during field operations.
- C. A heavy equipment related or personal injury accident.

Below is a list of emergency-response agencies and their telephone numbers:

General Emergency: 911
Fire Department: 911
Police Department: 911

Environmental Protection Agency:

The emergency procedures for such occurrences are covered in the following sections:

### 6.0 FIRST AID

A first aid kit will be located in RDI emergency vehicle. The On-Site Safety Coordinator, or his designate, will be certified by the American Red Cross in first aid and cardiopulmonary resuscitation. If an injured individual requires further attention, the individual will be immediately transported to the nearest emergency medical facility will be present on-site. If possible, the victim will be decontaminated prior too transport to the facility; if the injury is serious, decontamination is of secondary importance. All accidents, without regard to the severity, shall be reported in writing to the RDI Health and Safety Officer within 24 hours.

## 6.1 Emergency Assistance

The name, telephone number and location of police, fire, and other agencies will be posted near the RDI phone.

If emergency personnel are called to the site, efforts should be made to accommodate their operations in the support zone. In lieu of this possibility (victim not ambulator, etc.), response personnel may have to enter the exclusion zone. The On-Site Safety Coordinator and the Project Manager shall supervise entrance into the exclusion zone so as to prevent injury or detrimental exposure to these personnel.



P.O. BOX 807, SAN FRANCISCO, CA 94101-0807

# CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

2-12-92

POLICY NUMBER 1180942 CERTIFICATE EXPIRES 6-1-93

SOUTHLAND CORPORATION P.O. BOX 404 PLEASANTON, CA 94588

This is to certify that we have issued a valid Workers' Compensation insurance policy in a form approved by the California Insurance Commissioner to the employer named below for the policy period indicated.

This policy is not subject to cancellation by the Fund except upon ten days' advance written notice to the employer.

We will also give you TEN days' advance notice should this policy be cancelled prior to its normal expiration.

This certificate of insurance is not an insurance policy and does not amend, extend or after the coverage afforded by the policies ilsted herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

PRESIDENT

EMPLOYER

RUBY DOME, INC 3766 BRADVIEW WY SACRAMENTO, CA 95827



