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## SITE AND SAFETY PLAN FOR

· UNDERGROUND STORAGE TANK- REPAIRS, REMOVAL, INSTALLATIONS ·

· INVESTIGATION/REMEDICATION OF CONTAMINATED SITES · MONITORING WELL & SOIL BORING ·

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As indicated throughout the plan, selected sections should only be filled out by people with technical expertise in health and safety issues. In addition, State organizations using this plan should set up a system to ensure that: (1) The plan is used properly; and (2) staff follows proper safety procedures. Attach copies of employee certification in hazardous waste/hazardous materials/underground storage tanks. Certifications are for employees who will be working at the job site. All selections are to be completed as appropriate.

**PART I** - (Sections I-IV) should be completed prior to the site visit and turned in with permit application.

### SECTION I. GENERAL SITE INFORMATION

SITE NAME AND ADDRESS: \_\_\_\_\_

CONTACT PERSON AND PHONE \_\_\_\_\_

NUMBER: \_\_\_\_\_

SITE IDENTIFICATION NUMBER: \_\_\_\_\_

PROPOSED DATE(S) OF SITE WORK: \_\_\_\_\_

### SECTION II. DESCRIPTION OF ACTIVITY

PURPOSE OF ACTIVITY:

New Tank Installation

Tank Closure

Tank/Pipe Removal

Tank/Pipe Disposal

Site Investigation/Mitigation

Tank/Pipe Repair

Leak Detection Testing

Installation of Monitor Wells/Sampling

Other \_\_\_\_\_

PROVIDE A BRIEF NARRATIVE DESCRIPTION OF THE PROPOSED ACTIVITIES:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### SECTION III. SPECIFIC SITE INFORMATION

SPECIFIC TANK SYSTEM INFORMATION:

Age/Size/Capacity of Tanks and

Piping: \_\_\_\_\_

Contents of Tank: \_\_\_\_\_

Other (Specify): \_\_\_\_\_

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TYPE OF SITE

CHECK ALL APPROPRIATE:

- |  |  |
|--|--|
| <input type="checkbox"/> Active              | <input type="checkbox"/> TSDF            |
| <input type="checkbox"/> Inactive            | <input type="checkbox"/> R & D Facility  |
| <input type="checkbox"/> Industrial facility | <input type="checkbox"/> Military base   |
| <input type="checkbox"/> Gas Station         | <input type="checkbox"/> Other (Specify) |

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RELEASE HISTORY

- No evidence of leaks or soil contamination       Suspected or known leaks and soil contamination
- Known groundwater contamination

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BACKGROUND AND DESCRIPTION OF ANY PREVIOUS INVESTIVATIONS OR INCIDENCE:

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BACKGROUND INFORMATION STATUS: —COMPLETE      —INCOMPLETE

**SECTION IV. POTENTIAL HEALTH AND SAFETY HAZARDS**

ANTICIPATED PHYSICAL HAZARDOUS OF CONCERN: (CHECK ALL THAT APPLY AND DESCRIBE)

- |   |  |
|---|--|
| <input type="checkbox"/> Heat (high ambient temp.)                      | <input type="checkbox"/> Heavy equipment   |
| <input type="checkbox"/> Cold   | <input type="checkbox"/> Physical injury and trauma<br>resulting from moving machinery |
| <input type="checkbox"/> Noise  |  |
| <input type="checkbox"/> Oxygen depletion                               | <input type="checkbox"/> General construction  |
| <input type="checkbox"/> Asphyxiation                                   | <input type="checkbox"/> Physical injury and trauma                                    |
| <input type="checkbox"/> Excavation                                     | <input type="checkbox"/> Electrical Hazards  |
| <input type="checkbox"/> Cave-ins                                       |  |
| <input type="checkbox"/> Falls, trips, slipping                         | <input type="checkbox"/> Confined space entry  |
| <input type="checkbox"/> Handling and transfer<br>of petroleum products | <input type="checkbox"/> Explosions  |
| <input type="checkbox"/> Fire   |  |
| <input type="checkbox"/> Explosions                                     | <input type="checkbox"/> Other (Specify):  |

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ANTICIPATED BIOLOGICAL HAZARDS: (LIST BELOW)

- |                                  |   |
|----------------------------------|---|
| <input type="checkbox"/> Snakes  | <input type="checkbox"/> Poisonous plants |
| <input type="checkbox"/> Insects | <input type="checkbox"/> Other            |
| <input type="checkbox"/> Rodents |   |

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NARRATIVE:(Provide all information which could impact Health and Safety – e.g., power lines, integrity of dikes, terrain, etc.)

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ANTICIPATED CHEMICAL HAZARDS: (LIST BELOW ALL CHEMICALS PRESENT ON SITE; ATTACH MATERIAL SAFETY DATA SHEETS-MSDS)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**PART II Section V should only be completed by persons with technical expertise in health and safety.**

**SECTION V. EVALUATION OF POTENTIAL HAZARDS**

Chemical	CHEMICALS OF CONCERN		Symptoms/Effects of Acute Exposure
	Highest Observable Concentration(media)	PEL/TLV	

**PART III Sections VI and VII should be completed by the applicant prior to the site visit.**

**SECTION VI. METHODS TO CONTROL POTENTIAL HEALTH AND SAFETY HAZARDS**

MONITORING INSTRUMENTATION: (NOTE: MONITORING INSTRUMENTS MUST BE USED FOR ALL OPERATIONS UNLESS APPROPRIATE RATIONALE OR RESTRICTIONS ARE PROVIDED)

- Organic Vapor Analyzer
- Photoionization Detector
- Combustible Gas Indicator (CGI)
- Oxygen Meter
- Hydrogen Sulfide Meter
- Detector Tubes (specify)
- Other, specify (toxic gas, air sampling pumps, etc.)

IF MONITORING INSTRUMENTS ARE NOT USED, SPECIFY RATIONALE OR JUSTIFICATION OR ACTIVITY/AREA RESTRICTIONS.

\_\_\_\_\_  
\_\_\_\_\_

**ACTION LEVELS (breathing zone):**

Combustible Gas Indicator		
0-10%	LEL	No Explosion Hazard
10-25%	LEL	Potential Explosion Hazard, Notify Site Health and Safety Officer
>25%	LEL	Explosion Hazard; Interrupt Task/Evacuate

Oxygen Meter

- <21.0% O<sub>2</sub> Oxygen Normal
- <21.0% O<sub>2</sub> Oxygen Deficient; Notify Site Health and Safety Officer
- <19.5% O<sub>2</sub> Oxygen Deficient; Interrupt Task/Evacuate

ACTION LEVELS (breathing zone)\_\_\_\_\_

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Photoionization  
Detector

Specify: \_\_\_\_\_

11.7 ev

10.2 ev

9.8 eve

Type: \_\_\_\_\_

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Flame Ionization  
Detector

Specify: \_\_\_\_\_

Type: \_\_\_\_\_

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Detector Tubes

Specify: \_\_\_\_\_

Type: \_\_\_\_\_

Type: \_\_\_\_\_

Type: \_\_\_\_\_

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PERSONAL PROTECTIVE EQUIPMENT: List all applicable items

**Minimum personal protective equipment**

1. Hardhat
2. Safety glasses/goggles
3. Steel toed/shank shoes or boots
4. Flame retardant coveralls
5. Hearing protection (muffs or ear plugs)

Is additional PPE required?  Yes *see below*

No

PERSONAL PROTECTIVE EQUIPMENT

Check all additional necessary items:

Uncoated tyvek coveralls

Sarnex tyvek overalls

Full face respirators

type of cartridge: \_\_\_\_\_

- |  |  |
|--|--|
| <input type="checkbox"/> Rubber boots                              | <input type="checkbox"/> SCBA/SAR                          |
| <input type="checkbox"/> Over boots                                | <input type="checkbox"/> ELSAs                             |
| <input type="checkbox"/> Surgical (inner) gloves                   | <input type="checkbox"/> Decontamination/eyewash/hand wash |
| <input type="checkbox"/> Butyl/neoprene/viton/nitrile/outer gloves | <input type="checkbox"/> Other (specify)                   |

**SECTION VII. EMERGENCY INFORMATION**

Emergency Contact: \_\_\_\_\_  
 Fire/Rescue: \_\_\_\_\_  
 Ambulance: \_\_\_\_\_  
 Police: \_\_\_\_\_

Hazardous Waste/  
 Material Response Units: \_\_\_\_\_

Hazardous Waste/Material Response Units:

Health and Safety Director: \_\_\_\_\_

Poison Control Center: \_\_\_\_\_

Onsite medical facility (clinic):  Yes  No

Facility health and safety officer:  Yes  No

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Hospital Name and Address: \_\_\_\_\_

Directions to hospital (include a map): \_\_\_\_\_

**PART IV.**

**SECTION VIII. PLAN APPROVAL**

Plan prepared by: \_\_\_\_\_  
 Signature (Date)

Plan approved by: \_\_\_\_\_  
 Signature (Date)

Plan approved by: \_\_\_\_\_  
 Signature (Date)

## HEALTH AND SAFETY REMINDERS

<b>Activity</b>	<b>Potential Hazard</b>
Is excavation going to be performed?	If so, hazards associated with construction machinery are possible.
Is excavation in a “known” clean area?	If not, toxic exposure could occur.
Have underground utilities and overhead power lines been identified and marked?	If not, the potential for electrocution, toxic Exposure and flooding exist.
Are excavations shored/supported properly?	If not, slope failure could result in physical injury and asphyxiation
Has air monitoring been conducted in the excavation prior to entrance?	If not exposure to toxic chemicals explosive and oxygen deficient atmospheres could occur.
Is the crane (or other lifting equipment) designed for the specific lift in question at the given boom angle?	If, not catastrophic equipment failure could occur.
Is the wire used for the lift appropriate and has it been inspected for integrity?	If not, wire breakage can occur, resulting in serious injury or fatality.
Is the tank integrity testing being performed correctly? Is pressurization to the maximum of 5 psi? Has the integrity of the pressure gauge been checked? Is someone assuring that the gauge is functioning properly (not sticking)?	If not, over pressurization could lead to tank rupture and subsequent injury.
Is entry/work in a confined area being performed? Is it necessary to enter sewers, manholes, basements, excavations, tanks?	If so, potential hazards associated with injury, exposure, fire/explosion, asphyxiation and biological hazard exists.
Is appropriate monitoring being performed prior to and during confined space entry/work?	If not, potential for fire/explosions, asphyxiation and toxic exposure potential exist.
Is product handling/transfer being performed?	If so, the potential for fire/explosion, toxic exposure and spills exist.
Is appropriate caution being taken to eliminate all sources of sparks including static electricity? Have personnel working in potential explosive atmospheres left all potential spark producing materials (lighters, matches, keys, etc.) behind?	If not, incidental sparks could initiate a fire/explosion. If not, the potential for fires, explosions, and toxic exposure exists.
Is appropriate monitoring being performed during product transfer?	If not, the potential for exposure exists.
Is appropriate protective clothing being used to prevent exposures? Is the UST inert or ventilated?	If not, the potential for explosion, fire and asphyxiation exist.