
HAZARDOUS INCIDENT SITE SAFETY PLAN

NOTE: A site-specific *Site Safety Plan* must be developed and implemented for each site where investigators may potentially be exposed to hazardous substances while conducting scene examinations (29 CFR 1910.120 (b)(4)). The purpose of the *Site Safety Plan* is to address the safety and health hazards that may exist at each phase of site operations and to identify procedures for the protection of personnel and the environment. A *Site Safety Plan* shall be prepared and reviewed by qualified occupational health and safety professionals for each hazardous substance response action. The Plan must address the safety requirements for hazardous activities, whether they are routine response activities or unexpected site emergencies. Before site operations commence, all safety aspects of the operations to be performed should be thoroughly examined, and the *Site Safety Plan* must be updated if new tasks or hazards are identified at the site.

A. SITE DESCRIPTION

DATE: _____

LOCATION: _____

TIME OF DAY: _____

INCIDENT #: _____

PRIMARY HAZARDS: _____

<i>Flammability</i>	<input type="checkbox"/>
<i>Health</i>	<input type="checkbox"/>
<i>Reactivity</i>	<input type="checkbox"/>
<i>Other</i>	<input type="checkbox"/>

AREA(S) AFFECTED: _____

IMMEDIATE EXPOSURES: _____

TOPOGRAPHY: _____

WEATHER CONDITIONS: _____

ADDITIONAL INFORMATION: _____

B. KEY PERSONNEL & HAZARD COMMUNICATIONS PLAN

NAMES OF KEY PERSONNEL: *(i.e., Incident Commander, Safety Officer, Supervisor, On-Site Health and Safety Personnel, etc.). [29 CFR 1910.120 (b)(2)].*

COMMUNICATIONS PROCEDURES: *(Means of communicating pertinent information to site personnel before site activities are initiated (e.g., briefings). Personnel should be briefed periodically throughout site operations to ensure that they are adequately apprised of the safety and health procedures being followed at the site). [29 CFR 1910.120 (b)(2)].*

C. HEALTH AND SAFETY RISK ANALYSES

(Health and Safety Risk Analyses should be established for each task and operation to be performed at the site. Discussion of these analyses should include identification of the chemical contaminant(s) present, affected media, concentrations, and potential routes of exposure. These activities should also include safety risk analyses to address potential on-site operations and safety problems). [29 CFR 1910.120 (b)(4)].

NOTE: An initial *Hazard Evaluation* for the hazardous substances present or suspected to be on-site and their primary hazards can be performed using the following table:

SUBSTANCE(S) INVOLVED	CONCENTRATION(S) IF KNOWN	PRIMARY HAZARDS

The following additional safety and/or health hazards are anticipated on-site: *(e.g., slippery ground, electrical hazards, falling debris, confined space, etc.).*

NOTE: Material Safety Data Sheets for the substances involved are attached.

D. SITE CONTROL MEASURES

(The Site Control Measures are those procedures that will be used to minimize personnel exposure to hazardous substances before site operations commence and during site operations. These procedures must be modified as any new information is obtained with respect to site hazards. These measures should include a site map, designation of hazard control zones, site communications, safety work practices, identification of the nearest medical assistance, description of the "buddy system" for site operations, and emergency alarm procedures). [29 CFR 1910.120 (d)].

Site Safety: (Name) _____ is the designated Site Safety Officer and is directly responsible to the Incident Commander for safety recommendations on-site.

Emergency Medical Care: (Names of qualified personnel) _____

(Medical Facility Names and Addresses) _____

are located approximately _____ minutes from this location.

(Name of Person) _____ was contacted at (Time) _____ and briefed on the situation, the potential hazards, and the substances involved. A map of alternative routes to this facility is available at (normally Command Post) _____.

Local ambulance service is available from _____ at (Phone Number) _____. Their response time to the site is approximately _____ minutes. Whenever possible, arrangements should be made for on-site stand-by.

First aid equipment is available from the following sources:

Emergency medical information for substances present:

SUBSTANCE(S)	EXPOSURE SYMPTOMS	FIRST AID INSTRUCTIONS

List of Emergency Telephone Numbers:

<u>AGENCY</u>	<u>PHONE NUMBER</u>	<u>CONTACT</u>
Police		
Hospital		
Public Health / EPA / OSHA		
State Fire Marshal		
BATF		

On-site personnel will use the following standard emergency procedures. The Site Safety Officer shall be notified of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed.

Personnel Injury in the Hot Zone: Upon notification of an injury in the Hot Zone, the designated emergency signal _____ shall be sounded. All site personnel shall assemble at the decontamination line. The rescue team will enter the Hot Zone (if required) to remove the injured person(s) to the hotline (*i.e., boundary between hot and warm zone*). The Site Safety Officer and Incident Commander should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement to the Warm Zone. The on-site EMT / Medical Personnel shall initiate appropriate first aid measures and contact should be made for an ambulance and with the nearest medical treatment facility (if required). **No persons shall reenter the Hot Zone until the cause of the injury or symptoms are determined.**

Personnel Injury in the Warm Zone: Upon notification of an injury in the Warm Zone, the Site Safety Officer and Incident Commander will assess the nature of the injury. If the cause of the injury or loss of the injured person does not affect the performance of site personnel, operations may continue, with the on-site EMT / Medical Personnel

administering the appropriate first aid and necessary follow-up as stated above. If the injury increases the risk to others, the designated emergency signal _____ will be sounded and all on-site personnel will move to the decontamination line and await further instructions. Activities on-site will cease until the added risk is removed or minimized.

Fire Explosion: Upon notification of a fire or explosion on-site, the designated emergency signal _____ shall be sounded and all on-site personnel shall assemble at the decontamination line. The fire department shall be alerted and all personnel will be moved to a safe distance from the involved area.

Personal Protective Equipment Failure: If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately exit the Hot Zone. Reentry shall not be permitted until the equipment has been serviced or replaced.

Other Equipment Failure: If any other equipment on-site fails to operate properly, the Incident Commander and Site Safety Officer shall be notified and then determine the effect of this failure on continued on-site operations. If the failure affects the safety of personnel or prevents completion of the work plan tasks, all personnel shall leave the Hot Zone until the situation is evaluated and appropriate actions taken.

Escape Routes: The following emergency escape routes are designated for use in those situations where egress from the Hot Zone cannot occur through the decontamination line: (*Describe alternate routes to leave area in emergencies*).

NOTE: In all situations when an on-site emergency results in evacuation of the Hot Zone, personnel shall not reenter until:

1. The conditions resulting in the emergency have been corrected.
2. The hazards have been reassessed.
3. The *Site Safety Plan* has been reviewed.
4. Site personnel have been briefed on any changes to the *Site Safety Plan*.

On-Site Work Plans: Work parties consisting of _____ persons will perform the following tasks:

PERSONNEL	FUNCTION
Team Leader / Group Supervisor	
Team #1	

Team #2	
PERSONNEL	FUNCTION
Rescue Team (<i>Required for entry into IDLH Atmospheres</i>)	
DECON Team	

The work parties were briefed on the contents of this Plan at (*Date, Time, Location.*) _____.

Communications Procedures: Channel _____ has been designated as the radio frequency for personnel in the Hot Zone. All other on-site communications will use Channel _____. Personnel in the Hot Zone should remain in constant radio communication or within sight of the Team Leader/Safety Officer. Any failure of radio communication requires an evaluation of whether personnel should leave the Hot Zone.

(*Horn, Blast, Siren, etc.*) _____ is the emergency signal to indicate that all personnel should leave the Hot Zone immediately. The following standard hand signals will be used in the event of a radio communications failure:

Hand Gripping Throat.....	Out of Air, Can't Breathe
Grip Partner's Wrist or Both Hands Around Waist.....	Leave Area Immediately
Hands On Top of Head.....	Need Assistance
Thumbs Up.....	O.K., I'm Alright
Thumbs Down.....	No, Negative

Telephone communication to the Command Post should be established as soon as practicable. The telephone number is () _____.

E. EMPLOYEE TRAINING ASSIGNMENTS

(*Training Assignments should address the employee's initial health and safety training, annual health and safety refresher training, on-the-job training, supervisory training, and first-aid/CPR training*). **Employees will not be permitted to participate in any site activities unless they have received training commensurate with their responsibilities**). [29 CFR 1910.120 (e)].

Supervisor(s) _____

Public Information Officer _____

Police Department Personnel _____

Federal Agency Reps (e.g., BATF, OSHA, EPA, NTSB, etc.) _____

State Agency Reps (e.g., State Fire Marshal, State Police, etc.) _____

Local Agency Reps (e.g., Police Department, etc.) _____

Insurance/Private Investigators _____

NOTE: All personnel arriving or departing the site should log in and out. All activities on-site must be cleared through the Incident Commander.

I. ON-SCENE SECURITY/CONTROL

(Name of Individual or Agency) _____

has been designated to coordinate access control and security on-site. A safe perimeter has been established at *(Distance or description of controlled area)*.

No unauthorized persons should be within this area. The On-Scene Command Post and Staging Area have been established at

The prevailing wind conditions are _____. This location is located upwind from the Hot Zone. Control boundaries have been established and the Hot Zone (*i.e., Contaminated Area*), Warm Zone (*i.e., DECON Area*), and Cold Zone (*i.e., Clean Area*) have been identified and designated as follows: *(Describe boundaries and/or attach map of controlled area)*:

These boundaries are identified by: (*Marking of Zones - Red Boundary Tape (Hot Zone); Traffic Cones (Support Zone), etc.*).

J. PERSONAL PROTECTIVE EQUIPMENT (PPE)

(Describe the different PPE ensembles / Levels of Protection that will be used to address potential hazards to personnel during site activities (Level A, Level B, Level C, etc.). This description should also include or reference a comprehensive PPE program that addresses site hazards, duration of site activities, limitations of PPE during temperature extremes, PPE selection, maintenance, storage, and decontamination, training for PPE use, inspection and monitoring, and inspection and check-out of self-contained breathing apparatus or other required respiratory protection devices. Such PPE should be used only when engineering controls and work practices are insufficient to adequately protect against exposure). [29 CFR 1910.120(g)].

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks:

LOCATION	JOB FUNCTION	LEVEL OF PROTECTION
Hot Zone	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___
Warm Zone	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___
	_____	A B C D Other ___

Specific protective equipment for each level of protection is as follows:

LEVEL A	<u>Chemical Vapor Tight Suit</u> <u>Self-Contained Breathing</u> <u>Apparatus (SCBA)</u>	LEVEL B	<u>Chemical Splash Clothing</u> <u>Self Contained Breathing</u> <u>Apparatus (SCBA)</u>
LEVEL C	<u>Chemical Splash Clothing</u> <u>Air Purifying Respirator (APR)</u>	LEVEL D	<u>(Description)</u> <u>(Description)</u>

Other: _____

The following protective clothing materials are required for the substances present on-site:

<u>SUBSTANCE</u>	<u>PROTECTIVE CLOTHING MATERIAL</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTE: No changes to the specified levels of protection shall be made without the approval of the Site Safety Officer and the Incident Commander.

If air-purifying respirators are authorized, (filtering medium) is the appropriate canister for use with the involved substances and concentrations. A competent individual has determined that all criteria for using this type of respiratory protection have been satisfied.

K. AIR AND PERSONNEL MONITORING

(Describe the employee and air monitoring equipment and environmental sampling techniques and instrumentation that will be used on site for evaluating potential exposure to contaminants that result from site activities. The Monitoring Program must include procedures for initial entry monitoring, periodic monitoring, and monitoring of high risk employees). [29 CFR 1910.120 (h)].

The following environmental monitoring instruments shall be used on-site (cross out if not applicable) at the specified intervals:

- | | | |
|-----------------------------|-------------------------------------|-------|
| • Combustible Gas Indicator | continuous / hourly / daily / other | _____ |
| • Oxygen Monitor | continuous / hourly / daily / other | _____ |
| • Colorimetric Tubes | continuous / hourly / daily / other | _____ |
| _____ | continuous / hourly / daily / other | _____ |
| _____ | continuous / hourly / daily / other | _____ |
| _____ | continuous / hourly / daily / other | _____ |
| • HNU / OVA | continuous / hourly / daily / other | _____ |
| Other _____ | continuous / hourly / daily / other | _____ |
| _____ | continuous / hourly / daily / other | _____ |

The following personal monitoring will be in effect at the site:

- **Personal Exposure Sampling:** *(Describe any personal sampling programs being implemented for on-site personnel. This would include the use of sampling pumps, air monitors, etc.).*

- **Medical Monitoring:** The expected air temperature will be (___°F). If it is determined that heat stress monitoring is required (mandatory if >70°F) the following procedures shall be followed: *(Describe procedures in effect such as monitoring body temperature, body weight, pulse rate, etc.).*

L. SPILL CONTAINMENT PROGRAM

(Include any elements of the Spill Containment Program that may be relevant to the site, and any procedures to contain and isolate the entire volume of any hazardous substance spilled in the course of transfer, major spill or an on-site release). [29 CFR 1910.120 (j)].

M. CONFINED SPACE ENTRY PROCEDURES

(If confined space entry is anticipated on-site, describe procedures for entry into the confined space. Such procedures should ensure the safety of site personnel who must enter areas where natural ventilation is insufficient to reduce contaminant concentrations. Refer to 29 CFR 1910.146, Permit Required Confined Space for additional guidance). [29 CFR 1910.120 (b)(9)].

N. DECONTAMINATION PROCEDURES

(Describe appropriate decontamination standard operating procedures for both personnel and equipment on-site and in locations where there is a potential for exposure to a hazardous substance. These procedures should explain how to conduct personal and equipment decontamination when leaving a contaminated area, the recommended levels of protection for personnel involved in decontamination activities, and the proper procedures for disposal of wastes. Refer to NFPA 471, Recommended Practice for Responding to Hazardous Materials Incidents for additional information). [29 CFR 1910.120 (k)].

Personnel and equipment leaving the Hot Zone shall be thoroughly decontaminated. The site decontamination protocol shall be used with the following decontamination stations:

- | | | |
|-----------|-----------|-----------|
| (1) _____ | (2) _____ | (3) _____ |
| (4) _____ | (5) _____ | (6) _____ |
| (7) _____ | (8) _____ | (9) _____ |

Other: _____

Emergency Decontamination will include the following stations:

The following decontamination equipment is required:

(Normally detergent and water) _____ will be used as the DECON solution.

NOTES:

O. EMERGENCY RESPONSE PLAN

(Describe how anticipated emergencies will be handled at the site and how the risks associated with response activities will be minimized. The Emergency Response Plan must be developed and implemented prior to beginning site operations and, at a minimum, should include the following elements: Pre-emergency planning, personnel roles and lines of authority, emergency recognition and prevention, evacuation routes and procedures, emergency contact/notification system, emergency medical treatment procedures, mitigation procedures for fires, explosions, spills or leaks, and emergency equipment/facilities).

P. DOCUMENTATION

All site personnel have read this Plan and are familiar with its provisions.

	<u>Name (Printed)</u>	<u>Signature</u>
Incident Commander	_____	_____
Site Safety Officer	_____	_____
Other Site Personnel	_____	_____
	_____	_____
	_____	_____
	_____	_____

NOTES:

STANDARD SITE SAFETY PRACTICES

- Minimize the number of personnel operating in the contaminated area.
- Avoid contact with all contaminants, contaminated surfaces, or suspected contaminated surfaces. Avoid walking through any suspected releases or placing equipment on contaminated surfaces.
- Advise all entry personnel of all site control policies including entry points, decon layout, procedures and working times.
- Always have an escape route. Ensure that everyone knows the emergency evacuation signals.
- Ensure that all tasks and responsibilities are identified before attempting entry. If necessary, practice unfamiliar operations prior to entry.
- Use the buddy system for all entry operations. Always ensure that properly equipped back-up crews are in place.
- Maintain radio communications between entry, back-up crews and the Safety Officer (whenever possible).
- Prohibit drinking, smoking and any other practices which increase the possibility of hand-to-mouth transfer in all contaminated areas.
- Follow decontamination and personal cleanliness practices before eating, drinking, or smoking after leaving the contaminated area.