
Appendix B. Generic Site Safety Plan

This appendix provides a generic plan based on a plan developed by the U.S. Coast Guard for responding to hazardous chemical releases.¹ This generic plan can be adapted for designing a Site Safety Plan for hazardous waste site cleanup operations. It is not all inclusive and should only be used as a guide, not a standard.

A. SITE DESCRIPTION

Date _____ Location _____
Hazards _____
Area affected _____

Surrounding population _____
Topography _____
Weather conditions _____

Additional information _____

B. ENTRY OBJECTIVES - The objective of the initial entry to the contaminated area is to (describes actions, tasks to be accomplished; i.e., identify contaminated soil; monitor conditions, etc.)

C. ONSITE ORGANIZATION AND COORDINATION - The following personnel are designated to carry out the stated job functions on site. (Note: One person may carry out more than one job function.)

PROJECT TEAM LEADER _____
SCIENTIFIC ADVISOR _____
SITE SAFETY OFFICER _____
PUBLIC INFORMATION OFFICER _____
SECURITY OFFICER _____
RECORDKEEPER _____
FINANCIAL OFFICER _____
FIELD TEAM LEADER _____
FIELD TEAM MEMBERS _____

¹U.S. Coast Guard. Policy Guidance for Response to Hazardous Chemical Releases. USCG Pollution Response COMDTINST-M16465.30.

FEDERAL AGENCY REPS (i.e., EPA, NIOSH)

STATE AGENCY REPS

LOCAL AGENCY REPS

CONTRACTOR(S)

All personnel arriving or departing the site should log in and out with the Recordkeeper. All activities on site must be cleared through the Project Team Leader.

D. ONSITE 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 person should be within this area.

The onsite Command Post and staging area have been established at _____

The prevailing wind conditions are _____. This location is upwind from the Exclusion Zone.

Control boundaries have been established, and the Exclusion Zone (the contaminated area), hotline, Contamination Reduction Zone, and Support Zone (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, i.e., red boundary tape - hotline; traffic cones - Support Zone; etc.)

E. HAZARD EVALUATION

The following substance(s) are known or suspected to be on site. The primary hazards of each are identified.

<u>Substances Involved</u> (chemical name)	<u>Concentrations (If Known)</u>	<u>Primary Hazards</u> (e.g., toxic on inhalation)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The following additional hazards are expected on site: (i.e., slippery ground, uneven terrain, etc.)

Hazardous substance information form(s) for the involved substance(s) have been completed and are attached.

F. PERSONAL PROTECTIVE EQUIPMENT

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

<u>Location</u>	<u>Job Function</u>	<u>Level of Protection</u>				
Exclusion Zone	_____	A	B	C	D	Other
	_____	A	B	C	D	Other
	_____	A	B	C	D	Other
	_____	A	B	C	D	Other
Contamination Reduction Zone	_____	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>Fully-encapsulating suit</u>	Level C	<u>Splash gear (type)</u>
	<u>SCBA</u>		<u>Full-face canister resp.</u>
	<u>(disposable coveralls)</u>		_____
	_____		_____
Level B	<u>Splash gear (type)</u>	Level D	_____
	<u>SCBA</u>		_____
	_____		_____
	_____		_____
Other	_____		_____
	_____		_____
	_____		_____

The following protective clothing materials are required for the involved substances:

<u>Substance</u> (chemical name)	<u>Material</u> (material name, e.g., Viton)
_____	_____
_____	_____
_____	_____
_____	_____

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 met.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER AND THE PROJECT TEAM LEADER.

G. ONSITE WORK PLANS

Work party(s) consisting of _____ persons will perform the following tasks:

Project Team Leader	(name)	(function)
	_____	_____
	_____	_____
	_____	_____
Work Party #1	_____	_____
	_____	_____
	_____	_____
Work Party #2	_____	_____
	_____	_____
	_____	_____
Rescue Team	_____	_____
(required for entries to IDLH environments)	_____	_____
	_____	_____
Decontamination Team	_____	_____
	_____	_____
	_____	_____
	_____	_____

The work party(s) were briefed on the contents of this plan at _____.

H. COMMUNICATION PROCEDURES

Channel ____ has been designated as the radio frequency for personnel in the Exclusion Zone. All other onsite communications will use channel ____.

Personnel in the Exclusion Zone should remain in constant radio communication or within sight of the Project Team Leader. Any failure of radio communication requires an evaluation of whether personnel should leave the Exclusion Zone.

(Horn blast, siren, etc.) is the emergency signal to indicate that all personnel should leave the Exclusion Zone. In addition, a loud hailer is available if required.

The following standard hand signals will be used in case of failure of radio communications:

- Hand gripping throat ----- Out of air, can't breathe
- Grip partner's wrist or ----- Leave area immediately
both hands around waist
- Hands on top of head ----- Need assistance
- Thumbs up ----- OK, I am all right, I understand
- Thumbs down ----- No, negative

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

I. DECONTAMINATION PROCEDURES

Personnel and equipment leaving the Exclusion Zone shall be thoroughly decontaminated. The standard level ____ decontamination protocol shall be used with the following decontamination stations: (1) _____

- (2) _____ (3) _____ (4) _____ (5) _____
- (6) _____ (7) _____ (8) _____ (9) _____
- (10) _____ Other _____

Emergency decontamination will include the following stations: _____

The following decontamination equipment is required: _____

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

J. SITE SAFETY AND HEALTH PLAN

1. _____ (name) is the designated Site Safety Officer and is directly responsible to the Project Team Leader for safety recommendations on site.

2. Emergency Medical Care

(names of qualified personnel) _____ are the qualified EMTs on site.
 (medical facility names) _____, at (address) _____,
 phone _____ is located _____ 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 _____. Their response time is _____ minutes.
 Whenever possible, arrangements should be made for onsite standby.

First-aid equipment is available on site at the following locations:

First-aid kit _____
 Emergency eye wash _____
 Emergency shower _____
 (other) _____

Emergency medical information for substances present:

<u>Substance</u>	<u>Exposure Symptoms</u>	<u>First-Aid Instructions</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

List of emergency phone numbers:

<u>Agency/Facility</u>	<u>Phone #</u>	<u>Contact</u>
Police	_____	_____
Fire	_____	_____
Hospital	_____	_____
Airport	_____	_____
Public Health Advisor	_____	_____
_____	_____	_____

3. Environmental Monitoring

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 _____
 O₂ Monitor - continuous/hourly/daily/other _____
 Colorimetric Tubes - continuous/hourly/daily/other _____
 (type) _____

 HNU/OVA - continuous/hourly/daily/other _____
 Other _____ - continuous/hourly/daily/other _____
 _____ - continuous/hourly/daily/other _____

4. Emergency Procedures (should be modified as required for incident)

The following standard emergency procedures will be used by onsite personnel. The Site Safety Officer shall be notified of any onsite emergencies and be responsible for ensuring that the appropriate procedures are followed.

Personnel Injury in the Exclusion Zone: Upon notification of an injury in the Exclusion Zone, the designated emergency signal _____ shall be sounded. All site personnel shall assemble at the decontamination line. The rescue team will enter the Exclusion Zone (if required) to remove the injured person to the hotline. The Site Safety Officer and Project Team Leader should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement to the Support Zone. The onsite EMT shall initiate the appropriate first aid, and contact should be made for an ambulance and with the designated medical facility (if required). No persons shall reenter the Exclusion Zone until the cause of the injury or symptoms is determined.

Personnel Injury in the Support Zone: Upon notification of an injury in the Support Zone, the Project Team Leader and Site Safety Officer 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 onsite EMT initiating the appropriate first aid and necessary follow-up as stated above. If the injury increases the risk to others, the designated emergency signal _____ shall be sounded and all site personnel shall move to the decontamination line for further instructions. Activities on site will stop 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 site personnel assembled at the decontamination line. The fire department shall be alerted and all personnel 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 leave the Exclusion Zone. Reentry shall not be permitted until the equipment has been repaired or replaced.

Other Equipment Failure: If any other equipment on site fails to operate properly, the Project Team Leader and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the Exclusion Zone until the situation is evaluated and appropriate actions taken.

