

3.4.3.5 Hazmat Site Management and Scene Setup



YOUR ORGANIZATION
STANDARD OPERATING PROCEDURES/GUIDELINES

TITLE: Hazmat Site Management and Scene Setup

SECTION/TOPIC: First Responder Operations

NUMBER: 3.4.3.5

ISSUE DATE:

REVISED DATE:

PREPARED BY:

APPROVED BY:

X

Preparer

X

Approver

These SOPs/SOGs are based on FEMA guidelines FA-197

1.0 POLICY REFERENCE

CFR	
NFPA	
NIMS	

2.0 PURPOSE

This standard operating procedure/guideline addresses identification of hazmat incident levels, use of hazard zones and perimeters, location of decontamination area, placement of vehicles and supplies, etc.

3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

4.0 DEFINITIONS

These definitions are pertinent to this SOP/SOG.

5.0 PROCEDURES/GUIDELINES & INFORMATION

5.1 Identification of Hazmat Incident Levels:

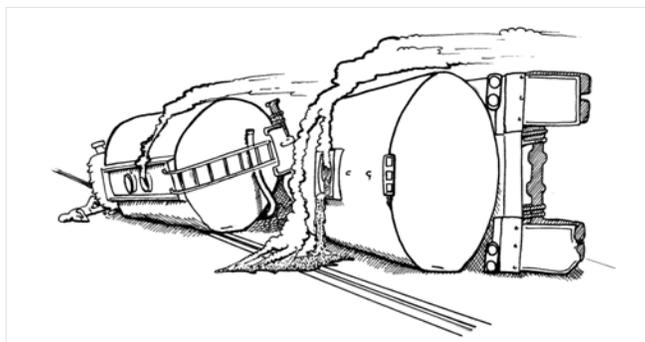
FIRST ARRIVING UNIT

The first arriving officer will establish Command and begin a size-up. The first unit must consciously avoid committing itself to a dangerous situation. When approaching, slow down or stop to assess any visible activity taking place. Evaluate effects of wind, topography and location of the situation. Route any other responding companies away from any hazards.

Command should consider ESTABLISHING LEVEL II STAGING WHENEVER POSSIBLE FOR OTHER RESPONDING UNITS. STAGED COMPANIES MUST BE in a safe location, taking into account wind, spill flow, explosion potential and similar factors in any situation. THE DOT GUIDEBOOK, NFPA REFERENCE MATERIALS, the NIOSH POCKET GUIDE, OR ANY OTHER MATERIAL SUCH AS MSDS OR SHIPPING PAPERS AVAILABLE TO THEM SHOULD BE USED TO ESTABLISH A SAFE DISTANCE FOR STAGING.

SIZE-UP

Command must make a careful size-up before making a commitment. It may be necessary to take immediate action to make a rescue or evacuate an area. This should be attempted only after a risk/benefit analysis is completed. Personnel must take advantage of available personal protective equipment in these situations.



The objective of the size-up is to identify the nature and severity of the immediate problem and to gather sufficient information to formulate a valid action plan. Hazardous materials incidents require a cautious and deliberate size-up.

Avoid premature commitment of companies and personnel to potentially hazardous locations. Proceed with caution in evaluating risks before formulating a plan and keep uncommitted companies at a safe distance. IN MANY CASES, EVALUATION BY HAZARDOUS MATERIALS TEAM MEMBERS BEFORE COMMITTING IS THE SAFEST APPROACH.



Identify a hazardous area based on potential danger, taking into account materials involved, time of day, wind and weather conditions, location of the incident and degree of risk to unprotected personnel. Take immediate action to evacuate and/or rescue persons in critical danger, if possible, providing for safety of rescuers FIRST.

The primary objective is to identify the type of materials involved in a situation, and the hazards presented, before formulating a plan of action. Look for labels, markers, DOT IDENTIFICATION NUMBERS, NFPA DIAMOND or shipping papers, etc. Refer to pre-fire plans, and ask personnel at the scene for additional information (plant management, responsible party, truck drivers, fire department specialist). Use reference materials carried on apparatus and have Dispatch contact other sources for assistance in sizing up the problem (state agencies, fire department specialists, manufacturers of materials, etc.).

ACTION PLAN

Based on the initial size-up and any information available, Command will formulate an action plan to deal with the situation.

THE ACTION PLAN MUST PROVIDE FOR:

1. Safety of all fire personnel
2. Evacuation of endangered area, if necessary
3. Control of situation
4. Stabilization of hazardous materials, and/or
5. Disposal or removal of hazardous material

Most hazardous materials are intended to be maintained in a safe condition for handling and use through confinement in a container or protective system. The emergency is usually related to the material escaping from the protective container or system and creating a hazard on the exterior. The strategic plan must include a method to control the flow or release, get the hazardous material back into a safe container, neutralize it, allow it to dissipate safely, or coordinate proper disposal.

The specific action plan must identify the method of hazard control and identify the resources necessary to accomplish this goal. It may be necessary to select one method over another

due to the unavailability of a particular resource or to adopt a "holding action" to wait for needed equipment or supplies.

Avoid committing personnel and equipment prematurely or "experimenting" with techniques and tactics. Many times it is necessary to evacuate and wait for special equipment or TECHNICAL help.

As a general policy, the Hazardous Materials Team will respond to any situation where a private contractor is required to clean-up hazardous materials.

USE OF NON-FIRE DEPARTMENT PERSONNEL

In some cases, it may be advantageous to use non-Fire Department personnel to evaluate hazards and perform certain functions within their area of expertise.

When such personnel are outfitted with breathing apparatus, chemical suits, etc., they must be made aware of the functions, limitations and safety precautions necessary in their use. Fire Department personnel with the necessary protective equipment must closely monitor and/or accompany such personnel for safety.

BE AWARE THAT COMMAND IS RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL INVOLVED IN ANY INCIDENT.

5.2 Use of Hazard Zones and Perimeters:

CONTROL OF HAZARDOUS AREA

A hazardous material incident has two initial zones associated with the scene, similar to a fire. There are the LIMITED ACCESS ZONE and the EVACUATION ZONE.

LIMITED ACCESS ZONE (LAZ)

The LAZ is the area in which personnel are potentially in immediate danger from the hazardous condition. This is established by Command and controlled by the Fire Department. Access to this area will be rigidly controlled and only personnel with proper protective equipment and an assigned activity will enter. All companies will remain in tact in designated staging areas until assigned. Personnel will be assigned to monitor entry and exit of all personnel from the LAZ. The LAZ should be geographically described to all responding units, if possible and identified by yellow fireline tape. (A Lobby Control Sector will be established to control access to the LAZ and maintain an awareness of which personnel are working in the area.)

- Establish a safe perimeter around hazardous area and identify with Hazard Zone tape.
- Request adequate assistance to maintain the perimeter.

- Identify an entrance/exit point and inform Command of its location.
- Coordinate with Haz Sector to identify required level of protection for personnel operating in the Hazard Zone.
- Collect/return accountability PASSPORTS of all companies entering/leaving the controlled area.

Restriction of personnel access into the LAZ includes not only Fire Department personnel, but any others who may wish to enter the L. A. Zone (Police, press, employees, tow truck drivers, ambulance personnel, etc.). Command is responsible for everyone's safety.

EVACUATION ZONE (EZ)

The EZ is the larger area surrounding the LAZ in which a lesser degree of risk to personnel exists. All civilians would be removed from this area. The limits of this zone will be enforced by the Police Department based on distances and directions established in consultation with Command. The area to be evacuated depends on the nature and amount of the material and type of risk it presents to unprotected personnel (toxic, explosive, etc.).

In some cases, it is necessary to completely evacuate a radius around a site for a certain distance (i.e., potential explosion).

In other cases, it may be advisable to evacuate a path downwind where toxic or flammable vapors may be carried (and control ignition sources in case of flammable vapors).

Reference: Evacuation Sector, Police Liaison Sector)

NOTE: When toxic or irritant vapors are being carried downwind, it may be most effective to, (shelter in place), keep everyone indoors with windows and doors closed to prevent contact with the material instead of evacuating the area. In these cases, companies will be assigned to patrol the area assisting citizens in shutting down ventilation systems and evacuating persons with susceptibility to respiratory problems.

In all cases, the responsibility for safety of all potentially endangered citizens rests with Command. Once the Hazardous Materials Sector has been established, Haz Mat personnel will define and establish a hot, warm and cold zone. These zones will remain in effect for the remainder of the incident.

5.3 Location of Decontamination Area:

The decontamination area shall provide a corridor from the perimeter of the Hot Zone and extending through the Warm Zone in the direction of the Cold Zone. This corridor will not extend into the Hot Zone or the Cold Zone.

1. Whenever possible, the decontamination area should be positioned:
 - a. In an area accessible to the Hot Zone.
 - b. Close to a hydrant or other usable water supply.
 - c. Downwind from the command post, Haz Sector, and staging areas.
 - d. Upwind from the actual incident.
 - e. Away from environmentally sensitive areas.
 - f. Using topographical advantages when possible.

2. The final portion of the decontamination area should be adjacent to the medical monitoring and rehabilitation area.

5.4 Placement of Vehicles and Supplies: