

SOUTH PORTLAND FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

SOG #:	6.609	Effective Date:	9/22/2022
Title:	Hazmat Response & Site Management	# of pages:	4
Category:	Hazardous Materials Response	Classification:	Red

1. **PURPOSE:** To provide a basic philosophy and strategic plan for hazardous materials situations.

2. **PROCEDURES:**

Overview

Hazardous Materials incidents encompass a wide variety of potential situations including fires, spills, transportation accidents, chemical reactions, explosions and similar events. Hazards involved may include toxicity, flammability, radiological exposure, corrosives, explosives, and detriments to health, chemical reactions, or a combination of factors. This plan provides a general framework for handling hazardous materials incidents, but does not address the specific tactics or control measures for particular incidents. Every incident presents the potential for exposure to hazardous materials; even the products of combustion of an ordinary fire may present severe hazards to personnel safety. This guideline is specifically applicable to known hazardous materials incidents, but it does not reduce the need for appropriate safety precautions at every incident. The use of FULL PROTECTIVE CLOTHING AND SCBA AS WELL AS SPECIAL PROTECTIVE CLOTHING and the use of all Standard Operating Procedures on a continuing basis are foundational for this plan. All South Portland Fire Department Standard Operating Guidelines, unless superseded by a specific part of this plan, remain in effect for Hazardous Materials incidents.

Procedures:

The Dispatch Center will attempt to obtain any and all information from the person reporting a hazardous materials incident. The information should, if possible, include material name and/or type, amount and size of container(s), problem (leak, spill, fire, etc.) and dangerous properties of the materials AS WELL AS THE NUMBER OF PERSONS INJURED OR EXPOSED.

The Dispatch Center will dispatch the APPROPRIATE Hazardous Materials Assignment to all reported hazardous materials incidents. The IC has the authority to adjust or request more resources as needed

The DUTY CHIEF shall be notified of any Hazmat Response

FIRST ARRIVING UNIT

The first arriving officer will establish Command and begin a size-up. The first unit must 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. Scene security needs to be established by law enforcement to protect residents and responders.

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 (when not a facility), the NIOSH pocket guide, NFPA reference materials, or any other material such as MSDS/shipping papers 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 first step in the size-up process 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, department of environmental protection, 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:

- Safety of all fire personnel
- Evacuation of the endangered area, if necessary
- Control of situation
- Stabilization of hazardous materials, and/or
- Disposal or removal of hazardous material

The 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.

CONTROL OF HAZARDOUS AREA

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

RESTRICTED ACCESS ZONE (RAZ)

The RAZ 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 by Command and only personnel with proper protective equipment, training and an assigned activity will enter. All companies will remain intact in designated staging areas until assigned. Personnel will be assigned to monitor entry and exit of all personnel from the RAZ.

The RAZ should be geographically described to all responding units (if possible) and identified by yellow fire line tape. (A Lobby Control Sector will be established to control access to the RAZ and maintain an awareness of which personnel are working in the area.)

Establishing and maintaining the RAZ may include:

- Establishing 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 Mat Branch to identify required level of protection for personnel.
- Collect/return accountability PASSPORTS of all companies entering/leaving the controlled area.

EVACUATION ZONE (EZ)

The EZ is the larger area surrounding the RAZ 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).

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 Branch 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.

3. REFERENCES:

- None

By Order Of:



James P. Wilson
Fire Chief