

Hazardous Materials Tactical Plan

A-015

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This plan provides a basic philosophy and strategic plan for hazardous materials situations. All Union Vale Fire Department Standard Operating Procedures, unless superseded by a specific part of this plan, remain in effect for Hazardous Materials incidents.

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 hazards, corrosives, explosives, health hazards, chemical reactions, and combinations of factors. This plan provides a general framework for handling a hazardous materials incident but does not address the specific tactics or control measures for particular incidents.

This procedure 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 proper turnouts and SCBA whenever appropriate and the utilization of all Standard Operating Guidelines on a continuing basis is the starting point for this plan.

Alarm and Dispatch

Upon receiving the alarm will attempt to obtain 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. The incident commander should obtain additional information after dispatch, if possible. Any additional information shall be relayed to responding units after dispatch.

If the call comes from a person with particular knowledge of the hazardous situation, have that person meet and direct the arriving units. Support personnel will immediately begin to research the situation using resources at their disposal (pre-fire plans, reference books, telephone contact, etc.) They will also obtain the prevailing wind speed and direction and for announcement to responding units.

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.

Command will advise ALL OTHER UNITS to stage until instructed to take specific action. Units must stage in a safe location, taking into account wind, spill flow, explosion potential, and similar factors in any situation.

Incident Command

For all hazardous materials incidents, command shall be established or transferred to an officer with the following qualifications:

Minimum of 24 hours of training equal to the first responder operations level and in addition have competency in the following areas:

- a) Know and be able to implement the fire department incident command system;
- b) Know how to implement the fire department hazardous materials tactical plan;

- c) Know and understand the hazards and risks associated with firefighters working in protective clothing;
- d) Know how to implement the County Mutual Aid disaster plan;
- e) Know of the county and state emergency response plans.
- f) Know and understand the importance of decontamination procedures.

Size-Up

Command must make a careful size-up before deciding on a commitment. It may be necessary to take immediate action to make a rescue or evacuate an area, but this should be done with an awareness of the risk to Fire Department personnel, and taking advantage of available protective equipment.

The objective of the size-up is to identify the nature and severity of the immediate problem and gather sufficient information to formulate a valid action plan. A hazardous materials incident requires a more cautious and deliberate size-up than most fire situations.

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.

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.

The major problem in most cases 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, and shipping papers, refer to pre-fire plans, and ask personnel at the scene (plant management, responsible party, truck drivers, fire department specialist). Utilize reference materials carried on apparatus and have dispatcher contact other sources for assistance in sizing up the problem (Chemtrec, other agencies, fire department specialists, manufacturers of materials, etc.).

Action Plan

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

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 for County HazMat Teams to get the hazardous material back into a safe container, dispose of it, neutralize it, or allow it to dissipate safely. The specific action plan must identify the method of hazard control and identify the resources available and/or required 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" wait for needed equipment or supplies.

As a general policy, the Dutchess County Hazardous Materials Response Team will be called to any situation involving direct contact with hazardous materials in which the proper protective equipment; trained personnel; control material; or equipment is required.

The Action Plan Must Provide For:

1. Safety of citizens

2. Safety of Firefighters
3. Evacuation of endangered area, if necessary
4. Control of situation
5. Stabilization of hazardous materials

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 expert help.

Control of Hazardous Area

A hazardous material incident has two zones associated with the scene, similar to a fire. There are the HAZARD ZONE and the EVACUATION ZONE Hazard Zone

The Hazard Zone 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 personnel and equipment will remain in designated staging areas until assigned. Personnel will be assigned to monitor entry and exit of all personnel from the Hazard Zone. The Hazard Zone should be geographically described to all responding units, if possible. (A Sector may be established to control access to the Hazard Zone and maintain an awareness of which personnel are working in the area.)

Evacuation Zone

The Evacuation Zone is the larger area surrounding the Hazard Zone in which a lesser degree of risk to personnel exists. All civilians will 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 more effective to keep everyone indoors with windows and doors closed to prevent contact with the material instead of evacuating the area. In these cases, companies would 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.

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 for which they would have particular experience or ability. Such personnel must be trained and certified relative to the type of incident. Incident command may include these people in the operations, when proper safety considerations are satisfied.

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