

Hurricane Fire & Rescue

Hurricane, WV
Operation Guidelines

Subject
Guideline Number
Adopted
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Pages

Haz Mat Incidents
800.413
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8

Purpose: To establish guidelines to operate a haz mat incident.

Scope: Operation Personnel

Responsibility: It is the responsibility of all personnel to adhere to these guidelines.

OBJECTIVES:

1. Be aware of and recognize hazardous materials.
2. Take appropriate actions to de-con, rescue, and treat patients.
3. Tactical control procedures.
4. Gather information and notify the Hazardous Materials Team.

RECOGNITION:

- A. Dispatch should obtain information from the caller and pass on to the first responding units.
 1. Is a cloud visible?
 2. What material is involved?
 3. Determine fire conditions if any
 4. What are the weather conditions?
 5. Does the problem involve a vehicle, building, storage, etc.?
 6. Are there any victims?
 7. Notification of any Hazardous Materials, Title III information in the CAD system for the location.
- B. Responding unit actions.
 1. Approach from upwind and uphill position.
 2. Attempt to identify the material involved from a distance.
 - a. Use placards as a guideline only.
 - b. Obtain as much information as possible from person(s) at the scene.
 - c. Obtain Material Safety Data Sheets (MSDS), if available.
 - d. Obtain shipping papers, if available, and forward them to "Command" for use by the Haz Mat. Team.
 - e. Physical characteristics: odor, gas or liquid, color of container, etc.
 - f. Constant update to Command of changes or lack thereof.

- g. Determine the presence of victims and isolate for treatment or transport, after decontamination.
3. Establish Command
4. Notify Emergency Management

RESCUE, EVACUATION, ISOLATION:

- A. Assess the rescue possibilities.
 1. Considerations for rescue.
 - a. Risk to the rescuers.
 - b. Probability of the victim's survival.
 - c. Capabilities of the unit's on-scene to perform the rescue.
 - d. Knowledge of the material(s) involved per MSDS sheets and reference material.
 2. Units on-scene are expected to take REASONABLE risks to protect life and property.
 3. Remember, if a civilian or a fellow firefighter has been overcome, you may also be affected.
 4. If a firefighter wearing full protective equipment has been overcome, rescue must only be done by the Hazardous Materials Response Team.
 5. Rescuers must also be considered contaminated and isolated with the victims.
 6. Standard protective equipment, i.e. bunker gear and SCBA, will not afford adequate protection from many chemicals. Rubber SCBA masks and boots will be penetrated by certain chemicals.
- B. Evacuation
 1. Notify the appropriate police agency or the Putnam County Sheriff's Department and Dispatch of the situation.
 - a. The State Police or Sheriff's department will manage the evacuation.
 - b. A law enforcement representative at the command post will coordinate the evacuation. Evacuators may be required to don SCBA and/or protective clothing.
 2. Evacuation distances will be based on DOT references, Hazardous Materials Response Team recommendations or best judgment, if no other reference sources are readily available.
 3. Evacuation may require the assistance of other agencies, such as mutual Aid from Putnam County EMS, the Putnam County School System, Red Cross, etc.
 4. A Hazardous Materials Response Team may be contacted for consultation.
- C. Isolation
 1. Access zones must be established to provide control of entry into the contaminated area (refer to appendix C).

2. Contaminated persons and/or equipment must be isolated until they can be decontaminated.
 3. Rescued victims must be isolated until the Hazardous Materials Sector Leader for transport clears them.
 4. Medical treatment teams must be considered contaminated until cleared by the Hazardous Materials Sector Leader.
 5. Emergency decontamination may be required; the decontamination area may need to be set up in a limited access zone.
 6. Once a restricted access zone is established, the Hazardous Materials Sector Leader will control entry and exit.
- D. Operational Decontamination with the Hazardous Materials Response Team on scene.
1. All decontamination procedures will be done under the direction of the Hazardous Materials Response Team.

SAFETY:

- A. A Safety Officer will be established and will assess the involvement of personnel, making recommendations to Command.
- B. All personnel will wear full protective clothing (including SCBA) upon entry from the support zone, unless otherwise recommended by the Hazardous Materials Response Team.
- C. Medical evaluation will be required for all personnel that may have been exposed.

EVALUATION:

A critique of the incident should be held as soon as possible following the incident, the Hazardous Materials Response Team should be invited to attend.

ON-SCENE OPERATIONS:

- A. A staging area must be established for the Hazmat units. Response by the Regional Haz Mat Teams will be approximately six (6) units.
- B. Command will be established and maintained by the local jurisdiction, with the Hazardous Materials Response Team Officer functioning as a specialty sector.
- C. The appropriate support companies (structural) will remain on the scene until the situation is terminated. The number of such companies will be determined by Command after consultation with the Hazardous Materials Sector.

LINE OF AUTHORITY

A. ADMINISTRATION

Primary role is to oversee Hurricane's portion of the Haz Mat team and its inter-workings at the County level.

Secondary role is to support the operations, goals and objectives set forth by Regional Haz Mat Team.

to speak on behalf of Hurricane Fire Rescue.

Assure that all personnel are trained and equipped to recognize, prepare for, and handle hazardous situations

B CHIEF OFFICERS

A Chief Officer will remain as (Command) during hazardous materials incidents within our jurisdiction, and assist in mitigation and support.

The Chief Officer having jurisdiction will be responsible for rescue, suppression, evacuations, resources and district coverage during a hazardous material incident.

TACTICAL PROCEDURES

SPILL CONTAINMENT - HYDROCARBON SPILLS

- 1 Approach from uphill/upwind.
- 2 Attempt to identify product(s) at a distance.
- 3 Isolate the area, (vehicles/pedestrians).
- 4 Protective clothing, SCBA (mandatory).
- 5 Personnel should avoid contact with the substance while containing, and trenching.
- 6 Prevent hydrocarbon products from entering sewers, ponds, streams, or lakes.
- 7 Remember, absorbents are the primary means of mitigation for hydrocarbons.
- 8 The absorbent material will be used on automotive hydrocarbon and radiator fluid spills. The absorbent is spread over the spill and allowed to absorb the hazardous material. It is then collected for disposal.
- 9 The contaminated material will be scooped up, placed into the 4 mil thickness plastic bags provided, sealed, and returned to the station.
- 10 The contaminated material must be numbered and logged on the accumulation sheet attached to the lid of the 30-gallon fiber drum.
- 11 The 30-gallon fiber drum will be lined with the 4 mil plastic bags provided, to reduce leakage.
12. The 30-gallon fiber drum is placed inside a 55-gallon PVC drum for extra security.
13. An officer will notify Support Services when the 30-gallon fiber drum is full. **Containers can only remain on site for 180 days after the first contaminated material is collected.**
14. Refuse personnel will collect and transport the full drums to the Appropriate Solid Waste landfill.
15. An officer will ensure that the absorbent buckets are refilled from the absorbent supply drum after each collection.

16. The bucket of clay absorbent will be used for spills which have soaked into road surfaces, and not as an absorbent material.
17. Absorbent pillows will be used for hydrocarbon material that is continuously leaking.
- 18 The contaminated material in the pillow will also be bagged for proper disposal.

SPILL CONTAINMENT - UNKNOWN MATERIALS

- 1 Approach from uphill/upwind.
- 2 Attempt to identify product(s) at a safe distance.
- 3 Isolate the area, vehicles, and pedestrians.
- 4 Protective clothing/SCBA (mandatory)
- 5 Contact with the material is forbidden; bunker gear is not designed for hazardous materials.
- 6 Diking or trenching to contain the material is the safest maneuver when unknowns exist.
- 7 The use of water and/or absorbents to extinguish or neutralize may cause a dangerous reaction if product is unknown.
- 8 Notify command if material smokes, fumes, burns, explodes or is injuring civilians or damaging the environment.
- 9 Evacuation of the immediate area may be required.
- 10 Haz Mat team notification is necessary.

FIREFIGHTING PROCEDURES

1. Product identification - determines strategy.
2. Approach uphill/upwind.
3. Full protective clothing/SCBA (mandatory)
4. Remember bunker gear is not designed for chemical fires.
5. The use of CO₂, dry chemical, or foam may be the best source of extinguishment.
6. The use of water may be dangerous if mixed with certain substances, and will increase the size of the hazard. (i.e., "class D" fires)
7. Containment of material run-off should be of major concern (pesticide and chemicals).
8. Decontamination of firefighters and equipment may be necessary.
9. Water availability (500 GPM minimum).
10. Unmanned monitors should be used when possible (reduces firefighter exposure).
11. Foam application is recommended on petroleum fires to reduce vapors and aid in extinguishment.
12. Water and/ or foam used for firefighting will be diked and contained to reduce run- off into sewers and water sources.
13. Foam applications should not be attempted until a sufficient amount of foam is available on the scene.

14. Non-water application may be considered in certain hazardous situations. i.e., pesticides fires, water re-actives.

APPENDIX A:

PLACARDS

Identification and labeling.

DOT regulations require that many hazardous materials must be identified by placards placed on the outside of the transporting vehicle. However, these regulations allow many shipments to be transported without warning placards, either because of the size or stability of the material under normal circumstances. Many pesticides, poisons and flammable materials are carried as partial cargoes in trucks and train cars with no outside labeling. In these instances, the cargo must be identified by other means.

There are three (3) commonly used placarding systems:

1. The N.F.P.A. 704 System which uses a diamond divided into four small squares, denoting each type of hazard. The number in each quadrant denotes the degree of the hazard.
 - a. 4 - Requires evacuation and expert assistance.
 - b. 3 - Hazardous, may require special methods of control.
 - c. 2 - Standard equipment may be used with caution.
 - d. 1 - Standard procedure may be used.
 - e. 0 - No hazard.

The special hazards quadrant denotes such items as water reactivity, radioactivity, etc.

2. The United Nations number system is a two-part system. The first part divides materials into nine (9) classes with the hazard classification number at the bottom point of the diamond.
 - a. 1 - Explosives
 - b. 2 - Compressed gases
 - c. 3 - Flammable liquids
 - d. 4 - Flammable solids
 - e. 5 - Oxidizers
 - f. 6 - Poisons and infectious substances
 - g. 7 - Radioactive substances
 - h. 8 - Corrosives

i. 9 - Miscellaneous

The second part identifies materials by assigning a four (4)-digit number to specific substances. This number may appear across the face of a standard DOT placard or on its own rectangular panel accompanied by a DOT illustrated placard. The UN number is used with reference materials such as the DOT Emergency Response Guide.

3. The DOT system classifies hazardous materials according to their primary danger (this means that there may also be other significant dangers associated with the material) and assigns standardized symbols to identify the classes. The symbols cover several types of substances in addition to the nine (9) UN classes.

