

Standard Operating Guidelines

Guideline 501.0 Hazardous Materials Response



Purpose:

This plan provides a basic philosophy and strategic plan for hazardous materials situations. 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, explosions, health and chemical reactions or a combination of factors. This Standard Operating Guideline provides a general framework for handling a hazardous materials incident, but does not address the specific tactics for control measures for particular incidents. This Standard Operating Guideline mirrors the statements made in the Hazardous Materials Emergency Response Plan for Williams County, Ohio.

Guideline:

All City of Bryan fire Department Standard Operating Guidelines, unless superseded by a specific part of this plan, remains in effect for Hazardous Materials incidents.

The City of Bryan Fire Department has been designated by the Williams County Local Emergency Planning Committee as the primary Hazardous Materials Team for Williams County, Ohio. The City of Bryan Fire Department Hazardous Materials Team is a Hazardous Materials Technician Level trained team capable of Level A entry, control, and containment.

Response Procedure

Initial Notification:

This notification procedure shall be followed for any leak, spill or fire involving any hazardous material, whether the leak, spill or fire originates in a facility or involves a transportation vehicle.

The Williams County Communications Agency has been designated the primary reporting point for all hazardous material incidents in Williams County. The City of Bryan Communications Center has been designated the secondary reporting point.

In all hazardous materials incidents, the following system will be used:

If the Williams County Communications Agency or the City of Bryan Communications Center has been notified, the dispatcher will notify the local fire department, in the political jurisdiction where the incident occurred. The LEPC Emergency Coordinator shall be notified.

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The Williams County Communications Agency and the City of Bryan Communications Center shall have a list of routine telephone numbers to call with Level One, Level Two or Level Three responses plus a list of special numbers that can be called as needed.

Surrounding political jurisdictions will be notified of a leak, spill or fire involving hazardous materials at the Incident Commanders judgment or when the incident reaches a Level 3 response.

HAZMAT Release Response Levels.

The Incident Commander of a political jurisdiction's fire department will determine the HAZMAT response level for each event above Level 1. The initial notifications of response agencies will be made by communications. The specific response level will be communicated to each agency notified, including neighboring jurisdictions. Any Chemical related incident is automatically classified a Level 1 response. Response levels are explained on the next page and the initial notification of response agencies for each Response Level is also shown on the following pages.

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Response Level	Description	Resources	Examples
<p style="text-align: center;">I</p> <p style="text-align: center;">POTENTIAL EMERGENCY CONDITIONS</p>	<p>An incident or threat of a release that can be controlled by the local fire department. It does not require evacuation, beyond the involved structure or immediate outside area. The incident is confined to a small area and poses no immediate threat to life and property. Emergency can be handled with defensive actions.</p>	<p>PAGED OR CONTACTED</p> <p>Local Fire Department LEPC Emergency Coordinator- Bruce R. Siders EMA Director – Ron Walker</p> <hr/> <p>NOTIFIED AS NEEDED</p> <p>Any additional resources as requested by the Incident Commander.</p>	<p>Fuel Spill. Inadvertent mixture of chemicals. Anhydrous Ammonia leaking from nurse tank. Any chemical related incident.</p>
<p style="text-align: center;">II</p> <p style="text-align: center;">LIMITED EMERGENCY CONDITIONS</p>	<p>An incident involving a greater hazard or larger area than Level I that poses a potential threat to life and property. It may require a limited protective action of the surrounding area.</p>	<p>PAGED OR CONTACTED</p> <p>All agencies in Level I and Bryan HazMat Team Montpelier Decon Team Local Law Enforcement EMS</p> <hr/> <p>NOTIFIED AS NEEDED</p> <p>Ohio EPA Ohio PUCO if involving transportation County/Municipal Officials Public Information Officer Health Department Hospitals Ohio EMA</p>	<p>Chemical release at a facility or in transportation. Tank truck rollover. Chlorine leak at a water treatment facility. Spills into waterways.</p>
<p style="text-align: center;">III</p> <p style="text-align: center;">FULL EMERGENCY CONDITIONS</p>	<p>An incident involving a severe hazard or a large area that poses an extreme threat to life and property and that may require a large-scale protective action.</p>	<p>PAGED OR CONTACTED</p> <p>All Level I & II agencies.</p> <hr/> <p>NOTIFIED AS NEEDED</p> <p>Mutual aid Fire, Police, EMS, and HazMat Teams. National Response Center. U.S. EPA Region V. FEMA</p>	<p>Major train derailment. Explosion or toxicity hazard. A migrating vapor cloud.</p>

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Incident Assessment

Upon response to a Hazardous Material incident, the local fire department will assume the roll of Incident Command (lead agency) and will endeavor to take all actions deemed necessary to save lives, prevent injuries, reduce property loss, and restore vital services. The Incident Commander may employ all available means to alleviate the hazardous condition. During the initial phase of the incident the fire commander takes action similar to the following:

1. Evaluates (size-up situation).
2. Assesses any visible activity taking place. Evaluates the effects of wind, topography, and the area affected.
3. Determines the level of the incident.
4. Establishes a command post
5. Evaluates the risks before formulating a plan. Avoids premature commitment of companies and personnel to potentially hazardous area. Keeps uncommitted firefighters and equipment at a safe distance. Evaluation may require immediate action to rescue or evacuate while recognizing the risk to personnel in relation to available protective equipment.
6. Positions apparatus for quick means of escape.
7. Establishes command posts, staging and triage locations.
8. Determines what public action should be taken.
9. Determines and designates the hazard zones (hot zone, warm zone, and cold zone).
10. Initiates public notification, if applicable.
11. Determines/requests appropriate emergency and support activities.
12. Determines and directs emergency and support activities.
13. Maintains overall command of the emergency scene until the hazard is contained and under control or until command can be passed effectively to relief command and/or to an appropriate agency.
14. If the event is a level 2 or 3 incident, requests apparatus, personnel, and equipment from adjacent jurisdictions as necessary. Requests mutual aid standby, identifies the hazardous substances if possible and requests the response of appropriate governmental environmental authorities and/or aid and guidance from manufacturer or others responsible for the material.

Direction and Control

The direction and control function is the combination of the combined capability of the Incident Commander at the emergency scene command post and the Emergency Operations Center (EOC). The exchange of critical information between these facilities,

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e.g., requests for support and key decision, enable first response efforts and support operations to be synchronized.

Incident Command

The first officer at the scene assumes command until:

- A A superior fire officer of the same department arrives
- B It is determined that the actual scene is located in a different jurisdiction, in which case the command will be relinquished to the fire officer with jurisdiction upon his arrival.

If an incident is located on the borderline of two or more jurisdictions, the senior fire officer of the first responding jurisdiction shall be in command. The senior fire officer is in charge of the operation, maintenance and deployment of the command post. Advice and technical assistance at the scene will be directed to the fire officer in command. All advisors, aides, technical teams, monitors, state and federal officials should be directed to the command post to report to the Incident Commander before undertaking activity at the site.

Radio traffic involving the communications center, EOC, and incident site shall be recorded and retained. Transcriptions shall be made available to authorized persons on official business.

Emergency On Scene Communications

The Bryan Fire Department will establish an Emergency on Scene Command Post in Haz Mat 1. Haz Mat 1 has communications with all emergency agencies in Williams County via four (4) mobile radios (two VHF and two UHF radios), a cellular telephone and a commercial telephone with capabilities to hook up via hard wire to any commercial telephone line.

Haz Mat 1 has maps of every area in Williams County as well as maps of every county surrounding Williams County, including Michigan and Indiana. Maps include Counties, Townships, Villages and Cities as well as the State of Ohio.

Response Personnel Safety

To reduce the risks to first responders, health and safety procedures are employed that include:

1. Medical surveillance
2. Establishment of exclusion (control) zones.
3. Personnel protective equipment.

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Medical Surveillance:

EMS personnel at the scene will maintain surveillance of personnel who may be affected by toxic exposure such as:

1. Change in complexion/skin discoloration.
2. Lack of coordination.
3. Changes in demeanor
4. Excessive salivation, pupillary response.
5. Changes in speech pattern.
6. Headaches.
7. Dizziness.
8. Blurred Vision
9. Cramps
10. Irritation of eyes, skin, or respiratory tract.

The Hot Zone is the area where contamination does or could occur. The contamination control zone is known as the Warm Zone and the support zone is known as the Cold Zone.

The *Incident Commander* will determine these boundaries and designate entry and exit points and assign personnel to regulate activities in and out of the zones. First response personnel entering the Hot Zone must wear the prescribed protective equipment. The Incident Commander will assign a person the task of personnel accounting, this person will be responsible for accounting of all personnel working in or near the hazardous materials incident.

Personnel Protective Equipment for Hazardous Materials Exposure:

Level A Protection

Self-Contained Breathing Apparatus (SCBA) or a Supplied Air Respirator with escape bottle (SAR).

Fully encapsulating chemical resistant suit.

Coveralls *

Long cotton underwear. *

Gloves, chemical-resistant, inner.

Boots, chemical-resistant steel toe & shank.

Hard hat (under suit). *

Disposable gloves and boot covers*

Cooling unit. *

2-way radio communication.

*Optional

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Level B Protection

Self-Contained Breathing Apparatus (SCBA) or a Supplied Air Respirator with escape bottle (SAR)

Chemical resistant clothing.

Long cotton underwear *

Coveralls. *

Gloves (outer) chemical-resistant.

Gloves (inner) chemical-resistant.

Boot covers (outer) chemical-resistant.

Hardhat.

2-way radio communication.

* Optional

Level C Protection

Air-purifying respirator, full-face, canister-equipped (MSHA/NIOSH) approved.

Chemical-resistant clothing includes, hooded one or two piece chemical splash suit; chemical-resistant hood and apron; disposable chemical-resistant coveralls.

Gloves (outer) chemical-resistant.

Boots (outer) chemical-resistant steel-toe & shank.

2-way radio communication.

The following Hazardous Materials Emergency Hand Signals are designed to provide you, the firefighter and hazardous materials technician and others with a secondary means of emergency communication while wearing a hazardous materials protective suit.

All personnel shall be familiar with these hand signals and the hand signals shall be reviewed prior to entry into a hazardous material suit and entry into a hazardous area or an unknown situation involving hazardous materials.

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O.K. OR YES



BOTH HANDS HELD UP OVER HEAD

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NO

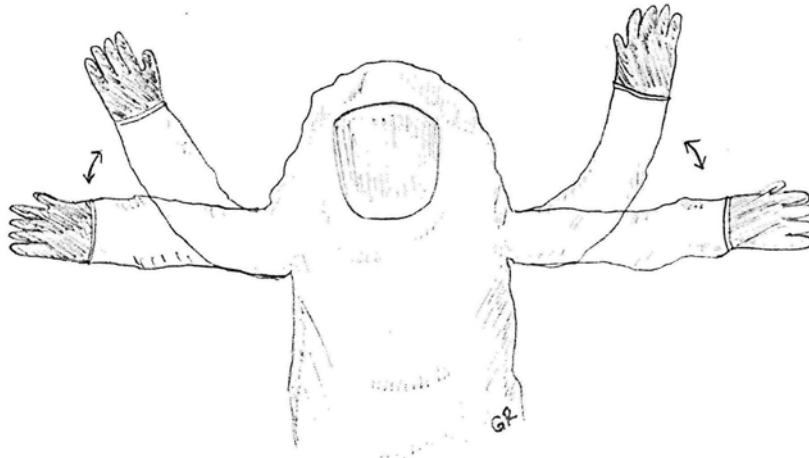


BOTH HANDS HELD DOWN AT SIDE
AT 45° ANGLE

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HELP



BOTH HANDS HELD OUT FROM SIDE AND MOVED
UP AND DOWN

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OUT OF AIR



BOTH HANDS AT THROAT



Containment/Scene Stabilization

The responsibility for selecting and implementing the appropriate countermeasures is assigned to the Incident Commander in coordination with the on-scene coordinator. The Incident Commander is responsible for monitoring the response activity to ensure that appropriate containment/displacement techniques are being initiated. Containment methods may include:

1. Dikes
2. Berms and drains
3. Trenches
4. Booms
5. Barriers in soil
6. Stream diversion
7. Patching and plugging of containers or vessels.
8. Portable catch basins
9. Overpack drums or other forms of containerization.
10. Reorientation of the container.

The Incident Commander, in conjunction with the EOC, will secure private contractors for displacement techniques. These may include:

1. Hydraulic and mechanical dredging.
2. Excavating
3. Skimming
4. Pumping
5. Dispersion/dilution

Treatment of spilled hazardous substances can be physical, chemical or biological in nature. Treatment operations are the responsibility of the operator. Monitoring responsibility is assigned to the State Department of Environmental Resources in accordance with Annex F of the State Operations Plan.

Decontamination

Contaminated Victims and Response Personnel:

The Incident Commander designates exclusion zone boundaries (Exclusion zone, contamination control zone, support zone). By establishing these zones it limits entry to persons who are adequately protected and as few as necessary to achieve objectives. Personnel performing decontamination must be equipped with adequate protective equipment.

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The Montpelier Fire Department has the responsibility to set up the Decontamination area, using personnel from Montpelier any other departments who have been trained and qualified to set up and operate the Decontamination area. The Montpelier Fire Department has available the set up diagrams of how the decontamination area will be set up.

All personnel entering and leaving the hazardous material hot zone will go through the decontamination area as determined by the Incident Commander. Neutralization and final decontamination may be beyond the scope and capability of the fire departments and these responsibilities should be referred to contractors, EPA or other such agencies, as determined by the Incident Commander.

Cleanup and Disposal

The City of Bryan Fire Department will not perform any clean up or disposal procedures.

In accordance with ORC §3737.80 the "the chief of the fire department in whose jurisdiction the emergency situation is occurring or his designee is responsible for primary coordination of the cleanup or disposal of a hazardous material..."

During an incident involving a hazardous material the Ohio EPA will be notified to respond to the scene. The Ohio EPA will assume responsibility for coordinating the restoration of the area immediately involving the incident and those areas outside the incident site that were contaminated. The Ohio EPA and the Incident Commander and the *Responsible Party* who had the spill will all collectively coordinate who will cleanup the area. The *Responsible Party* is responsible for hiring a hazardous materials cleanup contractor and restoring the area back to an acceptable manner. If food and or water supplies are affected in any way, the Williams County Health Department in conjunction with the Ohio Department of Health and Ohio EPA will make determinations regarding the safety and future use of food and or water supplies.

The area surrounding a release of hazardous materials may need to be evacuated. If that is done, the Police Agencies will set up site entry points. Entry back into the evacuation site will require a site entry tag, which will be used to control that, for low long and where a person may be permitted entry into an evacuation area.

Recovery Procedures

Restoration

The Ohio EPA, in conjunction with state and federal authorities, is in charge of restoration efforts, including any testing required prior to authorization of public reentry to the hazardous materials area.



Investigative Follow-up

The Fire Chief of the jurisdiction, local law enforcement, and or fixed facility representatives shall be responsible for determination of post incident investigations to determine cause and origin.

Documentation and Critique

Documentation

A Chronological log that details the time sequence account of release response activities, e.g., emergency response team, activation, notification of off-site authorities, significant situation changes, time of recommendations to off-site authorities, etc.

All facilities will forward all release reports to the Fire Chief of the jurisdiction, so he may complete a final report.

The Communications Center documents and has available a report detailing communications during the incident to include initial specifics of the release, e.g., time, location, material and quantity released, manufacturer, shopper, vehicle, consignee, source of release, public health hazards, agencies contacted, comments, etc.

Press arriving at the scene should report to the Public Information Officers, for this information.

The Fire Chief of the jurisdiction in which the incident occurs will prepare a final report summarizing the incident including cause, incident critique, damages, expenditures, and conclusions.

Critique

After all Level 2 or greater hazardous materials incidents a critique will be held to review the incident and Williams County Hazardous Materials Emergency Response Plan. The critique will be Co-chaired by the jurisdictions Fire Chief and the Chairman of the Williams County Local Emergency Planning Committee. All agencies involved in the incident will send a representative to the post incident critique.

Cost Recovery

In accordance with Ohio Revised Code 3745.13, all local government expenditures associated with a hazardous materials leak, spill or fire is to be invoiced to the shipper or fixed facility that is responsible for the leak, spill or fire of hazardous materials. All agencies are responsible for their own invoicing and collection.

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All Williams County Governmental agencies have adopted the Williams County Hazardous Materials Cost Recovery Standard. This standard establishes a uniform rate for cost recovery.

See Appendix B of the Williams County Hazardous Materials Response plan for a complete copy of the Williams County Cost Recovery Standard for Hazardous Material Incidents.