



FIRST RESPONDER - GENERAL GUIDELINES

1. INCIDENT CLASSIFICATION

1.1 10-80

Initial notification of a hazardous material incident. Serves to warn responders to proceed with caution.

1.2 10-80 Code 1

Transmitted by the Incident Commander to indicate a Level 1 incident. It is **not** a request for additional units or specialized resources. Level 1 incident is a situation that can be controlled by the responding unit or units up to and including three engines, two ladders and two battalion chiefs. It does not require evacuation of other than the involved structure or immediate outdoor area and does not pose an immediate threat to life or property.

Note: Hazardous Materials Company No. 1 may be special called to the incident for consultation or if in doubt of incident level.

1.3 10-80 Code 2

Transmitted by the Incident Commander to indicate a Level 2 or 3 incident. The dispatcher will order the response of:

- ◆ Total 1st alarm assignment of three engines, two ladders and two battalions chiefs.
- ◆ Deputy Chief
- ◆ Haz Mat Unit
- ◆ Safety Operating Battalion
- ◆ Safety Coordinator (3rd Battalion Chief)
- ◆ Decon Support Unit
- ◆ Field Communications Unit
- ◆ Public Information Officer

2. CLASSES OF HAZARDOUS MATERIALS

The Department of Transportation classifies chemicals according to their major hazardous characteristics.

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|-----------------------|-----------------------------------|
| 1. Explosives. | 6. Poisons. |
| 2. Compressed Gases. | 7. Radioactive Material. |
| 3. Flammable Liquids. | 8. Corrosives. |
| 4. Flammable Solids. | 9. Miscellaneous Dangerous Goods. |
| 5. Oxidizers. | |

3. METHODS OF EXPOSURE

3.1 There are five ways a chemical can gain entrance into the body.

- ◆ Inhalation. (breathing)
- ◆ Skin contact. (absorption)
- ◆ Ingestion. (swallowing)
- ◆ Puncture/wound.
- ◆ Eyes.

4. IDENTIFICATION OF INVOLVED SUBSTANCE

4.1 Proper identification of the material involved is essential to decide on safe tactics to handle any hazardous materials incident. Identification should be the initial action taken by the first to arrive units.

4.2 Look for any visible placards, labels, chemical names, symbols, etc. on the container, tank, drum, or vehicle.

4.3 Often, plant personnel or the vehicle driver can supply the name of the material.

Manufacturers and transporters tend to play down the hazards, so try to check any information about the hazard obtained from these sources. It is advisable to rely on the more restrictive source as a safety precaution.

4.4 Check shipping papers if possible.

- ◆ **Truck**-----The "bill of lading" is kept in the cab within reach of the driver.
- ◆ **Railroad** -----The "waybill" is carried by the conductor in the caboose or engine.
- ◆ **Aircraft** -----The "air bill" is kept by the pilot.
- ◆ **Ships**-----The "cargo manifest" is kept by the master or first mate.

4.5 Sometimes the configuration, size, shape, construction or use of the vehicle or container is a tip off to the material involved.

4.6 If no information is available from placards or chemical names on the vehicle, obtain the transporter's name on the vehicle and the license plate number and state, which can be checked by Police Department computer. The owner of the vehicle can then be contacted for identification of the contents. A similar procedure can be used for railroad cars, using the railroad's name and the number on the car.

4.7 Obtain as much information as possible to assist in identification. Often, a series of numbers and letters which mean nothing to you will provide much information to trained personnel.

4.8 Do not assume, because there are no clearly recognizable signs, that there are no hazards.

- 4.9 As much information as is available shall be transmitted to the responding Haz-Mat Unit by radio. This should include:
- ◆ Name of material involved.
 - ◆ 4 digit number.
 - ◆ Quantity.
 - ◆ Type of release (explosion, leaking valve, broken bag, etc.).
 - ◆ Color of vapor or material.
 - ◆ Whether fuming or not.
 - ◆ How it is reacting with surrounding material.
 - ◆ Any other information that may be pertinent.
- 4.10 Any members who are exposed prior to recognition of the hazardous material should be isolated until proper information is available.

5. HAZARD ASSESSMENT

- 5.1 Once all available clues have been obtained that may identify the involved substances, resources must be tapped to formulate appropriate tactics.
- 5.2 Emergency Response Guidebook.
- A. This book has been issued to all units and must be carried on the apparatus.
 - B. It was developed for use by firefighters as a guide to initial actions to protect themselves and the public until more specific information is obtained. Recommendations given are those most likely to be helpful in the majority of cases. They are not always adequate, nor applicable in every case.
 - C. How to use the Guidebook.
 - 1. Identify the material.
 - a. By black 4-digit identification (ID) number on placard or orange panel.
 - or**
 - b. By 4-digit number (preceded by UN or MA) on shipping papers or packages.
 - or**
 - c. By the name of the material found on shipping papers or packages.
 - d. Only if no ID number or shipping name can be found should you resort to matching the diamond shaped placard on tank, vehicle, or railroad car with a placard in the back of the Guidebook, and then turn to the guide page number given.

2. Locate guide number.
 - a. In the ID numerical index.
or
 - b. In the alphabetical name index.
and
 - c. Double-check guide number.

NOTE: For explosives, use:

Explosives A-Guide 46
Explosives B-Guide 46
Explosives C-Guide 50
Blasting Agents-Guide 46

3. Turn to indicated numbered guide page for action.
- 5.3 Every effort shall be made to obtain and evaluate all information concerning the hazards of the involved material before any actions are taken. Generally, after initial evacuation of the involved area, there is no escalation of the problem.
- 5.4 If first arriving units are able to identify the substance by name, this shall be relayed, letter by letter, phonetically (A-Adam, B-Boy, etc.), to the dispatcher for notification to Chemtrec and to the Hazardous Materials Response Team (HMRT).
- It cannot be overemphasized how critical the spelling of a chemical name is.

6. STRATEGY AND TACTICS

- 6.1 Strategy and tactics to control an incident will be formulated after a hazard assessment is made.
- 6.2 There will be times when there is an immediate life hazard that may have to be dealt with. In such cases, the best available protective clothing must be used. This includes positive pressure masks if available. Before attempting rescue, evaluate the risk of compounding the rescue problem by exposing improperly equipped members. While some risk may be justified, it must be weighted against the expected results.

7. PRECAUTIONS

- ◆ In general, Department of Transportation regulations require placards to be posted only on trucks that are transporting OVER 1000 pounds of the particular material. It is possible to have vehicles transporting up to 1000 pounds of a hazardous substance without placards visible on the outside of the vehicle.
- ◆ Because no information is available from books or other resources, do not assume that the involved material is not hazardous. Proceed as if it is hazardous until proven otherwise.
- ◆ Do not assume that a small leak in a small container is insignificant.

- ◆ Do not assume, because plant personnel are not using protective clothing, that there is no hazard.
- ◆ Empty containers may be MORE HAZARDOUS than full ones. Vapors or residue of the product they formerly contained may be present.
- ◆ Do not use water on any substance that is fuming until after proper identification and hazard assessment.
- ◆ Under no circumstances are members to touch, taste, or intentionally smell any substance suspected of being hazardous.
- ◆ Because a substance is classified in a particular group, such as flammable gas, don't assume that this is the only hazard involved. Often, there are multiple hazards.
- ◆ Operate from the upwind and uphill side where possible.
- ◆ Keep apparatus uphill, upwind, and out of run-off.
- ◆ Complete fire clothing shall be worn.
- ◆ Self contained mask shall be used.
- ◆ Avoid smoking, eating or drinking at the scene.
- ◆ Be aware of the possibility of encountering hazardous materials at occupancies where illegal drug operations exist. (See REFERENCE # 1)
- ◆ Contaminated clothing, tools, etc., shall be left at the scene. (See REFERENCE # 2 Sec. 1)
- ◆ Responses to waterproofing worksites. (See REFERENCE # 2 Sec. 2)
- ◆ Hazardous Materials are transported by rail daily in New York City. Rail tank cars come in various sizes, configurations, and construction. Accidents and derailments can and do occur during transportation. The first priority at these incidents is the safety of the responders and the public.

Damage assessment requires specialized training and skill. Initial responders are not qualified to fully assess these situations. In all cases involving derailment of railroad tank cars the Hazardous Materials unit must be called, even when it appears there is no damage. Haz-Mat will provide the technical knowledge and skills to assist the Incident Commander in determining the condition and contents of the involved tank car(s). This will aid in controlling the incident safely.

BY ORDERS OF THE FIRE COMMISSIONER AND CHIEF OF DEPARTMENT

REFERENCE # 1
FORMER SAFETY MESSAGES 57, 58, 59 & 64

ILLEGAL DRUG FACTORIES (From S.M. 57)

As opposed to smoke shops, or head shops, which are usually identifiable, illegal drug factories are much more insidious. These factories can be found anywhere from one small room to an entire building.

These windows of these factories are usually covered or painted with opaque materials due to the use of light sensitive chemicals. In addition to the storage of chemicals, typical equipment found in these occupancies can be heating plates, glass tubing, scales, etc.

Crude ventilation systems such as household fans or vent pipes running to the lavatory to exhaust fumes produced during the various processes can also be present. Some hazardous materials that may be found include, chloroform, ether, acetone, ammonia, benzene, methyl ethyl ketone, and sulfuric acids. These materials may be improperly stored. Buildings and adjacent areas may be booby trapped. Firearms and ammunition may also be found.

When responding to alarms, look for signs (mentioned above) of an illegal drug factory. Typical incidents involve hazardous materials. Approach with caution and request the response of the Haz-Mat Unit. Use of masks, full firefighting clothing and distance is imperative when fighting a fire in a known illegal factory. Avoid handling products and equipment since many are known to be poisonous and all are considered evidence. Notify the Police Department and the Department of Health. Be aware that the chemicals and runoff water may be contaminated. Take proper steps to reduce the contamination that may be caused by this runoff.

ADDENDUM-TO ILLEGAL DRUG FACTORIES (From S.M. 58)

One type of booby trap being reported consists of boards or sheets of plywood placed in front of windows and inside entrance doors. These boards or sheets of plywood have nails pointing upward to inflict injury on the uninvited. Be careful when entering suspected illegal drug factories, especially when crawling.

DRUG PARAPHERNALIA (From S.M. 59)

It has been reported that it is becoming commonplace to find hypodermic needles pushed between seat cushions in automobiles and hidden on top of and in voids located in elevators. It has also been reported that some drug users carry exposed needles in their pockets with the needle pointed upward.

Members shall exercise care when operating in any of the above situations. Whenever possible, tools should be used when overhauling and/or removing seats of motor vehicles. The use of a flashlight and a generally cautious attitude when working at elevator operations should prevent being accidentally pricked by a hidden hypodermic needle. When administering first aid to suspected drug abusers and checking for possible presence of hypodermic needles, do not rub the victim's pockets. Gentle patting of the pocket areas should reveal the presence of the needle. Cut the pocket area away to retrieve the needle. Never attempt to retrieve the needle by placing your hand in the victim's pocket.

MORE BOOBY TRAPS (From S.M.64)

Information has been received about yet another type booby trap being found at illegal drug distribution houses. The devices may appear to be little more than a scrap of aluminum foil. They consist of rolled aluminum foil containing red phosphorus, chlorate and alcohol. When this mixture dries it becomes crystallized. It is reported that very slight movement results in an explosion. It is said that a marble sized mass can blow off a finger, a golf ball sized mass can blow off a hand and a baseball sized mass can kill.

Being booby traps, these devices can be expected to be found anywhere in suspected drug distribution houses. Consequently, officers in command of hose lines shall advance the line with due caution using the streams reach to its full advantage. Members involved in overhauling shall survey the area whenever possible before pulling ceilings or opening walls etc..

Should these devices or the possibility of such an explosive device be observed at an operation the area must be considered a "Bomb Site" and operations conducted in accordance with AUC 190 and ABC 5/86.

REFERENCE # 2
FORMERLY SAFETY MESSAGE # 60

1. EXPLOSION OF OVERPACK DRUM

After an operation, equipment that was thought to be possibly contaminated was placed in an overpack drum pending tests. The tests revealed that the material involved was non-hazardous and the equipment was to be placed back in service. This equipment contained a number of self contained breathing apparatus (SCBA).

When the unit involved removed the overpack drum from the truck and place it on the apparatus floor, a hissing sound was heard and the drum suddenly became pressurized. As the members moved to a position of safety the drum expanded at the top, bottom and sides. Within seconds, the cover of the drum which was bolted in place blew off the drum striking the ceiling of the apparatus quarters. Fortunately, there were no injuries.

In order to prevent a reoccurrence of this incident, the following procedure shall be adhered to before placing SCBA in overpack drums:

- A. Open the cylinder valve fully
- B. Open the purge valve and allow the air from the cylinder to be expelled through the regulator.
- C. Do not disconnect the high pressure hose from the cylinder
- D. When the entire cylinder has been purged of air, close the cylinder valve and purge valve and place the entire assembly into the overpack drum.

2. WATERPROOFING CONTRACTORS AT WORK SITE

Units had responded to odors of gasoline in and/or outside a building at a waterproofing work site. On arrival at the scene, the odor had dissipated. However, contractors were actively at work cleaning the facade of a building in the area, using muriatic acid prior to repointing. The odor of gasoline was probably the result of spillage when the contractors filled the engines of their spraying equipment. Seeing no immediate cause for alarm and weather conditions being hot, some members removed part or all of their firefighting gear. Although used in a diluted form, muriatic acid can cause burns to the skin and should not be inhaled.

When responding to these and other incidents in the area of building cleaning, the spraying shall be ordered stopped while our personnel are on the scene and full firefighting protective equipment shall be worn. Apparatus shall be parked upwind of any mist from the spray used to clean the building faced .

A spillage of muriatic acid requires the response of the Haz Mat Unit.