

Title: TOXIC MATERIALS, POISONS, AND PESTICIDES

Purpose:

To establish procedures and provide guidance to the Hazardous Materials Response Team when dealing with toxic materials, poisons, and pesticides.

Policy

This procedure will apply to all incidents where the Hazardous Materials Response Team responds and determines or suspects that toxic materials, poisons, and pesticides are involved. It is the intent of this policy to comply with the requirements of OSHA 29 CFR 1910.10.120 and EPA 40 CFR Part 311 for responding to toxic, poison, pesticides, and similar hazardous materials.

Applicability

This policy shall be utilized to guide selection, use of the appropriate equipment, and procedures in performing hazardous materials identification and control measures. The Hazardous Materials Group Supervisor is responsible for making sure the Incident Commander is aware of the hazards involved and the Hazardous Materials Response Team follow these guidelines in assuring the safety of the Hazardous Materials Response Team members, operations personnel, and the general public.

Procedures

1. Identify the material(s) involved (refer to Field Analysis of Unidentified Potentially Hazardous Materials).
2. Keep non-essential people away. (This includes non-essential emergency service personnel.)
3. Establish control zones. (Isolate area and deny entry.)
4. Wear positive pressure SCBA and appropriate full protective clothing (refer to Selection and Use of Specialized Chemical Protective Ensembles). Due to construction and materials used for firefighter turnout clothing, the clothing may actually absorb and hold the pesticide or poison if contact with the smoke, fumes, vapors, dust, or material occur.
5. Stay upwind and keep out of low areas. If you can smell the pesticide, you are too close and not sufficiently protected.

TOXIC MATERIALS, POISONS, AND PESTICIDES (continued):

6. Avoid exposure to smoke, fumes, vapors, dust, or direct contact.
7. Determine signs and symptoms of exposure and advise all personnel operating at the site. Some symptoms may not become present for up to 48 hours following exposure.
8. Ventilate confined areas before entering. It is not advisable to enter tanks or other confined spaces that contain or have contained pesticides and/or poisons unless it is to save a life.
9. If spilled material has entered storm, sewer, or water systems, notify the proper authority. Maps should be used to determine the direction of flow and destination (discharge) of the system. Consideration should be given to diking ahead of the flow.
10. Determine and implement appropriate decontamination procedures for personnel and equipment.
11. Flush any contacted material from skin immediately.
12. Remove and isolate any contaminated clothing at the site and avoid spreading contamination to non-contaminated areas.
13. Consult CHEMTREC (800) 424-9300 for product information and assistance.
14. Make sure all personnel exposed to the toxins are referred to proper follow-up medical care. Make sure samples are taken of product to confirm what personnel were exposed to and corresponds to field test results.

Additional Requirements

FIRE CONDITIONS

1. Consider protecting exposures and allowing the fire to burn. This may create less of a hazard to people and the environment, especially if run-off cannot be confined.
2. For small fires, use dry chemical, CO₂, water spray or the appropriate foam.

Model Hazardous Materials Emergency Response Procedures

3. For large fires, used the appropriate foam or water spray.
4. Do not extinguish fire unless the flow can be stopped.
5. If sufficient water is available, use water spray to cool containers exposed to the fire.
6. Dike fire control water for later analysis and/or disposal.

TOXIC MATERIALS, POISONS, AND PESTICIDES continued:

SPILL OR LEAK

1. For liquid pesticide spills, extinguish or eliminate all sources of ignition in the vicinity as many pesticides have flammable liquids as the carrier of the poison. Use combustible gas detectors to determine the boundary of the flammable vapors if the pesticide is flammable. The absence of a reading on a CGI does NOT indicate the absence of a toxic atmosphere.
2. Do not allow vehicles or other sources of ignition in the area as long as the combustible gas detector indicates the presence of flammable vapors.
3. If it can be done safely, attempt to close valves, plugs, or otherwise reduce the amount of leakage.
4. Water spray can be used to absorb water miscible vapors, and water spray or explosion proof fan can be used to disperse vapors. Do not get water inside containers. Run-off must be contained for later analysis and possible disposal. Do not permit the run-off to enter storm, sewer, or water systems.
5. Keep material out of storm, sewer, and water systems.
6. Dig trenches or build dikes ahead of the flow to confine the spill for later disposal or recovery.
7. Powder spills can be covered with a plastic sheet or tarp to minimize spreading.