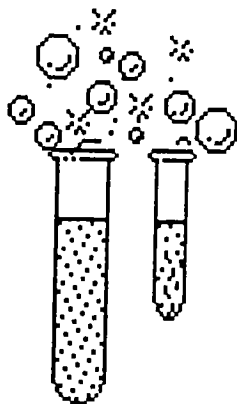




Just the Facts

56-021-0783

Hazardous Chemical Spill Response in Laboratories



Distinguishing Between Minor and Major Chemical Spills

No simple method exists for distinguishing between a minor and major chemical spill. Each safety/chemical hygiene officer must make this determination based on—

The quantity of the material released.

The chemical and physical properties of the material (i.e., physical state, vapor pressure, and air or water reactivity).

The hazardous properties of the material (i.e., toxicity, corrosivity, and flammability).

The type(s) of personal protective equipment (PPE) needed to protect employees who perform cleanup procedures.

Developing a Comprehensive Chemical Spill Control Policy for the Laboratory

When developing a policy, safety/chemical hygiene officers should consider—

Establishing a committee comprised of safety, industrial hygiene, fire prevention, and environmental personnel to develop and oversee a spill control policy. The policy should address the prevention, containment, cleanup, and reporting of hazardous chemical spills.

Reviewing the material safety data sheet for each hazardous chemical used/stored in the laboratory and identifying the chemicals and/or circumstances requiring cleanup by trained emergency response personnel.

Coordinating with the installation safety/emergency response personnel to establish notification and emergency response procedures for hazardous chemical spill response.

REFERENCES

1. DOD Instruction 6050.5, 29 October 1990, DOD Hazard Communication Program.
2. DOD Instruction 6050.5-h, June 1989, DOD Hazardous Chemical Warning Labeling System.
3. HQDA Letter 11-91-2, 1 November 1991, Implementation of Hazard Communication Program.
4. Title 29, Code of Federal Regulations (CFR), 1993 rev, part 1910, section 38, Employee emergency plans and fire protection plans.
5. Title 29, CFR, 1993 rev, part 1910, section 1200, Hazard communication.
6. Title 29, CFR, 1993 rev, part 1910, section 1450, Occupational exposure to hazardous chemicals in laboratories.
7. National Research Council, Prudent Practices for Handling Hazardous Chemicals in Laboratories, National Academy Press, Washington, DC, 1981.

- ◆ Chemical Hygiene Officers/Safety Managers
- ◆ Guidance
- ◆ Laboratory Safety