

6 - Storing Hazardous Materials: Safety Training

EH&S – MGA

Goals: This safety session should teach you to:

- A. Understand that hazardous substances are still dangerous when stored.
- B. Know that following safety rules can prevent serious emergencies.
- C. Appreciate importance of knowing the proper way to store different substances.

OSHA Regulation: 29 CFR 1910.101, 103, 104, 106, 107, 108, 109, 110, 111, 176, 1200

1. It's important to take precautions with hazardous materials—whether they are being used or simply being stored.

- A. Flammable or combustible liquids can catch fire or explode.
- B. Compressed gases can release pressure or explode.
- C. Corrosive substances can cause skin or eye burns or damage other equipment or materials in the storage area.
- D. Some gases or vapors may be deadly if inhaled.
- E. Some materials will react violently if exposed to air, water, or other specific substances.

2. OSHA has both general and specific hazardous materials regulations.

- A. The general rule states that storage of materials shall not create a hazard and good housekeeping rules should be followed.
- B. Specific standards cover oxygen, hydrogen, acetylene, anhydrous ammonia, and nitrous oxide.
- C. Several standards cover storage of flammable and combustible materials, explosives and blasting agents, and liquid petroleum gases.
 - 1. These substances require special precautions like fire walls to separate inside storage areas from other parts of the building.
 - 2. They require storage containers made of metal, with emergency vents.

3. Container labels identify substances and safety data sheets (SDSs) carry information about their particular hazards:

- A. Physical and chemical characteristics of the substance
- B. Fire and explosion hazards, like flash point and flammable limits
- C. Reactivity and instability hazards
- D. Health hazard risks
- E. Required personal protective equipment (PPE)

4. Keep these rules in mind about hazardous materials storage:

- A. Before you enter a storage area:
 - 1. Be sure you are authorized to enter any restricted area.
 - 2. Check signs and follow their instructions.
 - 3. Know as much as possible about what's stored inside.
- B. When you enter a hazardous materials storage area:
 - 1. Read container labels to identify hazards.
 - 2. Read SDSs to learn about hazards, protective measures, and precautions.
 - 3. Use personal protective clothing and equipment designed to protect against stored substances' hazards.
 - 4. Be sure all substances are being stored in proper containers.
 - 5. Check condition of containers and report any holes, leaks, rust, dents, or missing or illegible labels.
 - 6. Be sure that the storage room is properly ventilated and well lit.
 - 7. Check that fire extinguishers and spill cleanup materials are available.
- C. Practice good housekeeping in storage areas:
 - 1. Keep aisles clear and unobstructed.
 - 2. Keep floors clean.
 - 3. Be sure all storage containers are secure against sliding or collapse.
 - 4. Don't stack containers less than 3 feet from ceiling beams, sprinklers, or other overhead fixtures.
 - 5. Minimize trash and dispose of it properly. Be sure to place combustible trash in closed metal containers
- D. When you work in a hazardous materials storage area:
 - 1. Wear personal protective clothing and equipment.
 - 2. Don't smoke, use sparking tools, or perform any task that could create an ignition source.
 - 3. Transfer liquids from container to container only in an assigned ventilated area away from other operations.

5. Know how to respond to any emergency.

- A. Notify any workers in the area who might be in danger.
- B. Proceed with cleanup only if you have been trained and have the proper PPE and equipment for cleanup.
- C. If you have not been trained, notify your supervisor so that properly trained personnel can be called right away.
- D. Get immediate medical attention if exposed to a hazardous substance.

Summation:

If it is called a hazardous material, it's important to follow proper safety procedures at all times—even when it's being stored. If you aren't sure about the right safety measures—**PLEASE ASK!**