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.


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!