

# HAZARDOUS MATERIALS INVENTORY STATEMENT – GENERAL PRACTICE GUIDELINES

NOTE: ALWAYS CONSULT STATE AND LOCAL REGULATIONS FOR MORE SPECIFIC REQUIREMENTS.

This is the statement of the \_\_\_\_\_ School District regarding the intent and purpose of our adoption of the hazardous materials inventory statement approach to recognizing and managing hazardous materials present in our schools. Our fundamental purpose is to increase the safety of students, teachers and staff by careful management of hazardous materials and increased awareness of the hazards and appropriate practices to be used in our academic laboratories.

## 1. WHAT IS AN HMIS?

- It is an inventory of chemicals with quantity, physical state, location, Uniform Fire Codes, and health hazards associated with each chemical.
- A Hazardous Materials Inventory Statement may be required under local fire codes for permitted storage or handling hazardous materials.

## 2. WHAT IS INCLUDED IN THE HMIS FOR SCHOOLS?

- Chemical Names
- Quantity each stored chemical.
  - By tracking the quantity of chemicals stored, the aggregate quantity can be tabulated for each hazard class.
  - Aggregate quantities for each hazard class may be required in the permitting procedures.
  - Location of stored chemicals
  - This feature will aid the Fire Department in assessing emergencies.
  - For most facilities, additional hazard cabinets will be added to permit the proper storage of hazardous chemicals.
  - Facility maps will be updated to show gas shutoff valves and electrical shut-offs.
  - Maps will also indicate the rooms where hazardous materials are stored.
- Uniform Fire Codes
  - Identifies the type of hazard a chemical poses.
  - This aids in the type of extinguishing method used by the fire department in the case of a fire. Examples of UFC codes are Flammable solids (FLS), Combustible Dust (CMD), and Aerosol Class III (AE3). See Attachment 1 for UFC abbreviations.
  - Health hazards Identifies the types of health hazards associated with inventoried chemicals, Examples of health hazards are Irritants (IRR), Corrosives (COR), and Carcinogens (CAR).
  - Chemicals have an assigned hazard ratings from 0-4 (zero presenting the lowest hazard) in each of the following categories: Fire hazard, Health hazard, and Reactivity. See Attachment 2 NFPA 704 Rating System.

## 3. WHY IS AN HMIS NECESSARY?

- It is extremely important for the Fire Department to know the potential hazards at a facility in the case of an emergency.

- Knowing the types of chemicals and their location will allow firefighters to use appropriate measures in fighting fires as well as ensure their safety.
- Identifying chemical hazards will allow for their proper storage and reduce the risk for dangerous reactions and accidents.
- An HMIS will raise the awareness level of faculty and. better equip them in the case of an emergency.

#### 4. HOW CAN SCHOOLS BENEFIT FROM HMIS?

- Each school will receive a complete inventory in print and electronically.
- All schools will receive a Chemical Hygiene and Safety Handbooks for each instructor dealing with hazardous materials.
- The overall safety of the faculty and students will be increased.
- The risk of emergencies is greatly reduced, resulting in lower liability for the school.
- Creates a better working relationship with the fire department.

#### 5. IMPROVED SAFETY BY FOCUSING ON INCOMPATIBILITIES

Incompatibility is a term used to describe a wide range of chemical reactions that may result in the generation of heat resulting from contact of a chemical with moisture; decomposition; the generation of toxic gases; the heating; overflow; rupture of containers; polymerization; the fire, detonation, and explosion; or any combination of these of other actions.

Key concepts:

- Do not store flammable liquids and oxidizers together. Oxidizers will greatly intensify fires involving flammable liquid.
- Do not store Combustible liquids and oxidizers together, they can cause an explosion.
- Flammable solids, spontaneously combustible solids, and water reactive liquids cannot be stored with aqueous solutions and must be kept away from friction. Their containers must be airtight because they have the capability to react with air and the moisture in it which is why water should not be used to put out a fire with these chemicals.
- Acid corrosives are not compatible with most metals.
- Acids and bases are not to be stored together. Mixing of the two may result in fire or an explosion.

#### 6. COMMON PROBLEMS FOUND IN SCHOOLS

- Stored Chemicals no longer in use
- Bottles improperly labeled or not labeled at all
- Improperly stored chemicals (lids not on tightly, bottles not upright, incompatible chemicals stored together, improper cabinets)
- Crystallized chemicals
- Excessive amounts
- Lack of awareness