

# SAFETY AND HEALTH TRAINING PLAN

## LESSON PLAN: HAZARD COMMUNICATION – MSDS (OSHA)

**Purpose** – To provide employees with the requirements and procedures necessary to evaluate chemicals used at their respective site, with respect to physical and health hazards, and to protect employees against uncontrolled exposure to chemicals.

**Course Length:** from \_\_\_\_\_ to \_\_\_\_\_

**Competent Instructor(s):** \_\_\_\_\_  
\_\_\_\_\_

**Training Materials:** NPCA Guide to Plant Safety

- Hazard Communication – MSDS

\_\_\_\_\_  
\_\_\_\_\_

---

### INSTRUCTION:

**Review the following definitions:**

- |                              |                             |                     |
|------------------------------|-----------------------------|---------------------|
| • Acid.                      | • Electrolyte.              | • Label.            |
| • Active Ingredient.         | • Employee Exposure Record. | • LEL.              |
| • Aerosol.                   | • Employee Medical Record.  | • MSDS.             |
| • Alkali.                    | • Explosive.                | • Neutralize.       |
| • ACGIH.                     | • Exposure.                 | • Physical Hazard.  |
| • Antidote.                  | • Fire Point.               | • Reactivity.       |
| • Auto Ignition Temperature. | • Flammable.                | • Specific Gravity. |
| • Base.                      | • Flash Point.              | • TLV.              |
| • Biodegradable.             | • Hazardous Chemical.       | • Toxicity.         |
| • BP.                        | • Health Hazard.            | • Trade Name.       |
| • Chemical.                  | • Incompatible.             | • UEL.              |
| • CAS.                       | • Inert Ingredients.        | • Use.              |
| • Combustible.               | • Insoluble.                | • Water Reactive.   |
| • Container.                 |                             | • Work Area.        |
| • Corrosive.                 |                             | • Work Place.       |
| • Distributor.               |                             |                     |

**Introduce and discuss the General Requirements associated with hazard communication, including:**

- Employee’s “Right-to Know,” the use and importance of MSDSs.
- The responsibility of each operation to obtain and maintain current MSDSs for each chemical used and/or stored at the site.
- The site-specific location(s) of MSDS binders.

- The organization of site-specific MSDS binders.

**Identify the information that should be included in every MSDS. Discuss the importance of this information and how to use this information when storing, handling, using and disposing of chemicals and hazardous materials.**

**Discuss the General Requirements associated with the labeling and the storing of chemicals and hazardous materials.**

**Identify the chemicals and/or hazardous materials used and/or stored in the workplace. Discuss observations that may be used to detect the presence or release of these materials. Discuss the physical and health hazards associated with exposure to these chemicals.**

**Discuss the work practices, emergency procedures and personal protective equipment to be followed or used to afford protection from the hazards associated with the chemicals used/stored in the work area.**

**Discuss the procedures for documenting occupational exposure to chemicals and hazardous materials, including the retention of exposure records.**

---

## **EVALUATION:**

### **Oral Examination:**

- The hazard identification section of a MSDS provides information pertaining to health effects including target organs or systems adversely affected by overexposure.
- Four common means of exposure to chemicals and/or hazard materials that may result in the need of first aid are:
  - ✓ Inhalation.
  - ✓ Eye Contact.
  - ✓ Ingestion.
  - ✓ Skin Contact.
- All labels shall include the following basic information:
  - ✓ Identity of the chemical.
  - ✓ Appropriate hazard warning – including target organs.
  - ✓ Name and address of the chemical manufacturer.
- Portable containers shall be labeled in the following situations:
  - ✓ More than one employee uses the portable container and its contents.
  - ✓ The container is used longer than one shift, or left in a work area.

### **Demonstration:**

- Have employee locate, identify and explain first aid procedures provided in a MSDS contained in the site-specific MSDS binder.
- Correct any errors and repeat the process until satisfactory performance is achieved.