Hazard Communication

- 29 CFR 1910.1200
Objectives

We will cover:

- General use of hazard communication in the workplace
- Role management and employees play in complying with standard
- General requirements and assessment of hazards
- Requirements and guidelines for an effective written program
Main Provisions of the Standard

- Purpose
- Scope And Application
- Definitions
- Hazard Determination
- Written Program
- Labeling
- Material Safety Data Sheets
- Training
- Trade Secrets
Purpose

- Ensure hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees
Scope and Application

- Requires chemical manufacturers or importers to assess the hazards of chemicals which they produce or import.
- Requires distributors to transmit the required information to employers.
Scope and Application

- Requires employers to provide information to their employees about the hazardous chemicals to which they are exposed by the following means:
  - Hazard communication (HazCom) program
  - Labels and other forms of warning
  - Material safety data sheets (MSDS)
  - Information and training
Scope and Application

- Applies to chemicals known to be present in the workplace

- Employees that may have a potential for exposure
  - Under normal conditions, or
  - Foreseeable emergency
Scope and Application

Application for laboratories only

- Labels are not to be removed or defaced
- Maintain MSDS for each chemical
- MSDS should be readily available
- Provide information and training
  » Except location and availability of HazCom program

(cont…)
Scope and Application

- Application for laboratories only
  - A laboratory that ships chemicals is considered to be a distributor or manufacturer and must ensure that containers are labeled prior to shipment and provide MSDS to other distributor(s) or employer(s).
Scope and Application

- Application for work operations where chemicals are handled only in sealed containers
  - Labels not to be removed or defaced
  - Maintain MSDS for each chemical
  - MSDS should be readily available
  - Provide information and training
    » Except location and availability of HazCom program
    » Trained to protect themselves in the event of a spill or leak
Scope and Application

- Exemptions for labeling
  - Pesticides (Federal insecticide, fungicide, and rodenticide Act 7 U.S.C. 136)
  - Food, food additive, color additive (FDA 21 U.S.C. 301)
  - Cosmetic, medical or vet device (FDA 21 U.S.C. 301)
  - Distilled spirits (Federal Alcohol Administration Act 21 U.S.C. 201)
  - Agricultural or vegetable seed (Federal Seed Act 7 U.S.C. 1551)
Does not apply to:

- Hazardous wastes & substances
- Tobacco or tobacco products
- Wood or wood products
- Articles as defined in the standard
- Food or alcoholic beverages
- Drugs as defined by 21 U.S.C. 301

(cont...)
Scope and Application

Does not apply to:

- Cosmetics for retail sale
- Consumer products
- Nuisance particulates
- Ionizing and nonionizing radiation
- Biological hazards
Key Elements of HazCom

- Hazard determination
- Written program
- Labeling
- MSDS
- Employee training
Definitions

- “Chemical”
  - Any element, chemical compound or mixture of elements and/or compounds

- “Hazardous chemical”
  - Any chemical which is a physical hazard or a health hazard

1910.1200(c)
“Physical hazard”

- A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, organic peroxide, oxidizer, pyrophoric, unstable, reactive or water-reactive
Definitions

Types of physical hazards

- Flammable/combustible liquid
- Compressed gas
- Organic peroxide
- Oxidizer
- Explosive
- Unstable
- Pyrophoric
- Reactive

1910.1200(c) Pyrophoric white phosphorus at Lawrence Livermore Laboratory
Definitions

"Health hazard"

- A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.
Examples of health hazards

- Allergens
- Carcinogens
- Dioxins
- Heavy metals
- Mutagens
“Label” means any written, printed or graphic material displayed on or affixed to containers of hazardous chemicals.
“Material Safety Data Sheet”

- Written or printed material concerning a hazardous chemical which is prepared in accordance with the standard
Chemical manufacturers or importers shall:

- Evaluate their chemicals to determine if they are hazardous
- Review and consider any scientific evidence about the hazards of their chemicals

» Refer to Appendix “A” and “B” in the standard for covered health hazards and evaluation criteria.
Hazard Determination

- Those that evaluate chemicals are responsible for the quality of test results.

- Test procedures will be in writing.

- Employers are not required to evaluate chemicals.
Written Program

- The employer shall have a **written** hazard communication program.

- It shall be available upon request to employees and/or their designated representative.
Written Program

Shall contain how the following will be met:

- Labeling practices
- Other forms of warning
- Material safety data sheets
- Information and training
- List of chemicals

(cont…)

1910.1200(e)
Written Program

Shall also contain:

- Methods used to inform employees of the hazards associated with non-routine tasks
  » Example: cleaning a reactor vessel
- Hazards associated with chemicals contained in unlabeled pipes in the workplace

1910.1200(e)(1)(ii)

(e) “Non-Routine Tasks."
Written Program 1910.1200(e)(2)

- Multi-employer workplaces
  - Methods used to inform other employer(s):
    » MSDS access
    » Precautionary measures during normal operating conditions and in foreseeable emergencies
    » Labeling system
Written Program

- When employees travel between workplaces
  - HazCom program may be kept at a primary workplace facility.
Labeling

Shall be in English and prominently display

- Chemical name
- Appropriate hazard warnings
- Name and address of manufacturer/importer/responsible party
Employers may add information for foreign language employees.
Labeling

Labeling exemption

- Portable containers which are intended for **immediate use** by the employee who performs the transfer of hazardous chemical from a labeled container

- **Immediate use**
  » Under the control of, **and**
  » Used only by the employee, **and**
  » Within the work shift of transfer
Material Safety Data Sheets

- Chemical manufacturers and importers shall obtain or develop an MSDS.

- Employers shall have an MSDS in the workplace for each chemical they use.

- Must be in English
Paragraph (g) lists the information required to be in an MSDS:

- Manufacturer and contact numbers
- Chemical and common name
- Physical and chemical characteristics
- Physical and health hazards
- Exposure levels
- Safe handling and control measures
- Emergency and first aid
- Date of preparation of MSDS
Material Safety Data Sheets

- Chemical manufacturers or importers shall ensure that distributors and employers are provided an appropriate MSDS with their initial shipment, and
  - With the first shipment after an MSDS is updated
Material Safety Data Sheets

- MSDS access for employees
  - Readily accessible, and
  - During work shift

- Electronic and other alternatives are acceptable
  - No barriers to immediate employee access

- When employees travel
  - May be kept at primary workplace
Access to Employee Exposure and Medical Records

**Please note:**

- 1910.1020 defines an “employee exposure record” to include the MSDS
  
  » In the absence of an MSDS, a chemical inventory

- Must be held and maintained at least 30 years

- Employee access to record
Information and Training

Provided to employees upon:
- Initial employment
- When chemicals change
- New hazards are introduced into the workplace
Information and Training

Information

- Requirements of this section
- Operations in their work area where hazardous chemicals are present
- Location and availability:
  - Written hazard communication program
  - List(s) of hazardous chemicals
  - Material safety data sheets
Information and Training

Training

− Methods and observations to detect presence or release of chemicals
− Physical and health hazards
− Measures to protect themselves

(cont...)
Training

- Details of the hazard communication program including:
  - An explanation of the labeling system
  - Material safety data sheets
  - How employees can obtain and use the appropriate hazard information
  - Non-routine tasks
Trade Secrets

Chemical manufacturers, importers, or employers may withhold specific information from the MSDS.

- They must be able to support that the information withheld is a trade secret.
Trade Secrets

Under the **NC Right to Know law**, hazard information on chemicals deemed as a trade secret are to be provided to the local Fire Chief who shall hold the information in confidence.
● **Emergencies**
  - Where a treating physician or nurse determines that a medical emergency exists, the chemical identity of the trade secret must be disclosed.

1910.1200(i)(2)
Trade Secrets

- Non-emergencies
  - Disclose to health professional if:
    » Requested in writing
    » Used to assess an employee’s exposure
    » Provide medical treatment
    » Design engineering controls
Trade Secrets

- Non-emergencies
  - Disclose to health professional if:
    » Assessing hazards
    » Conducting medical surveillance
    » Assessing PPE
    » Conducting medical studies
Summary

● Purpose
● Scope and Application
● Definition
● Hazard Determination
● Written Program
● Labeling
● Material Safety Data Sheets
● Training
● Trade Secrets
Thank You For Attending!

Final Questions?