USGS West Virginia Water Science Center
Hazard Communication Program

(Prepared 4/11/2014)

Approved by: Mark R. Bennett **, Director** **Date:** 4/17/14

1. Introduction

The management of **the USGS West Virginia Water Science Center** is committed to preventing accidents and ensuring the safety and health of our employees. We will comply with all applicable federal and state health and safety rules. Under this program employees are informed of the contents of the OSHA Hazard Communications Standard, 29 CFR 1910.1200, the hazardous properties of chemicals with which they work, safe handling procedures and measures to take to protect themselves from these chemicals. Theses chemicals may be physical or health-related. This written hazard communication plan is available at the following location for review by all employees: **Hardcopy is available in the office of the collateral duty safety officer, and electronic version is available in the "Safety" folder in the "All users have Access" drive on the computer.**

2. Identifying Hazardous Chemicals

A list is attached to this plan that identifies all hazardous chemicals with a potential for employee exposure at this workplace. **(See attached chemical inventory that is continuously updated).** Detailed information about the physical, health, and other hazards of each chemical is included in a Safety Data Sheet (SDS); the product identifier for each chemical on the list matches and can be easily cross-referenced with the product identifier on its label and on its Safety Data Sheet.

3. Identifying Containers of Hazardous Chemicals

The labeling system to be used by **the West Virginia Water Science Center** will follow the requirements in the 2012 revision of the OSHA Hazard Communication Standard to be consistent with the United Nations Globally Harmonized System (GHS) of Classification of Labeling of Chemicals. The label on the chemical is intended to convey information about the hazards posed by the chemical through standardized label elements, including symbols, signal words and hazard statements.

All hazardous chemical containers used at this workplace will have:

1. The original manufacturer's label that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

2. A label with the appropriate label elements just described

3. Workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provides at least general information regarding the hazards of the chemicals.

Doug Chambers, chemical hygiene officer, will ensure that all containers are appropriately labeled. No container will be released for use until this information is verified. Workplace labels must be legible and in English. Information in other languages is available at: **The West Virginia Water Science Center does not or will not have any chemicals that are labeled in any language other than English.**

Small quantities intended for immediate use may be placed in a container without a label, provided that the individual keeps it in their possession at all times and the product is used up during the work shift or properly disposed of at the end of the work day. However, the container should be marked with its contents.

4. Keeping Safety Data Sheets (previously known as Material Safety Data Sheets)

The manufacturer or importer of a chemical is required by OSHA to develop a Safety Data Sheet (SDS) that contains specific, detailed information about the chemical's hazard using a specified format. The distributor or supplier of the chemical is required to provide this SDS to the purchaser.

SDS's are readily available to all employees during their work shifts. Employees can review SDS for all hazardous chemicals used at this workplace in the MSDS folders located in the laboratory, at the front of the office near the copier, and over the workbench in the warehouse.

The SDS's are updated and managed by **collateral duty safety officer Melvin Mathes**. If a SDS is not immediately available for a hazardous chemical, employees can obtain the required information by calling **chemical hygiene officer Doug Chambers. Any employees purchasing new chemicals must provide the collateral duty safety officer with a copy of all MSDS sheets. If sheets were not available with the purchase, these must be obtained from online sources.**

5. Training Employees about Chemical Hazards

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication training that covers the following topics:

- An overview of the requirements in OSHA's Hazard Communication Standard.
- Hazardous chemicals present in their workplace.
- Any operations in their work area where hazardous chemicals are used.
- The location of the written hazard communication plan and where it may be reviewed.
- How to understand and use the information on labels and in Safety Data Sheets.
- Physical and health hazards of the chemicals in their work areas.
- Methods used to detect the presence or release of hazardous chemicals in the work area.

- Steps we have taken to prevent or reduce exposure to these chemicals.
- How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
- An explanation of any special labeling present in the workplace.
    - What are pictorgrams?
    - What are the signal words?
    - What are the hazard statements?
    - What are the precautionary statements?
- Emergency procedures to follow if an employee is exposed to these chemicals.

Doug Chambers, chemical hygiene officer, is responsible to ensure that employees receive this training. After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to our hazard communication plan.

Prior to introducing a new chemical hazard into any department, each employee in that department will be given information and training as outlined above for the new chemical hazard.

6. Informing Employees who do Special Tasks

Before employees perform special (non-routine) tasks that may expose them to hazardous chemicals, their supervisors will inform them about the chemicals' hazards. Their supervisors also will inform them about how to control exposure and what to do in an emergency. The employer will evaluate the hazards of these tasks and provide appropriate controls including Personal Protective Equipment all additional training as required.

Examples of special tasks that may expose employees to hazardous chemicals include the following: The West Virginia Water Science Center is committed to avoiding the use of extremely hazardous chemicals..

7. Informing contractors and other employers about our hazardous chemicals

If employees of other employer(s) may be exposed to hazardous chemicals at our workplace (for example, employees of a construction contractor working on-site) It is the responsibility of Doug Chambers, chemical hygiene officer, to provide contractors and their employees with the following information:

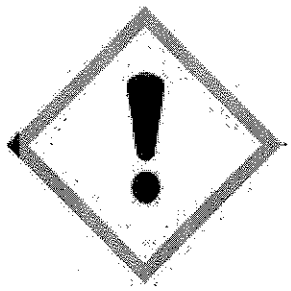
- The identity of the chemicals, how to review our Safety Data Sheets, and an explanation of the container labeling system.
- Safe work practices to prevent exposure.

Collateral duty safety officer Melvin Mathes or chemical hygiene officer Doug Chambers will also obtain a Safety Data Sheet for any hazardous chemical a contractor brings into the workplace.

HCS Pictograms and Hazards

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

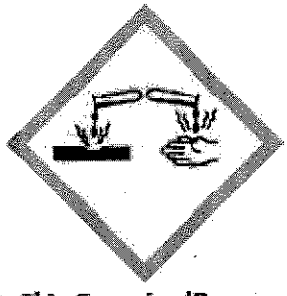


- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

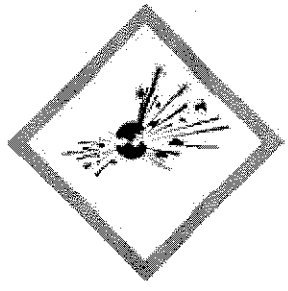
- Gases Under Pressure

Corrosion



- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb



- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment (Non-Mandatory)

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (Fatal or Toxic)