

Hazard Communication Program

The University's hazard communication program complies with the Washington Administrative Code Part 296-901. The program's purpose is:

- To ensure that the University community is aware of hazards, including chemical hazards in their workplace.
- To establish uniform standards consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

All campuses, colleges, schools and administrative offices are incorporated within this program.

The Hazard Communication Standard requires that persons working with chemical, biological, or radioactive substances properly identify, through labeling, all containers of such substances, including substances synthesized in the laboratory or workplace. The contents of all containers or apparatus containing such substances must be identified by chemical name. Symbols and/or abbreviations alone are not adequate.

A. Labeling Hazardous Materials

1. Original Container

The label on an original container must be legible and written in English. It must include the chemical/ product name as shown on the safety data sheet (SDS) and the manufacturer's name and address. Do not accept materials if the label is illegible or missing required information.

Beginning June 1, 2015, labels on chemicals and products shipped from the manufacturer must be consistent with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) as required by Washington Administrative Code (WAC) 296-901. There are six required WAC elements as of June 1, 2015:

- 1. Product name
- 2. Manufacturer's name and contact information
- 3. Signal word (e.g., danger, warning or no signal word)
- 4. Hazard statement(s) (e.g., toxic if inhaled, combustible liquid)
- Pictogram(s)
- 6. Precautionary Statements (e.g., keep container tightly closed)

Figure 6-1, Example of Original Label Signal Word: **Product Name or Identifiers*** Indicates relative level of **Hazard Statements:** hazard. "Danger" is used for Carbon Monoxide DANGER Phrases that describe the nature most severe instances, while H220: Extremely flammable gas. -H331: Toxic if inhaled. - H360D: May damage the unborn child. - H372: Causes damage to organs through prolonged or repeated exposure of hazardous products and "Warning" is less severe. oftentimes the degree of hazard. **Precautionary Statements** Keep container tightly closed. Avoid Symbols (Hazard Phrases associated with each breathing vapours. If inhaled: Remove victim to fresh air and keep at rest in a Pictograms): hazard statement, that describe position comfortable for breathing. Call a Poison Center or doctor. Store in a Convey health, physical general preventative, response, vell-ventilated place and environmental hazard storage or disposal precautions. information with red diamond pictograms. May use a Manufacturer Information combination of one to five Company name, address and *Additional Product Identifiers symbols. telephone number.

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Avoid damaging the original container's label, if possible. If a container label becomes illegible, replace the label. The replacement label must include the six required WAC elements to be in compliance with GHS rules, Contact EHS at 360-650-3064 or ehs@wwu.edu for assistance.

See Table 6-1 below for examples of physical and health hazards.

Table 6-1.

List of Physical and Health Hazards of Chemicals
Physical Hazards
Combustible Liquid
Compressed Gas
Explosive
Flammable
Organic Peroxide
Oxidizer
Pyrophoric
Unstable (reactive)
Water-reactive
Health Hazards
Carcinogenic
Acutely Toxic
Chronically Toxic
Reproductive Toxin
Irritant
Corrosive (acid/ base)
Hepatotoxins (liver)
Nephrotoxins (kidney)
Neurotoxins (central nervous system)
Agents which damage the lungs, skin, eyes, mucous membranes
Agents which act on the hematopoietic system

a. Labeling Waste Containers

Waste containers must be labeled following guidelines in Section 10 Hazardous Waste Program of the Safety Information Book. If re-using a container to hold waste, the container must be compatible and appropriate for the waste. Completely deface all old labels on containers used for wastes.

For radioactive and biological waste, please contact your department safety coordinator or EHS at x3064.

B. Chemical Inventory

Departments must maintain chemical inventories and perform periodic audits. The intent of a chemical inventory is to assist responders in recognizing the hazards should a fire, accident, leak or spill occur. A web-based tool is available through EHS to assist departments in tracking inventories and help departments comply with federal, state and local regulations. In addition, maintaining a chemical inventory in the web-based system will help avoid unnecessary purchases and prevent legacy or unneeded chemicals in storage. The inventory should be checked annually.

The inventory must be updated whenever a new chemical is added and conversely, chemicals should be deleted when it will no longer be used and there is no more stock.



1. Access to Web-Based Chemical Inventory Tool

For access to the web-based chemical inventory program, please visit http://www.wwu.edu/ehs/CHIMERA/CHIMERA.shtml, contact your department safety coordinator or EHS@wwu.edu. In your request, include your name, contact information, and department. Training is also available upon request. Contact EHS at EHS@wwu.edu.

2. Conducting Your Chemical Inventory

Personnel must inventory all chemicals found in their area and specify the maximum amount normally found at that location. Review and update inventories annually, when moving to another location or when there are significant changes in your chemical inventory.

While conducting your inventory, examine containers for deterioration and integrity. Chemicals that are expired, corroded or no longer needed must be managed as hazardous chemical waste. See Section 10 Hazardous Waste Program for more details.

C. Safety Data Sheet (SDS)

Manufacturers are required to provide Safety Data Sheets (SDSs) to summarize the health and safety information about their products. In many cases, manufacturers automatically send a SDS whenever a hazardous substance is ordered.

Your department is required to keep SDSs readily available at all times for the hazardous materials used in your workplace, including research laboratories. Two methods for maintaining safety data sheets are available – electronically or in paper form. EHS recommends utilizing the electronic method as described above in "Access to Web-Based Chemical Inventory Tool" to comply with federal, state and local requirements. Once a chemical is entered in the inventory system, it will electronically attach the appropriate safety data sheet to that specific chemical. If using the electronic method, all workers must be trained and must be able to demonstrate that they can retrieve SDSs using the electronic inventory system.

If departments choose the paper method for maintaining a chemical inventory, the SDSs files need to be readily accessible and personnel need to be trained in the location.

If you cannot find a SDSs in the inventory system, call EHS at 360-650-3064 to request additional assistance during business hours. After business hours, call University Police at 360-650-3555 and Dispatch will contact an EHS representative.

D. Employee Information and Training

Department heads and supervisors are responsible for employee training as described in Section 3 of the Safety Information Book. "Employees" are considered to be those who qualify for workers' compensation in the event of injury or illness. This includes those paid through the University, visiting scientists, and volunteer workers who are part of a formal volunteer worker program. Students do not fall into this category unless they're paid or otherwise qualify for workers' compensation.

The procedures for how employees will be informed and trained are as follows:

General hazard communication training is provided by the Environmental Health and Safety office. Supervisors provide site-specific training or request the EHS or other departmental personnel do so. Supervisors inform employees when non-routine tasks arise involving hazardous chemicals and arrange training in the hazards involved.

If employees work at other employers' job sites around hazardous chemicals from another employer, WWU supervisors ensure that these employees will have access to SDSs and labels,



and will be informed of precautionary measures to take during normal or emergency operations, if any.

Refer to Section 4 of the Safety Information Book regarding new employee orientation. Training on the following is provided by the Environmental Health and Safety office:

- An overview of the requirements contained in the Hazard Communication Standard (WAC 296-800)
- Hazardous chemicals present at the employee work place
- Physical and health risks of the hazardous chemical
- The symptoms of overexposure
- How to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment
- Steps the University has taken to reduce or prevent exposure to hazardous chemicals
- Procedures to follow if employees are overexposed to hazardous chemicals
- How to read labels and review SDSs to obtain hazard information
- Access to SDSs and written hazard communication program

Before introducing a new chemical hazard, the supervisor will ensure that each employee in that unit be given information and training as outlined above for the new chemical.

1. GHS training

If a work area receives products coming from manufacturers or suppliers that are using the Globally Harmonized System of Classification and Labeling of Chemical Substances (GHS), personnel need training on the system. This system uses standardized signal words, pictograms, hazard statements, and precautionary statements on their labels and SDSs to provide safety information.

Chemical producers use the system to classify chemicals into major hazard classes and categories which are related to specific signal words, pictograms, hazard statements, and precautionary statements.

The eight Hazard Communication GHS pictograms are shown below.





If these labels and Safety Data Sheets are provided on chemicals in your work area, everyone using the chemical must receive training as to the pictogram meanings. For example, all workers should realize that a product labeled with a "Flame" (flammable) pictogram should not be stored in the same cabinet as a product labeled with a "Flame over Circle" (oxidizer) pictogram.

Personnel should also be trained to understand the hazard statements and to obey the precautionary statements. Please contact your department safety coordinator or EHS at 360-650-3064 or ehs@www.edu for more information on GHS and hazard communication classes.

2. Training Documentation

EHS maintains training records of all EHS provided classes and follows the appropriate records retention schedules. Departments or units may contact EHS at 360-650-3064 or ehs@wwu.edu for a copy of staff training records.

Supervisors must ensure records of all laboratory or work-specific safety training are maintained either within the laboratory or at a central location if that is required by the department. The location of the training records should be noted in the department's safety plans.

E. Non-routine Tasks with Hazardous Chemicals

Periodically, employees are required to perform non-routine tasks involving hazardous chemicals. Some examples of non-routine tasks are confined space entry, tank cleaning, and painting reactor vessels.

Prior to starting work on such projects, the supervisor will provide information to each affected employee about the hazardous chemicals he or she may encounter during these activities.

Section 5 of the Safety Information Book includes information on hazardous tasks and associated personal protective equipment including respiratory protection.

Non-routine task information includes for each activity:

- A list of the specific chemical hazards,
- · Protective and safety measures the employee can use, and
- The steps the employer has taken to reduce the hazards, including ventilation, respirators, presence of another employee, and emergency procedures.

F. Multi-employer Work Places

It is the responsibility of Western Washington University to provide employers of any other employees at a University work site with the following information:

- Copies of SDSs (or make them available at a central location) for any hazardous chemicals that the other employer(s)' employees may be exposed to while working.
- Inform other employers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
- Provide other employers with an explanation of the labeling system that is used at the work site.

It is the responsibility of the Facilities Management Project Manager to identify and obtain SDSs for the chemicals a construction contractor is bringing into the work place.



G. Asbestos Awareness Information for University Employees

What is asbestos? Asbestos is a naturally occurring mineral fiber widely used in the construction and other industries. Most asbestos is immobilized in binding materials which do not release asbestos fibers into the air. Asbestos may be present in a building without endangering the health of building occupants.

Some building materials contain asbestos which will release fibers if disturbed. This is known as friable asbestos, which is estimated to be present in about 700,000 commercial and public buildings in the U.S. A number of building materials within University buildings contain asbestos. Most of these materials will not release asbestos fibers unless they are damaged.

Exposure to asbestos fibers released into the air increases a person's risk of contracting an asbestos-related disease, such as a chronic lung ailment or cancer. The risk is related to such factors as the length of time a person is exposed, the amount of asbestos fiber in the air, and other considerations such as smoking tobacco.

To protect the health of workers in the state, the Washington Department of Labor and Industries has set maximum limits for the number of asbestos fibers in the air which workers may routinely breathe. Air monitoring is performed at the University to ensure that the air quality is safe.

What is the University doing? The University has procedures in place to properly inspect, maintain, and clean asbestos-containing materials to ensure the health and safety of students, staff, and visitors.

Facilities Management and Environmental Health and Safety have increased the level of staff training and have personnel certified to work with asbestos and to remove it safely.

If damage to an asbestos-containing material is noted, an inspection by certified staff will be made. If a possible fiber release has occurred, procedures to repair the damage, clean the area, and monitor the air quality will be implemented. Temporary evacuation of the affected area may be required to ensure continued safety.

The Environmental Health and Safety office assesses buildings which contain asbestos. Projects relating to asbestos include removal or encapsulation as required by law. The on-going health and safety of students and staff are pre-eminent in scheduling asbestos-related work.

What Can I do? Asbestos is still present and may be found in buildings you occupy. However, if asbestos is intact, in good condition and you do not break it loose from the surrounding material, asbestos fibers will not be released into the air where you could inhale them. You can help protect the safety of the University environment by **not tacking, nailing, screwing, drilling, or sawing** any building materials and by **being careful not to puncture wrapping around any pipe.**

NEVER VACUUM OR TRY TO CLEAN UP DAMAGED MATERIAL WHICH YOU SUSPECT MAY CONTAIN ASBESTOS.

Where do I report problems? Call your supervisor. Report problems to Environmental Health and Safety at 650-3064 and Facilities Management at 650-3420.