

# Washington State University Health Sciences Chemical Hazard Communication (HAZCOM) Program

## Contents

1.0	GENERAL POLICIES .....	2
2.0	RESPONSIBILITIES .....	2
2.1	Environmental Health and Safety .....	2
2.2	Supervisor/Principal Investigator .....	2
2.3	Employees .....	3
3.0	EMPLOYEE TRAINING .....	3
4.0	PERSONAL PROTECTIVE EQUIPMENT RISK ASSESSMENT .....	4
5.0	SAFETY DATA SHEET (SDS) .....	4
5.1	Employee Exposure Records .....	5
6.0	CONTAINER LABELING .....	5
6.1	Primary Container Labels .....	5
6.2	Secondary Container Labels .....	6
7.0	CHEMICAL HYGIENE PLAN .....	6
7.1	Chemical Inventory .....	6
8.0	CHEMICAL SPILLS .....	7
9.0	CHEMICAL EXPOSURE INCIDENT PROCEDURE .....	7
10.0	HAZARDOUS NON-ROUTINE RECORDS .....	7
11.0	OTHER WSU DEPARTMENTS & CONTRACTORS IN LABORATORIES .....	8
11.1	Other WSU Departments Working in Laboratories .....	8
11.2	Contractors Working in Laboratories .....	8

## **1.0 GENERAL POLICIES**

In accordance with the Washington State Globally Harmonized System for Hazard Communication and the Globally Harmonized System Standard, this program has been developed and implemented by the Washington State University Health Sciences Environmental Health and Safety (EH&S) department.

The general purpose of this program is to ensure each employee is informed and trained on the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, the location and hazardous properties of the chemicals used in the workplace, and the protective measures required.

The Hazard Communication Standard is based on a simple concept – employees have both the need and right to know the identities and hazards of the chemicals they are potentially exposed to when working. Employees also need to know what protective measures are required. This knowledge should reduce work-related injuries and illnesses caused by chemical exposure.

The program applies to all WSU Health Sciences locations where employees might be exposed to hazardous chemicals. The EH&S department has overall responsibility for the program. A copy of this program is available on the EH&S and Lab Safety web pages for employee review.

## **2.0 RESPONSIBILITIES**

### **2.1 Environmental Health and Safety**

The EH&S department is responsible for providing guidance to ensure a safe workplace for all employees. Following are some of the responsibilities of EH&S:

- Authoring and updating the WSU Health Sciences Safety Plans
- Providing HAZCOM training
- Providing guidance and assistance to departments with worker safety issues and/or environmental concerns
- Providing protocols/programs for general work safety
- Assisting laboratories in the preparation of their chemical hygiene plan
- Assisting laboratories with personal protective equipment (PPE) risk assessments
- Conducting annual laboratory inspections
- Maintaining updates in MSDSonline

### **2.2 Supervisor/Principal Investigator**

Supervisors or principal investigators (PIs) are responsible for the safety of the employees working for them. Following is a summary of their responsibilities—note that these tasks may be delegated to a qualified employee, but the supervisor or PI remains responsible for their completion:

- Ensuring that employees receive training on the safe use of hazardous chemicals within their designated workplace
- Documenting employee training by recording the employee name and the date and content of the training
- Obtaining Safety Data Sheets (SDSs) for each hazardous chemical used and ensuring that those chemicals are entered into MSDSONline
- Ensuring that hazardous chemicals are properly labeled
- Completing Standard Operating Procedures (SOPs) for hazardous chemicals or procedures
- Completing and updating the chemical hygiene plan (for laboratories only)

### **2.3 Employees**

Employees are responsible for making sure they work with chemicals in the workplace in a safe manner. They are responsible for:

- Completing annual HAZCOM training and other trainings, as directed by their supervisor/PI
- Reviewing the safety data sheets (SDSs) for chemicals in their work area
- Reviewing the laboratory chemical hygiene plan
- Reviewing standard operation procedures (SOPs)
- Making sure that containers (primary and secondary) are properly labeled
- Using proper PPE and engineering controls as required by the campus, the laboratory, and/or the SOP, or as recommended by the SDS
- Contacting their supervisor/PI as needed for assistance interpreting the SDS

### **3.0 EMPLOYEE TRAINING**

Prior to working with or being potentially exposed to hazardous chemicals, employees must receive initial hazard communication training. Refresher training is required for WSU Health Sciences employees annually. The following training and information are provided to each employee covered by this program:

- Details of the Washington State Globally Harmonized System for Hazard Communication and the Globally Harmonized System Standard
- Details of the WSU Health Sciences chemical hazard communication program
- How to identify the hazardous chemicals present in the employee's workplace
- Physical and health risks of hazardous chemicals
- Symptoms of chemical exposure to the chemicals they work with
- How to reduce or prevent exposure to hazardous chemicals in the workplace
- How to read labels and review SDSs to obtain hazard information
- Location of SDSs and the written chemical hazard communication program
- Emergency procedures to initiate when an employee is exposed to a hazardous chemical

#### 4.0 PERSONAL PROTECTIVE EQUIPMENT RISK ASSESSMENT

Departments are responsible for performing personal protective equipment (PPE) risk assessments for each work task to determine any hazards—including chemical hazards—that require the use of PPE. This responsibility may be directed to PIs or supervisors. The PPE risk assessment may be incorporated into chemical hygiene plans and SOPs within laboratories. Employee PPE training must be documented.

The PPE risk assessment evaluates hazards associated with a task, including chemical hazards. If other safety control methods—elimination, substitution, or engineering or administrative controls—cannot be identified to protect employees, then suitable PPE must be selected based on information from SDSs, container labeling, EH&S, and other resources, as necessary.

Employees must be provided with appropriate PPE, as well as be trained in its proper use. PPE training should be documented and maintained in each employee's file or maintained in the chemical hygiene plan for laboratories.

A PPE risk assessment form that can be used to perform and document hazard assessments is [available from EH&S](#). EH&S is available to assist in completing assessments.

#### 5.0 SAFETY DATA SHEET (SDS)

The safety data sheet (SDS) is a written document that describes each chemical, including its common name(s), chemical properties, physical and health hazards, exposure route(s), permissible exposure limit, and safety precautions for handling, storing, and transporting the chemical. The material safety data sheet (MSDS) had been the standard document provided by companies; the MSDS was updated to the SDS as of June 1, 2015. If chemicals are no longer manufactured, the MSDS is not required to be updated so there may only be an MSDS available for some chemicals.

Department heads or their designee are responsible for obtaining SDSs. SDSs are required when new chemicals are procured. SDSs may be obtained by contacting the manufacturer or supplier, searching MSDSONline, or searching the internet. For assistance obtaining the SDS, contact EH&S. The PI/supervisor is responsible for the review of incoming SDSs for safety and health information and for informing and training affected employees on any new information.

WSU Health Sciences Spokane maintains SDSs on an outside platform called [MSDSonline](#). If employees do not have access to a computer from their work area, hard copies of SDSs must be maintained in those work areas. EH&S maintains backup data that can be used if internet access is lost. SDSs can be printed from MSDSONline if a hardcopy is preferred. A bookmark and/or desktop shortcut for the following link should be added to computers of employees who work with chemicals: <https://msdsmanagement.msdsonline.com/40718b1d-e2b8-4eb2-a3a8-13c45df9c974/ebinder/?nas=True>

The page can also be reached through this shortened URL: <https://bit.ly/MSDS-online>. Links to MSDS online are also available on the WSU Health Sciences [EH&S](#) and [lab safety](#) web pages.

Safety data sheets are defined as an employee exposure record and therefore must be retained for 30 years after employment. All SDSs and MSDSs—including those no longer used—must be retained and maintained by the department. Refer to section 5.1 "Employee Exposure Records" for additional information.

## **5.1 Employee Exposure Records**

The Washington Administrative Code defines SDSs as an employee exposure record, which must be preserved for 30 years. SDSs for chemicals no longer used by the department or laboratory must be retained. At the time of each employee's initial employment and annually thereafter, the employee's supervisor must:

- Note the existence, location, and availability of any inactive SDSs.
- Inform the employee that he or she has the right to access all SDSs and MSDSs

In the event of an exposure, the chemical exposure record and all medical records must also be preserved by Human Resources.

## **6.0 CONTAINER LABELING**

Department heads or their designee must ensure that all primary and secondary containers of hazardous chemicals in their area are properly labeled.

Labels must be maintained in legible condition until the container has been properly emptied and cleaned. Once emptied and cleaned, labels should be removed or crossed out.

### **6.1 Primary Container Labels**

Primary labels are the original labels on chemicals as they were shipped from the manufacturer. Primary labels must contain:

- Product identified
- Signal word
- Hazard statement(s)
- Pictograph(s)
- Precautionary statement(s)
- Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

## 6.2 Secondary Container Labels

Secondary containers are any container that a chemical is transferred into. If the container will contain the chemical for more than a single work shift or will be used by more than one person, it must contain secondary labeling. All secondary containers are to be labeled, tagged, or marked upon transfer of the product to the secondary container by the person handling the product.

Regulations require secondary labels include a product identifier, symbols, or a combination thereof that provides at least general information regarding the hazards of the chemicals. In conjunction with the other information **immediately** available to employees under the hazard communication program, secondary labeling must provide employees with specific information regarding the physical and health hazards of the hazardous chemical(s).

The guidance is to follow the Global Harmonization System secondary labeling standards, which at a minimum must contain the following:

- Product identifier (name of the reagent or chemical)
- Signal word (non-hazardous, warning, danger)
- Pictogram(s)

EH&S supplies preprinted labels for WSU Spokane Health Sciences upon request.

## 7.0 CHEMICAL HYGIENE PLAN

A chemical hygiene plan (CHP) is required for each laboratory. The purpose of the CHP is to protect laboratory workers from harm due to exposure to hazardous chemicals by:

- Identifying hazards before work begins
- Identifying the appropriate PPE and equipment necessary to safely work with a hazard
- Identifying the best method to dispose of the hazard when work ends
- Identifying the steps to be taken in the event of accidental exposure to a hazardous chemical

### 7.1 Chemical Inventory

PIs/supervisors are responsible for maintaining a list of hazardous chemicals used in the laboratory and updating the list, as necessary. The list must be updated immediately upon receipt or disuse of any chemical. The identity of each chemical on the list must match the name on the container label and the name on the SDS.

## 8.0 CHEMICAL SPILLS

EH&S must be notified in the event of chemical spills. Employees **MAY NOT clean up mercury spills**; notify EH&S immediately.

Employees may clean up spills in the workplace **ONLY** when all the following conditions are met:

- The chemical is known, and the spill can be cleaned up in ten minutes or less.
- Employees can wear the same personal protective equipment that they wear during normal work activities.
- Appropriate clean-up supplies are readily accessible.
- The chemical does not have a ceiling limit listed in WAC 296-841 or does not create an Immediate Danger to Life and Health (IDLH) atmosphere (IDLH information can be found in the NIOSH Pocket Guide to Chemical Hazards).
- Clean-up materials are disposed of through the EH&S department.

For small spills that the employee may not clean up or does not feel comfortable cleaning up and for medium-sized spills that are contained, contact EH&S to arrange clean up.

For large, hazardous chemical spills that cannot be immediately contained, call 911. Qualified emergency response personnel will respond to clean up the spill.

## 9.0 CHEMICAL EXPOSURE INCIDENT PROCEDURE

If an employee may have been overexposed to a hazardous chemical, after the necessary medical care has been provided, the PI/supervisor must complete an "Incident Report" form (see SPPM S25.20). The following information should be included on the form:

- The specific chemical(s) and the duration of the exposure
- The type of exposure (inhalation, ingestion, injection, or absorption)
- Personal protective equipment used

EH&S retains this form for 30 years as an employee exposure record.

## 10.0 HAZARDOUS NON-ROUTINE RECORDS

Periodically, employees may be required to perform non-routine tasks involving hazardous chemicals. Prior to starting work on any non-routine task, the PI/supervisor must conduct a PPE risk assessment and provide affected employees with the following information and training:

- The specific hazards related to the non-routine tasks
- Protective measures required
- Steps the department is taking to reduce chemical hazards
- Emergency procedures

## **11.0 OTHER WSU DEPARTMENTS & CONTRACTORS IN LABORATORIES**

Other WSU departments and contractors occasionally need to work within and around laboratories. Contractors must have access to SDSs of any hazardous chemicals present in the work area in which they will be.

Contractors and other WSU departments in the course of their work may expose employees to hazardous chemicals. Contractors are to provide SDSs to EH&S prior to the work proceeding. EH&S will provide the information to the affected departments. If employees have not been informed of chemicals being used by contractors, they should contact EH&S.

### **11.1 Other WSU Departments Working in Laboratories**

Other WSU departments must work within laboratories to conduct maintenance or repair work occasionally. If this work will impact laboratories—for example by affecting water, electricity, or gas service or by generating noise and/or vibrations—they must notify lab personnel in advance. If repair work is done to resolve an emergency situation, departments will try to make sure impacted labs are informed.

If WSU departments are requested to work on or move laboratory equipment, a laboratory work permit must be filled out by the employee requesting the work. To complete the permit, the employee must:

1. Identify the work activities and any disruptions the work may cause
2. Identify any chemical, biological, or radioactive hazards associated with the equipment being worked on or moved and indicate that it has been cleaned and decontaminated
3. Identify PPE that must be worn while conducting the work
4. Sign the form and forward it to EH&S for review and signature

Once approved, EH&S will forward the form to the department conducting the work. The department will sign the form and leave a copy with the lab when the work is complete.

### **11.2 Contractors Working in Laboratories**

First-time contractors must register with the Facilities Operations Office prior to working on campus. Contractors working within laboratories must check in with the department requesting the work. The Office of Research or the department scheduling the work activities will delineate the work area the contractor has access to and may work in.