Portland Community College Health & Safety Manual	Dept: **Environmental Health and Safety**	
	Topic: **Chapter 8 — Hazard Communication Plan**	
	Board Policy: **B507**	Revised Date: **May 2024**

Authority	**PCC Board Policy—B507**
	Portland Community College is committed to providing a safe and healthy work and educational environment for employees, students and visitors.

Summary	**This plan outlines how PCC manages chemicals used at the college including how to ensure proper container labeling, Safety Data Sheet (SDS) management, and employee training.**

I. PURPOSE

The Hazard Communication Plan outlines how Portland Community College (PCC) manages information about chemical use at the college including proper container labeling, management of safety data sheets (SDS), and implementing employee training according to the requirements in Oregon OSHA standard 1910.1200.

The Plan provides provisions to ensure chemical inventories are maintained, SDSs are available for all hazardous chemicals, and container labeling meets the requirements for original containers as well as for secondary containers created by the departments. There are also provisions to meet the Or-OSHA standard for assessment and ensuring employee training when using hazardous chemicals that are not in routine job tasks, ensuring that outside contractors are informed of any chemical hazards associated with contract work, and ensuring contractors provide PCC with information regarding potential chemical hazards associated with the work they will be performing prior to use.

II. AUTHORITY

Including but not limited to:

OAR 437 – Division 2 – 1910.1200 Hazard Communications
OAR 437 – Division 2 – 1910.1201 Retention of DOT Markings, Placards and Labels
OAR 437 – Division 2 – 378 Pipe Labeling
OAR 437 – Division 2 – 1910.38 Emergency Action Plans
NFPA 704 – Standard System for the Identification of the Hazards of Materials for Emergency Response
40 CFR 370 – Hazardous Chemical Reporting: Community Right-to-Know

Other referenced Health & Safety Manual Chapters:
Chapter 1 – General Safety Programs & Responsibilities
Chapter 18 – Contractor Hazard Notification Plan
Chapter 21 – Regulated Waste Program

Scope:

The Hazard Communication Standard covers a wide range of chemicals used in the workplace, but not all chemicals or substances are included under this standard. In some cases, the Or-OSHA required labeling does not apply because other governmental agencies have labeling requirements.

1. Label requirements for hazardous waste or waste materials from cleanup sites are regulated by the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in accordance with EPA regulations.

   As a result, PCC manages hazardous waste labeling according to procedures outlined in *Chapter 21 Regulated Waste Program* in accordance with applicable DEQ requirements.

2. The following products are exempt from labeling requirements of the Hazard Communication Standard but may be required to comply with safety data sheet and inventory requirements:

    - Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act and Federal Hazardous Substances Act respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended
    - Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act, when it is in solid, final form for direct administration to the patient (e.g., tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies)
    - Articles as defined in *Appendix A: Definitions*
    - Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace
    - Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted)
    - Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section
    - Ionizing and nonionizing radiation
    - Biological hazards
    - Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace
    - Tobacco or tobacco products

III. RESPONSIBILITY

Responsibility for Hazard Communication rests at all levels in the College and is described as follows:

Supervisor/Manager/Deans:

- Ensure that safety data sheets (SDS) are available for all chemicals in use or stored in their department.
- Assess the hazards associated with any new chemicals and ensure that both employee and environmental safety procedures are followed.
- Submit SDSs to the online chemical database prior to purchase of new chemicals.
- Ensure proper chemical labeling on all workplace containers
- Provide or arrange for specific chemical training for the hazards these chemicals may pose to the department employees.
- Maintain training records for employees in their department.
- Provide personal protective equipment (PPE) to ensure safe handling of these chemicals.
- Routinely verify their department's chemical inventory against the database by location

of chemical usage/storage and submit corrections to Environmental Health & Safety.
- Maintain records of employees working with carcinogens for thirty years.

Environmental Health & Safety (EH&S):

- Develop and provide employees with general hazard communication training.
- Assist department management as requested with employee refresher training, assessing chemical hazards, and ensuring proper chemical labeling.
- Serve as administrator for the online chemical inventory including reviewing, approving, and maintaining SDSs.
- Conduct periodic audits to ensure that chemical inventories match the actual chemicals found at each location, that any secondary containers are properly labeled, that chemicals are stored correctly, and are used safely. These audit findings shall be reported to the department manager.
- Maintain a current inventory of carcinogens used district wide.
- Work with safety committees and outside resources to investigate employee chemical complaints.
- Assist project managers with ensuring outside contractors are notified of potential chemical hazards associated with their work sites. Contractors will provide PCC with potential chemical hazards associated with the work they will be performing prior to use.
- Complete the annual Hazardous Substance Inventory report.

All Employees:

- Read the labels and SDSs for the products that they use.
- Properly handle chemicals per the labels, SDS, and training.
- Complete all required and appropriate Hazard Communication training.
- Report chemical spills or releases to their supervisor and Public Safety (ex. 4444).
- Report to their supervisor any potential chemical adverse reactions as soon as they are recognized and complete an *Injury or Property Incident Report (H&S Manual Chapter 2 Form 1)*.

IV. PROCEDURES

A. Required Manufacturer Labeling

Chemical manufacturers, distributors, and importers must provide a label on original containers of hazardous chemical products and ensure that the labeling meets the requirements of the Globally Harmonized System (GHS) for labeling. It is the responsibility of the Department ordering the chemicals to ensure that labels are legible and meet GHS requirements. A container label must have the following elements as it relates to the GHS chemical classification:

- Product Identifier
- Signal word
- Pictograms (See *Appendix B*)
- Hazard statements
- Precautionary statements
- Supplier identification including address and contact method for additional data.

No container of hazardous chemicals will be released for use until the purchaser verifies the label information is readable and meets the above requirements.

No employee shall remove or deface labels on products. If a product container is received that displays required GHS label elements or U.S. Department of Transportation (DOT) labels in accordance with Hazardous Materials Regulations, those labels must remain intact on the container until it is empty and sufficiently rinsed to remove any potential hazards.

If employees find unlabeled containers, they must either apply a proper secondary label or notify their supervisor so that an appropriate label can be applied.

B. Workplace Container Labeling

There are some instances where hazardous chemicals are transferred from their original container into a secondary container. Or-OSHA refers to this secondary container labeling as "Workplace Labeling". Containers that hold transferred hazardous chemicals are required to be labeled, tagged or marked with either the information from the original container label or the product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the Hazard Communication Plan, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

The employee in charge of the transfer must ensure that an appropriate label is placed on the container. Directions on how to generate a label through the chemical SDS database can be found in *Appendix C: MSDSonline Overview and Instructions*. No WATER, DRINK, OR FOOD containers shall be used as chemical secondary containers.

Portable containers of chemicals intended for immediate use (used by one employee and completely used during their shift) are not required to be labeled. If more than one employee uses the containers or the chemical is stored over to the next shift, it must be labeled. Employees creating a secondary container or filling a secondary container shall ensure that the secondary container is labeled with the product identifier and hazard information.

The workplace label must be legible, in English, and prominently displayed. Departments having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well. If a label becomes torn or illegible the user or user's supervisor must re-label the product.

PCC may use signs, placards, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required in this section.

C. Labeling of Chemicals in Piping Systems

Piping systems carrying hazardous chemicals must be labeled with the chemical contents and employees who use the piping systems must be trained in the hazards of the specific chemicals. This includes piping carrying compressed air.

Pipe labels must:

- Include the name of the contents in full or abbreviated form
- Be posted in the area of the pipe/piping system
- Be applied at least at the beginning and end of any continuous pipe run
- Include additional labels if the pipe insulation contains asbestos.

Where pipes are inaccessible and/or at a distance which prevents clear identification, alternatives to the labeling may be used such as schematics posted on walls in the work area. If employees find unlabeled pipelines, they need to notify their supervisor who, with assistance

as needed from Facility Management Services (FMS), will determine the contents of the pipeline and ensure proper labeling.

D. Storage Location Signs

The National Fire Protection Association (NFPA) requires that PCC post signs at specific chemical storage locations that display the level of hazards associated with the chemicals stored in that area. The NFPA rates hazards according to three categories; health, fire, and instability. The ratings are arranged in a diamond formation with the fourth square reserved for other specific hazards such as water reactivity or oxidizing potential. The ratings use a numerical system ranging from 0 (minimal hazard) to 4 (severe hazard) and are color coded. Blue is used for health hazard, red for flammability hazard, and yellow for instability hazard.

Where one or more hazardous chemicals are stored at the location, at least one NFPA diamond listing the hazard ratings for the stored chemical will be posted on the primary entrance door(s). This includes laboratory and art storage and prep rooms as well as exterior storage rooms for specific chemicals. For locations where more than one hazardous chemical is stored, the NFPA diamond will summarize the maximum ratings contributing to each hazard category. For locations where three or fewer chemicals are stored, individual NFPA diamonds will be posted along with the chemical name.

E. Safety Data Sheets

Chemical manufacturers, distributors, and importers are required by Or-OSHA to develop or ensure availability of Safety Data Sheets (SDS) for every hazardous chemical they handle. The SDS shall contain detailed information about the health and physical hazards associated with the product. The required sections of a SDS are:

1. Product identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transportation information
15. Regulatory information
16. Other information, including date of preparation or last revision

It is the responsibility of the Department using the chemical to ensure that PCC receives a SDS either through a request in the online SDS inventory or by mail/email from the manufacturer prior to receipt and use of the chemical. When the Department using the chemical receives a SDS by mail/email, the Department must ensure that the SDS is added to the online SDS inventory maintained by EH&S.

SDSs are available to all employees for review during each work shift by accessing the inventory from PCC's intranet webpage. Other methods for accessing the SDS inventory are

listed in *Appendix B*. Some departments may choose to have binders with SDSs for employees but must also ensure the online inventory is up-to-date and accurate. Departments should have a process established for accessing SDS information in the event there is an issue with the main inventory, which can include paper copies or a backup USB drive obtained from EH&S.

F. Inventory of Chemicals and Adding New Products

1. Inventory

PCC is required to maintain an inventory of all known hazardous chemicals used at the college. This inventory is maintained by EH&S with an online chemical database of all SDSs in their most up to date version. The inventory is organized by specific storage locations and is updated as new chemicals are purchased or are added to a new location. When a chemical is no longer used in that location, the inventory is updated to mark the chemical as inactive.

A SDS shall be available for EACH manufacturer if more than one manufacturer's product is in use, even if it is similar to another product used at PCC or has the same name. All SDSs generated by manufacturers for products used at PCC shall be included in the SDS inventory even if there is reason to believe that a product may not be hazardous under Or-OSHA requirements. Each SDS contains guidance and direction for safe use and emergency response that employees might need to reference.

When a department is purchasing a new product, the purchaser must add the SDS specific to that product and manufacturer to their department's location inventory BEFORE the new chemical is purchased. The SDS will be reviewed by EH&S to ensure that it is an acceptable product for use by the Department staff and the requester will be notified by email that it is approved or denied. If approved, the SDS shall be added to the location and chemical inventory. If denied, EH&S staff will notify the requester the reason why and provide guidance for possible alternatives. For information on how to add SDSs to the chemical database currently used by PCC, please see *Appendix C: MSDSonline Overview and Instructions*.

EH&S will work with individual departments to conduct periodic audits of their chemical inventories to ensure the online inventory matches the actual chemicals found at each location. These audits will include review of secondary containers and workplace labeling, chemical storage, and safe chemical use. These audit findings shall be shared with the department and records of the audit maintained by EH&S.

2. Chemical Prior Approval Process

Prior to ordering and using new chemicals, the SDS must be reviewed for specific hazards that might prompt the Chemical Prior Approval Process. *Form 1: Chemical Prior Approval Request* must be completed and submitted to EH&S for review if the chemical is stated to have one or more of the following hazards:

Acute toxicity Category 1 and 2

Germ cell mutagenicity as a:

- Category 1A: Known to induce heritable mutations in germ cells of humans
- Category 1B: Should be regarded as if they induce heritable mutations in the germ cells of humans

Reproductive Hazard as a:

- Category 1: Known or presumed human reproductive toxicants
- Category 2: Suspected human reproductive toxicant and effects on or via lactation.

Carcinogen as a:

- Category 1 (includes 1A and 1B): Known or presumed human carcinogen
- Category 2: Suspected human carcinogens

Any chemical with at least one of these hazards requires special procedures or equipment for handling and use and should be managed as stated below:

a. **Carcinogens:**

Any department wanting to utilize a chemical included in OR-OSHA's list of 13 Carcinogens must contact EH&S before purchasing the chemical to review the regulatory requirements specific to the chemical.

Any chemical or product classified as a category 1 or 2 carcinogen must be isolated in a specific work area, and access to that area must be restricted to designated staff to ensure hazard controls are as effective as possible. Ventilated apparatus, such as laboratory type hoods, shall be tested at least annually or immediately after ventilation modification or maintenance operations, by personnel or contractors qualified to certify correct containment and operation.

Records of personnel working with carcinogens must be kept and maintained for thirty years.

Departments must provide specific training regarding the cancer-causing possibilities of the chemical, decontamination procedures, emergency procedures, and the employees' role in recognizing situations that might result in the release of these chemicals. Documentation of such training will be maintained by the manager in the department's records.

Regulated areas must be posted with appropriate signs reading:

CANCER--SUSPECT CHEMICALS; AUTHORIZED PERSONNEL ONLY

All employees working with carcinogens must review and follow the SDS safety procedures for handling, storage, spill response, and disposal procedures. A current inventory of carcinogens is maintained by EH&S and can be found in *Chapter 9 - Chemical Hygiene Plan Appendix E: Inventory of Carcinogens*.

b. **Acute Toxicity, Reproductive Hazard, and Mutagenic Chemicals:**

Always ensure adequate ventilation or other containment device for procedures which may result in the generation of aerosols or vapors containing the chemical; trap released vapors to prevent their discharge.

Always avoid skin contact by use of appropriate gloves and long sleeves (and other protective apparel as appropriate). Always wash hands and arms immediately after working with these chemicals.

Be prepared for accidents and spills. Store breakable containers of these chemicals in chemically resistant trays. Work and mount apparatus above such trays or cover work and storage surfaces with removable, absorbent, plastic backed paper.

Obtain proper waste handling instructions from EH&S.

The department purchasing the new chemical is responsible for providing the chemical specific training to the users if the product has different associated hazards than what was included in the user's initial training. *Form 2: New Chemical and Non-routine Chemical Exposure* provides an outline of the training requirement and can serve as documentation that the employee has been trained.

G. Contractor Notification

PCC is required to inform outside Contractors of any hazardous chemicals in the work area that the Contractor may be exposed to as well as receive information on any hazardous chemicals the Contractor may bring on site during the course of their work. The PCC Project Manager must include the following information in the notification:

- Hazardous chemicals the Contractor may be exposed to while on the job site.
- Potential chemical hazards associated with the work a specific Contractor will be performing.
- Precautions PCC and Contractor employees may take to lesson possibility of exposure
- Method PCC will use to give the Contractor on-site access to PCC's Safety Data Sheets (SDS) for hazardous chemicals.
- PCC's preferred method of receiving access to the Contractor's SDS if any hazardous chemicals are brought in by the Contractor.
- Specifics of any workplace labeling in the contractors work area.

This information is reviewed with the Contractor according to procedures outlined in *Chapter 18 Contractor Hazard Notification Plan*. The required information will be documented through completion of *Chapter 18 Form 1: Contractor Notification Project Hazard Assessment*. The PCC Project Manager will provide access to relevant SDSs as needed and obtain copies of SDSs for any chemicals associated with the Contractor's work. The Contractor's SDSs must be submitted to the PCC SDS database under the location "District-wide - Contractors" for review by EH&S. A copy of the *Chapter 18 Form 1* shall be maintained by the Project Manager or Department per the Contractor Notification Requirements in *Chapter 18*.

H. Hazardous Chemical Reporting

PCC completes annual reporting on the inventory of various hazardous chemicals at different locations according to requirements outlined in the Emergency Planning and Community Right-to-Know Act (EPCRA). The purpose and intent of EPCRA is to encourage and support emergency planning and to give the public access to information about possible chemical hazards in their communities. In Oregon, the annual report is submitted through the Office of the State Fire Marshal and is completed for each campus and center that stores reportable quantities of hazardous chemicals. A hazardous chemical's reportable quantity is listed by Or-OSHA in their Extremely Hazardous Substance table as well as compiled in the EPA's List of Lists. The information from this report is used by the local fire department and Local Emergency Planning Committees (LEPC) in their emergency preparedness documents and planning.

The reporting requirements for the annual inventory includes identifying information for each campus and center, detailed information on quantity and storage locations of the hazardous chemicals, and copies of SDSs. Prior to filing the report each year, EH&S performs a survey of the district to confirm information from the previous year's report and locate any additional chemicals that, due to increased quantity, need to be added to the report.

V. EMPLOYEE TRAINING

A key component of this plan is employee training in both general PCC procedures as well as department specific information about the hazardous chemicals they may come in contact with.

All new employees are required to complete general training which includes some of the required elements of Hazard Communication training. Those training elements are:

- An overview of the requirements contained in the Hazard Communication Rules, Division 1910.1200
- Location and availability of the written Hazard Communication Plan
- How to read labels and review a SDS to obtain appropriate hazard information
- General emergency procedures to follow if an employee is exposed to a chemical

The department manager is responsible for the remaining chemical specific training for each work area. This is done by a review of the chemicals present in their workplace operations and documenting the information on *Chapter 1 Form 1: New Employee Safety Training Checklist* under “Department Safety and Health Topics”. The remaining required training elements are:

- Physical and health effects of the hazardous chemicals used in the work area
- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area
- Techniques about how to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment
- Steps the department has taken to lessen or prevent exposure to these chemicals

When new chemicals are introduced or chemicals with different hazards are purchased for routine or non-routine use, the supervisor is required to review the above items as they are related to the employees’ work areas. The Supervisor will ensure that employees are trained in the hazards and controls based on the label and SDS information.

The training will be documented using *Form 2: New Chemical and Non-routine Chemical Exposure* and will include the following:

- Specific chemical hazards
- Protective/safety measures which must be utilized
- Measures the plan has taken to lessen the hazards such as ventilation, respirators, presence of another employee, and posting of emergency procedures in the applicable work area

VI. RECORD KEEPING

Training Records: Record of initial Hazard Communication training will be documented through online training records and maintained by EH&S.

Chapter 1 Form 1: New Employee Safety Training Checklist and will be maintained by the manager/supervisor for the length of employment.

Chapter 8 Form 2: New Chemical and Non-routine Chemical Exposure will be maintained by the manager/supervisor for 30 years past the end of employment.

Safety Data Sheets and the online database housing them will be maintained by EH&S. All SDSs will be maintained for the life of PCC even after the chemical is no longer in use.

Chapter 8 Hazard Communication Form 1: Chemical Prior Approval Form will be maintained by EH&S for 5 years.

Chapter 18 Contractor Hazard Notification Plan Form 1: Contractor Notification Project Hazard Assessment will be maintained by the Project Manager in the Contractor's file.

SDS Inventory Audits will be maintained by EH&S for 1 year.

EPCRA Hazardous Substance Inventory Report will be completed annually by EH&S and copies of the report kept for three years.