Dickinson

Hazard Communication Program

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Review/Revision Summary

Below is a summary of reviews and revisions made to this document:

Review/Revision Date	Major Changes	Reviewed/Revised By:
07/13/2012	Original Document	BJ Shoemaker
01/08/2016	Updated Titles	Steph Koser, WasteStrategies
04/20/2018	Added Review/Revision Summary Periodic Review – Minor changes only	Steph Koser, WasteStrategies
2/9/2021	Periodic Review	Daniel Berndt, Lauren Lasater

Introduction

A. The Hazard Communication Standard (29 CFR 1910.1200)

Effective May 25, 2012, the Department of Labor adopted 29 CFR 1910.1200, titled "Hazard Communication". The Hazard Communication Standard ensures that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets, and employee training.

B. Scope and Application

This document serves as the written guide for Dickinson College compliance to 29 CFR 1910.1200 and the Hazard Communication Program requirements contained therein. All employees at Dickinson College engaged in the use of hazardous chemicals outside laboratories and art studios are required to comply with this document.

Laboratories, covered by the Dickinson College Chemical Hygiene Plan, are exempt from the requirements of the Hazard Communication Standard and this document except as follows:

1. Labels on incoming containers of hazardous chemicals must not be removed or defaced.
2. Safety Data Sheets (SDS) that are received with incoming shipments of hazardous chemicals must be maintained and readily accessible during each work shift to laboratory employees when they are in their work areas.
3. Laboratory employees must be provided information and training in accordance with Section 6.0 of this document, except for the location and availability of the written Hazard Communication Program.
4. Hazardous chemicals that are shipped must be labeled in accordance the Hazard Communication Standard (29 CFR 1910.1200)

This document will hereafter be known as the Dickinson College Hazard Communication Program (DCHCP).

C. Responsibility

In compliance with 29 CFR 1910.1200, titled "Hazard Communication", Dickinson College realizes our responsibility for the protection of our employees. Dickinson hereby institutes the enclosed Hazard Communication Program to assist us in our safety program.

Although the college realizes the success of the Hazard Communication Program rests with all of the employees on campus, the ultimate responsibility of the Hazard Communication Program rests with the President of Dickinson College.

A. **The President of the College** has ultimate responsibility for hazard communication within the Institution. General oversight responsibility is assigned to the **Provost**.

B. **The Director of Compliance & Risk Management** advises on matters of material safety policies and practices and:

    1. Works with administrators and other employees to develop and implement the appropriate chemical hygiene policies and practices.
    2. Monitors procurement, use, and disposal of chemicals used in the workplace.

3. Ensures that appropriate audits are conducted.
4. Helps supervisors develop precautions and adequate facilities.
5. Knows the current legal requirements concerning regulated substances.
6. Seeks ways to improve the Hazard Communication Plan.
7. Conducts information and general training sessions.
8. Assists with the investigation of accidents involving hazardous materials.
9. Provides necessary information to the healthcare professional when a report of possible overexposure occurs.
10. Schedules services for hazardous waste disposal.
11. Maintains a resource file of references and publications on safety matters.
12. Writes, or assists supervisors in writing standard operating procedures pertinent to their needs.

C. **The Division Head/Department Chair** is responsible for hazard communication in his or her department and:

1. Ensures that action is taken to correct work practices and conditions that may result in the release of hazardous materials.
2. Implements this plan for those workplaces where the supervisors do not exercise primary discretion in the choice of hazardous materials used or stored.

D. **The Supervisor** is the faculty or staff member under whose instruction hazardous materials are used and/or stored. The supervisor has a primary responsibility for implementing this plan and:

1. Ensures that workers know and follow the Hazard Communication Program.
2. Ensures that training specific to the work area has been provided
3. Ensures that the required level of personal protective equipment is available, in working order, and that specific training in its use has been provided.
4. Provides regular, formal inspections including routine inspections of containers for labels and SDS.
5. Knows the current legal requirements concerning regulated substances used in the workplace.
6. Ensures that facilities and training for use of any material being ordered is adequate.
7. Provides for the safety of visitors and employees of contractors in the workplace.
8. Prepares procedures for dealing with accidents that may result in the unexpected exposure of personnel or the environment to a hazardous material.
9. Maintains the inventory of hazardous materials use under his or her supervision.
10. Maintains the file of safety data sheets for hazardous materials used in the workplace.
11. Oversees the handling of chemical waste pending proper disposal.

E. **The Worker** must be alert to and aware of the hazards of the materials with which he or she is working and

1. Maintain a thorough understanding of this plan.
2. Plan and conduct each operation in accordance with this plan.
3. Develop good personal hygiene habits.

4. Report all incidents, whether involving personnel, equipment, or facilities to their supervisor.

F. **The Associate Vice President of Campus Operations** has the responsibility for the continuous operation of work areas, including engineered safety devices, and:

1. Regularly tests (or contracts for services to test) and maintains safety showers, ventilation devices, fire extinguishers, fire pumps, sprinklers, and fire alarm systems.
2. Reviews construction, modification, and renovation plans for safety design.

G. **The Director of Public Safety** has general responsibility for personal safety and:

1. Schedules and conducts emergency and disaster drills
2. Oversees DPS Officer response to medical incidents of overexposure, provides treatment and assessment and determines the appropriate transportation.
3. Investigates accidents involving hazardous materials.

H. **All Employees of the college** are responsible for ensuring that they follow the procedures and faithfully implement the appropriate responsibilities put forth in the Hazard Communication Plan. Failure to do so is a serious breach of College policy and subject to disciplinary action up to and including termination of employment. The procedures to be followed in the event of such action shall be in keeping with existing guidelines as stated in the appropriate handbook for faculty, administrators, or staff.

D. Availability

The Dickinson College Hazard Communication Plan must be readily available to employees and employee representatives through their supervisor or the Director of Compliance & Risk Management.

E. Periodic Review

The Director of Compliance & Risk Management, or Safety & Emergency Management Specialist, will review the Dickinson College Hazard Communication Plan periodically from its effective date.

Hazard Classification

According to the Hazard Communication Standard, “hazardous chemical” means any chemical which is a physical hazard or a health hazard.

“Health hazard” means 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. Health hazards include chemicals which are acute toxins, germ cell mutagens, carcinogens, reproductive toxins, irritants, corrosives, sensitizers, aspiration hazards, and specific target organ toxins. Asbestos and lead-based paint are two examples that are covered in detail by their own respective plans.

“Physical hazard” means a chemical for which there is scientifically valid evidence that it is an explosive, flammable, oxidizer, gas under pressure, self-reactive chemical, pyrophoric, self-heating chemical, chemical which in contact with water emits flammable gases, organic peroxide, or corrosive to metal.

Chemical manufacturers and importers must evaluate chemicals produced in their workplaces or imported by them to determine if they are hazardous. Dickinson College as a "user" of the chemicals can rely on the information received from its suppliers and has no independent duty to analyze the chemical or evaluate the hazards of it.

Chemical Inventory

A complete list of hazardous chemicals used or stored in work areas must be attached to this document and maintained at that location; the Department of Compliance & Risk Management shall affix each department's latest available inventory to meet this requirement. Further, the college utilizes the free online database, Quartzy, to manage each department's chemical inventory. Departments are requested to conduct an annual update of their inventory, if not managing more regularly, with specific emphasis on quantity available and location stored. The workplace supervisor must update this inventory as quantities, products, or locations change. Additionally, SDSs should be uploaded and attached to each item in the inventory and a copy sent to or saved with the Department of Compliance & Risk Management.

Where employees must travel between workplaces during work shift, the written Hazard Communication Program and attached inventory list may be kept at the primary workplace facility. This plan is also available for access on the Campus Policies Manual via the Dickinson College Gateway.

Laboratories, which have been defined in the Dickinson College Chemical Hygiene Plan, are exempt from this listing requirement.

Labeling

Each container of hazardous chemicals in the workplace must be prominently labeled in English with the following information as specified in Appendix C of the OSHA Hazard Communication Standard:

1. Product Identifier
2. Supplier Information
3. Signal Word
4. Pictograms
5. Hazard Statements
6. Precautionary Statements

Portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the *immediate* use of the employee who performs the transfer, are exempt from labeling.

This labeling requirement does not apply to students assigned unknown chemicals for analysis. However, hazard information must be provided for all unlabeled chemicals in student laboratories.

Chemical manufacturers, importers, and distributors of hazardous chemicals are all required to provide appropriate labels and safety data sheets to the employers to which they ship the chemicals. Dickinson College, as a "user" of the chemicals can rely on the information received from its suppliers and has no independent duty to re-label incoming containers; however, must ensure that the labels have not been removed or defaced.

If commercially acquired chemicals are transferred out of the original container, the new container must be labeled with the full chemical name or other non-ambiguous identifier. If a chemical container is reused to contain a different material, the original label must be removed or thoroughly defaced to avoid confusion about the contents. Labels must be written legibly and

replaced when damaged or faded. Chemical labels, complete with hazard information, must be affixed to or written on any semi-permanent container in the lab such as an acid or base bath for glassware cleaning.

Any existing labels shall not be removed or defaced on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information

Containers of non-hazardous materials (e.g. water or buffers) must be clearly labeled with the full name of all contents.

The Avery Label company offers a template wizard for creating GHS-compliant labels for chemical containers. Use of the Avery wizard is not a Dickinson requirement, but it may be a useful option for creating complete and legible container labels for purchase or for self-printing. You can access the wizard using the link. https://www.avery.com/custom-printing/labels/ghs-safety/

All containers that hold carcinogens, reproductive hazards or acutely toxic reagents must be properly labeled concerning the health hazard posed by the chemical. Most newer reagent containers will have the chemicals hazard clearly displayed on the label. However older reagents and containers of solutions that are mixed in the lab must be properly labeled by the laboratory worker.

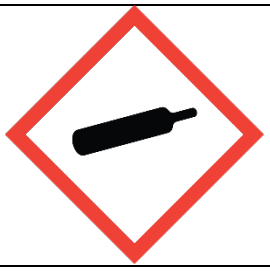
Acid and Base Baths should be labeled with the OSHA hazard pictogram and contents.

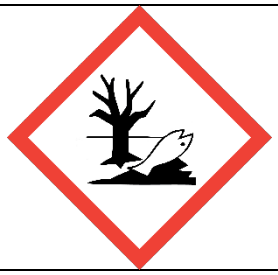
There are various labels that may be used for the identification of chemical hazards including OSHA GHS Pictograms, NFPA 704 Diamond, HMIS system, and DOT Placards.

A. Pictograms

Pictograms are required on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard, or hazards. The pictogram on the label is determined by the chemical hazard classification.

1. Health Hazard	
	▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity
2. Flame	

	▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides
3. Exclamation Mark	
	▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity (harmful) ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
4. Gas Cylinder	
	▪ Gases Under Pressure
5. Corrosion	
	▪ Skin Corrosion/Burns ▪ Eye Damage ▪ Corrosive to Metals
6. Exploding Bomb	
	▪ Explosives ▪ Self-Reactives ▪ Organic Peroxides
7. Flame Over Circle	

	▪ Oxidizers
8. Environment (non-mandatory)	
	▪ Aquatic Toxicity
9. Skull and Crossbones	
	▪ Acute Toxicity (fatal or toxic)

B. NFPA 704 Diamond

NFPA 704 provides a simple, readily recognized, easily understood system for identifying the specific hazards of a material and the severity of the hazard that would occur during an emergency response. The system addresses the health, flammability, instability, and special hazards presented from short-term, acute exposures that could occur as a result of a fire, spill, or similar emergency.

There are several widely used systems for labeling hazardous materials. Each has a specific purpose and it is important to recognize the differences between each. Table 1 provides a brief summary of the purpose and use of three common labeling systems used for hazardous materials. Note that you may see more than one label on a container depending on the situation

Comparison of NFPA 704 and HazCom 2012 Labels.

Safety Data Sheets (SDS)

Chemical manufacturers and importers must obtain or develop a safety data sheet for each hazardous chemical they produce or import. A safety data sheet must be provided with their initial shipment, and with the first shipment after a safety data sheet is updated. Physical copies of each SDS shall be scanned and saved in the Department of Compliance & Risk Management's

electronic files. SDSs received by departments should be sent (physically or electronically) to the Department of Compliance & Risk Management.

Dickinson College, as a "user" of the chemicals can rely on the information received from its suppliers and has no independent duty to develop a safety data sheet; however, each work area must have an SDS for each hazardous chemical that is used. If a safety data sheet is not provided with a shipment that has been labeled as a hazardous chemical, one must be obtained as soon as possible. The college maintains Safety Data Sheets with each chemical product in its online chemical inventory system, Quartzy.

Safety data sheets (SDS) for each hazardous chemical must be readily accessible, in the work area, during each work shift to employees or their designated representatives. Electronic access or other alternatives to paper copies of the SDS are permitted if no barriers to immediate employee access are created by such options.

Safety Data Sheets may be accessed by using the college's chemical inventory system, Quartzy. Staff should contact their supervisor who will then access Quartzy to locate the chemical and its attached SDS. In an emergency, individuals may also contact DPS (717-245-1111) and the dispatcher will look up the chemical, also via Quartzy, and its attached SDS. Available SDSs are integrated with each chemical as an attachment. Those chemicals with a paperclip () symbol next to the product name have an SDS attached. Departments are encouraged to upload their SDSs to Quartzy and send the original SDS to the Department of Compliance & Risk Management for recordkeeping.

Where employees must travel between workplaces during work shift, the SDS may be kept at the primary workplace facility. In this situation, the college must ensure that employees can immediately obtain the required information in an emergency.

Employee Information and Training

Employees must be provided with effective information and training on hazardous chemicals in the work area. Such information must be provided at the time of an employee's initial assignment to a work area where hazardous chemicals are present and whenever a new physical or health hazard the employees have not been previously trained about is introduced into their work area. Employees should receive periodic refresher information and training to ensure that they are aware of the risks of exposure to hazardous chemicals.

A. Information

Information provided by the Department of Compliance & Risk Management/department head/supervisor to employees must include:

1. The contents of the Hazard Communication Standard and its appendices.
2. Any operations in their work area where hazardous chemicals are present.
3. The location and availability of this plan, including safety data sheets.

B. Applicability

Training shall be assigned to employees in contact with any chemical which is known to be present in the workplace in such a manner that they may be exposed under normal conditions of use or in a foreseeable emergency.

Department	Group	Task/Reason
Facilities Management	Trades	Normal Use
	Grounds	Normal Use

	Housekeeping	Normal Use
Dining Services	Retail Operations	Normal Use/Cleaning
	Dining Hall	Normal Use/Cleaning
	Catering	Normal Use/Cleaning
	Kitchen	Normal Use/Cleaning
DPS	Officers	Emergency Response
Organic Farm	All staff	Normal Use
Athletics	Laundry	Normal Use
	Coaches	Cleaning
Chemistry	Technicians	Normal Use
Biology	Technician	Normal Use
Earth Science	Technician	Normal Use
Environmental Studies	Technician	Normal Use
Theatre & Dance	Select Staff	Normal Use
All others as assigned for purposes of Chemical Inventory interaction/management	Various	Normal Use

C. Method of Training

General training will be provided by the Department of Compliance & Risk Management (or an appropriate designee) and may take the form of individual instruction, group seminars, audiovisual presentations, handout material, or any combination of the above. Site-specific training may be provided by supervisors (or an appropriate designee).

D. Training

General awareness training provided by the Department of Compliance & Risk Management to employees annually and will include:

1. Methods and observations that may be used to detect the presence or release of a hazardous chemical (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).
2. General physical and health hazards of chemicals in the work area.
3. The measures employees can take to protect themselves from these hazards, including specific procedures the College has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
4. The applicable details of this plan, including an explanation of the labeling system and the safety data sheet, and how employees can obtain and use the appropriate hazard information.

Site-specific training provided by supervisors (or designees) to employees should include:

1. Site-specific standard operating procedures.
2. Specific physical and health hazards of chemicals in the work area (available on Safety Data Sheets).

New Chemical Hazard Training

Employees shall be trained whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Supervisors shall be responsible for training employees on new chemicals, their use, required PPE, and other safety information and for notifying the Department of Compliance & Risk Management.

Departments shall furnish employees with an explanation of:

- Location of hazardous materials in the workplace.
- Methods and observations that may be used to detect the presence or release of hazardous chemicals in the work area.
- The physical and health hazards of the chemicals in the work area.
- The measures employees can take to protect themselves from these hazards.
- Location and availability of hazard communication information, such as this Program, the site-specific chemical inventory list and an SDS.

Recordkeeping

A. Training Records

The Hazard Communication Standard does not require employers to maintain records of employee training; however, the Department of Compliance & Risk Management may retain records of employees who attend the general awareness training.

Site-specific training records should be retained within the division or department.

B. Employee Exposure and Medical Records

Employee exposure records and medical records must be retained for at least 30 years in accordance with 29 CFR 1910.1020. Ideally exposure and medical records should be retained indefinitely.

C. Safety Data Sheets

Safety Data Sheets (SDS) shall be retained for a period of at least thirty years in accordance with 29 CFR 1910.1020. Ideally, SDS should be retained indefinitely.

All records must be made available to employees or their designee's in accordance with 29 CFR 1910.1020.

Miscellaneous

A. Non-Routine Tasks & Unlabeled Pipes

Non-routine tasks (e.g., spill clean-up or tank cleaning) must be conducted under the direction of the work area supervisor. The supervisor will inform employees of the hazards of non-routine tasks and the hazards associated with chemicals contained in unlabeled utility pipes in their work area.

B. Employees of Contractors

Work area supervisors shall provide contractors the following information upon request to ensure the safety of the contractor's employees:

1. On-site access to Safety Data Sheets for each hazardous chemical the contractor's employees may be exposed to while working.
2. Precautions that the contractor's employees need to take during the workplace's normal operating conditions and in foreseeable emergencies.

3. Information on the labeling system used in the workplace.

Contractors should be able to provide the college with appropriate SDSs upon request.

Appendix A: Chemical Inventory

The college's full chemical inventory including each item's associated Safety Data Sheet may be found in Quartzy. The inventory may be sorted by department or filtered for rapid identification purposes.