

**University of Illinois at Urbana-Champaign
Facilities & Services
Division of Safety and Compliance**

**Employee “Right to Know”
Hazard Communication Plan
for
All F&S Shops in PPSB**

Last Updated 2009

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PURPOSE

The University of Illinois at Urbana-Champaign (UIUC) has implemented policies and programs to keep exposures to hazardous chemicals at the lowest practical levels and below the Permissible Exposure Limits (29 CFR 1910.1000, Subpart Z) established by OSHA. The control of exposures to hazardous chemicals shall be accomplished by each unit implementing a hazard communication plan containing work practices, procedures, and policies that facilitate a safe and healthy environment.

The OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Illinois Toxic Substances Disclosure to Employees Act (P.A. 38-240) were established to protect workers from harmful exposures to hazardous chemicals. All persons using hazardous chemicals are covered by these regulations (see NOTE below). In Illinois, these regulations are enforced by the Illinois Department of Labor (IDOL).

The UIUC Division of Research Safety has developed the UIUC Hazard Communication Standard Compliance Program to assist campus unit compliance with these regulations. One element of the compliance program is the development of the UIUC Model Hazard Communication Plan.

NOTE: Persons working with hazardous chemicals in laboratories shall utilize a Chemical Hygiene Plan rather than a Hazard Communication Plan. For more information about the Chemical Hygiene Plan, go to: www.dr.s.uiuc.edu/css/guidesplans/chyp.

The purpose of this Hazard Communication Plan is to ensure that:

- Hazardous chemicals present in the workplace are properly identified and labeled by the Campus Unit.
- Employees have access to information on the hazards of these substances.
- Employees are provided with information on how to prevent injuries or illnesses due to exposure to these substances.
- The unit has designated an individual who has the responsibility for maintaining the plan, the Material Safety Data Sheets (MSDS), conduct training, etc.

This plan shall be available to all employees for review and a copy shall be located in the following area(s):

1. F&S Homepage
2. Safety and Compliance Office

HAZARD DETERMINATION

A hazard determination shall be made for every chemical used in the workplace, so that the persons using the chemical and those working in the area can make the right decision about what kind of exposure controls, such as ventilation or personal protective equipment, should be used. The hazard determination identifies all of the hazards associated with a particular chemical or product and is based on information provided in Material Safety Data Sheets (MSDSs), container labeling, and any other information that may be available in reference books or from the manufacturer.

Manufacturers, importers, and distributors are required to perform the appropriate hazard determination for the chemicals they produce or sell. Hazardous chemicals are defined below.

Health Hazard

OSHA defines a health hazard as 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. Chemicals covered by this definition include carcinogens, toxic or highly toxic agents, reproductive toxin, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes.

Physical Hazard

OSHA defines a physical hazard as a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, and organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water-reactive.

Additional Hazardous Chemicals

The broad definition OSHA uses to define hazardous chemicals includes not only generic chemicals but also paints, cleaning compounds, inks, dyes, and many other common substances. Chemical manufacturers and importers are required to determine if the chemicals they produce or repackage meet the definition of a hazardous chemical. A chemical mixture may be considered as a whole or by its ingredients to determine its hazards. It may be considered as a whole if it has been tested as a whole and an MSDS has been issued accordingly. Otherwise the mixture must be evaluated by its components. If the mixture contains 1.0 percent or more of a hazardous chemical, or 0.1 percent of an ingredient listed as a carcinogen or suspected carcinogen, the whole mixture is assumed to have the same health and/or carcinogenic hazards as its components.

Using the above criteria for hazardous chemicals, Safety and Compliance shall compile, maintain, and update when necessary, a master list of hazardous chemicals used or produced in the facility. Use Appendix 1 at <http://www.drs.uiuc.edu/css/guidesplans/hazcom/appendix1.pdf> to manage the inventory list.)

The inventory list shall include the common identity or trade name of the product and the name and address of the manufacturer, and shall be listed alphabetically by product name.

Substances which are not in containers shall also be included on the inventory list, e.g., welding fumes, carbon monoxide from a fork lift, etc.

The identity of the substance appearing on Appendix 1 shall be the same name that appears on the manufacturer's label, in-house label, and the MSDS for that substance. Appendix 1 shall be updated at least annually to accurately reflect all the hazardous chemicals present in the workplace.

The following materials are not covered by the Hazard Communication Standard:

1. Any hazardous waste as defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, as amended (42 USC 6901 et seq.) when subject to regulations issued under that act by the Environmental Protection Agency. The safe handling of hazardous waste is regulated under RCRA. Refer to the UIUC Chemical Waste Management Guide at: www.drs.uiuc.edu/wasteguide for information about handling chemical wastes.
2. Tobacco or tobacco products.
3. Wood or wood products.

- Wood dust is not exempt since the hazards of wood dust are not "self-evident" as are the hazards of wood or wood products.
 - 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.
 - Hardwood dusts pose a carcinogenic hazard. Likewise, wood preservatives such as chromium copper arsenate (CCA) also pose hazards. In each case, an MSDS is required.
 - The standard does not apply to wood or wood products, including lumber which shall 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.
4. Consumer products (including pens, pencils, adhesive tape) used in the work place under typical consumer usage.
 5. Articles (i.e. plastic chairs).
 6. Foods, drugs, or cosmetics intended for personal consumption by employees while in the work place.
 7. Foods, drugs, cosmetics, or alcoholic beverages in retail stores packaged for retail sale.
 8. Any drug in solid form used for direct administration to the patient (i.e. tablets or pills).
 - Note that liquid, aerosol or intravenous medications are not exempt from coverage under the provisions of the standard.

MATERIAL SAFETY DATA SHEETS

MSDSs shall be available to the employees on all hazardous chemicals to which there is potential or actual exposure. The Division of Safety and Compliance is responsible for ensuring that MSDS are available on all incoming products. A product can not be used until a completed MSDS is on file. The Division of Safety and Compliance is responsible for compiling and updating the master MSDS file. This file shall be kept at Central Stores.

Copies of MSDSs shall be kept in the following areas:

1. F&S Homepage
2. The Division of Safety and Compliance office

In addition to the above location(s), each campus unit's MSDS are available via the University's MSDS Database, located at <http://www.uiuc.msds.com>.

All MSDSs shall be kept for 30 years after the use of the substance has been discontinued. These are accessible via the University's MSDS Database, located at <http://www.uiuc.msds.com/>, by searching the archive.

If an employee exposure to a particular hazardous chemical occurs, a copy of the MSDS for that product shall become part of the employee's medical records. Medical records must be kept for 30 years after employment termination.

“Exposure” or “exposed” means that an employee is subjected to a toxic substance or harmful physical agent in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes past exposure, but does not include situations where the employer can demonstrate that the toxic substance or harmful physical agent is not used, handled, stored, generated, or present in the workplace in any manner different from typical non-occupational situations. When a substance is no longer actively used or

purchased, its MSDS shall be removed from the active file and placed in a file for inactive substances. These shall be maintained for 30 years.

Employees shall have access to these MSDSs during all work shifts. Copies shall be made available upon request to The Division of Safety and Compliance.

The Division of Safety and Compliance is responsible for updating the data sheets to include new information as it is received. A notice shall be posted to inform employees that revised information has been received. (Use [Appendix 3 at http://www.drs.uiuc.edu/css/guidesplans/hazcom/appendix3.pdf](http://www.drs.uiuc.edu/css/guidesplans/hazcom/appendix3.pdf))

Employees are to read the MSDS to become familiar with the new information, and then sign Appendix 3. This Appendix shall be maintained with all training records.

LABELING

No hazardous chemicals shall be accepted for use at the University, or shipped to any other location, unless labeled with the following information:

1. Identity of the substance
2. Appropriate hazard warning(s)
3. Name and address of the manufacturer

If the label is not appropriate, the Division of Safety and Compliance; all F&S Shops is responsible for preparing an appropriate label within 5 days of receipt.

No hazardous chemical shall be used in the work area unless labeled with at least the following information:

1. Identity of the substance
2. Appropriate hazard warning(s)
3. If the label is not appropriate, the Division of Safety and Compliance; all F&S Shops is responsible for preparing an appropriate label if one is not supplied by the user within 5 days.

Labels shall be removed if they are incorrect. When the container is empty it may be used for other materials provided it is properly cleaned and relabeled.

The Division of Safety and Compliance; all F&S Shops is responsible for ensuring that all containers used in his/her Campus Unit are labeled properly and remain legible. Defacing labels or using them improperly is prohibited.

All secondary containers must be labeled. The Division of Safety and Compliance; all F&S Shops must ensure that the container is labeled with either a copy of the original label or with a generic label which has a space available for appropriate hazard warnings.

HAZARD ASSESSMENT & PERSONAL PROTECTIVE EQUIPMENT SELECTION

Protective equipment, including personal protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

The shops with assistance from the Division of Safety and Compliance shall assess the workplace to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or are likely to be present, the shops with assistance from the Division of Safety and Compliance shall:

1. Select and have each affected employee use PPE that will protect the affected employee from the hazards identified in the hazard assessment.
2. Communicate the selection decisions to each affected employee
3. Select PPE that properly fits each affected employee.

The shops with assistance from the Division of Safety and Compliance shall verify that the required workplace hazard assessment has been performed through a written certification (Use [Appendix 2](http://www.dr.s.uiuc.edu/css/guidesplans/hazcom/appendix2.pdf) at <http://www.dr.s.uiuc.edu/css/guidesplans/hazcom/appendix2.pdf>) that identifies:

1. The workplace evaluated.
2. The person certifying that the evaluation has been performed.
3. The date(s) of the hazard assessment
4. Identifies the document as a Certification of Hazard Assessment.

The shops with assistance from the Division of Safety and Compliance shall provide training to each employee who is required by this section to use PPE on:

1. When PPE is necessary.
2. What PPE is necessary.
3. How to properly don, doff, adjust, and wear PPE.
4. The limitations of the PPE.
5. The proper care, maintenance, useful life and disposal of the PPE.

Each affected employee shall demonstrate an understanding of the training specified above, as well as the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

Retraining of employees shall be performed when there is reason to believe that any affected employee who has already been trained does not have the understanding and skills required above. Retraining is required, but not limited to, situations where:

1. Changes in the workplace render previous training obsolete.
2. Changes in the types of PPE to be used render previous training obsolete.
3. Inadequacies in an affected employee's knowledge or use of assigned PPE indicated that the employee has not retained the requisite understanding or skill.

If the employees provide their own protective equipment, the shops with assistance from the Division of Safety and Compliance shall be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment. Defective or damaged PPE shall not be used.

EMPLOYEE TRAINING

Prior to starting work with hazardous chemicals, each employee shall attend a Hazard Communication Training Session where they shall receive information on the following topics:

1. Policies and procedures related to the Hazard Communication Plan
2. Location of the unit's written HCP
3. Location of MSDSs
4. How to read and interpret an MSDS
5. Physical and health hazards of hazardous chemicals in their work area
6. Work practices that may result in exposure
7. How to prevent or reduce exposure to hazardous chemicals
8. Proper selection and use of personal protective equipment
9. Methods to determine the presence or release of hazardous chemicals
10. Procedures to follow if exposure occurs
11. Emergency response procedures for hazardous chemical spills
12. Non-routine task training (i.e. confined space entry)
13. Results of any monitoring done within the work area.

Upon completion of the training program, each employee shall sign a form documenting that he/she has received the training. (Use [Appendix 4](http://www.dr.s.uiuc.edu/css/guidesplans/hazcom/appendix4.pdf) at <http://www.dr.s.uiuc.edu/css/guidesplans/hazcom/appendix4.pdf>)

Whenever a new employee is transferred or hired, he/she shall be provided training regarding the Hazard Communication Standard. The training session shall be conducted by the Division of Safety and Compliance before the start of his/her employment if possible.

The Division of Safety and Compliance is responsible for identifying and listing any non-routine hazardous task performed at this facility. The Division of Safety and Compliance shall conduct training on the specific hazards of the job and the appropriate personal protective equipment and safety precautions and procedures.

When a new substance is added to the inventory list, the Division of Safety and Compliance is responsible for notifying all affected employees about the new substance.

A copy of the new MSDS shall be posted by the Division of Safety and Compliance for 30 days. Both the new Material Safety Data Sheet and the Employees New Substance Signature form shall be placed above or near the MSDS information binder. Each affected employee must read the MSDS and sign the signature form.

Workers trained under the Hazard Communication Plan are required by the Illinois Department of Labor to receive annual refresher training, provided by the campus unit to which they are assigned.

RESPONSIBILITY FOR COMPLIANCE

The administration of this plan shall be the responsibility of the Campus Unit with the assistance of the Division of Research Safety (DRS). The administrative responsibilities are divided as follows:

The campus unit will:

1. Establish a Hazard Communication Plan specific to the campus unit.
2. Identify employees to be included in the Hazard Communication Plan (with assistance from DRS Guidelines)
3. Develop and maintain of a hazardous substance master inventory
4. Train their employees (DRS provides "Train the Trainer" services)
5. Annually evaluate the unit's plan (w/DRS assistance)

Division of Research Safety will:

1. Provide a Model Hazard Communication Plan for campus units to use to establish their own specific Hazard Communication Plan
2. Provide guidelines for units to follow to determine the identification of employees to include in the Hazard Communication Plan
3. Assist with training, working with the units to train their employees on all 13 points
4. Coordinate any necessary exposure monitoring (with help from unit to identify those areas needing monitoring)
5. Provide a central repository for copies of each campus unit's Hazard Communication Plan
6. Provide a central online repository for each campus unit's MSDS
7. Provide a central training database for use by campus units.

Employees are responsible for following all safe work practices and using proper precautions required by the guidelines in this plan.

PROGRAM EVALUATION

F&S the Division of Safety and Compliance Division shall conduct an evaluation of the Hazard Communication Plan at least annually to ensure its effectiveness. If items are found to need improvement, the individual responsible for the items identified shall be notified in writing. It is expected that action shall be taken to correct the item within five working days after notification.