

Northwestern

Hazard Communication

Environmental Health and Safety

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## I. Purpose

This program establishes the requirements to ensure those working with or exposed to hazardous chemicals are aware of their hazards and identities and are provided with the necessary information, training, and protective measures to store, handle, and use chemicals safely.

## II. Scope

This program applies to all Northwestern faculty, staff, students, and contractors who have the potential for hazardous chemical exposure and the physical and health hazards posed by those chemicals on campus property, including leased spaces. This applies to any chemical known to be present in the workplace in such a manner that individuals may be exposed under normal conditions of use or in a foreseeable emergency.

## III. Exemptions

This program does not apply to:

- A. Research areas such as laboratories (refer to the [Laboratory Safety and Chemical Hygiene Plan](#)).
- B. Hazardous waste, tobacco or tobacco products, wood or wood products, articles (e.g., plastic chairs, tires, etc.), food or alcoholic beverages, any drug, cosmetics, consumer products (e.g., pens, pencils, adhesive tape), nuisance particulates, ionizing and non-ionizing radiation, and biological hazards.
- C. Administrative Roles (e.g., Office Staff)
  - i. Individuals with administrative roles (e.g., office environments) may periodically work with products that may contain small amounts of hazardous chemicals, such as adhesives, cleaners, and inks. Since most office products are used intermittently and in small quantities, exposure is not expected to exceed safe limits or produce adverse health effects. In addition, many of these types of products are consumer products and therefore meet the more stringent regulations for consumer product safety.
  - ii. Individuals must read, understand, and adhere to product usage and warning labels and instructions and only use products as intended. Manufacturers or distributors can also be contacted for safety data sheets (SDSs).

## IV. Responsibilities

- A. **Environmental Health and Safety (EHS)**
  - i. Adhere to the requirements of this program.
  - ii. Review and revise this program, as necessary.
  - iii. Coordinate and/or administer training (see **Section VIII – Training**).
  - iv. Serve as the program and online SDS library administrator in non-research areas, and ensure SDS accessibility to all necessary parties.
  - v. Provide consultation and guidance, as necessary and upon request, to identify, evaluate, and control potential exposure to chemical hazards.
  - vi. Coordinate with schools and units to ensure SDS libraries are updated on an annual basis, and whenever there are significant changes, utilizing the annual [Chemical Inventory Certification](#).

- vii. Provide secondary labels to schools and units, as necessary (see **Section V – Labeling and Containers**).
- B. Schools and Units**
- i. Adhere to the requirements of this program.
  - ii. Ensure staff, faculty, and students complete all required training (see **Section VIII – Training**).
  - iii. Ensure staff, faculty, and students are provided adequate personal protective equipment (PPE) for the hazardous chemicals they are exposed to.
  - iv. Assign an adequate number of Hazard Communication Coordinators (see **Section IV.C.**) to ensure chemical inventories are maintained in accordance with this program.
  - v. Maintain overall responsibility for the hazardous chemicals within their areas, including the inventory, storage, handling, use, and disposal.
- C. Hazard Communication Coordinators**
- i. Adhere to the requirements of this program.
  - ii. Complete all required training (see **Section VIII – Training**).
  - iii. Ensure all hazardous chemical containers within their area of responsibility are correctly labeled (see **Section V – Labeling and Containers**).
  - iv. Serve as the local administrator of the hazardous chemicals within their area of responsibility (e.g., shop).
  - v. Maintain an accurate and current inventory of hazardous chemicals within their area of responsibility, including when chemicals are added or removed, by completing the annual [Chemical Inventory Certification](#) when requested by EHS.
  - vi. Provide EHS with available SDSs, upon request.
  - vii. Inform EHS when new hazardous chemicals are added to the inventory and when there are significant changes to the inventory (e.g., storage location changes).
  - viii. Inform those affected within their school or unit, including applicable contractors, about this program, including the location of hazardous chemicals within their area, storage requirements, and how to access the SDSs before handling.
  - ix. Coordinate hazardous chemical disposal with Northwestern’s hazardous waste disposal vendor (refer to the [Northwestern Hazardous Waste Program](#)).
  - x. Consult EHS for guidance, when necessary, to ensure compliance with this program.
  - xi. Reports program non-compliance to supervisors or EHS.
- D. General University Population (e.g., Staff, Faculty, and Students)**
- i. Adhere to the requirements of this program.
  - ii. Complete all required training (see **Section VIII – Training**).
  - iii. Review and adhere to all label and SDS requirements before handling or using any hazardous chemical; contact a supervisor or EHS to obtain the SDS if not available.
  - iv. Wear all required PPE when handling and using chemicals (e.g., gloves, goggles). Refer to the [Northwestern Personal Protective Equipment \(PPE\) Program](#) for more information.
  - v. Inform Hazard Communication Coordinators, supervisors, or EHS of any apparent or potential safety and health hazards (e.g., spilled or leaking chemicals).

#### E. Contractors

- i. Adhere to the requirements of this program, and responsible for any subcontractors.
- ii. Complete all required training (see **Section VIII – Training**).
- iii. Properly store, handle, and label all hazardous chemicals brought to campus property, including leased spaces.
- iv. Wear all required PPE when handling and using chemicals (e.g., gloves, goggles).
- v. Inform schools and units (e.g., the Hazardous Communication Coordinator) of any hazardous chemicals brought to campus property, including leased spaces, that may introduce new, unique, or significant hazards, and ensure appropriate measures are implemented to control or eliminate such hazards.
- vi. SDSs must be readily available to all those who may handle, use, or otherwise come in contact with hazardous chemicals, including any affected school or unit individuals.
- vii. SDSs must be available to any Northwestern school or unit, upon request.
- viii. Properly remove all unused and hazardous waste chemical products in alignment with the [Northwestern Hazardous Waste Program](#).

## V. Labeling and Containers

- A. No hazardous chemical may be accepted for use at Northwestern unless labeled in accordance with this section.
- B. To ensure that the necessary information concerning the hazards of a chemical is accessible, all hazardous chemical containers must be clearly, legibly, and prominently labeled in English (additional languages may be included as necessary), as follows:
  - i. **Primary Containers:**
    - a. Manufacturers are required to properly label all containers, and this is the primary means of labeling.
    - b. Labels must be affixed to the container and include: A product identifier (i.e., chemical name or common name on the SDS), [pictograms](#), a signal word, hazard and precautionary statements, and supplier identification (i.e., supplier's or manufacturer's name, address, and telephone number).
  - ii. **Secondary Containers:**
    - a. If chemicals are transferred from the primary container to another 'secondary' container (e.g., spray bottle), the secondary container must be labeled by one of the following methods (listed in order of preference):
      - 1) A copy of the original label,
      - 2) A label that includes a product identifier (i.e., chemical name or common name on the SDS), signal word, nature of the hazard (e.g., hazard statement, pictogram), precautionary statements, first aid information (if available), and PPE (if available), or
      - 3) A label that includes a product identifier (i.e., chemical name or common name on the SDS) and words, pictures, symbols, or combination thereof, which provide at least

general information regarding the hazards of the chemical (i.e., physical and health hazards).

- b. An example of a proper secondary label can be found in **Appendix 1 – Secondary Label Examples**.
  - c. A label is not required on a secondary container intended for immediate use under the user's control (i.e., the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred). If however, an unlabeled secondary container continues to contain chemicals after the work shift, is no longer intended for immediate use, or is no longer under the user's control, the container must be labeled in accordance with **Section V.ii.a**.
  - d. Containers must be compatible with the chemicals they are storing (e.g., the material of the container should not react with the chemical inside, preventing damage to the container and potential hazards from a chemical reaction).
  - e. Flammable liquids must be stored in approved containers.
  - f. When a container is to be used for another chemical, it must first be thoroughly cleaned, the old label removed, and a new label affixed.
- C. Labels on containers must not be defaced or removed until the container is empty.
  - D. If a container label becomes damaged, illegible, or inadvertently removed from a container, it must be replaced immediately.
  - E. Non-hazardous substances (e.g., distilled water) should be labeled to avoid confusion with other chemicals.
  - F. All hazardous chemical containers must be stored in approved areas when not in use (e.g., corrosives cabinets, flammable safety cabinets). Refer to the [Northwestern Fire Prevention Program](#) for storage information.

## VI. Safety Data Sheets (SDSs)

- A. SDSs are typically provided by the chemical manufacturer or chemical supplier and are the primary source of information intended to outline the special precautions and controls necessary for handling specific hazardous chemicals and responding to emergency situations, such as spills.
- B. SDSs must meet the requirements of the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1200 [Appendix D](#).
- C. An SDS must be kept on file for each hazardous chemical stored or used and must be readily available to affected individuals.
- D. The Northwestern online [SDS library](#) is accessible on electronic devices (e.g., computers, mobile phones, tablets).
- E. SDS library user tutorials are available on the Northwestern Hazard Communication Program [website](#).
- F. Schools and units may utilize alternative methods of ensuring SDS accessibility (e.g., physical paper copies in a binder), however, such methods would be considered supplemental to the online SDS library, and must be kept current and aligned with the online SDS library.
- G. Contact EHS for SDS library accessibility issues or if an SDS is unavailable.

## VII. Hazardous Non-Routine Tasks

- A. A non-routine task is one which the individual does not normally perform and for which they have not previously been trained.
- B. Standard operating procedures (SOPs) should be written and available to individuals performing non-routine tasks involving hazardous chemicals.
- C. Prior to beginning non-routine tasks involving actual or potential exposures to hazardous chemicals, individuals must be informed of the hazards present and be given appropriate work instructions, emergency procedures, and PPE to be used.
- D. Schools and units are encouraged to consult with EHS for hazardous non-routine tasks.

## VIII. Training

- A. Northwestern staff, students, and faculty with potential exposure to hazardous chemicals must complete online [Hazard Communication](#) training at the time of their initial assignment, and annually. Training includes:
  - i. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (e.g., monitoring, visual appearance, or odor of hazardous chemicals when being released).
  - ii. The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area.
  - iii. The measures individuals can take to protect themselves from hazards, including specific procedures to protect them from exposure to hazardous chemicals (e.g., appropriate work practices, emergency procedures, or PPE).
  - iv. The details of the hazard communication program, including an explanation of the labels, labeling systems, SDSs (including the order of information), and how individuals can obtain and use the appropriate hazard information.
- B. In addition to the requirements of **Section VIII.A.**, Northwestern Hazard Communication Coordinators must complete annual [Hazard Communication Coordinator](#) training, administered by EHS.
- C. Contractors are responsible for ensuring that personnel, including subcontractor personnel, have the proper knowledge and adequate training to safely store, transport, use, and dispose of hazardous chemicals in alignment with this program and OSHA 29 CFR 1910.1200(h). Proof of training must be available upon request.
- D. In addition to the requirements of **Section VIII.A.-C.**, training is required whenever a new chemical hazard that has not previously been trained on is introduced into their work area.
- E. Retraining is required when an individual who has already been trained has been determined not to have the necessary understanding and skills. Circumstances where retraining is required include, but are not limited to, when:
  - i. Changes in the workplace render previous training obsolete
  - ii. Changes in the types of PPE to be used render previous training obsolete
  - iii. Inadequacies in an individual's knowledge or use of assigned PPE indicate that they have not retained the requisite understanding or skill.

## IX. Recordkeeping

- A. Training records will be maintained by EHS in myHR Learn and kept for the duration of employment, plus 1 year.

- B. Completed Chemical Inventory Certifications will be retained by EHS for at least 30 years.
- C. A chemical inventory list, including each material's name, manufacturer, hazardous substance(s), location, and date of use, will be generated annually by EHS, and maintained by EHS for at least 30 years after final use.
- D. The complete SDS library will be generated annually by EHS, and maintained by EHS for at least 30 years after final use.

## X. Regulatory Authority and Related Information

Northwestern and contractors will comply with the Occupational Safety and Health Administration's (OSHA) standards and any other applicable codes and standards, including:

[OSHA 29 CFR 1910.1020 – Access to Employee Exposure and Medical Records](#)

[OSHA 29 CFR 1910.1200 – Hazard Communication](#)

[OSHA Quick Card – Comparison of NFPA 704 and HazCom 2012 Labels](#)

[Northwestern Annual Chemical Inventory Certification](#)

[Northwestern Fire Prevention Program](#)

[Northwestern Hazardous Waste Program](#)

[Northwestern Personal Protective Equipment \(PPE\) Program](#)

## XI. Contact

For questions, contact Environmental Health and Safety at [ehs@northwestern.edu](mailto:ehs@northwestern.edu).



## Appendix 1 – Secondary Label Examples

### Rustlick WS-11

ITW Pro Bands 616 East Industrial Street DeWitt, IA  
52742 1-800-424-9300

#### WARNING



**May cause an allergic skin reaction.**

*Prevention • Avoid breathing dust/fume/gas/mist/vapors/spray. • Contaminated work clothing should not be allowed out of the workplace. • Wear protective gloves/protective clothing/eye protection/face protection. Skin • IF ON SKIN: Wash with plenty of soap and water. • If skin irritation or rash occurs: Get medical advice/attention. • Wash contaminated clothing before reuse.*

*In case of Fire: Use CO2, dry chemical, or foam for extinction.*

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