

Campus Safety and Emergency Operations Office of Environmental Health and Safety

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Hazard Communication Program



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Introduction

The University of North Carolina at Pembroke (UNCP) is committed to providing a safe and healthy work environment. The purpose of the UNCP Hazard Communication Program (UNCP HCP) is to increase employee awareness of hazardous chemicals used in the workplace so that they can recognize known and potential hazards and take proactive measures to minimize harm to themselves, others, and the environment. Potential chemical hazards consist of two main categories: chemical hazards encountered during normal working conditions and accidental exposures. Additionally, the HCP improves the quality and consistency of hazard information in the workplace, making it safer for workers by providing easily understandable information on appropriate handling and safe use of hazardous chemicals.

The UNCP HCP complies with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200. The success of the program depends on the joint efforts of the administration, managers and supervisors, and UNCP employees.

Scope

The UNCP HCP provides the mandatory requirements for safe use of hazardous chemicals. The HCP affects all employees who, in the normal course of their work or during foreseeable emergencies, could be exposed to or come in contact with a hazardous chemical.

The UNCP HCP has been established to provide information to employees about chemical hazards. This information is communicated in three primary ways:

- Safety data sheets (SDSs);
- Warning labels and signs; and
- Training of employees on chemical hazards in the workplace.

Laboratory areas are exempt from the UNCP HCP if they are in full compliance with the UNC Pembroke Chemical Hygiene Program.

Responsibilities

Effective hazard communication can be accomplished when responsible management and responsive employees work together in implementing an integrated hazard communication program. The roles and responsibilities of UNCP management and employees are outlined below.

Responsibilities of the Supervisor

Supervisors in support (e.g., housekeeping, maintenance, and facilities, etc.) and administrative areas who routinely encounter hazardous chemicals provide the necessary direction to ensure the effective implementation of the UNCP HCP for their work locations.

At the time of the employee's initial assignment, the supervisor is responsible for:

- Identifying chemicals that pose potential health or physical risk to employees in their work area;
- Ensuring that employees are made aware of the potential hazards associated with those chemicals, including the availability of chemical-specific information (e.g., SDSs);
- Maintaining an inventory list of hazardous chemicals, SDSs for chemicals used in the workspace, and maintenance of labels on hazardous chemical containers;
- Ensuring that employees minimize any potential exposure through the use of safe work practices and necessary or assigned personal protective equipment; and
- Providing employees guidance and training specific to their work.

Responsibilities of the Employee

Employees have the opportunity to affect their work environment by gaining knowledge about the chemical hazards associated with their work, and applying this knowledge to reduce the risk of injury and adverse health effects to themselves, coworkers, and visitors in their work area.

Each employee is responsible for:

- Safely performing work;
- Understanding and complying with all applicable provisions of the UNCP HCP;
- Following all standard operating procedures for their worksite;
- Adhering to the precautions outlined on container labels and SDSs; and
- Using proper personal protective equipment and clothing.

Responsibilities of the Environmental, Health and Safety Office

The EHS office provides oversight for the UNCP HCP and is responsible for:

- Updating the UNCP HCP to reflect any changes;
- Providing basic training in hazard communications for UNCP employees;
- Providing technical guidance and program interpretation to personnel on matters about the UNCP HCP;
- Help supervisors and employees in the implementation of the UNCP HCP; and
- Conduct investigations for injuries and illnesses.

Definitions

<u>Acute effect:</u> An adverse effect on a human or animal which has severe symptoms developing rapidly and coming quickly to a crisis.

Carcinogen: A substance or agent capable of causing or producing cancer in mammals, including humans. A chemical is considered to be a carcinogen if it is listed by either the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or by the Occupational Safety and Health Administration (OSHA).

<u>Chronic effect:</u> An adverse effect on a human or animal body, with symptoms that develop slowly over a long period or which recur frequently.

<u>Classification:</u> To identify the relevant data regarding the hazards of a chemical; review those data to ascertain hazards associated with the chemical; and decide whether the chemical will be classified as hazardous, and the degree of hazard where appropriate, by comparing the data with the criteria for health and physics hazards. Container: Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, tank truck or the like that contains a hazardous substance. For purposes of this section, pipes or piping systems are not considered to be containers.

Combustible liquid: Any liquid having a flashpoint at or above 100° (38° C), but below 200° F (93°C).

<u>Corrosive:</u> A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact.

Engineering control: A mechanical or design feature intended to remove or isolate potentially harmful substances in the workplace. Common engineering controls include local exhaust ventilation systems such as hoods and physical barriers to contain potential hazards.

Exposure potential: Factors that influence the effects of chemicals on the health of employees.

Flammable: A solid, gas, liquid or aerosol that will ignite and burn according to specific tests and definitions. A flammable liquid is defined as any liquid having a flashpoint below 100° F (38° C).

<u>Flashpoint:</u> The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite and burn according to specific tests and definitions. Hazard category: The division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard class: The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazardous chemical: 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. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic systems and agents which damage the lungs, skin, eyes, or mucus membranes.

Hazard classification: An evaluation of chemicals to determine the hazard classes, and where appropriate, the category of each class that applies to the chemical being classified.

Hazard statements: A statement assigned to a hazard class and category that describes the nature of the hazards of a hazardous product, including, where appropriate, the degree of hazard.

Hazard warning: Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the health hazard and physical hazards of the substance(s) in the container(s).

Health hazard: A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 Health Hazard Criteria.

Immediate use: The hazardous substance 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.

<u>Irritant:</u> A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact.

Non-Routine task: A specific task or activity that is not part of the employee's assigned duties. A non-routine task includes work which the employee may not have specific training or requisite experience to do the work safely.

Personal Protective Equipment: Devices worn by the worker to protect against potential hazards. Typical examples include chemically resistant gloves, eye and face protection, hard hats, impermeable aprons, etc.

Physical hazards: A chemical for which there is statistically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, corrosive, pyrophoric, unstable (reactive) or water reactive.

<u>Pictogram:</u> A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical.

Precautionary statement: A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous product, or improper storage or handling of a hazardous product.

<u>Signal word:</u> A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The words 'Danger' and 'Warning' are used as signal words.

<u>Vapor pressure</u>: The pressure exerted by a saturated vapor above its own liquid in a closed container. These values are usually expressed in millimeters of mercury (mmHq). The higher the vapor pressure, the more easily it will enter the atmosphere when left exposed.

Water reactive: A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Contractors

Each contractor will have a hazard communication program implemented and will be evaluated prior to them entering the workplace.

Each contractor will be advised of the hazardous chemicals within the workplace, along with appropriate protective measures to be taken and the labeling system.

All hazardous chemicals used by the contractor will be evaluated and must receive approval prior to bringing the hazardous chemical to the university. Once the hazardous chemical receives approval from EHS, the contractor must provide a copy of the SDS for the hazardous chemical.

Labeling

Secondary Containers

All secondary containers containing hazardous chemicals will be labeled and prominently displayed in English on the container. Each label will contain the following information:

- Product identifier; and
- A Pictogram from Hazard Symbols and Classes from <u>29 CFR 1910.1200</u> Appendix C, Figure C.1 – Hazard Symbols and Classes.

Shipping Containers

All containers being shipped which contain hazardous chemicals will be labeled in English with the following information:

- Product identifier:
- Signal word;
- Hazard statement(s);
- Pictogram(s);
- Precautionary statement(s); and,
- Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

Exemption

Labels are not required for secondary containers when they are for immediate use and controlled, at all times, by the employee who transferred the hazardous chemical.

All existing labels on incoming containers and secondary containers of hazardous chemicals shall not be removed or defaced.

Hazardous Chemical List

The supervisor is responsible for maintaining the list of all hazardous chemicals known to be present using the product identifier that is referenced on the appropriate SDS. The hazardous chemical list will be maintained and accessible during working hours, within the "Hazard Communication Binder" at each worksite.

When a new hazardous chemical is approved and introduced into the worksite, the supervisor will update the hazardous chemical list. When the use of a hazardous chemical is discontinued, the hazardous chemical list will be updated to reflect this change and the hazardous chemical name will be moved to the "discontinued use" section within the list contained in the binder. The hazardous chemical designated as "discontinued use" will remain on the hazardous chemical list for 30 years, until such time it will be removed from the list completely.

Safety Data Sheets

The "Hazard Communication Binder" contains the SDSs for each hazardous chemical currently being used within the workplace. When a new hazardous chemical is approved and introduced into the workplace, the SDS will obtained immediately.

SDSs for any hazardous chemical where the use is discontinued, will be preserved for 30 years starting from the discontinued date within the "discontinued use" section within the list contained in the binder.

Training

New employees will complete an information and training program regarding hazardous chemicals, prior to their work assignment. All employees will receive additional training when new hazardous chemicals are introduced to the workplace or re-training when an employee demonstrates a lack of understanding regarding any of the elements within this program.

- The lesson plan will cover the following topics in detail:
- Overview of the 29 CFR 1910.1200 standard;
- Location of the SDS, hazardous chemical list, and hazard communication program along with procedures to obtain copies;
- Overview of methods to detect the presence and release of hazardous chemicals;
- Procedures and hazards associated with non-routine tasks;
- Physical and health hazards associated with the hazardous chemicals used;
- How to read SDSs and container labels;
- Labeling procedures within the workplace; and
- All work operations where hazardous chemicals are used, including procedures for handling and storing chemicals, and emergency responses.

At each training session a sign-in sheet will be used to document completion of training. The sign-in sheet will contain the instructor's name, date of training, a summary of the training, and a list of who attended including the employees' names, printed, along with their signatures.

Note: Some training could include face to face, Skillsoft LMS (online) training or a combination of both.

Access

The hazard communication program, hazardous chemical list, and SDSs must be accessible for all employees to access during their work shift.

Employees and designated representatives (i.e., spouse) have the right to request and receive a hard copy of the hazard communication program, hazardous chemical list, and/or SDSs within 15 days of the request, in accordance with the requirements of 29 CFR 1910.1020(e).