Introduction: The Occupational Safety & Health Administration (OSHA) Hazard Communication Standard and the State of Wisconsin Employees’ Right-To-Know Law were developed to promote a safe and healthful workplace and to prevent accidental injury to people and the environment or loss of property. This regulation applies to University employees who have the potential for exposure to hazardous chemicals on the job. **Marquette University follows a “least risk” policy for all hazardous materials procured, received, handled, stored and disposed of. This means that only the quantity of material absolutely necessary should be on hand.**

Purpose: Marquette University’s Hazard Communication Program is designed to inform all employees who may be potentially exposed to hazardous chemicals on the job. This Hazard Communication Program, is available for review by employees at the Student Employment Office and the Office of Risk Management and at the Risk Management web site.

Scope: This program encompasses all Marquette facilities and is available to all employees.

Background: Modern life would be impossible without chemicals. Plastics, synthetic clothing, drugs, and building materials are just a few of the things that are made from chemicals. Chemicals must be treated with respect as many can cause injury or illness if not handled properly. Chemicals may be found in many unexpected places on the job. Chemicals are found in chemical companies, business places and nearly everywhere including our homes.

Everyday chemicals include household polishes, detergents, pesticides, office copier toner, etc. Chlorine is used as a disinfectant in drinking water and swimming pools. Gasoline, a chemical handled by millions of people on a daily basis is extremely flammable and contains cancer-causing ingredient (benzene). Properly used, it causes no health or fire hazards.

Contents: This document includes the following items:

- A description of how the criteria for labels and other forms of warning is met,
- A description of how the criteria for Material Safety Data Sheets (MSDS’s) is met,
- The location where a list of the hazardous chemicals known to be present in the workplace can be found,
- A discussion of the methods Marquette University uses to inform employees of the chemical hazards and
- The methods Marquette University used to inform contractors with employees working at the University, of hazardous chemicals to which their employees may be potentially exposed. Contractors also are required to provide MSDS’s for chemicals they bring onto the campus for subsequent review by MU employees.
- Information as to waste disposal sites on campus and labeling requirements.

Responsibilities: The Hazard Communication Standard affects everyone who manufactures, distributes, provides, uses or stores hazardous chemicals in the workplace.

By law, Chemical manufacturers or Distributors must determine the physical and health hazards of each product that they make or distribute. Then they must let users know about those hazards by using container labels and MSDS’s.

Employers must develop a written hazard communication program. They must also:

1) Tell employees about the Hazard Communication Standard;
2) Explain how it’s being put into effect in their workplace;
3) Provide information and training on hazardous chemicals in the workplace including:
   a) Recognizing, understanding and using labels and MSDS’s; and
b) Use safe procedures when working with hazardous substances.

Employees must take positive actions to protect themselves as well. They must read labels, MSDS’s and follow their instructions and warnings.

OSHA has developed these safety regulations and Marquette University has developed a compliance program to protect you. The only person who can keep you safe on the job however, is YOU! Make these rules part of your job:

1) Identify hazards before you start a job. If you aren’t familiar with a chemical, read the MSDS:
2) Respect all warnings and precautions, don’t take chances;
3) When in doubt, ask your supervisor;
4) Know in advance what could go wrong and what to do about it;
5) Know how and where to get help;
6) Learn basic first aid measures.

List of Hazardous Chemicals: A data base containing MSDS for hazardous chemicals which could be present in the Marquette University workplace can be found in each area that uses chemicals. Employees may contact their supervisors or the Office of Environmental Health & Safety regarding chemicals used in their jobs.

Labeling and Other Forms of Warning: Every container of hazardous chemicals is labeled by the manufacturer. The actual format may differ, but the labels must contain similar types of information. That makes it easy to find out at a glance about the chemical’s possible hazards, and the basic steps you can take to protect yourself against those risks. The label may use words or symbols to tell you:

1) The common name of the chemical.
2) The name, address, and emergency phone number of the company that made or imported the chemical.
3) A signal word. In order of seriousness, signal words are: Danger, Warning, and Caution.
4) The principal hazards: Physical hazards (Will it explode, catch fire, reactive?) The health hazards (Is it toxic?) Could it cause cancer? Is it an irritant?)
5) The precautionary measures, including basic protective clothing, equipment, and procedures that are recommended when working with this chemical.
6) The first-aid instructions.
7) The proper handling and storage instructions.

If using an unlabeled container, notify your supervisor and ask for instructions. The label contains valuable information but if you don’t find everything you need, refer to the MSDS.

To determine if a chemical is hazardous, check the container’s label. There are different types of labels, but all will tell you if a chemical is hazardous. Many Marquette University chemical substances may contain a hazard coding label. Read the labels on all containers and follow all instructions. If you have questions, ask your supervisor or refer to the MSDS.

Marquette University maintains labels, as provided by manufacturers or distributors, on containers of hazardous chemicals and will not remove or deface existing labels on such containers. When transferring a chemical from one container to another, the new container must be labeled properly. Empty containers which may be reused for other purposes must have their original labels removed or obliterated and relabeled as shown below:

- Identity of the chemical,
- Appropriate hazard warnings,
Supplier name and address.

**Material Safety Data Sheets (MSDS’s):** An MSDS is a written or printed data sheet concerning a chemical which is prepared and distributed by chemical manufacturers and/or distributors. A sample is attached.

Updates of MSDS’s on campus are done as new or updated manufacturer MSDS’s are received. New materials introduced into work areas will be controlled by the appropriate departments. MSDS files are maintained throughout our facilities for all hazardous chemicals used in work areas. MSDS's are in English and available to all employees and contain the following:

1) **Identity.** Who makes it, their address, emergency phone number and date prepared.
2) **Hazardous ingredients.** The substance’s hazardous components, chemical ID and common names will be listed. Worker exposure limits to the chemical, such as the OSHA Permissible Exposure Limit (PEL), ACGIH Threshold Limit Value (TLV), etc. If the identity of the chemical is considered a trade secret, it will not be listed. The MSDS will still tell you about its hazards and the safe measures they require.
3) **Physical and chemical characteristics,** such as boiling and freezing points, density, evaporation rate, water solubility, flash point, etc. are listed.
4) **Physical hazards** such as fire and explosion and ways to handle those hazards, such as fire fighting equipment and procedures are noted.
5) **Reactivity** tells if the substance is reactive and, how to avoid unwanted reactions.
6) **Health hazards** covers the chemicals’ possible entry into the body, e.g., by inhalation, through the skin, or by ingestion. Possible health hazards caused by exposure including possible carcinogenicity, corrosivity, chronic health hazards, or possible effects upon certain target organs are covered. Also covered are signs and symptoms of exposure, such as eye irritation, nausea, dizziness, skin rashes, headaches, existing medical conditions that could be aggravated by exposure, etc. Emergency first-aid procedures are noted.
7) **Precautions for safe handling and use** discussed what to do if the substance spills or leaks, how to dispose of the substance, equipment and procedure needed for cleaning up spills and leaks as well as storage requirements and other precautions.
8) **Control measures** to reduce harmful exposure are listed in this section. Required personal protective equipment such as respirators, gloves, eye protection, etc. are noted. Ventilation requirements when using or handling that particular chemical are listed. Special safety practices that are recommended will also be included here.

The MSDS will provide you with everything you need to work safely with chemicals. MSDS’s may differ in format or length but you will find a summary of everything that’s known about the chemical, its hazards, and precautions to take to avoid injury and illness when handling that particular hazardous substance. Read the MSDS before using a chemical substance.

**Training:** Employees who work with or are potentially exposed to hazardous chemicals should ask supervisors for training schedules on the Hazard Communication Standard and the safe use of those hazardous chemicals using audiovisual materials and classroom type training. Various video programs giving an overview of Hazard Communication can also be obtained through the Office of Environmental Health & Safety.

Departments should include regular safety meetings and review or add to the information presented in training as it relates to their specific operations. Supervisors should refer to the various University websites to assure that they are aware of updated policies and procedures and as a source of information and contact the Office of Environmental Health & Safety for updated information to request assistance in safety programs.

The training plan emphasizes these items:
- Summary of the Hazard Communication Standard (HCS) and the written program.
- Chemical and physical properties of hazardous materials (e.g., flash point, reactivity) and methods that can be used to detect the presence or release of chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.) Health hazards, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical.
- Work procedures for protection when cleaning up hazardous chemical spills.
- Procedures to protect against hazards (e.g., personal protective equipment, proper use, and maintenance; work practices or methods to assure proper use and handling of chemicals; and, procedures for emergency response).
- The location of MSDS’s, how to read and interpret the information on MSDS’s and chemical containers, and how employees may obtain additional hazard information.

Supervisors must be aware of training programs offered by the University and attend refresher courses to provide additional employee training concerning workplace hazards when:

- Chemicals with new hazards are introduced into the workplace,
- Equipment changes are made which could cause new or increased employee exposure,
- Procedures and work practices are introduced or changed which could cause new or increased employee exposure,
- Employees are transferred from one work area to another where different hazards may be present.

Video programs covering specific chemical hazards that are available to departments include:

- Corrosive & Irritant Chemicals
- Flammable Chemicals
- Carcinogenic Chemicals
- Poisonous & Toxic Chemicals
- Biological Hazards
- Radiation Hazards
- Cleaning Chemicals

**Disposal of Chemical Waste and Labeling Requirements:**

All users of chemicals and their supervisors in every University department should be aware of the hazardous substances holding areas in Chemistry and Biology. The department of Environmental Health & Safety has a program in place for chemical and hazardous waste disposal from these sites. Marquette is a small quantity generator under the federal act and must comply with regulations.

The regulations require that the name of each chemical to be stored and/or to be disposed must be clearly marked on each container. As a general rule, chemicals should not be combined, however, in situations where that is acceptable; all substances included must be clearly marked and dated on the container. The date of the accumulation of the stored material must also be clearly marked.
In the case where the exact chemical information is not known, we have contracted with certified laboratories to test the substances. If the composition is unknown, this must also be clearly marked and dated as to placement in any storage or disposal container.

**Training Documentation:** Training records for employees are maintained by the department, and by the Training Contractor for out-sourced programs. Records for student employees are maintained by the department.

**Non-Routine Tasks:** Employees required to perform non-routine tasks, e.g., cleaning tanks, entering confined spaces, etc., should inquire on training sessions that are available regarding potential exposure to hazardous chemicals and proper precautions to take to reduce or avoid exposure. Training information is available from the Environmental Health & Safety Office.

**Contractors:** MU purchase orders will contain a brief description of the contractor’s responsibilities. Contractors bringing hazardous chemicals on site are responsible for providing MSDS’s with appropriate hazard information. MU employees working in the vicinity of the contractor’s work site, may review the contractor’s MSDS’s. In turn, MSDS’s of MU chemicals used at the work site may be reviewed by the contractor’s employees.

**Procedures to follow in the event of an injury or accident:** For Emergencies immediately call 8-1911 the Department of Public Safety (DPS). DPS should always be called to report any Fire, Accident, Chemical/Radioactive Spill, or Other Incident when Emergency Assistance is needed. DPS assists the University in reporting incidents, contacting appropriate University officials, arranging transport and medical assistance, and interfacing with government response agencies. As an urban center, Marquette falls under the Milwaukee County Emergency Government planning and assistance programs that coordinate emergency response programs throughout the county linking the Marquette campus and area Hospitals. In the event of a workplace injury to an employee the Office of Risk Management should be contacted for proper Workers Compensation forms and information. Information is available at the Risk Management Web site, available as a link from the Finance and Human Resources information assessable from the main home page under the Faculty and Staff information. Any safety concerns should be reported to department supervisors and the Office of Environmental Health & Safety, call 8-8411.

**Summary:** Marquette’s Hazard Communication Program is designed to ensure safe handling of chemicals on the job and may also be helpful to you at home. Safety and Health training is provided on a general and specific basis to all University areas. Activities with specific exposures will be provided additional guidance and training within their department and the Office of Environmental Health & Safety will work with personnel to identify hazards and assist in developing safety protocols and provide additional training resources. Contact your supervisor or the Environmental Health & Safety Office if you have any questions about this program or safe handling of chemicals on the job.