3/13/2020

Ferris State University Hazard Communication Standard



FERRIS STATE UNIVERSITY SAFETY, HEALTH, ENVIRONMENTAL AND RISK MANAGEMENT

FERRIS STATE UNIVERSITY REVISION 2

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1. PURPOSE

- a. The purpose of this program is to ensure that the hazards associated with chemicals used by the Ferris State University are communicated to employees and management. Information concerning health hazards will be communicated by the use of container labeling, material safety data sheets, and training. This information will be used to evaluate and develop appropriate protective measures to safeguard employee health and safety.
- b. This document details the Hazard Communication Program developed by the Ferris State University for the purposes of:
 - i. Further enhancing our employee awareness program and,
 - ii. Ensuring compliance with the MIOSHA Hazard Communication Standard/The Michigan Right to Know Law and GHS Global Harmonization System
- c. MIOSHA requires employers to provide their employees with information about hazardous chemicals used in the workplace to which employees may be exposed. The Standard requires a written hazard communication program, which includes information on container labeling and other forms of warning, safety data sheets (SDSs), and an employee information and training program.
- d. MIOSHA delineates rights for employees including:
 - i. The employees' right to notification of the location of the Safety Data Sheets.
 - ii. The employees' right to notification of the new or revised SDSs no later than five (5) working days after receipt.
 - iii. The employees' right to request SDSs from their employer.
 - iv. Employees' protection from discrimination or discharge as a result of requesting information on hazardous chemicals.
- e. The goal of our program is to reduce the possibility of illnesses and injuries caused by exposure to chemicals. To accomplish our goal, we intend to provide employees with as much information as needed concerning the hazards of chemicals with which they have contact, presented in a usable, readily accessible form.
- f. This Hazard Communication Program, including the Safety Data Sheets and the chemical inventory lists will be reviewed on an annual basis to ensure that the plan reflects the latest changes in the workplace and regulatory requirements.

2. APPLICABILITY AND SCOPE

a. It is the responsibility of each Department within the Ferris State University to ensure that whenever a chemical is purchased, the hazards associated with its use are reviewed prior to its use on-site. All chemicals are required to have a material safety data sheet, which is available to all employees. A current inventory list of chemicals must be maintained.

- b.
- c. All employees must receive training upon assignment for the chemicals and associated hazards they may encounter. Employees performing nonroutine tasks involving chemicals must receive training. The Hazard Communication Program also applies to contractors performing services, maintenance, or construction on Ferris State University properties or facilities. Each Department is responsible for ensuring the contractor notifies them of the chemicals they use or bring into our facilities.

3. **RESPONSIBILITES**

- a. Employee Responsibilities
 - i. Employees are responsible for being aware of the hazards associated with chemical use, handling, or storage.
 - ii. Employees are responsible for reporting any personal injury from a chemical exposure.
 - iii. Employees are responsible for using the appropriate personal protective equipment (PPE) properly. If proper PPE is not available, employees shall not proceed with the task until all proper PPE and equipment is available. The supervisor shall assess the need and provide if necessary the proper PPE, thereby permitting the employee to proceed with the task.
- b. Departmental Responsibilities
 - i. Each Ferris State University Department will assign someone to have overall responsibility for maintaining a chemical inventory list and SDSs for the chemicals it uses.
 - ii. Ferris State University managers/supervisors are responsible for providing employees with information from SDSs to ensure their health and safety.
 - iii. Ferris State University managers/supervisors are responsible for informing employees of the chemicals being brought into their facilities by contractors.
 - iv. Ferris State University managers/supervisors are responsible for ensuring that proper personal protective equipment is used.

4. **DEFINITIONS**

a. <u>American Conference of Governmental Industrial Hygienists (ACGIH)</u> is a private organization of occupational safety and health professionals. The ACGIH recommends occupational exposure limits for numerous toxic substances and it updates and revises its recommendation, as more information becomes available.

- b. <u>Carcinogenic</u> means Capable of causing cancer.
- c. <u>Ceiling Limit</u> means the maximum amount of toxic substance allowed to be in workroom air at any time during the day.
- d. <u>Combustible</u> means able to catch fire and burn.
- e. <u>Concentration</u> means the amount of one substance in another substance.
- f. <u>Decomposition</u> means breakdown of a chemical.
- g. <u>Density</u> means how much space a given weight of substance takes up. Gold is a very dense substance because a small piece of it weighs a lot. Styrofoam is not very dense because it weighs very little but takes up a lot of space. The density of a substance is usually compared to water, which has been given a density value of 1. Substances more dense than water (which sink in water) have a density greater than 1; substances that float on water have a density of less than 1.
- h. <u>Dermal</u> means by or through the skin.
- i. <u>Explosive Limits</u> means the amounts of vapor in air sufficient to form explosive mixtures. Explosive limits are expressed as LOWER EXPLOSIVE LIMITS and UPPER EXPLOSIVE LIMITS; these give the range of vapor concentrations in air that will explode if heated. Explosive limits are expressed as a percentage of vapor in the air.
- j. Flammable means catches on fire easily and burns rapidly.
- k. Flammable Limits see EXPLOSIVE LIMITS
- I. <u>Flash Point</u> means the lowest temperature at which, the vapor of a substance will catch on fire, if heat is applied. Provides an indication of how flammable a substance is.
- m. <u>Health Hazard</u> means anything that can have a harmful effect on health under the conditions in which it is used or produced. There can be both ACUTE and CHRONIC health hazards.
- n. <u>Ignition Temperature</u> means the lowest temperature at which a substance will catch on fire and continue to burn. The lower the ignition temperature, the more likely the substance is going to be a fire hazard.
- o. Inflammable means same as FLAMMABLE.
- p. Ingestion means swallowing.
- q. <u>Lc50</u> means the concentration of a substance in air that causes death in 50% of the animals exposed by inhalation. A measure of acute toxicity.
- r. <u>Ld50</u> means the dose that causes death in 50% of the animals exposed by swallowing a substance. A measure of acute toxicity.
- s. <u>Mg/kg</u> means a way of expressing dose: milligrams (mg) of a substance per kilogram (kg) of body weight. Example: A 100 kg (220 pound) person given 10,000 mg (about 0.02 pounds) of a substance would be getting a dose of 100 mg/kg (10,000 mg/100 kg).
- t. <u>Mg/m</u> means a way of expressing the concentration of a substance in air: milligrams (mg) of substance per cubic meter (m) of air.
- u. <u>Milligram</u> means one one-thousandth of a gram.

- v. <u>Safety Data Sheet (SDS)</u> means information sheets, such as Safety Data Sheets for hazardous or toxic substances contain words that may be unfamiliar. The following explanation of terms will help you to understand the SDS.
- w. <u>Mutagenic</u> means capable of changing cells in such a way that future cell generations are affected. Mutagenic substances are usually considered suspect carcinogens,
- NIOSH is an abbreviation for the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services.
 NIOSH conducts research on occupational safety and health questions and makes recommendations to MIOSHA.
- y. <u>Odor Threshold</u> means the lowest concentration of a substance's vapor, in the air, that can be smelled. Odor thresholds are highly variable depending on the individual who breathes the substance and the nature of the substance.
- z. <u>Oxidizer</u> means any substance that reacts violently with oxygen or that gives off large amounts of energy in a chemical reaction.
- aa. <u>PEL</u> means Permissible Exposure Limit: means the same as TLV. PEL is often used in MIOSHA Standards instead of TLV.
- bb. <u>PH</u> means a measure of how acidic or caustic (basic) a substance is on a scale of 1-14. pH 1 indicated that a substance is very acidic; pH 7 indicates that a substance is neutral; and pH 14 indicates that a substance is very caustic (basic).
- cc. <u>PPM</u> means parts per million: Generally used to express small concentrations of one substance in a mixture.
- dd. <u>Reactivity</u> means the ability of a substance to undergo change, usually be combining with another substance or by breaking down. Certain conditions, such as heat and light, may cause a substance to become more reactive. Highly reactive substances may explode.
- ee. <u>Solubility</u> means the amount of a substance that can be dissolved in solution, usually water.
- ff. <u>Suspect Carcinogen</u> means a substance that might cause cancer in humans or animals, but has not been proven to do so.
- gg. Teratogenic means capable of causing birth defects.
- hh. <u>TLV</u> is an abbreviation for Threshold Limit Value (TLV). The average 8hour occupational exposure limit. This means that the actual exposure level may sometimes be higher, sometimes lower, but the average must not exceed the TLV. TLV's are calculated to protect most workers for a working lifetime.
- ii. <u>Toxic Substance</u> means any substance that can cause acute or chronic injury to the human body, or that is suspected of being able to cause disease or injury under some conditions. Many toxic substances are chemicals or chemical mixtures, but there are other kinds of toxic substances as well (bacteria and viruses, for example).

- jj. <u>Vapor</u> means the gas given off by a solid or liquid substance at ordinary temperatures.
- kk. <u>Vapor Density</u> means the density of the gas given off by a substance. It is usually compared with air, which has a vapor density set at 1. If the vapor is denser than air (greater than 1), it will sink to the ground; if it is less dense than air (less than 1), it will rise.
- II. <u>Volatility</u> means a measure of how quickly a substance forms vapors at ordinary temperatures. Vapor pressure is a measure of volatility. The lower the vapor pressure, the lower the volatility.

5. GENERAL INFORMATION

- a. This program is available for review by all Ferris State University employees.
- b. What Products and Materials Are Covered?
 - i. The MIOSHA standard applies to any chemical or combination of chemicals known to be present in the workplace to which employees may be exposed under normal conditions of use, or in a foreseeable emergency. Also covered by this standard: all materials commonly used by Ferris State University employees in the course of their work. This includes, but is not limited to, lubricants, fuels, solvents, acids, inks, fire extinguishers, lighting devices, compressed gas containers, paints, glue, cleaning materials, welding rod, and disinfectants.
- c. What Is Not Covered By This Standard?
 - i. The standard does not apply to any hazardous waste regulated by the U.S. Environmental Protection Agency (EPA), tobacco, wood or wood products, food, drugs, or cosmetics intended for personal consumption by employees in the workplace; and "articles." The Occupational Safety and Health Administration (OSHA) as an item have defined an "article":
 - 1. Which is formed to a specific shape or design during manufacture?
 - 2. Which has end use functions dependent in whole or in part upon its shape and design;
 - 3. Which does not release, or otherwise result in exposure to a hazardous chemical under normal conditions of use?

6. **REQUIREMENTS**

- a. Hazard Evaluation and Determination
 - i. Ferris State University relies upon Safety Data Sheets from suppliers to meet hazard determination requirements. Ferris

State University is an end-user of various chemicals, which have been found to present possible hazards to our workers. As a user, rather than a manufacturer or importer of chemicals, we are not required to evaluate those chemicals for their potential hazards.

- ii. Ferris State University is mandated by law to maintain copies of the required SDS for each hazardous substance in the work place and to ensure that these are readily accessible to employees at all times when they are in their work area(s). The designated departmental person responsible for the on-site hazard communication program and the location of SDS will be posted at each site. The new and revised SDS poster should be posted within 5 days of the arrival of a new or revised SDS.
- b. Other components of the Hazard Determination Requirements are as follows:
 - i. A complete list of hazardous chemicals must be maintained onsite for each department. The list will include the location where the hazardous chemicals are stored, handled, or utilized.
 - ii. Safety Data Sheets (SDS) must be requested from manufacturers and suppliers, and all purchases of any item containing a "Hazardous Substance" must include the SDS with the delivery.
 - iii. Any hazardous substance received without the Material Safety Data Sheet (SDS) should not be utilized until a follow-up request has been sent and an SDS received. If the vendor has not provided the SDS within 25 working days of the request, the local office of MIOSHA must be notified for assistance as specified in the regulation.
 - iv. Any employee who purchases hazardous chemical materials must ensure that vendors and suppliers supply a copy of the SDS for the product.
 - v. It is the responsibility of the designated department coordinator to ensure that Safety Data Sheets and hazardous substance lists are developed, maintained in a current status, and posted or filed in the work place for employee use. A list of hazardous chemicals and their location must be provided to the local fire department. SDS's that are not current or no longer used shall be maintained on-site in an inactive file.
 - vi. Each Department designated Coordinator will rely upon the manufacturer's determination of hazardous material as stated in the information provided on their published Material Safety Data Sheet (SDS).

7. SAFETY DATA SHEETS

- a. Each Ferris State University department is responsible for compiling a master file of Safety Data Sheets (SDS). It will be kept in the location designated on the State of Michigan Right to Know Poster. SDSs will be available for review to all employees during each work shift. Copies will be available upon request to the individual indicated on the Michigan Right to Know Poster.
- b. Chemical manufacturers, importers, wholesalers, distributors, and suppliers are required to provide the SDS to us at the time of initial shipment of a chemical to our facility.
 - i. The SDS contains information on the chemical such as physical properties, health and safety data, and first aid information, which is useful in meeting the goals of this program.
 - ii. SDSs must be received with the first shipment of a chemical or be mailed to individual purchasing the chemical. Chemicals will not be used in our processes, even on a trial basis, unless the SDS has been received and reviewed. If an SDS is not received with the initial shipment of a chemical, Department Coordinators will contact the manufacturer and/or supplier requesting the SDS for that specific chemical.
 - iii. SDSs for each chemical in use at each department will be maintained in the master SDS binder or electronic file. The SDSs will be filed by the Manufacturers' name and then by the product name.
- c. Revised or updated SDSs received from our suppliers will be logged and filed in the master SDS binder or electronic file. If a revised SDS alerts us to a new hazard previously not present in a work area, employees will be trained accordingly. Each Ferris State University Department must have the required MIOSHA Right-To-Know posters and must post the notification for employees for new or revised SDSs within five days of receipt of the new or revised SDSs.
- d. Valuable information for the safe use, handling and disposal of chemical materials on the site may be obtained from the manufacturer or supplier in the form of a Safety Data Sheet (SDS). Each SDS describes the physical and chemical properties of one chemical material or substance. It also provides information for first aid treatment and special personal protection, procedures for cleanups, and precautions for storing and handling that are appropriate to the material.
- e. The Safety Data Sheet is designed to inform the user of the properties of the material and to suggest proper controls for protecting employees, property and the environment against injury or damage. The data sheet also helps the user set up and maintain appropriate controls so that he can avoid preventable accidents.
- f. All SDSs will have a consistent 16-section format. Below is an outline of the contents of a Safety Data Sheet.

- i. Section 1 Identification
- ii. Section 2 Hazard(s) Identification
- iii. Section 3 Composition / Information on Ingredients
- iv. Section 4 First-aid Measures
- v. Section 5 Fire-fighting Measures
- vi. Section 6 Accidental Release Measures
- vii. Section 7 Handling and Storage
- viii. Section 8 Exposure Controls / Personal Protection
- ix. Section 9 Physical and Chemical Properties
- x. Section 10 Stability and Reactivity
- xi. Section 11 Toxicological Information
- xii. Section 12 Ecological Information*
- xiii. Section 13 Disposal Consideration*
- xiv. Section 14 Transport Information*
- xv. Section 15 Regulatory Information*
- xvi. Section 16 Other information including date of preparation of last revision
- *xvii.* *Sections outside of MIOSHA jurisdiction but these sections must be included for a GHS compliant SDS.
- g. Copies of SDS's for all hazardous chemicals to which employees may be exposed will be kept in the supervisor's office. SDS's will be available for review by all employees during each work shift. Copies will be available upon written request to the supervisor (with a copy of the request sent to the safety officer).

8. HAZARDOUS CHEMICALS

- a. The responsibility for determining whether a chemical is hazardous lies with the chemical manufacturer or importer of a chemical. As a user of chemicals, Ferris State University may rely on the evaluation received from these suppliers through labels on containers and safety data sheets.
- b. Chemicals considered hazardous are those:
- c. Regulated by OSHA in 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances;
- Included in the American Conference of Governmental Industrial Hygienists (ACGIH) latest edition of Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment;

9. CONTAINER LABELING AND GHS LABELING

a. MIOSHA requires chemical manufacturers, importers, and distributors to place warning labels on original containers of materials they send. If it is not feasible to place a label on a container, it may be sent to us along with the SDS.

- i. Each label should include:
 - 1. Name of the substance
 - 2. Name of the manufacturer or importer
 - 3. Emergency procedures and phone numbers
 - 4. Appropriate warning statements.
- b. In addition, we are responsible for maintaining the integrity of all required Department of Transposition shipping labels on containers. These labels must not be removed until the container is empty.
 - Each Ferris State University Department will verify that chemical containers are properly labeled at the time they are received.
 Further, all containers, such as storage containers or bulk storage areas covered by the standard, will be appropriately labeled.
- c. Each supervisor is responsible for ensuring that all portable containers used in their work area are labeled with identity and hazard warning.
- d. All container labels will be legible, in English, and prominently displayed. If we are informed of a new hazard for a particular chemical, new labels will be placed on the container.
 - i. As an alternative to labeling individual containers, or when an item is not containerized (such as fumes or dust created by processes and procedures), signs or tags, which identify the chemical and include appropriate hazard warning statements may be used.
 - ii. Each Ferris State University department will periodically inspect container labels, signs, and tags to ensure they are prominently displayed and legible. If missing or defaced, they will be replaced immediately. If the employees discover any unlabeled containers or labels, which are defaced, they are expected to notify their supervisor.
 - iii. Portable containers, holding a potentially hazardous chemical (e.g. a bucket of solvent) drawn by an employee from a labeled container and intended for use of that employee only during the course of his or her shift, are not required to be labeled.
 Containers into which chemicals will be transferred and which can be expected to be used by more than one employee or for a period longer than one shift must be labeled.
 - iv. Under no circumstances are containers, which were previously used as food, or beverage containers to be used as portable containers.
- e. If and when the chemical supplier informs us of new hazards, labels for these portable containers will be changed accordingly.

10. NEW GHS LABELS AND PICTOGRAMS

a. There are several new label elements:

- i. Symbols called "Pictograms"
- ii. Signal Words
- iii. Hazard Statements
- iv. Precautionary Statements
- v. Product Identification
- vi. Supplier/Manufacturer Identification
- b. Health Hazards "Pictograms"



Acute toxicity (Severe) Acute toxicity (Less Severe): Irritant Dermal sensitizer

Acute toxicity (harmful) Narcotic Effects

Respiratory Track Irritation



Skin corrosion Serious eye damage/ Eye irritation



Carcinogen, Respiratory Sensitizer Reproductive toxicity, Target Organ Toxicity Mutagenicity, Aspiration Hazard

Physical Hazards "Pictograms"



Explosives Flammables Self Reactives



Self Reactives Pyrophorics Self Heating Emits Flammable Gas Organic Peroxides



Corrosive to Metals





Gases under Pressure

Oxidizer

- c. Signal Words
 - i. These are words used to indicate the severity of the hazard and alert employees to the potential hazard.
 - ii. Only 2 signal words will appear:
 - 1. "DANGER" (more severe hazard)
 - 2. "WARNING" (less severe hazard)
 - iii. Not all labels will have a signal word. Some chemicals are not hazardous enough to require that a signal word appear on the label.
 - iv. Hazard Statement
 - v. There are specific hazard statements that must appear on the label based on the chemical hazard classification.
 - vi. Examples:
 - 1. Flammable liquid and vapor
 - 2. Causes skin irritation
 - 3. May cause cancer
- d. Precautionary Statements
 - vii. Precautionary statements describe *recommended* measures that should be taken to protect against hazardous exposures, or improper storage or handling of a chemical.
 - viii. Examples:
 - 1. Wear respiratory protection
 - 2. Wash with soap and water
 - 3. Store in a well ventilated place
 - ix. Not necessarily a mandate for employees to follow
- e. Sample Label Wording:
 - x. Danger! Toxic If Swallowed, Flammable Liquid and Vapor
 - xi. Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Keep away from heat/sparks/open flame. No smoking. Wear protective gloves and eye/face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in cool/well-ventilated place,
 - xii. IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth.

In case of fire, use water fog, dry chemical, CO2, or "alcohol" foam.

xiii. See Safety Data Sheet for further details regarding safe use of this product.

Ferris State University 420 Oak Street, Big Rapids MI 49307-2020, Tel: 231-591-2151.

SAMPL	E LABEL	
PRODUCT IDENTIFIER	HAZARD PICTOGRAMS	
CODE		
Product Name		
SUPPLIER IDENTIFICATION Company Name Street Address	SIGNAL WORD Danger	
City State	HAZARD STATEMENT	
Postal Code Country	Highly flammable liquid and vap May cause liver and kidney dan	or. Iage.
Emergency Phone Number	SUPPLEMENTAL INFORMAT	ION
PRECAUTIONARY STATEMENTS	Directions for use	
 well ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measure against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear Protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispoae of in accordance with local, regional, national, international regulations as specified. In Case of Fire: use dry chemical (BC) or Carbon dinvide (CO₂) fire extinguisher to 	Fill weight: Lot N Gross weight: Fill Expiration Date:	– " Jmber Date
extinguish.		
First Aid If exposed call Poison Center. If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.		

11. TRAINING EMPLOYEES FOR EVERYDAY OPERATION

- a. Details of the facility specific hazard communication program:
 - i. Location and availability of written program and SDSs
 - ii. Physical hazards, health hazards and hazards not otherwise classified (HNOC) of the chemicals in the work area
 - iii. Chemical list, location and use of hazardous chemicals
 - iv. Secondary container labeling system
 - v. Specific procedures to protect employees from the chemical hazards
 - vi. Methods used to detect the presence or release of hazardous chemicals (sensor alarms, odors, visual other monitoring devices)
- b. Training may be given in a classroom setting or individually, depending on the situation. Audiovisuals will be used when appropriate. The instructor will document all training and attendance records shall be taken.
- c. All employees who are exposed to chemical hazards will receive initial training. New employees will receive training as part of their new employee orientation. At a minimum, retraining will be conducted whenever a new hazard is introduced to a work area or whenever a new work assignment exposes an employee to chemical hazards for which he or she has not previously been trained.
- d. During the training session, the employee will be informed that:
 - i. Ferris State University is prohibited from discharging or discriminating against an employee who exercises the rights regarding information about hazardous chemicals in the workplace.
 - ii. This written Hazard Communication Program, the labeling procedures, and the Chemical Listing and SDSs, which are part of this program, are all intended to provide additional information to employees.

12. Training Employees for Hazardous Non-Routine Tasks

- a. From time to time, employees perform tasks of a non-routine nature, which may expose them to certain chemical hazards.
- b. Examples of non-routine tasks may include:
 - i. The cleaning of boilers.
 - ii. The use of cleaning solvents and degreasers.
 - iii. The cleaning of machines and equipment.
 - iv. Painting.
 - v. The cleaning of containers (55-gallon drums, fiber barrels, etc.).
 - vi. Entry into confined spaces.

- c. These non-routine tasks may expose workers to chemical hazards, which have not been specifically addressed in our Hazard Communication Program.
- d. When assigning employees to perform non-routine tasks, it is our intention and policy to identify the chemical hazards associated with performing non-routine tasks, provide information on recommended procedures, and to give specific instructions as appropriate. This information will include:
 - i. Specific chemical hazards.
 - ii. Protection/safety measures the employees must take to lessen risks.
 - iii. Measures Ferris State University has taken to lessen the hazards including ventilation,
 - iv. Respirators, the presence of another employee, and emergency procedures.
- e. It is Ferris State University's policy that no employee will begin work in a confined space, or any other non-routine task, without first notifying management and receiving a safety briefing.

13. PROCEDURES FOR CONTRACTORS, OUTSIDE VENDORS, AND SUPPLIERS

- a. It is the responsibility of the Ferris State University to provide any contractors or others on the premises operated by Ferris State University who might be exposed to our chemicals with the following information:
 - i. Hazardous chemicals, which they may come in contact with.
 - ii. Measures they may take to lessen the risks.
 - iii. Where to obtain SDSs for the hazardous chemicals.
 - iv. Emergency procedures and first aid procedures.
- b. It is the responsibility of each Ferris State University department to obtain chemical information from contractors when employees will be exposed to hazardous chemicals being introduced into the facilities. It is the responsibility of each department to obtain SDSs for each hazardous chemical from the general contractor, contractor, sub-contractor, and service providers prior to the commencement of work. The SDSs are to be provided in advance to the commencement of work unless it is an emergency repair. Even for emergency repairs, SDSs for the hazardous chemicals introduced will be provided prior to commencement of work.

14. PIPE AND PIPING SYSTEMS

 a. Ferris State University facilities will label all piping systems in buildings. The hazards will be explained to employees in the course of their hazard communication training or as refresher hazard communications training.
 1.

15. STORAGE OF HAZARDOUS SUBSTANCES

- a. To the maximum extent possible, all poisons, acids, and flammable chemicals must be stored separately from all other substances, shall be in designated storage areas or cabinets that are approved for the type of exposure anticipated.
- b. All departments must schedule periodic inspections to ensure that all hazardous substances within the department are appropriately labeled and stored.

Appendix A

Departmental Responsibility Person Form

Purpose

This document is ______'s departmental program for Hazard Communication GHS and Control. Its purpose is to set forth guidelines and procedures for the proper handling, storage, and disposal of hazardous substances in order to ensure a healthful and safe work environment consistent with the Ferris State University's Hazard Communication & GHS Policy.

Responsible Person

The following individual has been assigned responsibility to ensure that this program is implemented throughout the department:

Name:					
Title:					
Address:					
Phone:					
E-mail:					

Site Coordinator(s)

In addition, where multiple departmental locations exist, each applicable department will assign a site coordinator who will be responsible to coordinate and manage the Hazard Communication and Control Program. The following is a list of each of our site coordinators:

Departmental Location	Site Coordinator	<u>Phone Number</u>

Appendix **B**

Departmental Hazard Determination & Disclosure Form

It is the responsibility of the designated Site Coordinator to ensure that storage, handling, and disposal of hazardous substances takes place in accordance with the guidelines and procedures set forth in this document.

Hazard Determination and Disclosure

Hazardous substances are those chemicals that are designated as hazardous by one of the following: the manufacturer, the Safety Data Sheet, or if they are listed on the various EPA lists of hazardous chemicals.

Manufacturers and suppliers are required to provide health and safety information to their customers on hazardous substances purchased. This is done through the use of Safety Data Sheets (SDS), which must be provided to the purchaser prior to, or at the time of shipment.

The Ferris State University is mandated by law to maintain copies of the required SDS for each hazardous substance in the work place and to ensure that these are readily accessible to employees at all times when they are in their work area(s). Signs that identify the site coordinator and location of data sheets must be posted at each site. These SDS signs should be posted in conspicuous locations in each facility.

The following is a list of the locations of each SDS book at our facilities:

Ferris State University Department Location SDS Book Location

Appendix C

Site Coordinator Responsibility

(Daily hands-on tasks of managing the SDS sheets)

It shall be the responsibility of each Site Coordinator to ensure that Safety Data Sheets and hazardous substance lists are developed, maintained in a current status, and posted or filed in the work place for employee use.

Site Coordinators will rely upon the manufacturer's determination of hazardous material as stated in the information provided on their published Safety Data Sheet (SDS).

An ongoing inventory shall be taken, and a complete and current master list of all hazardous substances shall be compiled for each area where such substances are stored, handled, or utilized.

Safety Data Sheets (SDS) shall be requested from manufacturers and suppliers, and all purchases of any item containing a "Hazardous Substance" must include the SDS with the delivery.

Any hazardous substance received without the Safety Data Sheet (SDS) should not be utilized until a follow-up request has been sent and an SDS received. If the vendor has not provided the SDS within 25 working days of the request, MIOSHA (517-322-1831) shall be notified for assistance as specified in the regulation.

Only "designated" employees shall have the authority to make purchases which involve "hazardous materials." All "designated" employees who purchase materials shall ensure that vendors and suppliers are notified of the SDS requirement. Open purchase orders shall not include hazardous substances that by law must be accompanied by an SDS. All "designated" employees should communicate with each respective site coordinator when purchases are made.

It shall be the responsibility of each Site Coordinator to ensure that Safety Data Sheets and hazardous substance lists are developed, maintained in a current status, and posted or filed in the work place for employee use.

Appendix D

Labels and Other Forms of Warning

Labels and Other Forms of Warning

Each product that contains hazardous substances must be properly labeled, tagged, or clearly marked with: (1) the identity of hazardous substance(s) within; (2) appropriate hazard warnings; and (3) manufacturer's name or you may use the GHS Labeling System.

Existing labels on incoming containers shall not be removed or defaced unless the container is immediately marked with the information required above.

If existing labels on containers received from suppliers already convey the required information, new labels do not need to be affixed. Likewise, if the labels are missing, the location's Receiving Department should not accept the containers.

Hazardous chemicals that are transferred to containers which are intended only for "immediate use" need not be labeled providing that such containers, upon completion of the transfer and use, shall be emptied. All other portable containers must be labeled with appropriate identity and hazard warnings.

Large containers or other stationary process containers may be labeled with signs or other appropriate written information as long as the container to which the information applies is identified.

Appendix E

Employee Information and Training

On any job where hazardous substances are used or stored, prior to initial assignment, and wherever the hazard changes, employees shall be provided with information and training on:

- 1. How to handle hazardous materials safely and use personal protective equipment.
- 2. Where to find and how to use Safety Data Sheets (SDS) and the hazardous substances labeling system.
- 3. Potential physical and health hazards associated with the use of hazardous substances or mixtures.
- 4. Methods and observations used to detect the presence or release of hazardous substances in the work place.
- 5. First aid and emergency procedures to be utilized in the case of spills or accidental overexposure.
- 6. General safety and health precautions necessary to prevent or minimize exposure to hazardous substances.
- 7. Throughout the facility, employees shall be informed whenever any temporary activity involving the use of hazardous materials is to take place. In such cases, employees shall be informed of the nature of the activity and advised of any necessary precautions or potential hazards to be avoided.
- 8. Employees shall be advised of the location and availability of the written Hazard Communication and Control program.
- 9. Employees shall be advised of their right to receive information regarding hazardous substances to which they may be exposed.
- 10. Employees shall be advised and trained regarding any new hazardous chemical introduced into the workplace they may be exposed to.

______ will coordinate and maintain records of all employees trained within our department.

Appendix F

Outside Contractors

Whenever outside contractors, vendors, suppliers, or emergency responders enter or work in an area where hazardous substances are stored or utilized, the supervisor for the area shall inform the contractors that their employees may encounter hazardous substances while performing their work, and provide the contractors with access to Safety Data Sheets (SDS) and suggested appropriate protective measures.

It is the responsibility of the Site Coordinator to obtain an SDS for each hazardous substance that an outside contractor will use on our premises and to assure that all necessary precautions are implemented and enforced.

Non-Routine Task

Whenever it becomes necessary for an employee to perform an unfamiliar, non-routine task, which involves exposure to or utilization of a hazardous substance, the employee's supervisor shall ensure that the employee receives appropriate safety and hazard awareness training prior to the work.

Storage of Hazardous Substances

To the maximum extent possible, all poisons, acids, and flammable chemicals shall be stored <u>separately</u> from all other substances, preferably in designated storage areas or cabinets that are approved for the type of exposure anticipated.

The <u>Site Coordinator shall schedule periodic inspections</u> to ensure that all hazardous substances within the facility are appropriately labeled and stored.

Chemicals and substances utilized in maintenance, and which are particularly vulnerable to incompatibility and possible adverse reaction or accident due to improper storage should be minimized. To the maximum extent possible, for storage purposes, chemicals and substances should be separated into organic and inorganic groupings and further sorted into compatible families within the two major groupings.

Safety Data Sheets (SDS)

Valuable information for the safe use, handling and disposal of chemical materials on the site may be obtained from the manufacturer or supplier in the form of a Safety Data Sheet (SDS). Each SDS describes the physical and chemical properties of one chemical material or substance. It also provides information for first aid treatment and special personal protection, procedures for cleanups, and precautions for storing and handling that are appropriate to the material. The Safety Data Sheet (SDS) is designed to inform the user of the properties of the material and to suggest proper controls for protecting employees, property and the environment against injury or damage. The data sheet also helps the user set up and maintain appropriate controls so that he can avoid preventable accidents.

Appendix G

HAZARD COMMUNICATION GHS CHECKLIST

In Self Audit only evaluate responsibilities assigned to you.

Self Audit	Responsible			
Auun	Hazard Communication GHS and Control Program			
	There is a written Hazard Communication program.			
	There is a designated individual at each site to manage Hazard			
	Communication at the worksite.			
	Hazard Determination			
	Safety Data Sheets(SDS)			
	 A new and revised SDS poster identifying the Site Coordinator 			
	and location of each SDS posted of the arrival of a new/revised SDS.			
	 An ongoing inventory is maintained showing type, location and quantity of all hazardous substances for each area where such substances are stored, handled or utilized. 			
	Labels and Other Forms of Warning			
	 Each product that contains hazardous substances is properly labeled. 			
	 Containers with missing labels are not accepted by the receiving department. 			
	Contractors – whenever contractors, vendors, suppliers, or emergency responders enter or work in an area where hazardous substances are			
	stored or utilized, the supervisor provides warning and access to the SDS.			
	Each hazardous substance container is properly labeled – The Safety and			
	Health Coordinator or Site Coordinator periodically inspects to assure that			
	all hazardous substances are properly labeled and stored. This is done:			
	Monthly			
	Quarterly			
	Annually			
	Training - Hazard Communication Standard			
	The trainer possesses the knowledge, skills, and ability to provide training.			
	Training is provided to affected personnel.			
	Employee understanding is tested and documented.			
	Employee training records are available from the supervisor.			

REFERENCES

For additional information on hazard communication requirements, refer to MIOSHA, General Industry Standard, Part 92 Hazard Communication and Employee Right to Know& Global Harmonization System