

Hazard Communication Program

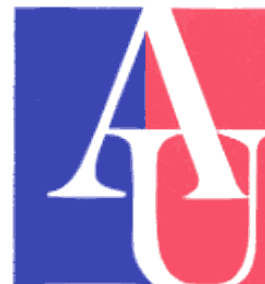


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Hazard Communication Program



1.0 Purpose / Policy

- 1.1 This Hazard Communication program provides detailed safety guidelines and instructions for receipt, use and storage of chemicals by Facilities and Administrative Services employees' and contractors. Reference: *OSHA Hazard Communication Standard* (1910.1200).
- 1.2 All persons working with or routinely coming into contact with hazardous materials are trained on the hazardous properties of the hazardous materials/chemicals they work with and the precautionary measures needed for protection from these hazards. Some agents used are explosive, corrosive, flammable, or toxic. Other products/chemicals are relatively safe to use and store but may become dangerous when they interact with other substances. To avoid injury and/or property damage, persons who handle products/chemicals in any work area must understand the hazardous properties of the products/chemicals. Before using a specific product/chemical, safe handling methods and health hazards must always be reviewed. Supervisors are responsible for ensuring that the personal protective equipment needed to work safely with chemicals is accessible and maintained for all employees on all shifts.
- 1.3 All FAS Safety Managers ensure that each work area maintains up-to-date Material Safety Data Sheets (MSDS) for each hazardous material used, and that the MSDS are readily available. The hazardous material Chemical Information List (CIL) and corresponding MSDS will be updated by each separate department on a monthly basis. A copy of the hazardous material CIL and any new or updated MSDS will be submitted to the Assistant Director of Central Plant Operations each month. The master files will be kept in the University's Risk Management Office.



2.0 Responsibilities

2.1 The responsibilities of the FAS Safety Managers are:

- 2.1.1 Ensuring proper conduct of the program through periodic audits and an annual review.
- 2.1.2 Maintaining an accurate master copy of the CIL, all corresponding MSDS, records of all new MSDS and inspections.
- 2.1.3 Ensuring compliance with this program by all departments.
- 2.1.4 Taking immediate corrective action for deficiencies found in the program.
- 2.1.5 Maintaining an on-going and effective Hazard Communication training program.
- 2.1.6 Making this program accessible to Facilities and Administrative Services' employees.

2.2 The Shipping, Receiving, and Materials/Products Storage Manager is responsible for:

- 2.2.1 Ensuring all received containers are properly labeled and that labels are not removed or defaced.
- 2.2.2 Ensuring all shipped containers are properly labeled and MSDSs are either provided with the shipment or mailed out to the receiver.
- 2.2.3 Ensuring MSDS are properly received and distributed.
- 2.2.4 Obtaining MSDS from the manufacturer for chemicals purchased from retail sources.

2.3 Supervisors are responsible for:

- 2.3.1 Promoting the practices and procedures of this program, and ensuring compliance by each employee within their department.
- 2.3.2 Providing specific chemical safety training for assigned employees.
- 2.3.3 Ensuring products/chemicals are properly used stored & labeled.
- 2.3.4 Ensure only the minimum amount necessary is kept in work areas.
- 2.3.5 Ensure up-to-date MSDS are readily accessible to all employees on all shifts.
- 2.3.6 Updating the CIL and all corresponding MSDS on a monthly basis or more often if required.



2.4 Employees are responsible for the following:

- 2.4.1 Complying with product/chemical safety requirements of this program.
- 2.4.2 Reporting any problems with the storage or use of products/chemicals.
- 2.4.3 Immediately report spills or suspected spills of products/chemicals.
- 2.4.4 Use products/chemicals only for specific assigned tasks in the proper manner.

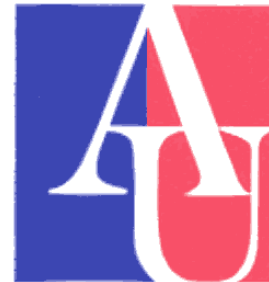
3.0 Definitions

- 3.1 **Chemical Manufacturer** - an employer with a workplace where chemicals are produced for use or distribution.
- 3.2 **Container** - means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or similar means of containing a hazardous chemical. For the purposes of this section, pipes or piping systems, engines, fuel tanks, or other operations system in a vehicle are not considered containers.
- 3.3 **Distributor** - means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.
- 3.4 **Employee** - means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Office workers who encounter hazardous chemicals only in non-routine, isolated instances, are not covered.
- 3.5 **Employer** - means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution.
- 3.6 **Hazardous Material (HM)** - any material, as defined in 29 CFR 1910.1200, that is a hazardous material.
- 3.7 **Hazardous Chemical** - any chemical that is a physical or health hazard per 29 CFR 1910.1200 (c), and with some exceptions are specified in the Community Right-to-Know Law of 1986 (Superfund Amendments and Reauthorization Act (SARA), Title III).
- 3.8 **Hazardous Waste (HW)** - any discarded substance as defined in 40 CFR 261 or applicable state regulation where the state has been granted enforcement authority by the Environmental Protection Agency.



4.0 **Program Elements**

The following is an outline of the areas covered within the Hazard Communication Program:



- 4.1 Hazard Determination.**
- 4.2 Labeling.**
- 4.3 Material Safety Data Sheets**
- 4.4 Product / Chemical Storage.**
- 4.5 Housekeeping Measures.**
- 4.6 Emergencies and Spills.**
- 4.7 Outside Contractors.**
- 4.8 Project Managers**
- 4.9 Safety Practices and Procedures.**
- 4.10 Training.**
- 4.11 Record keeping.**
- 4.12 Chemical Information List (CIL).**

4.1 Hazard Determination

Facilities and Administrative Services does not manufacture hazardous substances, but does purchase such materials from various manufacturers, importers and/or distributors. It is the responsibility of the supplier to determine potential hazards and relay that information through the use of Material Safety Data Sheets (MSDS).

4.2 Labeling

4.2.1 The Hazard Communication Standard (29 CFR1910.1200) requires that hazardous chemicals be labeled by the manufacturer. Each container label shall contain at least the following:

- 4.2.1.1 Identity of the hazardous chemical.
- 4.2.1.2 Appropriate hazard warning.
- 4.2.1.3 Name and address of the chemical manufacturer, importer or distributor.

- 4.2.2 When hazardous materials are received, the person who initially accepts and/or takes receipt of the hazardous material inspects the container to ensure that all labels are intact. When chemical products are received that do not contain the proper labels, the merchandise is returned as soon as possible with an explanation as to why the shipment was refused. Supervisors periodically inspect all containers to ensure compliance with labeling requirements.



Whenever chemicals are transferred from a primary or original container to another container, the identity of the hazardous material and the appropriate hazard warnings must be placed on the container. This is done by affixing a label to the container or otherwise permanently marking the container. All labels must be written in English. All piping containing hazardous materials is marked with the identity of the material and the appropriate hazard warning.

4.3 Material Safety Data Sheets (MSDS)

- 4.3.1 Material Safety Data Sheets are a key element in this Hazard Communication Program. Supervisors for each department will maintain MSDS for all hazardous material products/chemicals in use or that may be encountered in the work area.
- 4.3.2 Upon receiving a shipment of hazardous material products, the person accepting the delivery ensures that corresponding MSDS have also been received and contain the proper chemical information. Hazardous material product shipments will not be accepted without the required MSDS information.
- 4.3.3 Personnel receiving any hazardous material products must check the current records to determine if that particular MSDS is already on file. If the MSDS is not already on file then the “new” MSDS is copied and distributed to the FAS Safety Managers and each FAS unit supervisor.
- 4.3.4 Any employee can request a copy of any MSDS from the FAS Safety Manager. The request can either be verbal or in writing. Upon receiving such a request, any FAS Safety Manager will provide a copy of the MSDS to the employee as soon as possible, or provide the facilities for making a copy.

4.3.5 Each MSDS provides the following information:



- 4.3.5.1 Common Name and Chemical Name of the material.
- 4.3.5.2 Name, address and phone number of the manufacturer.
- 4.3.5.3 Emergency phone numbers for immediate hazard information.
- 4.3.5.4 Date the MSDS was last updated.
- 4.3.5.5 Listing of hazardous ingredients.
- 4.3.5.6 Chemical hazards of the material.
- 4.3.5.7 Information for identification of chemical and physical properties.
- 4.3.5.8 Name of person preparing MSDS.
- 4.3.5.9 Fire and/or Explosion Information:
 - Material Flash Point, auto-ignition temperature and upper/lower flammable limits.
 - Proper fire extinguishing agents to be used.
 - Fire fighting techniques.
 - Any unusual fire or explosive hazards.
- 4.3.5.10 Chemical Reaction Information:
 - Stability of chemical.
 - Conditions and other materials, which can cause reactions with the chemical.
 - Dangerous substances that can be produced when the chemical reacts.
- 4.3.5.11 Control Measures:
 - Engineering controls required for safe product use.
 - Personal protective equipment required for use of the product.
 - Safe storage requirements and guidelines.
 - Safe handling procedures.
- 4.3.5.12 Health Hazards:
 - Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV).
 - Acute or chronic symptoms of exposure.
 - Main routes of entry into the body.
 - Medical conditions that can be made worse by exposure.
 - Cancer causing properties if any.
 - Emergency and First Aid treatments.
- 4.3.5.13 Spill & Leak Procedures:
 - Clean up techniques.
 - Personal Protective Equipment to be used during cleanup.
 - Disposal of waste & cleanup material.

4.4 Product / Chemical Storage

Separating chemicals (solids or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Products/chemicals will be isolated by distance or barriers into the following groups:



- 4.4.1 Flammable Liquids - store in approved flammable storage lockers.
- 4.4.2 Acids - are stored only in approved acid storage cabinets.
- 4.4.3 Bases - do not store bases with acids or any other material.
- 4.4.4 Other liquids - ensure other liquids are not incompatible with any other chemical in the same storage location.

NOTE: Batteries and/or chemicals will not be stored in the same refrigerator that may be used for food storage. Refrigerators used for storing batteries and/or chemicals must be appropriately identified with a label on the outside of the refrigerator door.

4.5 Housekeeping Measures

- 4.5.1 The following practices and procedures are routinely observed:
 - 4.5.1.1 Maintain the smallest possible inventory of chemicals to meet immediate needs.
 - 4.5.1.2 Periodically review the stock of agents on site.
 - 4.5.1.3 Ensure that storage areas or equipment containing large quantities of chemicals are secure from accidental spills.
 - 4.5.1.4 Do not place hazardous chemicals in salvage or garbage receptacles.
 - 4.5.1.5 Do not pour chemicals onto the ground.
 - 4.5.1.6 Do not dispose of chemicals through the storm drain system.
 - 4.5.1.7 Do not dispose of highly toxic, malodorous chemicals down sinks or sewer drains.



4.6 Emergencies and Spills

In case of an emergency:

- 4.6.1 Implement the proper Emergency Action Plan
- 4.6.2 Evacuate people from the area and isolate the area.
- 4.6.3 If the material is flammable, turn off ignition and heat sources.
- 4.6.4 Call for Emergency Spill Response Team assistance if required at ext. 3636.

Only personnel specifically trained in emergency response are permitted to participate in chemical emergency procedures beyond those required to evacuate the area.

4.7 Outside Contractors

All outside contractors are required to provide a site-specific safety plan and follow the requirements of this program. Contractors are required to provide the following information to the FAS Project Managers prior to bringing any hazardous materials on site:

- 4.7.1 An accurate alphabetical list of all products/chemicals, by common name being utilized.
- 4.7.2 Copies of Material Safety Data Sheets for each hazardous material.

4.8 Project Managers

Project Managers are responsible for meeting with all contractors before commencement of work to apprise the contractors of the following:

- 4.8.1 The location and availability of MSDS and CIL
- 4.8.2 The locations of hazardous materials that the contractor's employees would be exposed or potentially exposed
- 4.8.3 Appropriate precautionary measures that their employees must take while working around the hazardous materials.

4.9 Safety Practices and Procedures

The following safety practices and procedures are observed when working with products/chemicals:

- 4.9.1 Read and understand Material Safety Data Sheets.
- 4.9.2 Assume all chemicals are hazardous.
- 4.9.3 Use chemicals in the smallest quantities as possible to minimize exposure and reduce possible harmful effects.
- 4.9.4 Keep the work area clean and orderly.
- 4.9.5 Use all necessary safety equipment.
- 4.9.6 Carefully label every container with the identity of its contents and appropriate hazard warnings.
- 4.9.7 Store incompatible chemicals in separate areas.
- 4.9.8 Substitute less toxic materials whenever possible.
- 4.9.9 Limit the volume of volatile or flammable material to the minimum needed for short operation periods.
- 4.9.10 Provide a means of containing the material if equipment or containers should break or spill their contents.



4.10 Training

4.10.1 Initial Orientation Training:

4.10.1.1 All new employees receive safety orientation training covering the elements of the Hazards Communication Program. This training encompasses the following areas:

- Location and availability of the written Hazard Communication Program.
- Location and use of MSDS.
- The specific physical and health hazard of all agents in the workplace.
- Specific control measures for protection from physical or health hazards.
- Methods and observation used to detect the presence or release of a hazardous chemical in the workplace.
- Location and availability of the CIL.

4.10.1.2 Supervisors are responsible for training all new employees before they are allowed to work with hazardous materials. Supervisors are responsible for documenting the training and forwarding the record to the FAS Training and Development Manager and the University's Risk Management Office.

4.10.2 Job Specific Training:

4.10.2.1 Employees will receive on the job training from their supervisor. This training will cover the proper use, inspection and storage of necessary Personal Protective Equipment and chemical safety training for the specific products/chemicals they will be using or will be working around.



4.10.2.2 Supervisors are responsible for training employees of the hazards associated with any hazardous materials used in non-routine tasks. Supervisors are responsible for forwarding a record of the training to the FAS Training and Development Manager and Risk Management Office.

4.10.3 Annual Refresher Training:

Annual Hazard Communication refresher training will be conducted as part of the continuing safety-training program.

4.10.4 On-The-Spot Training:

Supervisors will perform On-The-Spot-Training for any employee that request additional information or exhibits a lack of understanding of the label or MSDS, and forward a record of the training to the FAS Training and Development Manager and Risk Management Office.

4.10.5 Effective Employee Use of MSDS:

Employee must:

4.10.5.1 Know the location of the MSDS.

4.10.5.2 Understand the major sections of MSDS for each agent.

4.10.5.3 Check the MSDS when more information is needed or questions arise.

4.10.5.4 Be able to quickly locate the emergency information on the MSDS.

4.10.5.5 Follow the safety practices and procedures provided on the MSDS.

4.11 Record Keeping

The FAS Safety Managers will update the Hazard Communication program on an annual basis. Chemical Information List will be revised on a bi-annual basis. The FAS Training and Development Manager will maintain all training documentation. A copy of all training documentation will be kept in the University's Risk Management Office, as well as records of the Hazard Communication program updates and Chemical Information List revisions.



4.12 Chemical Information List

- 4.12.1 Facilities and Administrative Services are responsible for providing a master chemical information list that includes all hazardous materials used. The master chemical information list is maintained with this written Hazard Communication Program and is available at these locations: the Facilities Resource Center, Public Safety, the Risk Management Office, and Boiler Room.
- 4.12.2 The Materials Supply Supervisor is responsible for updating the satellite storerooms and central receiving.