

**Section:** Business and Support Operations

**Section Number:** 3.23.1.2

**Subject:** Safety, Security and Health: Hazardous Waste Disposal Policy

**Date of Present Issue:** 01/19/00

**Date of Previous Issues:**  
09/89

This instruction is designed to provide guidance with the on-site hazardous waste generation, storage, inventory, labeling, classification and the transport to disposal facilities in compliance with all Environmental Protection Agency (EPA) and Department of Transportation (DOT) regulations.

POLICY:

All generators of hazardous waste are legally responsible for proper handling and disposal of wastes listed in the Federal regulations as hazardous or acutely hazardous or hazardous by the nature of their dangerous properties. The University is required to document its dangerous properties and its efforts to package, label, store, transport, treat and dispose of hazardous waste in accordance with existing standards of practice established in EPA regulations for Hazardous Waste Management (40 CFR 260 through 270, as amended).

To comply with all EPA regulations as established by the Hazardous and Solid Waste Amendments (HSWA) and the Resource Conservation and Recovery Act (RCRA) a Lab Pack will be implemented at Lake Superior State University. The Lab Pack System will include by trained professionals (see Attachment 1):

On-site inventory and classification  
Computerized database for fast turn around  
Identification, packaging and disposal in one complete program

PROCEDURE:

There are certain responsibilities and safety practices that need to be followed by University staff. These areas of responsibility are in chronological order and will be defined as follows:

Material Safety Data Sheets  
Safe Handling Practices  
Proper Labeling  
Inventory  
Proper Storage  
Requesting Disposal

I. Material Safety Data Sheets (MSDS) [See Section [3.23.1](#)]

The Occupational Safety and Health Administration (OSHA) regulations require employers to maintain readily accessible files of the MSDS's for all products in the workplace containing hazardous substances [29 CFR 1910.1200 (g)].

To insure compliance of these regulations, the following steps should be followed:

- A. A copy of all Material Safety Data Sheets are to be readily accessible to all staff members and students for all products containing hazardous substances.
- B. A copy of all Material Safety Data Sheets are to be sent to the Physical Plant and updates forwarded on a routine basis.
- C. All staff members and students are to be indoctrinated in the Right-To-Know laws and the use of Material Safety Data Sheets.

II. Safe Handling Practices

The Occupational Safety and Health Administration (OSHA) requires the University to protect staff members and students from health hazards due to exposure of materials, setting specific standards for the handling of materials and the design of work environment. Some general safe handling practices should be followed:

- A. Specifically train those working with these products in the legally prescribed procedures for handling such products and the residuals of their use (29 CFR 1910.1200 as amended).
- B. Insure that proper protective equipment and clothing is worn when handling these products.
- C. Proper supervision is essential when handling products and residuals that have the potential to become hazardous waste.

III. Proper Labeling

All generators of RCRA regulated waste materials (40 CFR 261.2) are required to determine whether any waste being disposed of is hazardous using a systematic evaluation (40 CFR 262.11). This evaluation requires that the generator determine:

- A. Which wastes contain constituents listed in 40 CFR 261, Subpart D.
- B. Which wastes are regulated as hazardous waste based on dangerous properties listed in 40 CFR 261, Subpart C.

Non-hazardous material or waste added to hazardous waste for the purpose of labeling the mixture as non-hazardous waste is prohibited [40 CFR 261.2 (B) (2)].

- A. For University purposes, all products must be labeled with the chemical name(s) contained in a bi-product.
- B. Products that cannot be identified due to age or the condition of the label will be identified by an environmental group.

#### IV. Inventory

Each staff member responsible for the handling of these products will maintain a running inventory of the products to be disposed of. This inventory is to be kept in the designated storage area and completed as follows:

Building	Self explanatory
Department	Include room number of storage area
Contact	Staff member responsible
For Office Use Only	Environmental group only
Hazardous waste material	Product name
Physical State	Check as liquid, solid or gas
Container Size & Type	Self explanatory
Amount Remaining	(g, kg, l, ml, qt, etc)

Note: Any product for disposal is to be listed on the inventory prior to storage.

#### V. Proper Storage:

A. To determine the storage precautions of hazardous wastes, you must first determine its regulated dangerous properties. The following containing devices/areas should be adhered to when storing chemicals for disposal:

1.	Flammables (40 CFR 261.21) (49 CFR 173.300)	Locking fire proof cabinet
2.	Corrosives (Acids) (40 CFR 261.22)	Locking dry/cool storage area in a separately designated space
3.	Corrosives (Basics) (40 CFR 261.22)	Locking dry/cool storage area in a separately designated space
4.	Oxidizers (40 CFR 173.151)	Locking dry/cool storage area in a separately designated space (away from organics)
5.	Reactives (Air) (40 CFR 261.23)	Locking dry/cool storage area in a separately designated space (in air tight containers)
6.	Reactives (Water) (40 CFR 261.23)	Locking dry/cool storage area in a separately designated space (in water tight containers)
7.	Reactives (Cyanides) (40 CFR 261.23)	Locking dry/cool storage area in a separately designated space (away from acids)
8.	Reactives (Sulfites)	Locking dry/cool storage area in a separately designated space (away from acids)
9.	Organic Peroxide	Locking dry/cool storage area in a separately designated space (away from all hazardous waste)

B. EPA regulations for a generator's on-site storage of hazardous waste cover design and operation of marshalling and storage areas, and training requirements for hazardous waste handling employees (40 CFR 265.16 and subparts C and I). Generally, these detailed storage regulations begin to take effect 90 to 180 days after on-site storage of hazardous waste exceeds 1.0 KG of acutely hazardous waste or 1,000 KG/month of hazardous waste.

1. Storage areas containing hazardous waste for disposal are to be inspected at least once per week for:
  - Damaged or leaking containers
  - Proper storage as per Section V, Paragraph A of this instruction
2. The person or persons inspecting the storage areas are to date and sign the hazardous waste inspection sheet. This sheet should be located in or directly outside the storage area (see Attachment 2).

## VI. Requesting Disposal:

Prior to exceeding the limits for on-site storage without a permit, on-site accumulation and storage of hazardous wastes is controlled by EPA regulations (40 CFR 261.5 and 262.34). Inventory sheets are to be submitted to the Physical Plant Department prior to:

- A. Exceeding generation of 100 -1,000 KG/month of hazardous waste on-site up to 180 days without a permit.
- B. Exceeding sufficient and safe storage practices.

When the inventories are received they will be forwarded to an environmental group who will in turn:

- A. Classify the chemicals from the inventory
- B. Provide costs for disposal
- C. Screen and package the chemicals on-site
- D. Provide transportation and disposal in compliance with all Federal, State, and Local regulations including EPA and DOT.
- E. Provide for record disposal approvals, government notifications and manifesting.

### General Information

Among the major federal agencies which have identified dangerous materials which can become waste are the National Institutes for Occupational Safety and Health (NIOSH), Nuclear Regulatory Commission (NRC), Environmental Protection Agency (EPA), Department of Transportation (DOT), and the Public Health Service (PHS). These agencies continually evaluate the hazards of specific materials and mixtures to protect the public health and our environment. To date, about two thousand of the tens-of-thousands of materials used daily in commerce have become legally designated as hazards. The sources for current listing of federally designated dangerous materials are:

OSHA Toxic & Hazardous Substances	29 CFR 1910, Subpart Z
OSHA Hazardous Substance Advisory Information Sources	29 CFR 1910.1200, appendix C
NIOSH/OSHA	
Occupation Health Guidelines	DHHS (NIOSH) Publication No. 81-123
EPA Hazardous Wastes	40 CFR 261
EPA Hazardous Substances & RQ's	40 CFR 117
DOT Hazardous Materials	49 CFR 172.101
Regulated Radionuclides	49 CFR 173.435
Etiologic Agents	42 CFR 72.3
National Toxicology Program Carcinogens	NTIS Publication No. PB-83-135855
EPA Regulated Pesticides	40 CFR 165
EPA Toxic Water Pollutants	40 CFR 403, Appendix B

#### Attachments:

1. Hazardous Waste Lab Pack Inventory
2. Hazardous Waste Storage Inspection
3. Substances Recognized as Carcinogens Under OSHA's Hazard Communication Standard
4. Constituents of Some Commercial Products which are Regulated Hazardous Wastes
5. Regulated Hazardous Chemicals Known to be in Use at Some Health Care, Medical Research and Education Facilities.