

# JACKSON STATE UNIVERSITY

## Hazardous Waste Disposal

### 1. POLICY

It is the policy of Jackson State University to manage hazardous waste generated on campus in compliance with applicable federal, state, and local regulations. In the course of conducting the University's educational, research, and operational activities, certain hazardous waste materials are generated. Their collections and disposal require planning and care so as to prevent any adverse reaction upon the university community. The purpose of the following policy and procedures is to ensure that all hazardous waste is properly and safely managed, from its generation through handling, storage, and preparation for transportation.

### 2. RESPONSIBILITIES

The Office of Facilities Management (OFM) is responsible for establishing and facilitating a program for disposal of hazardous waste in accordance with applicable policies, rules, and regulations. University departments will work towards reducing the toxic materials, the generation of hazardous waste, and will take reasonable care to recycle, reuse, or dispose of all toxic or hazardous chemicals in an environmentally sound manner.

#### a. Environmental Health and Safety (Facilities Management)

1. Provides assistance in developing and approving proper waste handling, storage procedures, and equipment for these purposes.
2. Provides for timely pick-up of hazardous wastes and/or instruct the employee in proper procedures for waste disposal.
3. Provides copies of the Hazardous Waste Disposal procedures to laboratory and maintenance personnel.

#### b. Supervisor (Department Head/Dean)

1. Ensures that all hazardous wastes generated at the University are properly identified and safely packaged for pick-up by EHS personnel so that they may be disposed of safely in accordance with the procedures given below and with minimal effect on the environment.
2. Evaluates work tasks and procedures to identify opportunities to prevent or minimize the generation of hazardous wastes. Implements waste minimization practices such as material recovery/reuse, efficient chemical purchases, material substitution, or equipment and process changes.

#### c. Employee (Principal Investigator)

1. Whenever possible, chemically modifies or deactivates hazardous waste materials such that they may be disposed of by incineration, reclamation and other alternatives to landfill etc. EHS will assist, consult and advise, when necessary.
2. Follows the procedures in this section regarding hazardous wastes disposal. Call to the attention of the Environmental Health and Safety Coordinator any possible hazardous conditions resulting from the handling or storage of potentially hazardous wastes.
3. Properly package all hazardous wastes according to the instructions for each waste type.
4. Performs work tasks in a manner that minimizes the quantity or toxicity of hazardous waste generated.

### **3. PROCEDURES FOR DISPOSAL**

The following are general guidelines for the preparation and disposition of radioactive, chemical and biological waste.

#### **a. Radioactive Wastes**

Radioactive waste is material resulting from the manufacture or use of substances containing at least one element having unstable atomic structure.

1. Radioactive wastes should not be disposed of via the drain.
2. All waste regardless of form should be separated by isotope to the extent possible. If multiple label experiments are performed, the waste should be separated to the extent possible.
3. Sharps (items such as needles, broken glass or pipettes which could possibly puncture a plastic bag) should be placed in a proper container that is lined with a plastic bag. All radioactive waste should be labeled with investigator's name, estimated activity of each isotope, date and estimated amounts. When the container is full, it should be sealed and labeled for pick-up.
4. Containers of liquid waste should be placed in large pans or other suitable secondary containers so if accidentally broken or if there is a leak, the activity will be retained.

#### **b. Chemical Wastes**

Hazardous chemical waste refers to any material substance that is corrosive, reactive, inflammable or toxic.

1. No chemical wastes are to be flushed down the drain except with specific approval by EHS.
2. All chemical waste should be labeled with investigator's name, estimated activity of each isotope, date and estimated amounts. When the container is full, it should be sealed and labeled for pick-up. If a used solvent/acid bottle is used for collection of solvents, a new label indicating the contents must be affixed to the container and the old label must be removed or crossed out.
3. Whenever possible, solid wastes should be separated into either the burnable or non-burnable category. This will allow for incineration of items such as disposable laboratory garments, paper mats, plastic pipettes or containers, gloves, etc., and reduce the amount of material that must be disposed off-site.
4. Pipettes, broken glass or other objects capable of puncturing plastic bags must be packaged by placing a plastic bag in a broken glassware box, hazardous material box or other cardboard container (available from the warehouse). The pipettes or other items would then be placed in the container. Once the container is ready for disposal, the top must be taped shut. On the top of the box--mark as either burnable items, or glassware.
5. Plastic bags that have been punctured will not be picked-up.

**c. Biological Wastes**

Biological hazard refers those infectious agents presenting a risk of death, injury or illness to individuals who handle them.

1. Except as otherwise provided, all laboratory specimens or materials consisting of, containing, or contaminated with blood, plasma, serum, urine, feces, or other human or animal tissues or fluids, as well as inoculated media, cultures, and other potentially infectious materials must be either incinerated or sterilized by autoclaving or by use of a chemical sterilant (in cases where autoclaving or incineration is not possible) and approved by EHS before disposal. It is preferable that autoclaving be done in the same lab where the material was used.
2. When there is no reasonable evidence to indicate that clinical specimens or other materials may contain an infectious agent, discarding into the sanitary sewer without sterilization may be permitted. If in doubt, consult with EHS. Materials that may be discarded directly into the sanitary sewer include:

Uninoculated liquid mediums  
Tissue cultures

## Nutrient fluids

3. All glassware, pipettes, slides, etc., used in the examination or testing of biological materials must be autoclaved or chemically disinfected before being discarded or prepared for reuse. Single-use bottles, tubes, vials, and other biological specimen containers should not be placed in wastebaskets customarily emptied by janitorial personnel.
4. Any material sent out of the laboratory for autoclaving must be clearly marked for autoclaving.
5. Hypodermic syringes and needles shall be disposed of in such a manner as to prevent accidental injection of those individuals charged with disposal of waste materials.

## HAZARDOUS WASTE STORAGE

Containers of hazardous waste may be stored in an area of a laboratory or facilities operation near the point of generation. This area must be controlled by the principal investigator or workers generating the waste. State and Federal regulations stipulate the following requirements:

- 1) Any container used to store hazardous waste must be labeled "HAZARDOUS WASTE".
- 2) No more than one quart of an acutely hazardous waste or 55 gallons of other hazardous waste may be stored in the waste storage area. If this threshold is reached, it must be transferred within three days.
- 3) Be sure that the container is compatible with the hazardous waste. Use containers that are made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous **waste** to be stored.
- 4) Waste containers must be closed at all times and do not leak.

## HAZARDOUS WASTE DISPOSAL FORMS

Hazardous Waste Disposal Forms may be picked up at the EHS Office located in Facilities Management. In completing the waste pick-up form special attention should be paid to the following:

- a. Appropriate labels must be attached to the containers. Abbreviations for proper chemical names will not be accepted except with specific approval by EHS;

- b. If the waste is a mixture (i.e. organic solvents), all components and approximate amounts of each constituent must be listed in order for that waste to be picked-up;
- c. The principal user must sign the certification at the bottom of the waste pick-up form.
- d. Facilities Management will pick up hazardous waste on a monthly basis at a location designated by EHS.