

WASTE CATEGORIES AND DISPOSAL GUIDELINES

Environmental Health and Safety
Louisiana State University

General Waste Disposal Statement

Proper segregation of laboratory waste is required to ensure regulatory compliance, environmental protection, and worker safety. Incorrect disposal of laboratory waste can result in regulatory violations, environmental contamination, increased disposal costs, and potential exposure risks to personnel and waste handlers. All personnel generating waste are responsible for ensuring it is properly segregated and disposed of in accordance with these guidelines.

1. Red Biohazard Waste (Biohazard Boxes)

Red biohazard waste consists of **potentially infectious biological materials** requiring regulated medical waste disposal.

Examples include:

- Blood-soaked materials
- Cultures on solid agar media
- Petri dishes
- Contaminated disposable lab supplies
- Contaminated PPE
- Syringes **without needles**
- Small pieces of biological tissue

Requirements

Biohazard waste must be placed in:

- A **red biohazard bag**
- Inside a **rigid biohazard box with a lid**

The following rules apply:

- **No liquids are permitted in the red bag waste**

- **Biobox bags must be tied closed before the box is sealed**
- Boxes must be closed when **3/4 full or at a maximum weight of 35 lbs.**

Before disposal the following information must be written on the outside of the box:

- Principal Investigator name (or Clinician)
- Date
- Room number

Boxes must be **closed and sealed before being placed in the hallway or the biobox cage.**

Animal Tissue in Biohazard Boxes

If **animal tissue is disposed of in a biohazard box**, the following requirements apply:

- Tissue must be **double-bagged and then placed into a double-bagged biobox.**
- This is required to **prevent leakage during handling and transport**

2. Sharps Containers

Sharps are items capable of puncturing skin and causing exposure to potentially hazardous biological materials and/or chemicals and drugs.

Examples include:

- Needles
- Syringes with needles (do not separate)
- Scalpel blades
- Razor blades
- Broken glass or pipettes contaminated with biological material

Sharps must be disposed of in **approved sharps containers that are:**

- Rigid
- Puncture resistant
- Leak-proof
- Labeled with the universal biohazard symbol

Disposal

- Sharps containers must be **closed when 2/3 full**

- Closed containers must be **taped shut to ensure nothing escapes**
- The sealed sharps container is then placed inside a **biohazard box**

Pipette Tips

Pipette tips are considered **sharps** because they can puncture skin and cause exposure.

However, plastic pipette tips may be:

- **Double bagged**
- Placed **directly into a biohazard box**

This exception applies **only to plastic pipette tips**. All other sharps must be placed in an approved sharps container.

3. Broken Glass Boxes

Broken glass boxes are used for **clean, non-infectious glass waste**.

Examples include:

- Broken clean laboratory glassware
- Clean glass containers
- **Glass slides with fixed material** (fixed material is not infectious)
- Uncontaminated glass slides

Requirements

- Glass must be placed in a **designated broken glass box**
- The **bottom of the box must be taped closed before use** to prevent breakage or leakage.
- When full, the box must be **taped closed**
- The sealed box is disposed of through the **regular waste stream**

Glass contaminated with biological material must instead be placed in a **sharps container**.

4. Incinerator Waste (Animal Tissue and Carcasses)

The incinerator is used for disposal of animal tissues and carcasses.

Examples include:

- Animal tissues or parts
- Small animal carcasses
- Large animal carcasses

Tissue and Small Animal Carcasses

Animal tissue and **small animal carcasses** must be handled according to the following requirements.

Transport to DLAM

- Small animal carcasses must be transported using **leak-proof primary and secondary containment**.
- Typically, this consists of:
 - **Primary container:** sealed plastic bag
 - **Secondary container:** additional container, bag, or bin.
- This containment is required to **prevent leakages during transport**.

Transfer for Incineration

- Plastic materials **cannot be placed in the incinerator**.
- Prior to incineration:
 - Tissue or carcasses must be **transferred to a brown paper bag**
 - The paper bag must then be **double-bagged**
- This step ensures proper **incineration compatibility while preventing leakage**.

Storage

Small animal carcasses are typically **collected and stored by DLAM prior to incineration**.

Large Animal Carcasses

Large animal carcasses **are not placed in brown paper bags** and are managed in accordance with established **SVM carcass disposal procedures for incineration**.

Important Restriction

Plastics must NEVER be placed in the incinerator.

Only biological tissue material is permitted.

5. Liquid Biohazard Waste

Liquid biohazard waste **must not be disposed of in solid biohazardous waste.**

Liquid biological waste should generally be treated using **chemical disinfection prior to disposal.**

Typical disinfection practice:

- Final concentration of **10% bleach**
- **Minimum contact time of 30 minutes**

Small, securely sealed containers containing minute volumes of liquid biological material (e.g., ≤15 mL screw-cap vials) may be disposed of in biohazardous solid waste when they are **leak-proof and present in limited quantities.** Bulk liquid waste must be chemically disinfected prior to disposal.

However, laboratories must **always follow the procedures described in their approved IBC protocol,** as procedures may vary depending on the organism and material involved.

6. Chemical Waste and Hazardous Waste Disposal

Chemical waste must **never be placed in biohazard waste containers or in regular trash.**

Examples include:

- Ethidium bromide gels
- Chemical reagents
- Staining solutions
- Solvents
- Chemical mixtures

All chemical waste must be managed in accordance with **LSU's hazardous waste disposal requirements.**

Requirements

Chemical waste must:

- Be labeled with the **full chemical name (no abbreviations)**
- Be stored in **compatible containers**

- Remain closed when not actively adding waste
- Be stored in designated **hazardous waste accumulation areas**

Chemical waste must be **collected by Environmental Health & Safety (EHS)**.

Waste pickup requests should be submitted through **EHS Assistant**.

Do not mix chemicals for disposal or pour them down the drain.

7. Pharmaceutical Waste

Pharmaceutical waste must be managed **separately from chemical and biological waste**.

Acceptable Pharmaceutical Waste

The pharmaceutical waste drum may contain:

- Non-controlled pharmaceuticals of any type
- Pharmaceuticals in any container
- Saline bags containing pharmaceuticals
- Expired disinfectants or cleaners
- Expired pharmaceutical vials containing preservatives

Materials NOT Permitted in Pharmaceutical Waste Drums

The following items must not be placed in pharmaceutical waste containers:

- Needles (dispose of in sharps containers)
- Biological material (dispose of biohazard waste)
- Empty glass containers (dispose in a broken glass box)
- Empty plastic containers (disposed in recycling or trash)
- Saline-only IV bags (drain/trash)
- IV fluid lines (trash or red bag depending on contamination)
- Controlled pharmaceuticals (return to pharmacy)
- General garbage

Waste pickup must be requested through **EHS Assistant**.

SVM pharmaceutical drum sign -

Pharmaceutical waste inventories are periodically reviewed to ensure regulated compounds are properly identified and managed in accordance with DOT and EPA regulations.

8. Black Bag Waste (Regular Trash)

Black bag waste consists of **non-hazardous, non-biological waste**.

Examples include:

- Paper towels (not in contact with biological materials)
- Napkins and food containers
- Packaging materials
- Styrofoam packing
- Brown paper

Important Restrictions

- **Gloves are NOT permitted in black bag waste**
- Paper towels **must not have been used to clean biological materials**

If paper towels were used to clean **biohazardous materials**, they must be disposed of in **biohazard waste containers (bioboxes)**.

Black bag waste is disposed of in the **waste vendor's dumpster**.

9. Recycling

Please contact the Campus Sustainability Manager, Lisa Mahoney, at LMahoney@lsu.edu for details regarding recycling.
