Standard Operating Procedure (SOP): Biohazardous Waste Handling, Storage, and Pickup

Effective Date: 7/1/2025
Department: Safety & Emergency Management (SEM)
Approved By: Audra Points
Review Cycle: Annual
Applies To: All University personnel generating, handling, or coordinating biohazardous waste disposal.

1. PURPOSE

To provide clear, consistent procedures for the safe handling, containment, storage, and disposal of biohazardous waste in compliance with OSHA, CDC, EPA, and KDEP regulations. This SOP also outlines the internal logistics for scheduled waste pickups coordinated by SEM.

2. SCOPE

This SOP applies to all university departments and personnel that generate or manage biohazardous waste, including laboratories, vivariums, and clinical or research areas.

3. DEFINITIONS

- **Biohazardous Waste:** Any material contaminated with potentially infectious biological agents, including:
    - Human blood and OPIM
    - Sharps (e.g., needles, scalpels)
    - Cultures and microbiological waste
    - Pathological specimens
    - Contaminated PPE or cleanup materials
- **Sharps Waste:** Any item capable of puncturing skin that has been contaminated with biological material.

4. RESPONSIBILITIES

Role	Responsibilities
Lab/Area Personnel	Segregate, label, and contain waste; maintain logs; report storage issues.
Principal Investigators	Ensure team members are trained and follow SOP procedures.
SEM Staff	Coordinate pickups, inspect waste areas, and maintain disposal records.
Waste Contractor	Pick up and properly dispose of collected biohazardous waste.

5. GENERAL HANDLING PROCEDURES

Segregation and Containment

- Place **soft biohazardous waste** (e.g., gloves, tissues, etc.) in **red biohazard bags**.
- Use **puncture-resistant sharps containers** for contaminated sharps or broken glass.
- Do **not** mix with chemical or radioactive waste.
- Store containers in secondary containment where applicable.

Labeling

- Ensure all bags and sharps containers are marked with the **biohazard symbol** and labeled with the **lab name/room number**.

Storage

- Store waste in **designated accumulation areas** such as SC132, SC226, SC223, SC229, FH171C, and FH182.
- Do not overfill containers—sharps containers must be replaced when ¾ full.

Spill Response

- Evacuate and secure the area.
- Wear proper PPE and use designated **biohazard spill kits**.
- Clean with appropriate disinfectant (e.g., 10% bleach), dispose of cleanup waste in red bags.
- Report incidents to SEM.

6. Pickup Procedures (SEM Responsibility)

Scheduling

- SEM will coordinate **quarterly biohazard waste pickups** with the approved vendor (Greenleaf Environmental). Additional pickups can be arranged as needed.
- Contact all known waste-generating departments (e.g., Biology, Vivarium, etc.) via email prior to scheduled pickups.

Coordination and Recordkeeping

- Confirm all biohazardous waste accumulation areas have been reported. Update SOP if new areas are identified.
- Maintain logs of contact, pickup schedules, and generator locations.

Pickup Day Procedure

1. Wear PPE: **Lab coat and gloves** are required.
2. Use a cart to retrieve waste from designated accumulation areas (SC132, SC226, SC223, SC229, FH171C, FH182).
3. Transport collected waste to the **Hazardous Waste Storage Facility in SC131**.

Packing for Vendor Pickup

4. Sort and place waste in **cardboard biohazard boxes** lined with heavy-duty red biohazard bags.
5. Optimize packing by combining lightweight, bulky items with dense items. Use a scale to ensure **boxes do not exceed 50 lbs**.
6. When full:
    - Seal bags with **zip ties or tape**
    - Close and tape box shut
    - Mark box **weight clearly** on top using a permanent marker

Vendor Handoff

7. Meet the vendor at the **Science Center loading area**.
8. Transfer sealed boxes to vendor and **restock** cardboard boxes and red bags for next use.

7. Training Requirements

All personnel handling biohazardous waste must complete:

- **Initial and annual Bloodborne Pathogens Training**
- Lab-specific training on segregation, handling, and emergency procedures

8. Documentation and Compliance

- Maintain waste pickup logs, accumulation area maps, and generator notifications.
- Training records must be kept in departmental safety files.
- Inspections of accumulation areas are conducted routinely by SEM.

9. References

- OSHA 29 CFR 1910.1030 (Bloodborne Pathogens)
- CDC Biosafety in Microbiological and Biomedical Laboratories (BMBL)
- KDEP and EPA hazardous and infectious waste regulations
- Disposal of Regulated Hazardous Materials