



Management and Disposal of Biohazardous Waste

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Purpose:

To establish minimum sanitary practices relating to the proper segregation, handling, labeling, storage, treatment, and disposal of biological waste, as required by Chapter 64E-16, Florida Administrative Code, Florida Statutes Chapter 381.006, and the Code of Federal Regulations Ch. 29, part 1910.1030, so as to minimize exposure of employees, patients, the public, and the environment to disease-causing agents.

Application:

This procedure applies to all biomedical waste generators at Florida Gulf Coast University.

Definitions:

Biohazard - Any potentially hazardous or regulated biological material applicable to any laws, contracts, permits, and accepted biosafety guidelines.

Biological/Biomedical/Biohazardous Waste - Any solid or liquid waste presenting a threat of infection to humans. Products on campus include non-liquid tissue, body parts, blood, blood products, or body fluids containing human disease-causing agents; discarded sharps; pathological and microbiological waste containing blood or other potentially infectious materials; any materials contaminated with any potentially infectious materials; any animal carcasses or parts. Additional waste products include biological sharps such as syringes, vials, caps, pipettes, glass slides, and tissue culture bottles.

Biomedical Waste Generator - A facility or person producing a biomedical or biohazardous waste.

Contaminated - Soiled by any biomedical waste.

Decontaminated - The process of removing pathogenic microorganisms from objects or surfaces, rendering them safe for handling.

EH&S - Environmental Health and Safety (at Florida Gulf Coast University)

F.A.C. - Florida Administrative Code

F.S. - Florida Statute

Hazardous Waste - Those materials defined in Chapter 62-730, F.A.C.

NIH - National Institutes of Health

Point of Origin - The room or area where a biological waste is generated.

Puncture Resistant - Able to withstand punctures from contained sharps during normal usage and handling.

Restricted - The use of a lock, sign, or location, to prevent unauthorized entry.

Sharps - Objects capable of puncturing, lacerating, or otherwise penetrating the skin or waste bag.

Site-Specific Biomedical Waste Plan - The plan developed by each generator outlining the specific procedures for segregation, handling, labeling, storing, and disposing of biomedical waste generated at that site.

Transfer - Moving biomedical waste within a facility.

Transport - Moving biomedical waste away from a facility.

Treatment - Any process, including steam, chemical exposure, microwave shredding, or incineration, which changes the character or composition of biomedical waste to render it noninfectious.

Responsibilities of the Biomedical Waste Generator:

1. Implement specific biomedical waste procedures in accordance with the requirements set forth in this document.
2. Identify and segregate biomedical waste from other waste streams at the point of origin. Segregate contaminated sharps from non-sharps biological waste.
3. Treat all biological waste known to contain NIH Risk Group 3 or 4 agents through autoclaving or other treatment method before it leaves the point of origin.
4. Manage biological waste mixed with hazardous waste, as defined by Chapter 62-730, F.A.C., as a hazardous waste.
5. Dispose of all radioactive waste according to the *FGCU Radiation Safety Manual* and Chapter 64E-5, F.A.C.

6. Properly package all biomedical waste when container is $\frac{3}{4}$ full and/or weighs less than 30 pounds. Package and seal all biomedical waste, except loose sharps, in impermeable, red plastic bags inside the approved outer box prior to removal from the restricted area.
7. Red bags for containment comply with the requirements of 64E-16. The bags, boxes, and bins supplied by EH&S and MWaste meet the specifications of 64E-16.011 F.A.C. Documentation is maintained in the EH&S Infectious Waste Manifest folder on the FGCU network.
8. Place sealed biomedical waste bags and sealed sharps containers into the biomedical waste boxes provided by EH&S/MWaste. Tape all of the box seams, and do not overfill.
9. Mark or label the outside of the box with the point of origin (room number), name, and date. **Place the box in the proper location for pick-up by MWaste personnel.** Note: Transporters will not pick up improperly packaged, overweight, unlabeled, or leaking waste containers.
10. Place solid materials from a spill cleanup into an appropriate package and dispose as biomedical waste. Clean any surface contaminated with biomedical waste with a solution of detergent to remove visible soil and then disinfect with a bleach solution, alcohol, or other appropriate germicidal solution. Dispose of liquid waste from a chemical disinfection operation via the sanitary sewer system.
11. Discard sharps at the point of origin into a sharps container. Seal sharps containers when $\frac{3}{4}$ full. The international biological hazard symbol, at least one inch in diameter, must be on all sharps containers.

Note: "Broken Glassware", not contaminated with biological material, goes into separate, specially marked containers disposed in regular trash dumpsters when $\frac{3}{4}$ full.
12. **Train** all employees who may handle biomedical waste according to the specific biomedical waste procedure. Train employees on Definitions and Identification of Biomedical Waste, Segregation, Storage, Labeling, Transport, Decontamination, Containment, and the Contingency Plan for waste. Train employees before they come into contact with biomedical waste, and annually thereafter. Maintain a record of the training for at least 3 years.

Storage and Containment:

1. Biomedical waste storage may not exceed 30 days. All biomedical waste and sharps containers are to be labeled with the **first-use date** to ensure compliance with this requirement. The 30-day period begins when the first non-sharps item of biomedical waste is generated, the first non-sharps item is put into a sharps container, or when a sharps container storing only sharps is sealed.
2. All biomedical waste and sharps containers must have clean lids and be closed at all times, except when actively adding waste to the container.
3. Indoor storage areas shall have restricted access, the biohazard symbol on all entry doors, and be designated in the specific biomedical waste procedure. They shall be located away from pedestrian traffic (storage cannot be in hallways, restrooms,

classrooms, or other readily available public areas). Storage areas shall be vermin and insect free, and maintained in a sanitary condition.

4. Biological waste is stored in exam rooms, prep rooms, research and teaching labs for biological science.
5. Outdoor storage areas and containers must be conspicuously marked with the international biological hazard symbol, a minimum of 6 inches in diameter, and be secured against vandalism and unauthorized entry.
6. The biomedical waste shed near Seidler Hall (formerly AB7) in Parking lot 1 is the main on-site storage location for biomedical waste. Additional locations include Whitaker Hall, Alico Arena, Marieb Hall, and the EH&S Modular. Other temporary storage locations may be designated with approval from EH&S.

Labeling:

1. Bags, outer containers, and generator barcode labels are provided by the transporter. Cardboard containers are pre-printed with the transporter's name, address, registration number, and 24-hour telephone number. Reusable containers are labeled accordingly prior to transport. All outer waste containers must be rigid, leak resistant and puncture resistant. Reusable outer containers shall be constructed of smooth, easily cleanable materials and shall be decontaminated after each use.
2. All packages containing biomedical waste shall be visibly identifiable with the international biological hazard symbol and one of the following phrases: "BIOMEDICAL WASTE", "BIOHAZARDOUS WASTE", "BIOHAZARD", "INFECTIOUS WASTE", or "INFECTIOUS SUBSTANCE", according to 29 C.F.R. 1910.1030, Occupational Exposure to Blood borne Pathogen Standard.

Transport Requirements:

Only a State approved transporter may remove the biomedical waste containers from campus. Our registered biomedical waste transporter is MWaste Medical Waste Technologies, # 7367, of 801 Anchor Road, Naples, FL; 239-434-1888.

Permits and Exemptions:

Contact EH&S for information regarding the required permits and exemptions for the University.

Recordkeeping:

1. Environmental Health & Safety will maintain the required records documenting transportation and disposal of biomedical waste (manifests, certificates of destruction, and invoices).
2. Biomedical waste generators must maintain their specific written procedures and training records. All biomedical waste records must be maintained for a minimum of 3 years.

Contingency Plan:

If our contracted registered biomedical waste transporter is unable to transport our biomedical waste, we will contact Stericycle.

Decontaminating Biomedical Waste Spills:

Inform supervisor so an assessment of the spill can be conducted:

1. Only employees who have been trained will conduct spill clean-up.
2. Wear appropriate personal protective equipment (gloves, etc.)
3. Cover spilled liquid with absorbent towels or granules, then spray with an approved tuberculocidal disinfectant (10:1 bleach solution).
4. Contain all materials and PPE, and dispose of as regulated medical waste.

References and Resources:

- Chapter 64E-16, Florida Administrative Code
- Code of Federal Regulations Ch. 29, section 1910.1030
- Biosafety in Microbiological and Biological Laboratories (BMBL) 5th Edition, Centers for Disease Control, Office of Health & Safety (OHS)
- Biosafety in the Laboratory: Prudent Practices for Handling and Disposal of Infectious Materials, National Academy Press, Washington, D.C. (1989).