

**The University of Texas at San Antonio
Office of Laboratory Safety and Compliance**

Part A

Biological Waste Management Safety Plan

i. Signature Page

This Biological Waste Management Safety Plan has been reviewed for regulatory compliance and best management practices by the undersigned individuals and is hereby adopted for use and compliance by all employees at The University of Texas at San Antonio.

PRINTED NAME	SIGNATURE	TITLE	DATE
Anthony Vallejo	Signature on file	Director, Laboratory Safety and Compliance	09/03/2024
Richard M. Garza	Signature on file	Asst. Director, Laboratory Safety and Hazardous Materials	09/03/2024

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iii. Emergency Procedures & Contacts

The Office of Laboratory Safety and Compliance (LSC) is responsible for properly and safely managing all biological waste for The University of Texas at San Antonio. Risks associated with performing this task involves potential exposure to infectious waste and associated biological health hazards as well as needle sticks.

Equipment Failure: If there is loss of power or equipment holding biological waste fails, LSC should be contacted at (210) 458-8515 or call the Police Dispatch (4242) after hours and they will contact an LSC Representative

Personnel who become contaminated with an infectious or biological agent should take immediate action:

1. Remove contaminated clothing.
2. Thoroughly wash the affected area with soap.
3. Vacate the premises.
4. Post sign on door – “Area Contaminated, Do Not Enter”.
5. Seek immediate medical care.
6. If affected area is to the eyes, flush with copious amount of water and seek medical care.
7. Report accident to LSC

Needle sticks or cuts with infected agent require that personnel immediately report the injury and seek medical care at the nearest emergency care clinic.

A. Emergency Contact Personnel include:

Joo L. Ong	Senior Director of Research Integrity and Infrastructure	210-458-7318
Anthony Vallejo	Director, Laboratory Safety	210-458-8515
Richard Garza	Asst. Dir. Of Laboratory Safety and Hazardous Materials Management	210-458-5808
Mohammad Khan	BioSafety Officer	210-458-5807

I. UTSA Overview and Purpose

The University of Texas at San Antonio (UTSA) is committed to providing a safe and healthful work environment to faculty, staff, and students. Hazardous Materials Management (HMM) manages UTSA’s disposal of biological waste to comply with TCEQ Title 30 TAC Part 1 Chapter 326 Medical Waste Management, 29 Code of Federal Regulation 1910.1030, Title 25 Part I Chapter 96 (Bloodborne Pathogen Control) of Texas Administrative Code §96.101 and Chapter 81 of the Health & Safety Code §301 – 306.

In order to ensure proper management of biological waste, HMM routinely monitors laboratories known to generate biological waste/sharps containers and makes waste collections on a daily basis. This waste is then transported to the West Campus storage facility for storage and disposal via a licensed third-party disposal contract company. It is the responsibility of the Principal Investigator (PI) for each

laboratory to dispose of biological waste in the proper shipping containers (biological waste box) provided by HMM.

II. Scope

This program applies to all faculty, staff and students who generate biological waste within their work environment and to all UTSA owned, operated or leased facilities generating biological waste. Biological waste boxes and sharp containers are provided free of charge for use in UTSA research labs and facilities by HMM.

III. Responsibilities

A. Hazardous Materials Management

1. Maintaining the Biological Waste Management Plan and conduct training for UTSA personnel who generate biological waste.
2. Ensuring that all generators of biological waste are identified.
3. Providing the necessary containers to collect and dispose of biological waste.
4. Picking-up and collecting all biological waste and transporting waste containers to UTSA's secured holding facility prior to disposal.
5. Responding to emergencies or concerns involving any biological hazards.
6. Maintaining documentation of shipment and destruction of biological waste.

B. Faculty, staff and students

1. Managing their generated biological waste in accordance with this plan.
2. Ensuring that all biological waste is placed into appropriate waste containers provided by HMM.
3. Marking all waste containers appropriately by generator to include:
 - a. Principal Investigator or Area Supervisor Name
 - b. Building
 - c. Room Number
 - d. Date Container was sealed
 - e. Request# from SciShield
4. Submitting the waste disposal request through <https://utsa.SciShield.com/>.

IV. Periodic Review

This program will be reviewed periodically, at least every three years for compliance with the most recent applicable federal, state and local rules and regulations.

V. Biological Waste

A. Infectious Wastes include the following categories:

1. Cultures and stocks of infectious agents
2. Pathological waste. **NOTE: human remains must be doubled bagged with red bags provided by HMM.**
3. Human blood and blood products
4. Contaminated sharps
5. Contaminated animal carcasses, body parts, and bedding
6. Wastes from Student Health Services
7. Patient isolation wastes, unless determined to be non-infectious by the infection control committee at the Student Health Care facility.
8. Any other contaminated equipment or material which, in the determination of the Institutional Biosafety Committee, presents a significant risk of infection because it is contaminated with, or may reasonably be expected to be contaminated with, pathological agents.

NOTE: All infectious waste should be autoclaved before packaging and submitted using the incineration waste profile name in BioRAFT.

B. Treated Biohazard Wastes

Treated Biohazard Wastes are all biohazard wastes that have been treated by one of the following methods and rendered harmless and biologically inert:

1. Incineration by UTSA's biological waste contractor in an approved incinerator.
2. Steam sterilization at sufficient time and temperature to destroy infectious agents in waste ("autoclaved").
3. Chemical disinfection where contact time, concentration and quantity of the chemical disinfectant are sufficient to destroy infectious agents, present in the waste.
4. Any other method approved by Texas Department of State Health Services and generally recognized as effective and suitable for landfill disposal.

C. Sharps

Sharps are used in animal or human patient care for treatment or in medical research, or laboratories. Sharps include:

1. Hypodermic needles
2. Contaminated syringes (with needle)
3. Pasteur pipettes
4. Scalpel blades
5. Suture needles
6. Broken blood vials or collection tubes
7. Needles with attached tubing
8. Broken culture dishes (regardless of presence of infectious agents)
9. Other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

VI. Guidelines for Special Biohazards Waste Disposal

The following guidelines should be followed for biohazard waste disposal:

- A. If any infectious waste is also a chemical waste, call HMM for assistance with disposal AFTER disinfection
- B. Biohazard wastes that are also radioactive shall be treated according to requirements for both biohazard and radioactive waste.
- C. Untreated biohazard waste shall NEVER be disposed of in the municipal solid waste stream.
- D. All laboratories shall evaluate their waste stream to ensure that all biohazard wastes, including sharps and syringes, are treated in a manner as described earlier before disposal in the municipal solid waste stream. (i.e. the trash).

VII. Treatment Before Disposal

- A. Prior to any treatment, all biohazard wastes shall be enclosed in a puncture-proof, red biohazard bag that is marked with the universal biological hazard symbol.
- B. All sharps intended for disposal, whether contaminated or not, shall be enclosed in a sharp's container. Recapping needles is dangerous and shall be avoided. It is recommended that all unwanted syringes be placed in the sharp's container for disposal. Do not cut needles prior to placing in the sharps containers as this generates an aerosol and can spread potentially infectious material.
- C. Special consideration should be given to the disposal of contaminated pipettes.
- D. Animal carcasses/human specimens should be transferred to the designated refrigerators found in Attachment 1. If animal carcasses/human specimens have been contaminated with infectious agents, they must be autoclaved prior to transfer to these refrigerators from the lab. All other laboratories generating animal carcass/ animal waste must seal the waste in an appropriate heavy-duty, clear plastic bag marked with the PI name and laboratory location (bldg./room) on the outside of the bag. Laboratory personnel will transfer the bags from the lab to the designated freezer
- E. All biological waste generated in BSL-3 labs must be autoclaved prior to leaving the labs. Once the biological waste is autoclaved, it should be placed in biological plastic bags, then in the disposal cardboard box provided by HMM.

VIII. Optional Disposal of Biohazard Waste

- A. HMM will dispose of all untreated waste generated from BSL 1 & 2 Labs.
- B. Any biohazard waste that has been treated as described in section V (B) above, should be packaged so that it is clearly evident that the waste had been effectively treated AND contains no chemical or radioactive waste and is NOT subject to regulation as biohazard waste and may be collected, transported, and disposed of as MUNICIPAL WASTE. Any UTSA Faculty or Staff utilizing this option must have their process validated and approved by Laboratory Safety and Compliance.

- C. The waste from the BSL -3 labs must be autoclaved prior to HMM handling the waste. Once this waste is autoclaved, place it in a biohazard container and refrigerate until pick up by UTSA's approved waste contractor.

IX. Collection and Disposal of Biological Waste

The following process will be used by HMM to collect and dispose of biological waste and sharps containers throughout campus.

- A. Pick-up will occur as requested by generators through <https://utsa.SciShield.com/>.
- B. All biological waste boxes and sharps containers must remain inside the laboratory or designated storage location until pick up by HMM.
- C. No container will be placed in the hallway outside the labs.
- D. The following markings must be attached or written in permanent marker on the outside of each container:
 - 1. Name of Principal Investigator
 - 2. Building and Room Number
 - 3. Date Container was sealed
 - 4. Request# from BioRAFT
- E. All contents of must be properly sealed in the bag by double tying the bag or using a tie wrap.
- F. Sharps container lid must be locked, with a piece of tape over the lid to secure.
- G. The boxes should not exceed 20 pounds.
- H. Once all biological waste has been collected, HMM staff will affix the control number label, provided to UTSA by the approved waste contractor to each box.

X. Record Keeping

- A. When the UTSA HMM approved waste contractor picks up the waste containers, a waste manifest will be generated and signed by an HMM representative. A copy (yellow) will be retained by HWMD for our records.
- B. The original copy of the manifest will be returned to HMM once the waste has been incinerated or treated at the disposal facility.
- C. HMM will file and maintain this record for at least 5 years.

Attachment I

The following locations contain freezers which are used to store animal carcass:

<u>Building</u>	<u>Room</u>
BSB	3.03.24
SAL	1.03.03