

**The University of Texas at San Antonio
Office of Environmental Health, Safety and Risk Management**

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
J. Brian Moroney	Signature on file	Director, EHSRM	8/19/2011
Richard M. Garza	Signature on file	Environmental & Construction Safety Manager	8/19/2011

Original: 11/08/2008

This plan was reviewed/revised on 8/19/2011 and replaces the 11/08/2008 version. Changes to this plan have been highlighted in "gray" and are summarized below:

Revised: 8/19/2011

Section iii, page 4 Emergency Contact Personnel;

Change David Hernandez to Steven Barrera.

Change Title for Richard Garza to Environmental and Construction Safety Manager;

Change Title for Wendy McCoy to Laboratory Safety Manager;

Change RSO to Curtis Nesbit , Radiation and Laser Safety Coordinator.

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iii. Emergency Procedures & Contacts

The Office of Environmental Health, Safety and Risk Management (EHSRM) 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, EHSRM should be contacted at (210) 458-5250 or call the Police Dispatch (4242) after hours and they will contact an EHSRM 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 EHSRM.

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

Emergency Contact Personnel include:

Steven Barrera, Director of Public Safety/Chief of Police 458-4242
Brian Moroney, Director, Environmental Health, Safety & Risk Management 458-5250
Richard Garza, Environmental & Construction Safety Manager, EHSRM 458-5808
Wendy McCoy, Lab Safety Manager 458-6101
Curtis Nesbit, Radiation and Laser Safety Coordinator 458-6697

I. Overview & Purpose

The University of Texas at San Antonio is committed to providing a safe and healthful work environment to faculty, staff, and students. The Office of Environmental Health, Safety and Risk Management conducts UTSA's management and disposal of biological waste to comply with 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, EHSRM 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 disposal via a licensed third party disposal contract company. It is the responsibility of the Principal Investigator for each laboratory to dispose of biological waste in the proper shipping containers provided by EHSRM.

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/sharp containers are provided free of charge for use in UTSA research labs and facilities.

III. Periodic Review

This program will be reviewed periodically, but at least every 3 years for compliance with the most recent applicable federal, state and local rules and regulations.

IV. Responsibilities

A. Environmental Health, Safety and Risk Management is responsible for:

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 secured holding facility prior to disposal.
5. Responding to emergencies or concerns involving any biological hazards.

B. Faculty, Staff and Student Responsibility

All faculty, staff and students are responsible for:

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 EHSRM.
3. Marking all waste containers appropriately, to include:
 - a. Principal Investigator or Area Supervisor Name
 - b. Building
 - c. Room Number
 - d. Date Container was sealed
 - e. Initials of individual closing the container
4. Submitting the waste disposal form through EHSRM website for pick-up.

V. Biological Waste

A. Infectious Wastes include the following categories:

1. cultures and stocks of infectious or pathological waste
2. human blood and blood products
3. contaminated sharps
4. contaminated animal carcasses, body parts, and bedding
5. wastes from Student Health Services
6. laboratory wastes
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

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 Stericycle 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 or treatment or in medical research, or industrial 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 EHSRM 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 waste stream. (i.e. the trash or down the drain)

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 sharps container. Recapping needles is dangerous and shall be avoided. It is recommended that all unwanted syringes be placed in the

sharps containers 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 specimens must be placed inside plastic bags to prevent fluid spills within the refrigerators. Clear plastic bags are preferred so that the technician picking up the waste can see the contents and avoid potential injury.
- 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 EHSRM.

VIII. Optional Disposal of Biohazard Waste

- A. EHSRM will dispose of all untreated waste generated from BSL Level 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 EHSRM.
- C. The waste from the BSL -3 labs must be autoclaved prior to EHSRM handling the waste. Once this waste is autoclaved, place it in a biohazard container and refrigerate until pick up by UTSA EHSRM approved waste contractor.

IX. Collection and Disposal of Biological Waste

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

- A. Pick-up will occur as request by generators [on our web site](#).
- B. All biological waste boxes and sharps containers must remain in the laboratory or designated storage location.
- C. No container will be placed in the hallway outside the labs.
- D. The following markings must be written in permanent marker or on a sticker and placed on the outside of each container:
 - 1. Name of Principal Investigator
 - 2. Room Number
 - 3. Date Container was sealed
- E. All contents of must be properly sealed in the bag by tying the bag or using a tie wrap.
- F. Sharps containers must be tightly sealed to avoid spillage of contents.
- G. The boxes should not be heavier than 25 pounds.
- H. Once all biological waste has been collected, EHSRM staff will affix the control number label, provided by UTSA EHSRM approved waste contractor, to each box.

X. Record Keeping

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

Attachment 1

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

Building	Room
BSB	3.03.24
BSE	3.300A
SAL	1.03.03
SB	3.01.54
SB	3.01.34
SB	3.01.48
MS	3.02.36
MBT	1.240
DB	Drive-in ramp