Biohazardous Material Waste Management			
Category:	QUALITY MANAGEMENT		
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Approved by:	Dr. Alaa Abdullah AlMasud	Effective Date:	

1.0 PURPOSE

The purpose of this SOP is to outline the procedures for the safe handling, segregation, storage, and disposal of biohazardous material waste within Nourah's Tissue Biobank. Proper management of biohazardous waste is essential to ensure the safety of personnel, the environment, and compliance with relevant regulations.

2.0 SCOPE

This SOP applies to all personnel involved in the generation, handling, and disposal of biohazardous waste within Nourah's Tissue Biobank, including tissue samples, contaminated materials, and any other potentially infectious waste.

3.0 ROLES AND RESPONSIBILITIES

This SOP applies to all The SOP applies to all personnel of Nourah's Tissue Biobank members

Biobank Personnel	Responsibility
Biobank Manger	Responsible for overseeing the implementation of this SOP, ensuring compliance with regulations, and conducting regular audits of waste management practices.
Laboratory Technicians	Responsible for the proper segregation, handling, and disposal of biohazardous waste according to this SOP.
Environmental Health and Safety (EHS) Officer	Responsible for training personnel, monitoring compliance, and managing waste disposal contracts with licensed service providers.
All Personnel	Responsible for adhering to the procedures outlined in this SOP when handling biohazardous waste.

4.0 MATERIALS, EQUIPMENT, AND FORMS

Listing of the materials, equipment, and forms being used to achieve the goals of the SOP, this list will mainly contain necessary materials and, or recommendations that may be substituted by alternative or equivalent materials more suitable at the time of testing.

Material to be used	Site
Biohazard waste bags (red or yellow, depending on local regulations)	
Sharps containers (puncture-resistant and leak-proof)	
Autoclave and autoclave bags (for waste that requires sterilization)	
Disinfectants (e.g., bleach, alcohol)	
PPE (gloves, lab coats, face shields)	
Biohazard waste storage containers	
Labels and markers for identifying waste	

5.0 POTENTIAL HAZARDS

In this part of the SOP, we explain the potential hazards from chemicals and methodologies used in this procedure. It will also contain information on how to handle these chemicals and the level of biosafety

Material	Safety and handling

6.0 PROCEDURES

This part of the SOP explains the methodology step by step to ensure that the goal of the SOP is achieved with minimal risk and minimal mistakes to provide the optimal results

6.1 WASTE SEGREGATION

1. Identify Biohazardous Waste:
    a. Identify all materials that qualify as biohazardous waste, including contaminated gloves, pipettes, culture plates, and any other disposable items that have encounter biohazardous material and label it.
2. Segregate Waste:
    a. Segregate biohazardous waste from general waste.
    b. Use designated biohazard waste bags for non-sharp items.
    c. Place sharps in designated sharps containers immediately after use.
3. Labeling:
    a. Clearly label all biohazard waste bags and sharps containers with the biohazard symbol and appropriate information, such as the date and the type of waste.

6.2 WASTE HANDLING AND STORAGE

1. Always wear appropriate PPE when handling biohazardous waste, including gloves, lab coats, and face shields.

2. Transport biohazardous waste to the designated storage area using leak-proof containers to prevent spillage.
3. Store biohazardous waste in a secure, designated area until it can be treated or disposed of.
4. Ensure that storage areas are clearly marked with biohazard signs and are inaccessible to unauthorized personnel.

6.3 WASTE TREATMENT AND DISPOSAL

1. Autoclave biohazardous waste that can be sterilized before disposal. Follow the autoclave's operating procedures to ensure proper sterilization.
2. Record the autoclave cycle parameters (time, temperature, and pressure) in the waste treatment log.
3. For waste that cannot be autoclaved, use a chemical disinfectant (e.g., bleach) to treat the waste before disposal.
4. Ensure proper dilution and contact time as specified by the disinfectant manufacturer.
5. Arrange for the collection of treated biohazardous waste by a licensed waste disposal service provider.
6. Ensure that all waste is packaged and labeled according to local regulations before disposal.

6.4 SPILL RESPONSE

1. In the event of a spill, contain the spill using absorbent materials and notify the safety Officer immediately.
2. Wear appropriate PPE and use disinfectant to clean the affected area thoroughly.
3. Dispose of cleanup materials as biohazardous waste.
4. Complete an incident report detailing the spill, cleanup actions, and any follow-up measures taken.

7.0 REFERENCES

1. CTRnet SOPs "08.01.002 Biohazardous Waste Management"
2. Declaration of Helsinki.
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3. Human Tissue and Biological Samples for use in Research. Operational and Ethical Guidelines. Medical Research Council Ethics
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4. Best Practices for Repositories I. Collection, Storage and Retrieval of Human Biological Materials for Research. International Society for Biological and Environmental Repositories (ISBER).
   http://www.isber.org/Search/search.asp?zoom_query=best+practices+for+repositories
5. National Bioethics Advisory Commission: Research involving human biological materials: Ethical issues and policy guidance, Vol. I: Report and recommendations of the National Bioethics Advisory Committee. August 1999.
   http://bioethics.georgetown.edu/nbac/hbm.pdf
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8.0 REVISION HISTORY

SOP No.	Date Revised	Author	Summary

9.0 APPENDICES