UNIVERSITY OF SOUTHERN MAINE
Office of Research Integrity & Outreach

Procedure #:	IBC-001
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Reviewed By:	Biosafety Officer; IBC Chair; EH&S
Procedure Title:	Transportation and Disposal of Biohazardous Materials

1.0 Objective:

1.1 To describe the guidelines for the safe transportation and disposal of biohazardous materials at the University of Southern Maine (USM).

1.2 To minimize the amount of waste disposed of as biohazardous.

2.0 General Description:

2.1 Although biohazard waste containers are often conveniently placed in all of the laboratories, it is important to remember that these bags are for biohazard and contaminated wastes only, and are not to be used for regular trash.

2.2 Disposal of non-biohazard waste in a biohazard waste container adds significant costs to waste management.

3.0 Definitions

3.1 Biohazardous materials are infectious agents or hazardous biological materials that present a risk or potential risk to the health of humans, animals or to the environment. The risk can be direct through infection or indirect through damage to the environment. Types of biohazardous materials include, but are not limited to:

3.1.1 Human or non-human primate blood, body fluids or tissues

3.1.2 Animal blood, body fluids, tissues, carcasses, bedding, and other waste that contain organisms or agents not usual to the normal animal environment AND that are pathogenic or hazardous to humans

3.1.3 Recombinant DNA and/or transgenic materials: molecules that are constructed outside living cells by joining natural or synthetic DNA segments to DNA molecules that can replicate in a living cell, or molecules that result from the replication of those described above.

3.1.4 Infectious materials: organisms and viruses infectious to humans, animals or plants (e.g. parasites, viruses, bacteria, fungi, prions, rickettsia)

3.1.5 Toxins: Poisonous substances produced within living cells or organisms

3.1.6 Select Agents: as defined by the United States Department of Agriculture

3.1.7 Cell Cultures or Cell Lines of human origin, or that are known to contain an agent that is pathogenic to humans, animals or to the environment or has a causative association to such a pathogen.

3.2 Contaminated materials are those that have had direct contact with a biohazardous material.

3.3 Incidental exposure is a release of human blood, body fluids or tissues that is limited in quantity and exposure potential, and which does not pose a significant safety or health hazard to any persons or the environment. An incidental spill may be safely cleaned up by employees who are familiar with the hazards of the substance. This does not include disposable laboratory equipment such as pipette tips that were purposely used to transfer human blood, body fluids, or tissues.

3.4 Uncontaminated materials are any items that have not had direct exposure to a biohazardous material, or that has had only incidental exposure.

3.5 Chain of custody is the set of traceable records that provide unbroken control over a material and its containers from initial collection to final disposal.

4.0 Responsibility:

4.1 It is the responsibility of the Biosafety Officer, Environmental Health and Safety (EH&S) staff, and investigators to execute this SOP.

5.0 Procedure:

5.1 Transfer and Transportation of Biohazardous Materials

5.1.1 Chain of Custody

5.1.1.1 In any transfer of biohazardous materials inter or intra-university, there shall be appropriate documentation of:

5.1.1.1.1 The transferor and transferee of such materials

5.1.1.1.2 The date and time of transfer

5.1.1.1.3 A detailed description of what is being transferred

5.1.1.1.4 Any comments regarding the condition and nature of the material

5.1.1.2 Chain of custody is documented through the Request for Biohazardous Materials Transfer Form.

5.1.1.2.1 The form must be completed and submitted to EH&S prior to any transfer or transportation of a biohazardous material.

5.1.2 Equipment

5.1.2.1 In any transportation of biohazardous materials, the proper vehicle and safety equipment must be used by all parties. The biohazardous material must be effectively contained so as to prevent any leakage.

5.1.3 Safety

5.1.3.1 Appropriate safety precautions must be taken in any transfer or transport of biohazardous materials. This

includes personal protective equipment for anybody handling containers holding biohazardous materials.

5.2 Disposal of Uncontaminated Materials

5.2.1 *Regular Waste*: Place in wastebaskets with plastic liners.
5.2.1.1 These are collected nightly by the Department of Facilities Management (DFM).

5.2.2 *Recyclable Materials*: Place in blue recycle containers. This includes universally recyclable glass, paper, cardboard, plastic, and metal materials.
5.2.2.1.1 These are collected nightly by DFM

5.2.3 *Ordinary Glass*: Place into regular trash or recyclable container if applicable
5.2.3.1.1 These are collected nightly by DFM

5.2.4 *Broken Glass*: Place into a cardboard box with plastic liners that are clearly marked "BROKEN GLASS". Once full, seal the box with tape.
5.2.4.1.1 These are collected by DFM on an as-needed basis.

5.2.5 *Liquid Waste*: Pour down the sink, flush with a copious amount of tap water and rinse the container.

5.2.6 *Uncontaminated Animal Carcasses*: If the carcass is not a biohazardous material, package the carcass in air-tight, opaque plastic bags. They should be frozen if possible, and must be discarded in the normal trash

5.2.7 UNCONTAMINATED ITEMS ARE NOT TO BE DISPOSED OF AS BIOHAZARDOUS WASTE

5.3 Disposal of Biohazardous Waste

5.3.1 *Solid Biohazardous Waste*: Must be placed in a biohazard container (with lid) lined with a red autoclave bag.

5.3.1.1 When these containers are full they are to be sealed and removed by the appropriate laboratory or DFM personnel to Basement Room 89 of the Science Building. This waste must be autoclaved and placed in the receptacle for pickup by USM's outside contractor

5.3.2 *Liquid Waste*: All liquid biohazardous waste must be collected in local, labeled waste containers. Appropriate bleach must be added into the waste containers; after 10 minutes, the liquid waste must be poured down a laboratory sink and flushed with a copious amount of tap water.

5.3.3 *Sharps Waste*: All needles, scalpels, razor blades, contaminated glass pipettes, microscope slides, contaminated broken glass, or other sharps must be disposed of in a closeable, puncture resistant, leak proof container (red or clear plastic "sharps" containers). When full, these containers must be closed up and removed by the appropriate personnel to the autoclave in Basement Room 89 of the USM Science Building. This waste must be autoclaved and placed in the receptacle for pickup by USM's outside contractor

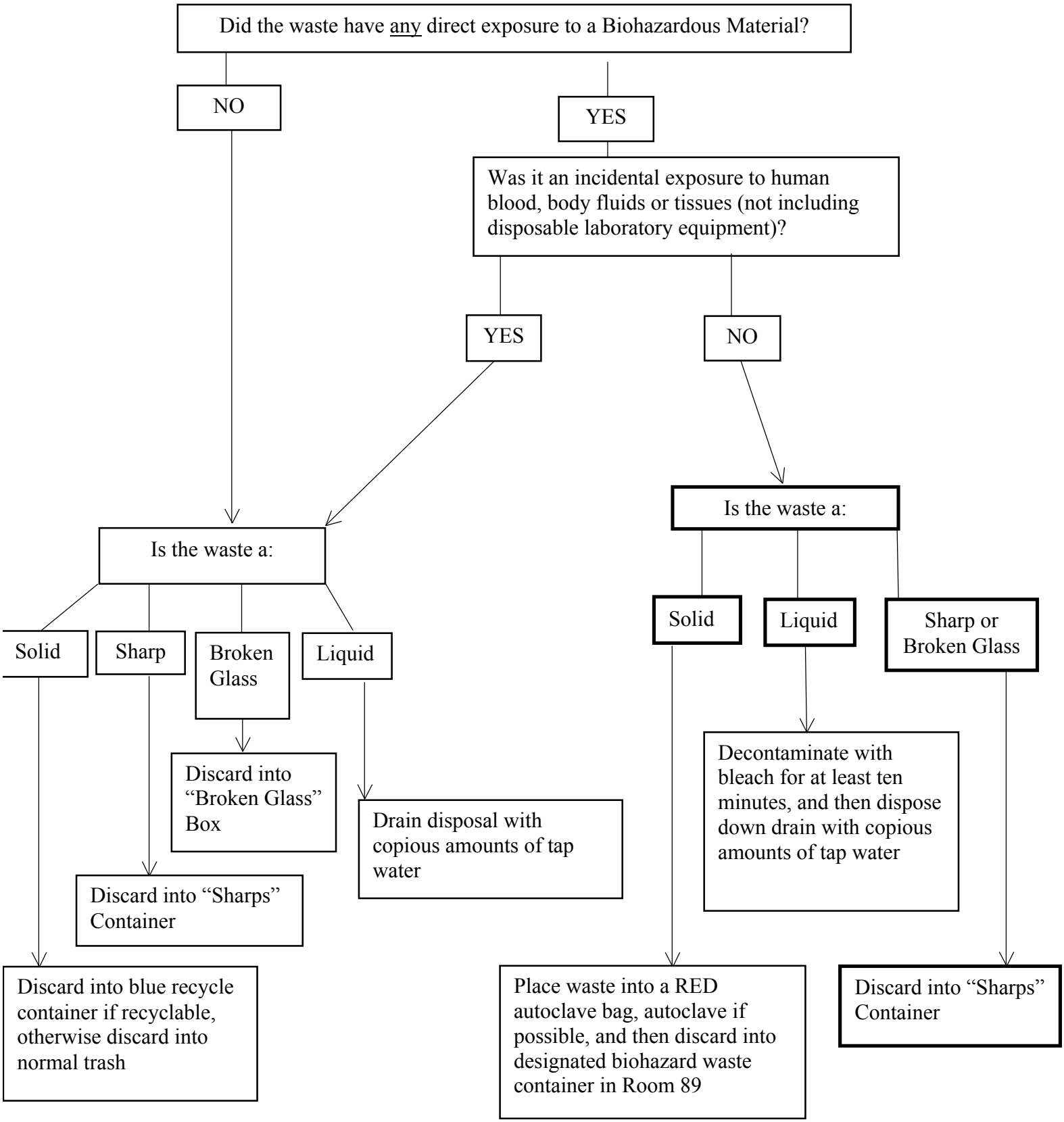
5.3.4 Only biohazardous materials may be disposed of as biohazardous waste

5.4 Biohazardous waste is collected by an outside contractor at a frequency consistent with USM's need.

6.0 References:

6.1 29 CFR 1910.120; 40 CFR 311

Disposal of Biohazardous Materials Flow Chart



Request for Biohazardous Materials Transfer Form

Please Note: This form must be filled out COMPLETELY and submitted to *Environmental Health & Safety* before any transfer of biohazardous materials inter or intra-university.

Transferor Name: _____ Department: _____

Location: _____

Transferee: _____

Date of Transfer: _____ Time of Transfer: _____

Material Type (not trade name) and Quantity (e.g., 2 litter)

_____

_____

Condition and Nature of the Material (e.g., solid, liquid)

_____

To be filled out by Environmental Health & Safety

Received on (date): _____

NOT APPROVED	**APPROVED**
Reason:	Evaluator Name:
____ Not labeled properly	_____
____ Inappropriate container	
____ Not sealed properly	
____ Request information not complete	