

#### 1.0 Introduction

This Standard Operating Procedure (SOP) outlines measures required for the safe release of laboratory equipment and furniture. These procedures will ensure that Memorial University of Newfoundland personnel are not exposed to potential hazards during the transport, service or disposal of laboratory equipment and furniture.

#### 2.0 Scope

This SOP applies to all MUN personnel responsible for laboratory equipment and furniture that will either leave a laboratory for any purpose (including but not limited to servicing/repair, relocation and disposal) or require service (e.g. repair, certification, etc.) within the laboratory.

#### 3.0 Responsibilities

This section outlines responsibilities within the university for the implementation of this SOP.

### 1. Environmental Health and Safety (EHS)

- Review and revise this SOP as necessary.
- Provide advice regarding appropriate decontamination methods that shall be employed.

#### 2. Administrative Heads

Ensure that supervisors, employees, and students are notified of their responsibilities under this SOP.

### 3. Principal Investigators

- Ensure that all laboratory equipment and furniture is decontaminated as outlined in this SOP before said equipment or furniture leaves the laboratory for servicing/repair, transfer or disposal.
- Ensure that a Laboratory Equipment and Furniture Decontamination form (Appendix A) is completed and attached to applicable equipment/furniture prior to release.
- Report any incidents (e.g. hazardous material spills, equipment/furniture contamination, personnel exposure, etc.) to EHS immediately.

#### 4. Technical Services and Facilities Management personnel

- Ensure that a completed Laboratory Equipment and Furniture Decontamination form is attached to any laboratory equipment or furniture prior to service/repair, transfer or disposal.
- Maintain copies of completed Laboratory Equipment and Furniture Decontamination forms.

#### 4.0 Procedure

LEFR v1.1

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The Principal Investigator (PI) is ultimately responsible for ensuring that all laboratory equipment and furniture is free from hazardous substances prior to servicing within the laboratory (e.g. biosafety cabinet and chemical fume hood annual recertification) or removal from the laboratory (e.g. transfer or disposal). Service and support personnel are within their right to refuse pick-up or repair/service for any item if they suspect it has not been properly prepared or fully decontaminated. A fully completed Laboratory Equipment and Furniture Decontamination form (Appendix A) serves to ensure that equipment is safe to handle by service personnel.

> Responsible Committee: University Laboratory Safety Committee Date of last review: November 2018 Date of next review: 2021

Page 1 of 5



#### a. Initial Preparation:

All electrical equipment should be unplugged. All materials inside should be removed and properly discarded or decontaminated. If the equipment is to be moved, all cords must be bundled and tied so that they will not drag across the floor and pose a tripping hazard. Fridges and freezers must be defrosted and allowed to come up to room temperature prior to decontamination. All materials used to soak up the thawed water should be either:

- Collected in autoclave bags and sent for autoclaving (for biohazardous waste).
- Sent for disposal as radioactive waste (only when wipe tests show contamination in the water).
- Disposal of as regular garbage if no hazardous materials are present.

Please note that Technical Services refrigeration mechanics should be contacted to conduct refrigerant disposal and recovery prior to disposal of refrigerated equipment.

Incubators and other equipment with water temperature jackets must be completely drained if they are to be moved or sent for surplus.

All electronics could potentially contain heavy metals in the lead solder.

Biosafety cabinets/chemical fume hoods must be completely decontaminated prior to in-lab servicing (e.g. annual certification).

#### **Decontamination Procedure:**

#### **Biohazards**

In order to properly decontaminate equipment which may have been used with a variety of biohazards, 10% bleach can usually be used, with a contact time of 10 minutes (it is the PI's responsibility to ensure that the decontamination solution used is effective against the biohazards in question). Note: 10% bleach may be corrosive to metal surfaces. Following decontamination with 10% bleach, rinse surfaces with water to prevent corrosion.

#### Radiation

For all equipment used with for radioisotope work and/or storage, a wipe test must be performed on all exterior and exposed interior surfaces of the equipment.

Note: Surface contamination that exceeds 0.5 Bq/cm<sup>2</sup> must be decontaminated and re-wiped to ensure that decontamination was successful.

#### Chemical

All exterior and exposed interior surfaces must be cleaned with soapy water. It is the responsibility of the supervisor to ensure that non-visible contamination (e.g. ethidium bromide) is thoroughly cleaned. If cleaning is not possible, then the item should be wrapped to prevent contamination/exposure and labelled with the contaminant.

LEFR v1.1 Responsible Committee: University Laboratory Safety Committee

Page 2 of 5

Date of first issue: November 2018 Date of last review: November 2018 Date of next review: 2021

2019-02-014



#### **Submission of Form**

Completed laboratory equipment and furniture decontamination forms (Appendix A) must be signed by the Principal Investigator or departmental designate responsible for the equipment. A copy of the signed form should be submitted with the requisition for service. **The original form must be attached to the front of the decontaminated item.** Technical Services or Facilities Management can then be contacted to arrange for repair or removal of the item. For items that have been decontaminated for biological or radiation hazards, a copy of Appendix A must be sent to the BSO (bso@mun.ca) or RSO (rso@mun.ca), respectively.

LEFR v1.1 Responsible Committee: University Laboratory Safety Committee Page 3 of 5
Date of first issue: November 2018 Date of last review: November 2018 Date of next review: 2021
2019-02-014



Appendix A: Laboratory equipment and furniture decontamination form.

Equipment/furniture information					
Building:		Room #:			
Description of equipment/furniture:		Model #:			
1 1		Serial #:			
		University ID #:			
Nature of work					
□ Service	☐ Disposal	☐ Transfer	□ Other*		
*If other, describe	•				
Provide a brief description	on of the nature of work:				
1					
Health & Safety hazards (check all hazards likely to be present)					
☐ Biological	☐ Chemical	☐ Radioactive	□ Other*		
*If other, describe (e.g. electrical, compressed gas, heavy metals, asbestos, etc.)					
Provide a brief description	on of the hazards present:				
_	_				
Equipment/furniture decontamination					
Has the equipment/furni	ture been decontaminated	?	□ Yes □ No		
Decontamination da	nte:				
Individual who perf	formed decontamination:				
	nination method used. If 1	no, explain why:			
Personal protective equipment (PPE) required (check all that apply):					
□ None	☐ Leather gloves	☐ Latex/nitrile gloves	☐ Eye protection		
☐ Foot protection	☐ Hearing protection	☐ Respiratory protection	☐ Coveralls/lab coat		
Other:					
Principal Investigator certification					
The undersigned cartifies that the information provided in this form is correct and that the					
The undersigned certifies that the information provided in this form is correct and that the equipment/furniture referenced has been decontaminated as described.					
Name:		Signature			
Date:		Telephone #:			

LEFR v1.1



### Version History:

Version	Date	Author(s)	Notes	
1.0	2016-03-29	Rod Hobbs	First writing.	
1.1	2017-01-12	Rod Hobbs	Included Technical Services edits.	
1.1	2018-11-14	Rod Hobbs	Laboratory Safety Committee approval	

LEFR v1.1 Responsible Committee: University Laboratory Safety Committee Page 5 of 5
Date of first issue: November 2018 Date of last review: November 2018 Date of next review: 2021
2019-02-014