

Environmental Health and Safety

100 Morrissey Blvd. Boston, MA 02125-3393 617.287.5445 www.ehs.umb.edu

Laboratory Equipment Decontamination

Standard Operating Procedure

SOP Number:

L-01-14

Effective Date:

May 1, 2014

Next Review:

May 1, 2015

PURPOSE

To ensure that lab equipment and devices are removed from service, whether for disposal, servicing or moving in a safe and compliant manner. The procedure will help minimize the risk of exposure to laboratory personnel, moving personnel and Environmental Health and Safety (EHS) staff when moving laboratory equipment.

2. SCOPE

Applies to all laboratory equipment at the UMass Boston campus including refrigerators, instruments, fume hoods, biosafety cabinets, pneumatic pumps, acid/base baths.

3. PRECAUTIONS AND HAZARDS

Lab equipment and apparatuses pose a special risk because of hazardous material used or stored in these articles and other possible physical hazards.

4. PROCEDURE

4.1 De-energized Equipment

Each piece of equipment needs to be de-energized. For most devices this will simply mean unplugging the apparatus from a wall outlet. In other cases it could mean removing pressure from a pneumatic device or gas storage unit, or removing a charge from a stored capacitor.

4.2 Remove Hazardous Materials

All chemical or radioactive substances must be removed by lab staff and placed in the appropriate container for transport, storage or disposal. EHS must be contacted for any disposal of hazardous material. In the case of a refrigerator or freezer, refrigerant must be removed by Facilities staff. In no circumstance will liquids or chemicals be permitted to remain in apparatuses.

4.3 Decontaminate Equipment

Apparatuses will need to be decontaminated by appropriately trained personnel. The work and environment in the lab will dictate what sort of decontamination is needed. In the event that only chemicals were used in the environment, wiping the surfaces with a cleaner will suffice if there are no heavy residues or major spills. Lab personnel should consult with EHS in the case of heavy residue or spillage. Specialize decontamination procedures may be necessary for equipment that has been used with biological materials. Note the order of decontamination is important for equipment that has multiple hazards. First deal you should with radioactive materials followed by biological materials and then chemical hazards.

If the article was in the environs of radioactive materials, special decontamination protocols will be needed. These procedures may include a radiation contamination survey and should be adhered to strictly. The Radiation Safety Office should be consulted to determine the exact needs.

In the event that radiological <u>and</u> non-radiological materials are present both decontaminations will need to be followed.

If the article was in the environs of biological materials, special protocols will be needed. These procedures may include wiping surfaces with a dilute bleach mixture. For biosafety cabinets and/or clean benches an outside vendor may be required to properly decontaminate and disconnect the unit and to certify the unit once it is reinstalled in its new destination. For questions about this please contact EHS.

4.4 Complete and Attach Decon Form

Following decontamination, lab personnel will complete the attached "Equipment Release Form " indicating that the equipment is properly decontaminated and ready to be moved. The form should be affixed to the equipment in a visible location.

5. ROLES AND RESPONSIBILITES

5.1 Principal Investigator (PI)

The Principal Investigator is responsible for ensuring the equipment is deenergized and decontaminated according to the requirements of the chemical, biological, and radiological safety programs, guidelines and protocols prior to vacating the lab. The PI is required to provide EHS with information about any potential hazards associated with the equipment or remaining in the space.

5.2 Designee of the PI

The PI may delegate tasks to lab staff and colleagues appropriate to their level of training, knowledge, and abilities. However, in all cases, it remains the PI's ultimate responsibility to assure tasks are completed satisfactorily according to the guidelines and protocols.

5.3 Environmental Health and Safety

EHS is responsible for providing safety and regulatory advice to the PI, the department and the move contractor (if applicable). EHS may inspect equipment and verifies decontamination is completed. If equipment is being moved, EHS will be available during the move and will respond to issues that may develop.

5.4 Radiation Safety Office

The Radiation Safety Technician in collaboration with the Chair of the Radiation Safety Committee will provide radiation safety and regulatory advice to the PI, the department and the move contractor. The Radiation Safety Technician inspects equipment and verifies that decontamination is complete.

5.5 Moving Contractor (if applicable)

The move contractor is responsible for only moving equipment that has been properly decontaminated and verified with an Equipment Release Form.

6. REFERENCES

NA

7. EQUIPMENT AND MATERIALS

Decontamination equipment and supplies as well as appropriate personal protective equipment.

8. TRAINING

Basic laboratory safety training for anyone involved in decontamination.

9. DEFINITIONS

EHS:

Environmental Health and Safety

UMass Boston:

UMass Boston shall include the campus at 100 Morrissey

Boulevard

10. RECORDKEEPING

EHS shall maintain a copy of the Lab Equipment Decontamination Forms

11. ATTACHMENTS

Equipment Release Form Contacts

Contact	Phone	Email	
Environmental Health and	617.287.5445	umbehs@umb.edu	
Safety			
Radiation Safety Office	617.320.8831	RSO@umb.edu	

Poter & charles	Peter Schneider EHS Director	4.29.14
Approved by signature	Name, Title	Date



Equipment Decontamination Release Form

Environmental Health and Safety (EHS) May 2014

Instructions

This form should be completed after the equipment is cleaned and decontaminated following the "Laboratory Equipment Decontamination" SOP. The signed form should then be affixed to the equipment.

Equipn	nent Description	n				
	Manufacturer					
	Model#,					
	Serial #					
	Current Location (Bldg. Rm)					
Equipn	nent Contact	Name				
		Phone #				
		Email				
	Equipment uipment has be	en used with the	following materials (Check all that apply):			
0	Chemicals (list high risk chemicals or "normal")					
0	Biological Agents (list biological agents used)					
0	Radioactive Materials (list isotopes used)					
0	This equipment has never been used with radioactive materials, chemicals, or biological agents. Principal Investigator's Agreement					
I certify	y that my staff a	nd I have adequa	tely cleaned and decontaminated this equip	oment.		
Pl's Signature				Date		
	manage and the same of the sam					



EHS FORM 04.28.14