



Environmental Health and Safety

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Laboratory Equipment Decontamination

Standard Operating Procedure

SOP Number:	L-01-14
Effective Date:	May 1, 2014
Last Review:	November 5, 2025

1. 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

This procedure applies to all laboratory equipment at the UMass Boston campus including refrigerators, instruments, fume hoods, biosafety cabinets, pneumatic pumps, acid/base baths or other equipment that may be used with hazardous materials.

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. OEHS 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. If 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 OEHS in the case of heavy residue or spillage. Specialized 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, you should deal with radioactive materials followed by biological materials and then chemical hazards.

If the article was in contact with radioactive materials, special decontamination protocols would be needed. These procedures may include a radiation contamination survey and should be adhered to strictly. OEHS should be consulted to determine the exact needs.

If radiological and non-radiological materials are present both decontaminations will need to be followed.

If the article was in contact with biological materials, special protocols would 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 re-installed in its new destination. For questions about this please contact OEHS.

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 RESPONSIBILITIES

5.1 Principal Investigator (PI)

The Principal Investigator is responsible for ensuring the equipment is de-energized 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 ensure tasks are completed satisfactorily according to the guidelines and protocols.

5.3 Office of Environmental Health and Safety

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

5.4 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

American National Standard for Laboratory Decommissioning ANSI/AIHA Z9.11-2008

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

OEHS: Office of Environmental Health and Safety
UMass Boston: UMass Boston shall include the campus at 100 Morrissey Boulevard

10. RECORDKEEPING

OEHS shall maintain a copy of the Lab Equipment Decontamination Forms

11. ATTACHMENTS

Equipment Decontamination Release Form

	Zehra Schneider Graham OEHS Director	11/05/2025
Approved by signature	Name, Title	Date

Equipment Decontamination Release Form

Equipment Description: _____
Manufacturer: _____
Model#: _____
Serial #: _____
Current Location (Bldg. Room) _____
Equipment Contact Name: _____
Phone number: _____
Email: _____

This equipment has been used with the following materials:

☐ Chemicals (list high risk chemicals or “normal”)

☐ Biological Agents (list biological agents used)

☐ Radioactive Materials (list isotopes used)

☐ This equipment has never been used with radioactive materials, chemicals, or biological agents

Principal Investigator’s Agreement

I certify that my staff and I have adequately cleaned and decontaminated this equipment.

Principal Investigator’s Signature

Date

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.