

Laboratory Decommissioning

Guideline

Revision Date: 10/17/2023

Applies To: Any researcher moving out of a laboratory. These moves include leaving the university, moving to another building on campus, or relocating to another laboratory within the same building.

Summary

When laboratories are vacated, all chemical, radioactive, and biological materials must be removed and disposed of properly.

Laboratory staff should contact EHS two weeks before the move to arrange a decommissioning inspection date.

Glossary of Terms

Decommission - the formal deactivation of a laboratory assuring the safety of the space for further cleaning, renovation, or occupancy. The decommissioning process involves an EHS Research Health and Safety inspection and if radioactive materials were used, EHS Radiation Safety Service (RSS).

Decontaminate - Rendered free of all chemical, biological, and radioactive contaminants.

Responsibility

Specified responsibilities are detailed in the University of Michigan <u>Research and Academic Safety Policy</u>, issued by the Department of Environment, Health & Safety (EHS) in collaboration with the Executive Leadership Team (ELT) that oversees and provides direction for the Research Safety First Initiative. Please click on the Policy link to view role-specific responsibilities.

Additional responsibilities specific to laboratory decommissioning are as follows:

Laboratory Director/Authorized Users

- Provide advanced notice to your department of your intent to vacate.
- Notify EHS by completion of the Request Laboratory Decommissioning Inspection Form when leaving the University or relocating within the university.
- Remove all chemical, biological, and radiological materials and equipment. Contact EHS at 763-6973 for assistance with waste disposal; biological, chemical, and radiological site evaluations; and decontamination of biological safety cabinets.
- If contamination is identified by EHS personnel, Laboratory Directors/Authorized Users will be responsible for all decontamination activities including biological, chemical, and radioactive.

Departmental Unit

• Responsible for all deficiencies not corrected by the Laboratory Director/Authorized User.

• Notify EHS by completing the <u>Request Laboratory Decommissioning Inspection Form</u> when an investigator will be leaving the University or relocating within the University.

EHS

- Advise the Laboratory Director/Authorized User on precautions to be taken during the transfer of biological, chemical, and radioactive materials.
- Conduct radioactive stock material transfers, if transfers involve movement of such materials between unconnected buildings.
- When contacted by a lab for hazardous waste removal, schedule a waste pick up for the laboratory. EHS will provide packaging materials for waste collection. Information regarding relocating laboratory hazardous materials is available upon request.
- Complete a decommissioning inspection to verify the facility is free of biological, chemical, and radioactive materials. If contamination is identified, EHS will notify Laboratory Directors/Authorized Users. Laboratory Directors/Authorized Users and the Facility Manager(s) will be notified by EHS once the decommissioning is complete.
- Provide services to assist with laboratory decommissioning: disposal of hazardous, biohazardous, and radioactive waste; biological, chemical, and radiological site evaluations; decontamination of biological safety cabinets. Contact EHS at 763-6973 to arrange these services.

Procedures

NOTE: Building Services will not service or clean rooms that have not been decommissioned by EHS.

Radiation Safety Service (RSS)

- Prior to relocating to the new facility, new radioactive material laboratory locations must be approved by the Radiation Policy Committee (RPC). RSS will notify the Authorized User of approval.
- Use of radioactive materials should be discontinued approximately one week before relocation.
- All radioactive waste containers not being transferred to a new facility must be collected by EHS Hazardous Materials Management (HMM).
- Upon written notification by the Laboratory Director/Authorized User or the Department, RSS will conduct a radiological survey of the facility. In addition, RSS will verify that the equipment used to store or analyze radioactive materials is decontaminated. For information on equipment decontamination, contact RSS or refer to the Checklist to Terminate Using Radioactive Material.
- Laboratory Directors/Authorized Users will be notified of the survey results. If contamination is identified, laboratory personnel will be responsible for decontamination. The laboratory will be reevaluated upon completion of decontamination efforts.

Research Health & Safety (RHS)

- Upon notification by the Laboratory Director or the Department, RHS will verify that all chemical and biological materials have been properly removed, disposed and/or stored. All drawers and cabinets must be emptied and wiped down, special in-house equipment must be removed, and fume hoods cleaned.
- Laboratory Directors and Facilities Management will be notified of results. Laboratory personnel will be responsible for any additional corrective actions. Decommissioning will be completed upon re-evaluation.

Hazardous Materials Management (HMM)

Upon notification by the laboratory staff or departmental unit, HMM will schedule removal of hazardous waste materials. Packaging materials and additional information regarding relocating laboratory hazardous materials are available upon request.

NOTE: Please work with your department to arrange the reuse/recycling of chemicals that have not reached the expiration date, rather than discarding unwanted chemicals.

In addition, there are requirements for proper recycling of batteries, electronic equipment, light bulbs, and other materials. Refer to this website for guidance on <u>Other Waste</u>.

Related Documents

- <u>Relocating Laboratory Hazardous Materials Guideline</u>
- Biological Waste Web page
- Laboratory Equipment Owner Decontamination Form
- <u>Checklist to Terminate Using Radioactive Material</u>
- <u>Checklist for Decommissioning a Laboratory</u>
- <u>Research and Academic Safety Policy</u>
- ANSI/AIHA Z9.11-2008 "Laboratory Decommissioning"

Reference Regulations

- Michigan Public Act 451, Parts 111 and 121
- NRC Materials License No. 21-00215-04
- NRC Regulations (10 CFR 20.1404 & 10 CFR 30.4)

Technical Support

All referenced guidelines, regulations and other documents are available at EHS (763-6973).

Attachments

Request Laboratory Decommissioning Inspection