



Laboratory and Equipment Decommissioning Policy

I. General Guidelines

- A. This policy applies to all laboratories and laboratory equipment that are part of the University of South Carolina System, including all teaching laboratories, research laboratories, and auxiliary spaces serving as laboratories. It provides guidelines for the removal of hazardous materials and equipment from laboratory spaces when the Principal Investigator (PI) or laboratory supervisor is:
- Leaving the University of South Carolina
 - Moving to another building on campus
 - Relocating to another laboratory within the same building
 - Disposing or transferring laboratory equipment that is no longer needed

This policy also applies to the removal of all hazardous materials and equipment from laboratory spaces prior to a renovation.

- B. All chemicals, radioactive and biological materials must be disposed or their ownership transferred; hazardous wastes, sharps and other wastes must be disposed in an appropriate manner before a laboratory is vacated.
- C. Laboratory work surfaces and storage locations for all hazardous materials must be thoroughly cleaned and decontaminated before a laboratory is vacated.
- D. All laboratory equipment must be thoroughly cleaned and decontaminated before:
- Removal from service
 - Placing back into service
 - Transporting to another location
 - Storing in another location
 - Disposing in a proper manner

II. Definitions

- ❖ **Decommissioning:** the process of verifying that hazardous materials (biological, chemical, radioactive) and research samples have been disposed or their ownership transferred, hazardous wastes have been disposed, equipment have been properly decontaminated according to regulatory requirement and USC guidelines before being removed from the laboratory, and work surfaces including hazardous material storage areas have been decontaminated in a laboratory being vacated. This definition includes the process of releasing laboratory equipment to USC Consolidated Services for final disposal, re-use or sale to another institution.

- ❖ Laboratory: A space where any quantity of hazardous chemicals, biological and/or radiological materials are used or stored for the purpose of research, teaching, healthcare or other similar activities. This definition includes research laboratories, teaching laboratories, animal facilities, greenhouses, healthcare facilities, stock rooms, autoclave rooms, waste storage areas, service corridors and other auxiliary spaces used to support research and teaching laboratories.
- ❖ Equipment: Appliances, devices, instrumentation and/or tools regardless of size originating from a laboratory as defined above.
- ❖ Hazardous materials: Chemical, biological and radioactive materials that may cause harm to personnel, property and environment of the University.
- ❖ Hazardous waste: Chemical, biological and radioactive materials that have been used in experiments or if unused, have been designated by the user as waste, and therefore need to be disposed according to existing regulations and guidelines.

III. Responsibilities

A. Department Chair

- a. Notify EH&S (Jocelyn Locke, 777-7650 or jlocke@mailbox.sc.edu) when a PI plans to vacate a laboratory.
- b. Ensure PIs are aware of and follow procedures defined in this policy.
- c. Pay for all costs associated with the proper disposal and/or decontamination of hazardous materials or equipment remaining in the laboratory after the PI leaves the university (e.g. hazardous waste, unknowns, expired chemicals, equipment).

B. Principal Investigator

- a. Notify EH&S of the plan to vacate the laboratory at least 4 weeks in advance and begin review of applicable items from the [Laboratory Decommissioning Checklist](#) or the [Equipment Decontamination Form](#).
- b. Arrange for the transfer or disposal of all chemicals, radioactive materials and/or biological materials prior to leaving the University.
- c. Ensure all hazardous waste has been logged in for pickup and removed by EH&S before leaving the University.
- d. Ensure all laboratory rooms, storage areas, equipment and work surfaces are thoroughly cleaned and decontaminated before vacating the assigned lab space.
- e. Ensure all laboratory equipment to be removed has been decontaminated and has a completed and signed [Equipment Decontamination Form](#).
- f. Correct all remaining non-conformances after a decommissioning inspection by EH&S.

C. Environmental Health and Safety

- a. Provide guidance to lab personnel on how to perform activities listed on the [Laboratory Decommissioning Checklist](#).

- b. Provide guidance on proper methods or procedures for decontamination of lab equipment listed on the [Equipment Decontamination Form](#).
- c. Collect all hazardous chemical waste, biological waste and radioactive waste.
- d. Perform a laboratory decommissioning inspection as soon as applicable activities described in the [Laboratory Decommissioning Checklist](#) have been completed, then notify the PI and Department Chair of any findings.
- e. Post 'unassigned laboratory' signage on the entrance door after decommissioning.

D. Facilities Department

- a. Contact EH&S to verify that laboratory space has been properly decommissioned prior to starting any laboratory renovations.

Notice: As of June 2017, the USC Facilities Department no longer moves equipment to or from USC Consolidated Services (Surplus). All requests to move items must be executed by outside commercial contractors. Please contact [Consolidated Services](#) for more information.

E. Consolidated Services

- a. Verify that each piece of equipment originating from a laboratory has an [Equipment Decontamination Form](#) attached to it before receiving the equipment.

IV. Procedures

- A. The PI or Department Chair will contact EH&S at least 4 weeks before vacating the laboratory, by sending an email to Jocelyn Locke (jllocke@mailbox.sc.edu) to request a decommissioning consultation. If radioactive materials have been used, the PI or Department Chair must also contact Caitlin Root (caitlinroot@sc.edu).
- B. Laboratory personnel will arrange for the removal of all chemicals, biological and radioactive materials from the laboratory. All equipment must be cleaned, decontaminated and tagged with the [Equipment Decontamination Form](#). All chemical or radiological samples and waste must be properly labeled (labeling is essential to avoid high costs associated with disposal of unknown wastes). Biological samples and waste must be properly decontaminated according to the [USC Biological and Infectious Waste Management Plan](#).
- C. Controlled substances must remain with the Drug Enforcement Agency (DEA) license holder or be appropriately transferred to another DEA license holder. The transfer must be done via DEA regulations and all appropriate paperwork must be submitted to DEA and maintained by both parties. Lab personnel should contact the South Carolina Department of Health and Environmental Control ([DHEC's Bureau of Drug Control](#)) with questions regarding proper disposal, transfer or documentation required for controlled substances.
- D. No hazardous chemicals, biological or radioactive materials or wastes may be disposed down drains or into the regular trash receptacles.
- E. If the laboratory is restricted for ionizing/non-ionizing radiation use (postings on entrance doors), the following actions must be completed by laboratory personnel in conjunction with Radiation Safety staff:

- a. Contact [Caitlin Root \(caitlinroot@sc.edu\)](mailto:caitlinroot@sc.edu), 777-7530), Jennifer Roose (roosej@mailbox.sc.edu, 576-6818) and/or Allen Boyd (boydca@mailbox.sc.edu, 777-2841) as soon as the PI knows they will be vacating a laboratory.
- b. Radiation safety staff will meet with the PI to develop a decommissioning and/or equipment relocation or disposal plan.
- c. Inventory all radioactive materials.
- d. The PI will decide if the materials and equipment will be transferred to another location or disposed.
- e. For unsealed forms of radioactive material use:
 - i. Survey all areas of the laboratory, including cabinets, drawers, work surfaces, fume hoods, or any containment devices.
 - ii. Decontaminate any areas that are identified to be above the USC license limits for fixed and removable contamination in unrestricted areas.
 - iii. Once decontaminated and measurements show that all areas are below the USC license limits for unrestricted areas, remove all radioactive waste items.
- f. Remove all radioactive material sample vials and/or equipment that produces ionizing or non-ionizing radiation.
- g. Remove all ionizing and non-ionizing warning tape, signage in all equipment, work areas (sink, fume hood, work bench) and containment where radioactive materials were used. Attach a completed and signed [Equipment Decontamination Form](#) on each equipment and fume hood.

NOTE:

- Sealed and unsealed forms of radioactive material may need to be transferred to the Radiation Safety Officer's possession – temporarily – until a new location is approved by the Radiation Safety Committee.
 - Equipment that electronically produces ionizing or non-ionizing radiation that is left in the lab for any reason must be locked-out by Radiation Safety staff to ensure the equipment cannot be energized. If this occurs, the PI or Department Chair needs to notify Radiation Safety. Plans for equipment relocation, re-use or disposal must be identified and communicated to all relevant parties.
 - Once the final survey shows all areas are below the USC license limits for unrestricted areas and all equipment producing ionizing or non-ionizing radiation is either removed or locked out, Radiation Safety staff will remove all restricted area postings on entrance doors.
- F. EH&S personnel will conduct a final inspection of the laboratory. If any non-conformances are identified, they must be addressed by the PI and a new inspection will be scheduled to verify that all non-conformances are corrected. If there are no outstanding non-conformances, EH&S will notify the PI and Department Chair of the “decommissioned” status of the laboratory and an “UNASSIGNED ROOM” signage will be posted on the door. The status of the decommissioned laboratory will be recorded in the EH&S Research Safety Management System.

Resources

[Laboratory Decommissioning Checklist](#)
[Equipment Decontamination Form](#)