

Environmental Health & Safety Policy for Termination of Laboratory Use of Hazardous Materials

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Proper disposition of all hazardous materials used in laboratories is primarily the responsibility of the principal investigator or researcher to whom a laboratory is assigned. Ultimate responsibility for hazardous materials management lies with each department. Proper disposition of hazardous materials is required whenever a responsible individual leaves the University or transfers to a different laboratory ("Responsible individual" can include faculty, staff, and post-doctoral and graduate students). All movable equipment and supplies inside a lab must be removed for closeout or relocation unless exceptions were made in writing from Environmental Health & Safety (EH&S).

If improper management of hazardous materials at closeout requires removal services by EH&S, the responsible department will be charged for this service. Any regulatory action or fines resulting from improper management or disposal of hazardous materials will accrue to the responsible department. EH&S will not be responsible for loss incurred by individuals or departments because of regulation—mandated removal of hazardous materials. The department will be responsible for everything left behind by a departing PI.

EH&S will conduct a laboratory closeout survey before and after the actual closing of the lab to make sure hazardous materials are disposed of properly.



When preparing to move or close a laboratory, several steps are necessary to manage potential chemical, biological and radiation hazards. **Department of Environmental Health & Safety Policy for Termination of Laboratory Use of Hazardous Materials**, found at: https://www.uab.edu/ehs/research-safety/lab-closeouts can help you plan to manage all types of hazardous materials, chemical, biological and radiation, that may be present in the lab. During the moving process EH&S staff can help you minimize delays and reduce potential for injuries and accidents.

You can start the closeout/move process by downloading the <u>lab closeout and decommissioning</u> <u>checklist</u> and contacting EH&S at <u>labmove@uab.edu</u> or 205-934-2487 to report the anticipated move. It is advised to start the planning at least three months before the actual move date. Upon receipt of your close out/move notice a Research Safety employee will be contacting you to review the checklist. Once EH&S has evaluated the lab and approved the move, the Environmental Health & Safety Support Facility (EHSSF) will be notified for moving assistance and hazardous waste management if needed.

Minimize the Number of Materials to be Moved

Don't move more than you need. This includes outdated or broken equipment, chemical, biological, or radioactive supplies and materials. Properly dispose of your decontaminated surplus equipment and supplies.

Don't Move Waste Materials

All waste must be properly disposed of prior to the move. Never dispose of hazardous chemical, biological, or radioactive wastes down the sink, in regular trash, or in the disposable labware or broken glass containers.

Safe Packing Tips

- Read this document.
- Budget enough time to accomplish the entire task needed. Rushing often leads to property damage and injuries.
- Always wear personal protective equipment (PPE) and appropriate clothing.
- Never work alone.
- Do not store any materials, boxes, or equipment associated with your move in the hallways or other public areas.
- If you are unsure of anything, contact EH&S at labmove@uab.edu or by calling 205-934-2487.

Tagging of Chemical Fume Hood and Other Equipment

Principal Investigators and ultimately university departments are responsible for properly managing hazardous materials in their laboratories.

 Chemically contaminated equipment must be decontaminated before being moved for transfer or to storage.



- Fixed equipment such as chemical fume hoods must also be decontaminated when a researcher leaves an area.
- Wiping down with a detergent solution followed by a water rinse can clean most pieces of equipment.
- If a material has a specialized cleaning procedure, then a lab representative knowledgeable in the proper use and decontamination of the material should perform the clean-up.
- Hoods and large items should have all containers removed and surfaces wiped down with detergent and water.
- Appropriate personal protective equipment must be worn during decontamination gloves, chemical splash goggles and a lab coat or apron.
- All equipment must have a **EH&S Release Tag** to assure personnel maintaining or moving laboratory fixtures and equipment are not exposed to hazardous chemicals.

To Obtain a EH&S Release Tag

After the equipment is clean, contact EH&S at labmove@uab.edu or by calling 205-934-2487. A Chemical Safety representative will issue a safety release tag to be attached to the item before it is moved or the lab is vacated. Once equipment is put back in service, the release tag must be removed.

Preparing to Move Chemicals and Labware

- Containers of chemicals need to be securely closed and properly labeled.
- Empty temporary containers such as beakers, flasks, evaporating dishes etc. must be emptied and cleaned.
- Hazardous chemical waste must be collected for disposal, not sewered or placed in the trash.
- Check refrigerators, freezers, fume hoods, bench tops and storage cabinets for chemical containers.
- Usable chemicals, which are not moved, can be transferred to another party who is willing to take charge of them. If the chemicals are transferred to another party, the move must be recorded in the online inventory system or contact EH&S at labmove@uab.ecu or by calling 205-934-2487 for guidance.
- Chemicals requiring assistance in moving from EHSSF staff must be packed by hazard class. A chemical manifest is not required; however, the hazard class must be marked on the box along with the building and room number. The movement of any chemical between labs or between PIs must be recorded in the online inventory system or contact EH&S at labmove@uab.edu or by calling 205-934-2487 for guidance.
- Chemical containers manifested and disposed of as waste must be deleted from the online inventory system.
- The lab manager or principal investigator must supply a chemical inventory to EHSSF Manager prior to the chemicals being moved by EHSSF staff.
- The EHSSF must be notified well in advance so they can schedule the move and chemical waste pickup. Chemical pickup should be completed before the laboratory is vacated. Waste collection may take a week after notification that waste is ready for pickup.
- Fume hood surfaces and countertops must be cleaned and decontaminated.



Equipment

- Clean and decontaminate laboratory equipment to be left for the next occupant before the laboratory is vacated.
- EH&S and Maintenance must be alerted if extremely hazardous substances or organisms have been placed in exhaust or filtration equipment.
- Notify EH&S at laboratory equipment that contains mercury or other chemicals (capacitors, transformers, mercury switches, and mercury thermometers).
- Remove radioactive sources and chemicals from equipment. EH&S must be contacted to survey equipment potentially contaminated with radioisotopes for release and tagging (205-934-7471).
- Contact EH&S at <u>labmove@uab.edu</u> or by calling 205-934-7488 for the release of equipment potentially contaminated with microbial agents.

Controlled Substances

- Controlled Substance Use Authorization (CSUA) numbers are issued by EH&S to individual researchers. Each principal investigator, or PI, is responsible for maintaining an online and hard copy of the usage logs for the drugs in their possession.
- Abandonment of a controlled substance is a violation of the CSUA permit agreement and can result in reporting to DEA, which has authority over the UAB program.
- Transfer of ownership of a controlled substance from one PI to another PI is not permitted.
- Transfer of controlled substances from one location to another within UAB requires EH&S approval.
- Individuals wishing to dispose of controlled substances must contact EH&S at 205-934-2255.

Gas Cylinders and Liquid Nitrogen Dewar

- Disconnect and cap compressed gas cylinders and liquid nitrogen tanks.
- Contact the vendor to return the cylinder. Shipping and receiving will not move compressed gas cylinders and liquid nitrogen tanks.
- Manifest non-returnable cylinders (i.e., lecture bottles) and pack them as chemical waste.
- Order new cylinders and liquid nitrogen tanks for the new location.

Once In Your New Location

- Responsible purchasing Buy only what you need, as you need it
- Maintain proper chemical segregation for storage. Chemical Segregation and Storage Guidelines are available at https://www.uab.edu/ehs/images/docs/chem/epa-chemical-segregation-chart.pdf
- If you have any questions, contact EH&S at 205-934-2487 or by emailing at <u>labmove@uab.edu</u>



Animal or Human Tissue

- Tissue held in a liquid preservative is separated from the liquid. Some liquid preservatives must be disposed of as hazardous waste. Do not assume that the preservative can be disposed of in the sewer.
- Animal tissue and carcasses are disposed of as biohazard waste in the appropriate animal morgue or medical waste barrels.
- Recognizable human tissue may require disposal in the university crematorium. Other human tissue specimens from pathology or surgery are placed in an appropriate biohazard waste container for incineration. Contact Biosafety for additional information (205-934-2478).
- Notify your department head if samples need to be saved, and arrange for an appropriate UAB investigator to take responsibility.

Microorganisms and Cultures

- Notify the Biosafety Office of the intent to transfer human pathogens or materials containing them (Risk Group 2 agents or higher), from the university or to another UAB PI or UAB location. Such transfers may have strict shipping regulations and/or require additional permits. These transfers must be arranged well in advance.
- Inventory and decontaminate non-regulated microorganisms no longer in use. Notify your department head if samples need to be saved and arrange for an appropriate UAB investigator to take responsibility.
- Solid contaminated waste may need to be decontaminated as appropriate to be disposed of as medical waste.
- Additional medical waste containers may be needed and would be provided by the medical waste contractor. Contact the medical waste contractor directly for additional containers.
- After all biohazardous material is removed from the lab, ensure that all hazard signage is removed from doors and the laboratory facility.

Packing Biological Materials

- All biological materials being moved must be documented and packed by laboratory staff.
- The materials must be properly labeled and packed to prevent spills or damage during transport.
- Please consult with EH&S to determine proper packaging and labeling for various biological materials.
- All containers must be closed and packed inside secondary containers.
- At least one of the two containers must be puncture-resistant and leak-resistant.

Shipping Biological Materials

Contact EH&S at 205-934-2487 concerning shipment of biological materials to ensure compliance with all regulations.



Radioactive Materials

Prior to the closeout of a radioactive material use area and/or a radioactive material use permit, it is the responsibility of the department and the authorized permit holder to ensure that steps in the following link have been completed. **Radioactive Materials Decommissioning and License Termination Procedures.** For any questions or additional details, contact EH&S at 205-934-2487.

Mixed Hazards

• Notify EH&S at labmove@uab.edu if it is necessary to dispose of materials that contain more than one of these hazards.

Shared Storage Areas

One situation where problems often arise in lab closeout is the sharing of storage units, such as refrigerators, freezers, cold rooms, stock rooms, waste collection areas, etc. This is particularly true if no one has been assigned to manage the unit. Departing researchers must carefully survey <u>any</u> shared facility to locate and appropriately dispose of their hazardous materials.

During the Move:

- 1) Packing and moving of lab items must be done during normal business hours (8 a.m.–5 p.m.) to have the EH&S staff available for any emergencies like a spill or an accident.
- 2) Always have secondary containment for hazardous materials, biologicals, and radioactive materials during transport (even when moving a few doors down the hall).
- 3) Never transport hazardous materials alone.
- 4) Wear appropriate personal protective equipment for the materials being handled (safety glasses or goggles, lab coat, gloves, closed-toe shoes, etc.).
- 5) Have boxes, plastic bags, and containers for broken glass, etc., ready and available before you begin.
- 6) Mark the new lab space with warning signs before moving in (radioactive materials, biohazard, etc.).
- 7) Make sure the new lab has all necessary safety equipment including safety showers, eyewashes, fire extinguishers etc., Become familiar with the location of this equipment, evacuation routes, and all available means of exit from laboratories and the building.
- 8) Revisit your old lab space to make sure the lab is clear of all hazardous materials and cleaned.
- 9) Notify EH&S when the lab is ready for the closeout survey by emailing at <u>labmove@uab.edu</u> or by calling 205-934-2487.
- 10) Lock your lab when you have completed the move out process and return your key to your department administrator.

The lab should be completely empty at the time of the closeout unless previous arrangements have been made with EH&S, department chairs, and other principal investigators intending to reoccupy the space.