

DEPARTMENT OF OCCUPATIONAL HEALTH & SAFETY POLICY FOR TERMINATION OF LABORATORY USE OF HAZARDOUS MATERIALS

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.)

If improper management of hazardous materials at closeout requires removal services by the Department of Occupational Health and Safety (OH&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. OH&S will not be responsible for loss incurred by individuals or departments because of regulation-mandated removal of hazardous materials.

CLOSEOUT PROCEDURES FOR HAZARDOUS MATERIALS IN LABORATORIES

The following procedures are to be completed before the responsible individual leaves the University or transfers to a different laboratory.

CHEMICALS

- All containers of chemicals are securely closed and labeled with the name of the chemical. Beakers, flasks, evaporating dishes, etc. are emptied. Hazardous chemical wastes are collected for disposal, not sewerred or placed in the trash. Refrigerators, freezers, fume hoods and bench tops and storage cabinets are checked for chemical containers.
- Usable chemicals, which are not moved, must be transferred to another party who is willing to take charge of them (see below). If chemicals are to be moved to another lab by the Hazardous Materials Facility (HMF) staff they must be packed into hazard classes according to instructions in the Chemical Safety and Waste Management Manual. A chemical manifest is not required however the hazard class must be marked on the box along with the building and room number. The lab manager or principal investigator must supply a chemical inventory to the Waste Facility Manager prior to the chemicals being moved by HMF staff. The HMF must be notified well in advance so they can schedule the move around chemical waste pickup.
- All other chemicals are prepared for disposal. Detailed instructions are available in the Chemical Safety and Hazardous Waste Management Manual. This process may take quite some time and should be started at least a month before departure from the laboratory. 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 counter tops are washed.
- Department Head is notified when laboratory has been cleared.

CONTROLLED SUBSTANCES

- Controlled substance permits are issued by the US Drug Enforcement Agency (DEA) and are issued to individual researchers. There is no central record of permit holders.
- Abandonment of a controlled substance is a violation of the DEA permit under which it was held.
- Permission to transfer ownership of a controlled substance to another individual must be received from DEA.
- Controlled substances being held by a licensed individual are disposed through the HMF.
- Chemical Safety is notified if controlled substances for which the licensee is unknown are found.
- The Department Head is notified of the disposition of controlled substances.

GAS CYLINDERS

- Cylinders are disconnected, their caps replaced and the cylinders returned to suppliers.
- Non-returnable cylinders (i.e., lecture bottles) are manifested and packed as chemical waste.

ANIMAL AND HUMAN TISSUE

- Tissue held in a liquid preservative is separated from the liquid. Some liquid preservatives must be disposed as a hazardous waste. Contact Chemical Safety for assistance. Do not assume that the preservative can be disposed of in the sewer.
- Animal tissue and carcasses are disposed in biohazard waste in the appropriate animal morgue 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.
- 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 fall under 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 for disposed as medical waste.
- Additional medical waste containers may be needed and would therefore 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, assure that all hazard signage is removed from doors and the laboratory facility.

RADIOACTIVE MATERIALS

- Prior to closeout of a radioactive materials use area and/or a radioactive materials use permit, it is the responsibility of the department and the authorized permit holder to assure that the following steps have been completed.
- Package all radioactive materials (stock vials, sealed sources, lead containers/shields, and wastes) and label them in accordance with the Radiation Safety Division procedures for pickup as radioactive waste or for transfer to another permitted use area.
- Prior to the transfer, notify Radiation Safety to obtain authorization for the transfer and to assure that the new use area is properly posted and permitted by Radiation Safety.
- Arrange for pickup of all radioactive wastes through the HMF.
- Following removal of all radioactive wastes and stock materials, perform a contamination survey (and if appropriate a GM instrument survey) of all former storage and use areas within the laboratory or under the permit to be closed out. **NOTE:** Areas of potential residual contamination include refrigerators/ freezers, centrifuges, water baths, hoods, sinks, floor areas under waste containers, etc. In addition, if there are contaminated areas or equipment in the laboratory, they must be decontaminated. A follow-up survey must be made of the decontaminated areas and the results included in the above survey.
- Provide the Department Head and Radiation Safety with a copy of the final contamination survey.
- Schedule the closeout survey by Radiation Safety. Do not allow further use of room until the Radiation Safety closeout survey is complete and the door posting is removed by Radiation Safety.
- If the permit holder fails to satisfactorily complete the above steps, the Department will be responsible for the completion of (or payment of costs to complete) the required closeout steps. The Department is responsible for immediate notification of Radiation Safety if the above steps have not been completed.

MIXED HAZARDS

- The Department of Occupational Health and Safety is notified if it is necessary to dispose of materials that contain more than one of these hazards.

SELECT AGENTS

- Contact OH&S for information on the CDC Select Agent Program.

EQUIPMENT

- Laboratory equipment to be left for the next occupant is cleaned or decontaminated, and tagged (see below) before the laboratory is vacated. Cleaning freezers, refrigerators incubators and drying ovens is included. OH&S and Maintenance are alerted if exhaust or filtration equipment has been used with extremely hazardous substances or organisms.
- Occupational Health and Safety is notified of disposal of mercury or chemical containing laboratory equipment (capacitors, transformers, mercury switches, mercury thermometers). Radioactive sources and chemicals are removed before disposal.
- Equipment potentially contaminated with radioisotopes is surveyed by Occupational Health and Safety (obtain Radiation Safety release tag).
- Equipment potentially contaminated with microbial agents must be released by UAB Biosafety before departing the laboratory or arranging for its relocation (obtain Biosafety release tag).

SHARED STORAGE AREAS

- One of the most problematic situations is the sharing of storage units such as refrigerators, freezers, cold rooms, stock rooms, waste collection areas, etc., particularly if no one has been assigned to manage the unit. Departing researchers must carefully survey any shared facility in order to locate and appropriately dispose of their hazardous materials.

REGULATORY IMPACT

- Mishandling of hazardous materials can result in citations, fines and/or loss of right to use hazardous materials. Adverse publicity is also a frequent result.

HAZARDOUS MATERIALS CLOSEOUT PROCEDURES CHECKLIST

See Policy Statement for detail.

Hazardous Material/Procedure	Completed
Chemicals	
Evaluate all chemicals and label all containers.	
Transfer responsibility for chemicals to:	
Prepare chemical waste for shipment. Notify HMF	
Clean laboratory surfaces, hoods.	
Controlled Substances	
Contact U.S. Drug Enforcement Agency regarding status of permit.	
Arrange for disposal by calling HMF	
Gas Cylinders	
Return to supplier.	
Animal and Human Tissue	
Dispose of tissue	
Dispose of preservative (Contact HMF)	
Transfer responsibility for samples to:	
Microorganisms and Cultures	
Decontaminate waste.	
Arrange for any special medical waste pickups (Contact the medical waste contractor)	
Clean laboratory surfaces, BSCs, incubators, ovens, and refrigerators	
Transfer responsibility for samples to:	
Transfer to new UAB location or outside facilities arranged	
After all biohazardous material is removed from area, assure all Biohazard signage is removed from doors	
Radioactive Materials	
Package all radioactive materials for disposal and arrange pickup.	
Transfer responsibility to: _____ (check with Radiation Safety first):	
Perform contamination survey, and resurvey, if necessary.	
Schedule closeout survey.	
Review results of survey.	
Mixed Hazards	
Identify mixed hazards:	
Equipment	
Clean or decontaminate equipment to be left in place. (incubators, ovens, refrigerators, freezers)	
Contact OH&S regarding disposal of equipment.	
Obtain release tags	
Shared Storage Areas	
Check all shared storage areas for hazardous materials.	
Department Sign-off	
Submit completed checklist to department head for signature.	

Researcher

Date

Department Head

Date

Laboratories Closed Out (Rooms & Building)

Date

Copies to: OH&S
 Building Administrator
 Department Chairman