

## **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 sewered 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 are found for which the licensee is unknown.
- 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. Do not assume that the preservative can be disposed of in the sewer. Contact Chemical Safety for assistance.
- 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 appropriate biohazard waste containers marked 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.
- Conduct inventories 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 is decontaminated as appropriate for disposal as medical waste.

- The HMF manager is contacted well in advance to arrange for pick-up of medical waste that exceeds usual volumes.
- After all biohazardous material is removed from the lab, ensure that all hazard signage is removed from doors and the laboratory facility.

## **RADIOACTIVE MATERIALS**

The decommissioning policy for radioactive materials licenses and rooms authorized to contain radioactive materials is briefly described herein. There are many tasks that must be given due consideration when decommissioning or “closing out” a laboratory where radioactive materials (RM) are used and stored. These requirements may result from (1) an upcoming move of licensed operations from one area of the UAB Campus or Medical Complex to another; (2) the termination of an investigator’s radioactive materials license; or (3) the “close out” of just one or more rooms listed on an existing radioactive materials license (RML). Holders of the RMLs must notify the Radiation Safety Division and their department heads of their “Intensions to Vacate” certain premises. They must then prepare for, schedule and have all radioactive materials properly removed from the affected room(s), and ensure that necessary “Room Surveys For Release” are performed for each room being decommissioned. Finally, the licensee must receive **final approval** from the Radiation Safety Officer and **Decommissioning Certificates** from the Radiation Safety Division giving notice (for posting) that the rooms have been properly decommissioned. The specific requirements regarding the necessary steps to be taken (i.e., scheduling, notification, RM packaging and transfer, RM licensing, decommissioning and required documentation) are addressed in the “Radioactive Materials Decommissioning and License Termination Instructions” available from the Radiation Safety Division of the Occupational Health and Safety Department. Other pertinent documents regarding your license may need to be filed with the Radiation Safety Division if your RML is being terminated.

## **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
<b>Chemicals</b>	
Evaluate all chemicals and label all containers.	
Transfer responsibility for chemicals to:	
Prepare chemical waste for shipment. Notify HMF	
Clean laboratory surfaces, hoods.	
<b>Controlled Substances</b>	
Contact U.S. Drug Enforcement Agency regarding status of permit.	
Arrange for disposal by calling HMF	
<b>Gas Cylinders</b>	
Return to supplier.	
<b>Animal and Human Tissue</b>	
Dispose of tissue	
Dispose of preservative (Contact HMF)	
Transfer responsibility for samples to:	
<b>Microorganisms and Cultures</b>	
Decontaminate waste.	
Arrange for any special medical waste pick ups (Contact HMF)	
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	
<b>Radioactive Materials</b>	
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.	
<b>Mixed Hazards</b>	
Identify mixed hazards:	
<b>Equipment</b>	
Clean or decontaminate equipment to be left in place. (incubators, ovens, refrigerators, freezers)	
Contact OH&S regarding disposal of equipment.	
Obtain release tags	
<b>Shared Storage Areas</b>	
Check all shared storage areas for hazardous materials.	
<b>Department Sign-off</b>	
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