

# **General Procedures for Laboratory Closures and Decommissioning**

RICE UNIVERSITY

Environmental Health and Safety

This guideline is in addition to the guidelines provided by the department or research accounting. EHS does not have the authority or jurisdiction to decide what can be transferred to a new institution. These procedures are intended to assist the Principal Investigator (PI) in complying with federal and state regulations.

## **CHEMICALS**

Chemicals to be transferred to the new institution must be inventoried with the CAS number, name, and container amount. The chemical container must have the original label with hazard classification or a new label with hazard classification affixed. EHS will obtain an estimate for packaging these chemicals based on the inventory list, in DOT shippable containers and provide the manifest and shipping labels. All chemicals will be packaged and shipped per the International Air Transporters Associations (IATA) and US Department of Transportation (DOT) regulations. Cost for this service and shipment of the material will be the responsibility of the PI or department.

## **CHEMICAL WASTE**

Any chemicals that are not being transferred will be redistributed to faculty members to minimize waste. Expired chemicals and chemicals with unreadable label should be disposed. Do not attempt to bulk or consolidate pure chemicals into carboys. Do not pour chemicals down sinks, sewers or place in the general trash. Contact Environmental Health and Safety to arrange for the segregations and disposal of these chemicals. Unknowns must be analyzed as to the content and labeled accordingly prior to disposal.

## **BIOLOGICAL MATERIALS**

Biological material to be transferred should be packaged and shipped per the International Air Transporters Associations (IATA) and US Department of Transportation (DOT) regulations. You must be trained and certified in the proper procedures for the classifications, packaging, labeling and documentation for the shipment of biological material. An inventory for all rDNA material must be maintained. Transportation via public or private transportation is strictly prohibited.

## **REGULATED MEDICAL WASTE**

Biohazardous waste should be decontaminated and disposed according to CDC guidelines. Please refer to disposal procedures at <http://safety.rice.edu> to determine the correct decontamination method.

Biohazardous disposal boxes are provided by the university and can be obtained from EH&S. The red interior liner should be hand-tied closed and the top of the box should be securely folded shut. Waste container weight should not exceed 40 lbs. Do not use biohazard waste bags for disposal of ordinary trash.

## **EXPERIMENTAL SAMPLES**

Laboratory samples that are dissolved in hazardous solvent or are inherently hazardous must be packaged according to DOT and IATA regulations. Samples that must remain frozen or cold while being shipped should be packed in accordance with IATA regulations. Any unwanted samples must be disposed in the appropriate hazardous waste stream unless the samples have been deemed non-hazardous by Environmental Health and Safety staff.

## **CONTROLLED SUBSTANCES**

DEA controlled substances should not be transferred to the new institution or any other PI unless they hold a DEA license with a schedule for that material. Transfer papers must be signed by both parties and record of transfer to remain with the license and the material. Laboratory personnel should contact Environmental Health and Safety staff for assistance in the destruction or transferring of the materials. Controlled substances should not be disposed as hazardous waste and must not be put in Biohazard boxes for disposal. In the event that the researcher will no longer be using controlled substances, the license should be terminated.

## **IONIZING RADIATION AND SOURCES**

The transfer or disposal of radioactive materials, sources, X-rays, and lasers must be coordinated with Environmental Health and Safety.

Radioactive material, sources, and x-ray producing equipment are only permitted to be transferred to an institution or PI with a current license or registration for that material. A written authorization of the transfer and receipt of the material must be maintained by the department and the Environmental Health and Safety Department.

Lasers intended to be transferred to the new institution must be inventoried and submitted to Environmental Health and Safety with the following information prior to shipment: manufacturer, model, serial, model description, and location.

## **RADIOACTIVE MATERIAL DISPOSAL**

Isotopes with half-lives of less than 60 days will be decayed in house prior to disposal. An inventory of all material with isotope, activity, and date of receipt should be affixed to all containers. For disposal of all other radioactive waste and radioactive materials contact the Environmental Health and Safety Department.

## **COMPRESSED GAS CYLINDERS AND LECTURE BOTTLES**

All cylinders should be shut off, gauges removed and safety caps applied. Cylinders should remain secured to the bench or in a cylinders rack for pickup. All lecture bottles should be marked with the contents and left in a fume hood or secure area or returned to the vendor.

Where possible all gas cylinders should be returned to the source vendor. The Chemistry Stockroom may be able to assist with the pickup. Compressed cylinders should never be transferred or shipped off

campus. The disposal cost of all cylinders that remain in the lab will be the responsibility of the researcher or department.

### **EQUIPMENT DISPOSAL/TRANSFER**

Obtain approval from Research Accounting for disposal, transfer, or selling of laboratory equipment. Equipment contaminated with hazardous material must be thoroughly cleaned with the appropriate solvent to remove as much chemical residue as possible. All solvent lines must be flushed with water or air before transfer or disposal. Refrigerators and freezers must be decontaminated with 10% bleach solution before disposal or transfer. Equipment requiring special licensing i.e. lasers, x-rays, GC's with sealed sources may only be sold to research institutions already possessing the appropriate license.

### **FINAL LABORATORY CLOSEOUT**

All laboratory countertops, fume hoods, refrigerators, freezers and cabinets should be free of chemicals, needles, razorblades, waste and other research support paraphernalia. All areas of the laboratory should be decontaminated, cleaned and all cabinets emptied. Any glassware not being transferred to the new institution can be redistributed among Rice University laboratories. Glassware on the DEA regulated list must be inventoried prior to transfer. All labeling and signage should be removed.

A final waste pickup request should be submitted to EHS to remove any remaining waste container.

### **FINANCIAL RESPONSIBILITY**

It is the responsibility of the Department to provide the resources and funding for the decommissioning of the laboratory.