



# DUQUESNE UNIVERSITY

## Laboratory Clean-Out Policy

### **Purpose**

This policy is to assist in safely removing all hazardous substances from a laboratory being vacated/decommissioned and to leave the laboratory free from hazardous contamination.

The principle investigator (PI) is responsible for seeing that the laboratory is free from hazardous materials and contamination. A PI is anybody working in the laboratory, including: faculty, staff, post doctoral fellows, graduate students and other staff members. The PI should contact the Office of Environmental Health and Safety (EH&S) for assistance with this policy.

### **Scope**

These procedures apply when the PI is:

- Leaving the University and closing his/her laboratory,
- Retiring and closing his/her laboratory,
- Relocating his/her laboratory to a different room, or
- Leaving the University, but transferring responsibility of his/her laboratory to another PI.

In all of these situations, the PI must follow the procedures outlined below to either arrange for the safe disposal of hazardous materials in his/her laboratory or transfer responsibility for those materials to another investigator.

### **Responsibilities**

When vacating a laboratory, proper disposition of all hazardous materials is the responsibility of the PI to whom the laboratory is assigned. All hazardous materials must be either moved or discarded, or responsibility transferred to another investigator. Ultimate responsibility for hazardous materials management lies with each department. If improper management of hazardous materials at closeout requires removal services from the EH&S or an outside contractor, the responsible department will be charged for this service.

### **Procedures**

Unwanted hazardous materials may not be left in the laboratory, discarded in regular trash, or poured down the drain. The Office of EH&S is available to perform a laboratory survey to assist in identifying the tasks that must be finished for clearance of the space. A suggested Laboratory Checkout List is attached.

### Biological Materials

- All biological materials (etiologic agents, human and animal blood, blood products, and body fluids) must be disposed of properly (See Waste Handling Guidelines).

- Ensure that all containers of microorganisms are properly labeled and secure.
- Any biological work surface must be decontaminated, which includes first utilizing a solution of warm water and soap and then a solution of 1:10 household bleach.
- All bio-safety cabinets, centrifuges, incubators, refrigerator/freezers, floors, and bench tops must be decontaminated.

### Chemicals

- All containers must be tightly closed and properly labeled (identify chemical name, including the proportions of a mixture; do not use symbols or abbreviations).
- All used and unused chemicals must be disposed of properly (See Waste Handling Guidelines).
- Characterize all unknown chemicals as completely as possible. If the chemicals are true unknowns, label the unknown chemical container as such and submit it on waste collection day as an unknown. Each department will be charged for proper characterization when necessary.
- EHS must be notified of any peroxide forming chemicals so that they can be disposed of properly.
- Peroxide-forming materials should be disposed of if the container has been opened and is more than six months old or has not been opened and is more than one year old. Always dispose of peroxide-forming chemicals by the expiration date listed by the supplier.

### Controlled Substances

- Contact EHS for instructions on disposal.

### Equipment

- If laboratory equipment is to be left for the next occupant, clean or decontaminate it before departing the laboratory.
- If exhaust or filtration equipment has been used with extremely hazardous substances or organisms, please notify EH&S.
- If laboratory equipment is to be discarded, be aware that capacitors, circuit boards, transformers, mercury switches, mercury thermometers, radioactive sources and chemical must be removed before disposal.
- The Radiation Safety Office must survey equipment that may be contaminated with radioactive isotopes.

### Gas Cylinders

- All gas cylinders shall be properly labeled.
- All gas cylinders must be returned to the cylinder holding location in the Receiving area of Mellon Hall.

- Empty gas cylinders should be labeled “empty”. Always leave at least a minimum of 25-psi pressure in all “empty” cylinders to prevent contamination and the formation of explosive materials.

### Glassware

- There are designated “broken glass” boxes in each lab. Broken glassware that is not contaminated may be placed into the heavy cardboard box that must be secured by taping all the edges. Place full boxes outside of the lab for housekeeping to remove.
- Contaminated glassware must be decontaminated prior to disposal.

### Radioactive Materials

- The Radiation Safety Office must be contacted to schedule a meeting with the Radiation Safety Officer (RSO).
- No items may be removed from the area until a decommissioning survey is completed.
- All radioactive items in the inventory **must** be accounted for.
- The RSO will assist the PI in proper disposal of waste and in filling out all required paperwork.
- Return dosimeter badge to the Radiation Safety Office.

### Shared Storage Areas

- Departing researchers must carefully survey any shared facility (refrigerators, cold rooms, stock rooms, waste collection areas, etc.) in order to locate and appropriately dispose of their hazardous materials.

### Sharps/Medical Waste

- Sharps include all needles/syringes, pipets, lancets, etc. All sharps must be placed in the special red puncture proof containers. A pick-up of these wastes can be arranged by contacting EH&S.

Routine service for the removal of laboratory waste chemicals is provided by EH&S at no charge. In situations where a major cleanup must occur, EH&S will coordinate a waste removal vendor to visit the lab to inventory the material. Costs for removal will be decided upon a case-by-case basis.

### **Close Out**

Any problem resulting from improper management of hazardous materials at closeout will be addressed by the department head/chairperson, appropriate dean, EH&S and the chairperson of the EHS/Radiation Safety Committee. EH&S will not be responsible for any additional cleanup costs, regulatory action or fines resulting from non-compliance with this policy. In these instances, the responsible department head will arrange for the necessary remediation funds and the departing employer's last paycheck will be held. The Office of EH&S **must** be notified to review the laboratory before the PI leaves to verify that clearance has been completed.

# HAZARDOUS MATERIALS CLOSEOUT PROCEDURES CHECKLIST

Hazardous Material/Procedure

Date Completed

## **Biological Materials**

Conduct proper disposal of all biological materials. \_\_\_\_\_

Ensure all containers are labeled. \_\_\_\_\_

Decontaminate all biological work surfaces and storage areas. \_\_\_\_\_

## **Chemicals**

Evaluate all chemicals and label all containers. \_\_\_\_\_

Transfer responsibility for chemicals to: \_\_\_\_\_

Clean laboratory surfaces. \_\_\_\_\_

Characterize any unknowns. \_\_\_\_\_

Notify EH&S of any peroxide-forming chemicals. \_\_\_\_\_

## **Controlled Substances**

Contact EH&S for disposal instructions. \_\_\_\_\_

## **Equipment**

Clean and decontaminate all laboratory equipment. \_\_\_\_\_

Notify EH&S of equipment used with extremely hazardous substances. \_\_\_\_\_

Inspect equipment for hazardous components before disposal. \_\_\_\_\_

Notify the Radiation Safety Office of any radiological equipment. \_\_\_\_\_

## **Gas Cylinders**

Label all gas cylinders properly. \_\_\_\_\_

Return unused and/or empty gas cylinders to holding location. \_\_\_\_\_

**Glassware**

Place all non-contaminated glassware in the broken glass box.

\_\_\_\_\_

Decontaminate any glassware, when necessary.

\_\_\_\_\_

**Radioactive Materials**

Notify the Radiation Safety Office for proper instructions.

\_\_\_\_\_

**Shared Storage Areas**

Survey all shared storage areas for hazardous materials.

\_\_\_\_\_

**Sharps/Medical Wastes**

Place all sharps in designated sharp container.

\_\_\_\_\_

Place all bio-hazardous waste in proper container.

\_\_\_\_\_

## CLOSEOUT CLEARANCE FORM

Department: \_\_\_\_\_

Building: \_\_\_\_\_

Laboratory Room: \_\_\_\_\_

Principle Investigator: \_\_\_\_\_

Laboratory Vacating Date: \_\_\_\_\_

### **Principle Investigator's Agreement**

I certify that my staff and I have adequately cleaned and decontaminated the laboratory(s) under my supervision.

\_\_\_\_\_

Principle Investigator's Signature

\_\_\_\_\_

Date

### **Department Head/Chair Agreement**

I am aware of the status of the laboratory(s) being vacated.

\_\_\_\_\_

Department Head/Chair Signature

\_\_\_\_\_

Date

### **EH&S Clearance**

I certify that the laboratory has been cleared of all biological material, chemicals, and radioactive materials.

\_\_\_\_\_

Environmental Health & Safety Coordinator

\_\_\_\_\_

Date