

Closeout Procedures for Hazardous Materials in Laboratories, Shops, or Other Areas

PURPOSE

The purpose of this procedure is to provide guidance to assure the proper disposition of hazardous materials when activities in laboratories, shops, or other areas are terminated. In addition, the intent is to account for all hazardous substances in a facility and to assure all rooms and equipment are decontaminated upon cessation of work activity.

The following information provides general instructions on the closeout of hazardous materials use. Specific information and instruction may be obtained by calling the personnel listed below.

RESPONSIBILITY

The Environmental Health and Safety Center (EH&S Center) has implemented a comprehensive program for the management of hazardous materials from University operations. The EH&S Center manages the program and provides oversight. Each user of a hazardous material must manage their waste disposal in accordance with University policy by following these procedures. Fines for non-compliance are the responsibility of the department generating the waste.

CONTACT TELEPHONE NUMBERS

Hazardous Waste Manager	Rob Pecarina	515-6863
Biosafety Officer	Bruce Macdonald	515-6858
Radiation Safety Officer	Amy Orders	515-5208
Process Hazard Review	Ken Kretchman	515-6860

CHEMICAL DISPOSAL

Assure that all chemical containers are labeled with the name of the chemical. All containers must be securely closed. Beakers, flasks, evaporating dishes, etc. should be emptied. Hazardous chemical wastes must not be sewered or trashed; they must be collected for disposal in accordance with local, state, federal, and University guidelines. Check refrigerators, freezers, fume hoods, bench tops as well as storage cabinets for chemical containers. Determine which chemicals are usable and transfer responsibility for these materials to another party who is willing to take charge of them. Any person accepting responsibility for such material must have a valid safety plan on file with the EH&S Center and included these materials in their inventory. If a new user cannot be found, the materials should be disposed. Wash off fume hood surfaces and counter tops.

CONTROLLED SUBSTANCES

Controlled substance permits are issued by the U.S. 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 DEA regulations by the permittee. Permission to transfer ownership of a controlled substance to another individual must be received from DEA. If controlled substances for which the licensee is unknown are found, contact the EH&S Center. Notify the Department Head of any disposition of controlled substances. There is no easy legal method to dispose of a controlled substance unless the permit is available. Information on the permit is required for regulatory reporting.

COMPRESSED GAS CYLINDERS Remove gas connections, replace cylinder caps, and return cylinders to suppliers by calling the NC State Central Stores 515-2197. Lecture bottles are generally not returnable to the vendor and may need to be disposed of as hazardous waste through the EH&S Center. It is recommended that lecture bottles not be used because of high disposal costs which may be charged back to the waste user.

BIOHAZARDOUS MATERIAL If tissue is held in a liquid preservative, tissue and liquid should be separated. Animal tissue can be disposed of by rendering (large animal parts) or by placing it in a biohazardous waste bag for incineration.

Liquid preservative usually needs to be disposed of as a hazardous waste. Do not assume that the preservative can be sewerred. Defrost and clean refrigerators and freezers if they are empty.

If an autoclave is available, decontaminate waste and dispose in regular trash. If material cannot be decontaminated, place it in a biohazard bag for incineration. Clean incubators, drying or curing ovens, refrigerators and freezers. If samples need to be saved, locate appropriate person to take responsibility for them.

RADIOACTIVE MATERIALS AND RADIATION PRODUCING DEVICES

The proper termination of projects for the use radioactive materials and radiation producing devices is an integral part of the University's Radiation Protection Program. This termination procedure includes:

- C accounting for all materials and devices approved for the project;
- C the performance of radiological surveillance to insure that the laboratory or place-of-use is free of any radioactive contamination;
- C the removal of any radioactive contamination;
- C the removal of all radioactive wastes;
- C the deposing and delisting of laboratories and places-of-use;
- C and the documentation of the termination activities.

The Radiation Safety Office has established procedures and documentation checklists for the performance of these project termination activities. The Authorized User In Charge must contact the Radiation Safety Office at 515-2894 to make notification of the pending termination of a project for the use of radioactive materials and/or radiation producing devices as far in advance of the terminations as possible, but not less than 30 days prior to termination.

Transfer of radioactive material and/or radiation producing devices may take place only to another approved project and then only upon approval of the Radiation Safety Office and/or the Radiation Safety Committee.

DECONTAMINATE EQUIPMENT If laboratory equipment is to be left for the next occupant, clean or decontaminate it before departing the laboratory. If equipment is to be sold or given away, it must be decontaminated by the user. Consult the EH&S Center for recommendations on equipment decontamination. If exhaust or filtration equipment has been used with extremely hazardous substances or organisms, alert the EH&S Center.

If laboratory equipment is to be discarded, be aware that capacitors, transformers, mercury switches, mercury thermometers, radioactive sources and chemicals must be removed before disposal. Contact the EH&S Center for assistance.

**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.