**Laboratory and Research Area Closeout Guidelines**

**For Moves Leaving Penn State**

If you are unsure about any aspect of moving your laboratory and research area, including planning, preparation, packing, or waste disposal, please ask questions! If you have any health and safety related concerns pertaining to vacating your old laboratory and research area contact EHS. Your safety officer may also be able to help you smooth out logistic problems.

**Closeout Process Overview**

1. As soon as possible after determining you are leaving Penn State, review the following *Laboratory and Research Area Closeout Checklist*. It covers general points to help you safely and efficiently move lab materials and vacate your old lab(s).
2. Email EHS ([ehslabsafety@psu.edu](file:///C%3A%5CUsers%5CAXH57%5CDocuments%5CLab%20Safety%5CLab%20Close%20Out%20Forms%5Cehslabsafety%40psu.edu)) and your department safety officer to schedule a tour of your lab(s).
3. After the tour, EHS will help you address safety issues identified. As a team, we will jointly develop a close out plan customized to your lab(s). We will agree upon target dates for critical process steps.
4. When you know the exact date of your move, notify EHS to schedule a *Laboratory and Research Area Closeout Certification*. This is the final step to closing out your lab(s).

**Laboratory and Research Area Closeout Checklist**

General

* Unless approved by the department, all biological, chemical, and radioactive materials, in addition to lab equipment, glassware, and lab supplies must be removed from the lab(s).
* Due to Department of Transportation shipping requirements, it is imperative that EHS be notified if any biological, chemical, or radioactive materials will be transported to a new location. This notification should be made as soon as possible so that an approved vendor can be arranged to move the materials, the cost of the vendor will be part of your moving expenses. **Only EHS approved vendors are to be used to move regulated materials.**
* Hazardous materials, including biological, chemical, or radioactive materials, will not be moved in compromised containers. This is one of the major causes of spills. Only containers that are labeled properly, in good condition and sealed will be moved by the vendor.
* Unwanted or broken equipment, such as refrigerators, freezers, incubators, centrifuges, vacuum pumps, etc., may be discarded through Lion Surplus. Equipment that could possibly be contaminated with biological, chemical, or radioactive materials MUST be decontaminated and checked first. Any equipment that may contain oils or refrigerants MUST be drained prior to disposal. At University Park, draining of oils and refrigerants is done by OPP. Campus maintenance and operations is responsible for this at other Commonwealth Campus locations.
* For items that will not be moved to a new location, such as chemicals, glassware, and lab supplies, check with your current colleagues to see if they can be redistributed.
* Ensure you have completed the Office of Sponsored Programs, *Checklist for Departing Researchers*.
* Check beneath hoods, in shared labs and equipment, and in freezers, refrigerators, or cold rooms for biological, chemical, or radioactive materials that might easily be left behind.
* Equipment, such as biosafety cabinets, glove boxes, centrifuges, ovens, laminar flow hoods, etc., must be decontaminated prior to being moved. Decontamination is the responsibility of the lab. Contact EHS if you are unsure of the appropriate way to decontaminate a piece of equipment.
* All surfaces and equipment in the lab(s) must be disinfected, cleaned, or decontaminated to assure that no biological, chemical, or radioactive contamination remains.

Chemical

* Assess all the chemicals in your lab(s). Moving partial containers of old chemicals may not be cost effective. Chemicals should be evaluated to ensure they are not expired and still useful before deciding if they are to be moved.
* Disposal of chemicals that will not be moved to the new location must be coordinated with EHS prior to vacating the lab. Someone from the research group must be appointed as the main contact to plan for and arrange proper disposal.
* If you find unlabeled or unclearly labeled containers, make sure to relabel them with full chemical name, not formula, as soon as they are located. Chemicals must be labeled properly to be moved or disposed.
* Mercury and mercury containing equipment, including mercury thermometers, pose special risks during moves. Labs are strongly encouraged to dispose of mercury thermometers through EHS as chemical waste prior to moving unless alternatives absolutely will not suffice.
* Gas cylinders and lecture bottles that are no longer used and will not be moved should be returned to General Stores or the manufacturer. You may be paying a demurrage charge for cylinder rental while the cylinder is in your possession. Cylinders that cannot be returned to General Stores or the manufacturer must be disposed of as chemical was through EHS.
* Prior to leaving the old lab location, tubing and regulators must be removed from all gas cylinders. Ensure safety procedures are followed when removing tubing and regulators of flammable, toxic, and/or corrosive gases. Caps must also be placed on the cylinder, regardless of if they are being moved to your new location or being returned to General Stores or the manufacturer.

Biological

* Assess all of the biological materials (recombinant DNA, microorganisms, cells and cell lines, tissues, organs, body fluids, plants, insects, and any biologically-derived or -contaminated media, etc.) in your lab and determine which materials will be moved to your new lab or to another Penn State PI. Plan to dispose of unwanted materials as you would have during the course of experimentation.
* If materials are to be moved to your new location, you must work with EHS to ensure transportation regulations are followed.
* If you will be cleaning out a large amount of biological waste for autoclaving, work with your facility coordinator and EHS to ensure that there will be sufficient containers, and that autoclaved waste is picked up in a timely fashion. Remember, individual biological waste bags should weigh 20 pounds or less.

Radiological

* Separate any rad/biological, chemical/biological, or rad/chemical mixed waste from other wastes. Be sure that the mixed wastes are addressed in inventories for inclusion in waste disposal planning.
* Usable radioactive materials you do not plan to use for continuing research may be transferred to another PI approved for radioisotope use. The transfer must be approved by EHS first.
* All radioactive materials that will not be moved or transferred MUST be disposed of through EHS.
* Contact EHS for planning and assistance on packing and moving licensed radiation sources.
* Contact EHS to schedule a radiation close out survey.

**Thirty Days Before You Move**

1. Review your lab(s) again to be sure all unknown materials have been identified and no new ones have been created while preparing to vacate the lab(s). It is productive to repeat this step of the close out process, because identifying and disposing of "unknowns" is a major cost item in laboratory close outs.
2. Seek assistance from EHS in planning the removal or safe transfer of any materials that may need special handling or containers (compressed gas cylinders, poison inhalation hazards, air reactive chemicals, and DEA controlled substances) as identified during the chemical inventory assessment.
3. Follow-up on the status of time critical close out plan steps such as: chemical and radioactive waste collection, special equipment moving arrangements, etc.
4. No equipment used for radioactive material should be moved with external removable contamination present. You and your radiation workers can perform wipe and meter surveys to assure this for smaller items. The Radiation Protection Office will provide this service for major pieces of equipment including freezers and refrigerators. Contact EHS to arrange this service.
5. Work with EHS to ensure timely removal of chemical waste.
6. Work with EHS to ensure your chemical inventory has been deleted from CHIMS (Chemical Inventory Management System).

**At Moving Time**

1. EHS will need to sign all shipping papers for any hazardous materials (biological, chemical, radiological, or dry ice shipments). Ensure EHS has been notified to ensure availability for shipments.
2. Spill cleanup materials should be available at the time of the move in case there is a spill while packing or loading.
3. Wear appropriate personal protective equipment (PPE) for the materials being handled (safety glasses or goggles, lab coat, gloves, closed-toe shoes, etc.).
4. NEVER transport hazardous materials alone or in personal vehicles.
5. Revisit your old lab space. Have any materials been left? Are any hazardous materials left in your old lab?
6. Lock your lab, when you are through moving out and return your key to your facility coordinator.