



Background

Wayne State University is committed to the highest standards of environmental health and safety for its students, employees and the surrounding community. Increased public concern over environmental issues has led to a major expansion of federal and state environmental laws in recent years. Aggressive enforcement of these laws by regulatory agencies has also increased. The mishandling of hazardous materials can result in citations, fines and/or loss of the right to use such materials, and is unsafe for the community. Therefore, it is essential that all hazardous chemicals, biohazards, infectious waste and radioactive material be removed from laboratories in a timely and orderly fashion. Optimally, this should be an ongoing process, but it is critically important when a laboratory is being decommissioned. This occurs when an investigator transfers to another lab or leaves the Institution, or whenever major renovations are required.

Purpose

The purpose of this decommissioning guideline is to ensure an orderly, timely and safe process for vacating, renovating, and/or moving laboratories. Decommissioning a laboratory is a multi-step process which ensures that the laboratory is free of old chemicals, equipment, refuse, and chemical, radiological or biological contamination. Improper management of hazardous materials by University personnel at lab closeout results in costly and time-consuming reliance on external hazardous waste removal services. Abandoned chemicals in laboratories create conditions that are unsafe and non-compliant with regulatory requirements. Therefore, it is imperative that principal investigators and laboratory staff follow the procedures outlined in this guideline for properly decommissioning their laboratories.

Definitions

Decommissioning: This is the process of removing and properly disposing of chemical, biological, and radioactive materials from the lab. Decommissioning also includes decontaminating laboratory space and equipment prior to vacating the location.

Laboratory: A space where research and/or teaching are conducted and where hazardous chemicals, biological materials, and/or radiological agents are used.

Hazardous Waste: Chemical, biological or radioactive material (or a combination of any of these, also called "mixed waste") that is spent or can no longer be used as part of an experiment or a process.

Guidelines

When a principal investigator, lab director, or other key personnel plan to vacate a lab, all chemical, radioactive and biological materials, sharps, and other wastes, must be disposed in a proper manner. All laboratory equipment must be decontaminated before being transported and placed back into service, stored in another location, or disposed of/taken out of service. Working surfaces and storage locations must also be properly decontaminated. The department/administrative unit over the lab is responsible for ensuring that lab decommissioning is accomplished in compliance with these guidelines.

Responsibilities

The proper management of all hazardous materials used in laboratories is primarily the responsibility of the Principal Investigator or researcher to whom a laboratory is assigned, but the ultimate responsibility lies with each department or other relevant administrative unit. Before a responsible individual leaves a laboratory or other assigned space, all unwanted chemicals, biological research samples, radioactive and chemical waste must be disposed following the previously established hazardous material pickup request process: <http://www.oehs.wayne.edu/hazardous/index.php>.

The Office of Environmental Health and Safety (OEHS) is responsible for ensuring that the collection, labeling, storage, and disposal of hazardous waste are done properly. While OEHS serves as a resource for laboratory users, individual departments and their researchers are responsible for the proper handling, labeling, storage, and processing of their hazardous waste prior to collection and disposal by OEHS.

Procedures

The Chair or Director of the administrative unit responsible for the laboratory must ensure that researchers are aware of and follow the procedures contained in this guideline, and that OEHS has been notified, as soon as possible, when an investigator plans to vacate a laboratory.

The Principal Investigator, lab director/lab manager or other responsible person vacating the laboratory must complete the following steps:

1. Notify OEHS at least 30 days in advance of leaving the university or relocating by completing a [Request for Laboratory Decommissioning Inspection form \(OEHS Form D1\)](#).
2. Make arrangements before leaving for the transfer or disposal of chemicals, radioactive materials and biological materials.
3. Ensure that all labs, storage areas, equipment and work surfaces within these spaces are thoroughly cleaned before vacating the space(s).
4. Correct all deficiencies that remain after a decommissioning inspection by OEHS.

If **radioactive materials** were used in the laboratory, the following actions must be completed:

1. Survey and decontaminate all areas and equipment in which radioactive materials were used or stored. The surveys shall be documented in the laboratory logbook.
2. Contact Radiation Safety at 313-577-1200 to transfer the remaining radioactive materials to another permit holder or to Radiation Safety for disposal. Arrangements can be made through Radiation Safety to ship radioactive materials.
3. Reconcile the radioactive materials inventory.
4. Terminate or transfer the dosimeter badges, if appropriate.

OEH&S must verify that the following activities have occurred prior to the lab being vacated:

1. All chemicals, radioactive materials, biological materials, and sharps (i.e. razor blades, broken glass and needles) have been properly removed, disposed and/or stored.
2. All non-fixed equipment has been removed; drawers/cabinets emptied, fume hoods cleaned.
3. All work surfaces have been properly cleaned and decontaminated.
4. Remove and destroy all labels indicating the presence of radioactivity.

OEH&S will complete a [Laboratory Decommissioning Checklist \(Form D3\)](#), and notify the PI and appropriate administrative unit of the survey results. The appropriate follow-up will be completed by OEH&S depending upon the type of hazards present in the lab. When all decommissioning processes are satisfactorily met, OEH&S will certify this in writing to the administrative unit.

Facilities Planning and Management (FP&M) will ensure that all equipment to be moved or repaired is tagged with an [Equipment Decontamination Form \(Form D2\)](#). They will also ensure that the [Laboratory Decommission Checklist \(Form D3\)](#) is completed before any scheduled renovations begin.

For more information, contact:

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313-577-1200
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Acknowledgment

Portions of this decommissioning guideline were gleaned from the Purdue University, the University of Rochester, and the University of South Carolina's decommissioning plans.