

Revision No.: 02 Date: 9/26/17

1.0 Purpose: The purpose of this document is to prescribe procedures to be followed to safely and legally deactivate and release to unrestricted use, or transfer responsibility for laboratory facilities, which may potentially be contaminated by hazardous chemical, radiological, or biological materials. Adherence to this procedure will ensure that employees, students, and members of the public are not needlessly exposed to potentially dangerous materials, and that all regulated materials are disposed of properly.

### 2.0 Scope:

- 2.1 This procedure applies to all laboratory facilities where radiological, hazardous chemical or biologically hazardous materials are used, created, or stored. This may include but is not limited to laboratories, large environmental chambers, coolers, walk in freezers, storage facilities, and large fixed location equipment. This procedure applies to facilities owned by, leased by, or similarly occupied by the university.
- 2.2 This procedure applies whenever the Principal Investigator for a laboratory vacates a laboratory due to retirement, reassignment, resignation, transfer, relocation, or similar reasons. This procedure also applies when a lab space or significant portions thereof are temporarily vacated for the purpose of remodeling or renovation of the space.

### 3.0 Responsibilities:

- 3.1 <u>Deans, Directors, and Department Chairs</u> will ensure that all Faculty and Principal Investigators receive a copy of this procedure, are instructed that it is necessary to comply with the terms of this procedure, and will ensure that this procedure is followed.
- 3.2 <u>Faculty and Principal Investigators</u> will ensure that all laboratory personnel have access to a copy of this procedure, that the procedure is followed, that any unusual problems are referred to Environment, Health & Safety (EH&S) for discussion and resolution.
- 3.2 <u>Laboratory Staff and Students</u> will follow this procedure, and will refer any problems or questions to their supervisor.
- 3.4 <u>Environment, Health & Safety</u> will provide consultative support, will assist in managing unusual or special problems, and will authorize any necessary deviations from this procedure.

### 4.0 Definitions:

- 4.1 Employees: University at Buffalo Facilities employees
- 4.2 <u>Equipment</u>: Any laboratory equipment used for research or storage of research materials, including but not limited to fume hoods, autoclaves, centrifuges, refrigerators, freezers, incubators, etc.
- 4.3 Materials: Hazardous, radiological, or biological materials.
- 4.4 EH&S: Environment, Health & Safety



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4.5 <u>Safe or Safety</u>: Having no exposure to potentially dangerous concentrations of materials.

## **5.0 Procedures:** Implement the "Laboratory Facility Release Checklist" Form.

5.1 <u>Equipment Release</u> - All potentially and known contaminated equipment shall be cleaned and released in accordance with the University at Buffalo "Laboratory Equipment Release" procedure (EH&S Document No. Campus 02-103).

## 5.2 <u>Material Removal</u> -

- 5.2.1 All hazardous chemical, radiological, or bio-hazardous materials shall be removed from the laboratory. Materials may be either disposed of in accordance with established procedure, or transferred to another laboratory or facility in a manner mutually agreed upon by the PI and EH&S.
- 5.2.2 Chemicals designated for disposal shall be disposed of in accordance with the Chemical Waste Management Guide or Laboratory Waste.
- 5.2.3 EH&S staff, in accordance with established procedures, will pick up radiological materials designated for disposal.
- 5.2.4 Bio-hazardous materials will be disposed of as regulated medical waste in accordance with established procedures. These materials may first be treated by chemical or high temperature methods to reduce risk prior to disposal as regulated waste.
- 5.2.5 Some materials require support by trained specialists, such as the removal of internal radioactive sources from liquid scintillation counters. The department or principal investigator shall make arrangements with the counter manufacturer for the proper removal and disposal of the sources. All such work must be documented.

## 5.3 <u>Decontamination</u> –

5.3.1 All hazardous chemical, radiological, or bio-hazardous materials shall be removed from facility surfaces before release of the facilities. Decontamination shall be performed as outlined herein:

Radiological Materials – radioactive contamination shall be removed by standard radiological decontamination methods. The maximum level of residual radioactivity shall be as determined by EH&S policy, or by Chapter I, Part 16 of the State Sanitary Code, whichever is more limiting. A documented "close out survey" shall be conducted by EH&S. Surveys will be performed by the Principal Investigator to demonstrate that decontamination limit has been achieved. These surveys shall be documented, and records shall be available for review by EH&S or by the Department of Health. The Principal Investigator shall notify EH&S of the impending close out. The area will then be posted in accordance with EH&S policies. All waste generated in the course of decontamination shall be disposed of as radioactive waste. After the close out



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survey is completed radioactive labels and stickers shall be removed or defaced.

<u>Chemical Residues</u> – shall be removed, neutralized, or otherwise rendered non-hazardous using an appropriate method determined by the chemical and physical characteristics of the contaminant(s), and the physical nature of the facilities surfaces. Hazard labels shall be removed or defaced as appropriate. The decontamination method shall be documented, and records shall be available for inspection by EH&S. Any incidental wastes shall be disposed of properly.

<u>Bio-hazardous Contaminants</u> - shall be removed or rendered non-pathological. Typically this will be accomplished using a bleach solution or other chemical means. Hazard labels shall be removed or defaced as appropriate. The decontamination method shall be documented, and records shall be available for inspection by EH&S. Any incidental wastes shall be disposed of properly as regulated medical waste.

- 5.4 <u>Certification and Labeling</u> Upon completion of Material Removal and Decontamination, the Principal Investigator (or other authorized individual as designated in writing), shall affix a "Laboratory Facility Release Certification" poster to the outside of all laboratory doors. All sections of the poster shall be completed with all pertinent information or "NA" as appropriate. A copy of the poster shall be forwarded to EH&S. The posting shall remain in place for 30 days.
- 5.5 Alternative Approach Transfer of Responsibility
  - 5.5.1 In some situations, a complete decontamination of the facility may not be appropriate. This would most often apply when a lab is being vacated, but not rehabilitated, and the subsequent occupant will utilize the laboratory for similar purposes.
  - 5.5.2 In such cases full decontamination is not required, however, the following alternative requirements must be met:
    - The "outgoing" PI will provide EH&S and the "incoming" PI with a complete inventory of any residual chemicals or biological materials.
    - The incoming PI will acknowledge in writing that he or she accepts full responsibility for the safekeeping and ultimate disposal of these materials. Any materials not accepted will remain the responsibility of the "outgoing" PI for proper disposition.
    - The outgoing PI will leave the facility in a state of good housekeeping, and will remove any contamination potentially injurious to future occupants.
    - The "outgoing" PI will inform the "incoming" PI and EH&S, in writing of any special safety considerations such as spills that may have left



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contamination in inaccessible areas within the lab (under flooring or carpeting, behind benches, etc.).

- The department chairs of the "incoming" and "outgoing" departments will notify EH&S in writing that they approve of the transfer of responsibility.
- 5.6 <u>Inherently Waste-like Materials</u> Indefinite storage is not an alternative to proper disposal of hazardous materials. Unused and outdated chemicals, and any hazardous materials not clearly and legitimately identified for use in the future is considered "inherently waste-like". Regulations require that these materials be promptly disposed of as hazardous waste.
- 5.7 <u>Special Problems</u> All special or unusual problems will be referred to EH&S for resolution. Any deviation from the requirements set forth in this procedure must be approved in writing by EH&S.
- **6.0 Document Management:** This procedure shall be reviewed once every two years, or as changes require.

#### 7.0 Associated Documents:

- 7.1 "Campus Commitment to Safety," University at Buffalo, Office of the Provost, Office of the Senior Vice President, April 3, 2001.
- 7.2 Radiation Protection Services "Radioactive Materials Safety Manual".
- 7.3 Chapter I, Part 16 of the State Sanitary Code (NYCRR Title 10).
- 7.4 University at Buffalo "Chemical Waste Management Guide"

### 8.0 Document Revision History:

Revision 00: Original 04/17/02 Revision 01: New Format 03/15/04 Revision 02: Revised Associated Forms 09/26/17

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#### 10.0 Associated Forms:

Laboratory Facility Release Checklist Form

Laboratory Facility Release Certification Form