UBC Life Sciences Centre
Laboratory Decommissioning
Procedure and Exit Protocol

Scope

This document is applicable to all departments, units or operations that have laboratories within the Life Sciences Centre (LSC) or that have equipment that has come in contact with hazardous materials. The decommissioning process is to ensure that all user-owned research materials, equipment and supplies are removed from the space and that a thorough clean-up be completed prior to the final departure of lab staff.

Purpose

This document provides a process for the proper decommissioning of labs prior to renovations or transfers of occupancy in lab spaces.

Administrative Heads of Units (or designates) are to provide this document to research faculty and staff under their supervision that are leaving the research space in question.

Background

Federal and provincial regulations[a], as well as UBC Policy 9 on Hazardous Materials Management have made it mandatory that principal investigators decommission their laboratories to ensure that the legal and ethical expectations associated with termination of their research are met.

When properly applied, an exit protocol ensures that:

- Unsafe conditions are eliminated
- A proper and complete clean-up is performed
- All lab equipment and materials are properly decontaminated and disposed of or recycled
- Hazardous materials are properly disposed of or recycled/reused
- Work surfaces are free of contamination
- The health and safety of researchers is protected
- University policies and Departmental procedures are followed, and
- Regulatory requirements are met.

[a] Workplace Hazardous Materials Information System (WHMIS); Provincial and Federal Health, Safety and Environmental regulations; the Canadian Nuclear Safety and Control Act (2000); Health Canada and Canadian Food Inspection Agency Guidelines for working with bio hazardous materials.

Notification of Departure

Faculty or staff members that are intending to leave UBC are to inform their Administrative Head of Unit (such as a Department Head) of their intention at least three months in advance of the anticipated departure date.

The Administrative Head of Unit (or designate) shall then provide a copy of the LSC Laboratory Exit Protocol and inform the LSC Safety Office of the researchers' intent to leave the University.

The date of this information transfer should be documented.

Note: As per University Policy, it is the responsibility of the Administrative Head of Unit to ensure that the faculty or staff member follows all the steps in the protocol to completion, including all requirements for documentation.

Decommissioning Checklist

A checklist will provide a simple method for the Administrative Head of Unit to confirm that the protocol has been completed. The faculty or staff member shall submit a completed exit protocol checklist to the Administrative Head of Unit prior to departure. The Administrative Head of Unit shall retain a copy and one shall also be provided to the faculty member.

Procedure

When the primary researcher or supervisor of a laboratory leaves or decommissions a laboratory, the following procedures shall be followed:

General

1. All unknown materials must be identified and appropriately labeled.
2. All chemicals should be removed from the laboratory by transfer to another primary researcher/laboratory supervisor, or by disposal through the Environmental Services Facility (ESF).
3. A complete and current inventory of all remaining hazardous materials must be completed, if applicable.
4. All solid waste and glass waste containers should be emptied and all equipment not transferred to the future occupant of the space should be removed.
5. Fume-hoods, biosafety cabinets, glove boxes and lab benches must be decontaminated and cleaned.
6. Special arrangements must be made for the disposal of potentially explosive materials and lecture bottles of hazardous gases (contact ESF at 26306 for assistance)

7. A member of the Local Health and Safety Committee should inspect the laboratory and demonstrate approval of the process by signing the inventory form.
8. A completed Exit Protocol Form should be sent to the office of the Administrative Head of Unit or Director. It is the responsibility of the Administrative Head of Unit or Director to ensure that all decommissioning procedures are completed.
9. In the case of building decommissioning, or when the area is to be renovated, or in swing spaces, the building manager should participate in the lab inspection and approve lab decommissioning.

Transfer of chemicals to another primary researcher or laboratory supervisor

All materials transferred must be labeled according to WHMIS requirements and the receiving party must obtain appropriate Material Safety Data Sheets. For further information please contact the Chemical Safety and Occupational Hygiene Associate at 604-822-2273. If you wish to transfer radioactive materials to another licensee please contact the Radiation Safety Advisor at 604-822-7052.

Some of the materials may be forwarded to the University Chemical Exchange Program for future use. Contact the Environmental Services Facility (2-6306)

Disposal of Chemicals

The identity of all materials must be established before disposal.

A chemical disposal inventory form must be completed for all chemicals ready for disposal and forwarded to the Department of Risk Management Services. Following approval by ESF staff, the materials must be packaged according to the instructions provided and then arrangements are to be made with ESF at 822-6306 for pick-up of the material.

If there are unidentified materials, contact the Environmental Services Facility to arrange for materials to be classified for waste disposal purposes; there will be a cost associated with this process ($100.00 - $150.00/hour). Payment will be the responsibility of the exiting lab (generator) or, failing this, the generator / PI's department.

Make special arrangements for the disposal of potentially explosive materials or lecture bottles of hazardous gases by ESF approved contractor (contact ESF at 2- 6306). Disposal costs are to be paid by the generator or, failing this, the generator / PI's department.

Return compressed gas cylinders to suppliers and terminate all delivery contracts.

Radioisotope Permit & Laboratory Decommissioning

Required from the Licensee:

1. Memo to Radiation Safety Office (RSO) stating intent to discontinue the radioisotope permit.
2. A complete set of wipe tests for each laboratory/room licensed for isotope use, regardless of radiation use, within the space. Please refer to your permit and associated amendments for the list of permitted rooms.
3. Record of proper disposal of all isotopes on hand. This can include a transfer of remaining isotope to another researcher that is licensed for that material or to the Radiation Safety Office.
4. Completion of a yearly isotope inventory (obtained from the RSO).
5. All isotope purchase, use, disposal and contamination control records must be transferred to the Radiation Safety Office.

Following the completion of the above steps, Radiation Safety Office staff will remove all signs and all records will be transferred to the RSO. Thereafter, a letter will be issued to the researcher, and the department head if requested, stating that the license is no longer active. Decommissioning of laboratory space is not complete until all steps have been verified by the Radiation Safety Office.

Biohazard Laboratory Decommissioning

1. Notify the Biosafety Office (604-822-9527) and the Office of Research Services that the biohazard protocols are to be concluded and by what date.
2. Record transfer of bio hazardous materials to the inventory of another researcher.
3. Terminate all biohazards not transferred to the inventory of another researcher.
4. Decontaminate all working surfaces.
5. Conclude liquid nitrogen delivery contract

LABORATORY EXIT PROTOCOL TRACKING FORM

This form is to be used by the departing laboratory's departmental / administrative unit to lead and track the lab decommissioning process and to endure its timely completion.

Researcher / Laboratory Name:	
Department / Administrative Unit:	

Item	Date received / completed	Notes
Notice of departure / lab closure		
Projected final lab closure date		
Lab decommissioning Inventory Sheet		
Initial decommissioning meeting / lab space walk-through		
Follow-up walk-through*		
Final walk-through and sign-off**		

Notes:

During the initial walk-through, the Lab Decommissioning Inventory sheet - provided in advance by the outgoing lab - is to be verified (or updated as needed). The inventory is then to be used to ensure a complete decommissioning process. In order to best effectuate this, it is recommended that the following LSC personnel (at minimum) participate the initial walk-through:

- the departing PI (or designate)
- the applicable LSI Wing Manager and / or local safety committee member
- the LSC Safety Advisor
- the Administrative Head of Unit (or designate)

*The follow-up walk-through is to ensure that the decommissioning process is progressing properly and to identify and address any issues that may prevent its timely completion. The Decommissioning Checklist is to be used to assess progress and determine outstanding items to be completed.

**A final walk-through is completed by the relevant parties in order to verify that the Decommissioning Checklist has been properly completed, allowing for the final sign-off and submission of this document. The shared-space model at the LSC necessitates that a number of individuals participate in an initial walk-though in order to precisely determine:

- the lab spaces for which the closing lab is responsible
- the lab equipment for which the closing lab is responsible
- the chemical, biological, radiological and other materials (including waste) for which the lab is responsible

LABORATORY DECOMMISSIONING INVENTORY SHEET

This form is to be used by the departing laboratory and the responsible department / administrative unit to ensure that the decommissioning process is completed for all relevant locations and equipment.

NOTE: Those involved in the process should print out and use as many copies of this as needed.

Lab / Group Name:	
Target Decommissioning Completion Date:	

The decommissioning process for this laboratory will involve the following areas / locations within the LSC:

Lab Locations	Description / Details

This decommissioning process will involve the following equipment / materials within the LSC:

Description	Location

LABORATORY DECOMMISSIONING CHECKLIST

This checklist is to be used to guide personnel through the laboratory decommissioning process and serves as a verification of completion at the end of the process.

Researcher / Laboratory Name:	
Department / Administrative Unit:	

For the areas and / or equipment identified in the Lab Decommissioning Inventory:	**Yes**	**No**	**Not Applicable / Comment**
1. Have all chemicals and other materials, including unknowns, been identified and properly labeled?			
2. Have all chemicals been transferred to another researcher's inventory or sent to the Environmental Services Facility?			
3. Were arrangements made for the disposal of lecture bottles of hazardous gases and potentially explosive chemicals?			
4. Was a complete inventory created of all hazardous materials and chemicals remaining in the laboratory?			
5. Has the Administrative Head of Unit received a copy of this inventory?			
6. Have compressed gas cylinders (in the lab and in the LSC Gas Cylinder Storage Room) been transferred to another lab or returned to the suppliers?			
7. Has the Radiation Safety Office (RSO) been notified of your intent to decommission the radioisotope permit?			
8. Has a complete set of wipe tests been performed in all licensed areas and submitted to the RSO?			
9. Have the radioisotopes (and rad waste) been disposed of, or transferred to another licensee?			
10. Has an annual inventory record been submitted to the RSO?			
11. Have all radiation inventory and contamination control records been submitted to the RSO?			
12. Has the Biosafety Office been notified of your intent to terminate work with Biohazards?			
13. Has all bio-hazardous material been transferred to another researcher and/or been properly disposed of?			
14. Has all lab waste (glass, sharps, packaging, etc.) been properly disposed of?			
15. Are all working surfaces decontaminated?			
16. Have cryogenic materials been disposed /transferred and the liquid nitrogen contract been terminated?			

17. Has specialized lab equipment been safely decontaminated / de-energized /recycled /disposed?			
18. If you will be transferring to a new laboratory or work area, has RMS been provided with updated information for the hazard information door signs, specifically hazard information and emergency contact information?			
19. Has the Safety Committee / Safety Officer inspected the laboratory? Date Completed:			
20. Will you require continued access to the LSC after decommissioning? (if no, please ensure you return all keys and access cards to your Departmental Administrator).			
Checklist Completed By:	**Date Completed:**		

When a PI retires, closes an entire lab or moves to another building, this document must be signed below and a copy forwarded to UBC Risk Management Services for record keeping purposes.

Principal Investigator:

Name:

Signature:

Date:

Administrative Head of Unit:

Name:

Signature:

Date

Wing Manager / Safety Committee Chair:

Name:

Signature:

Date:

LSC Safety Advisor

Name:

Signature:

Date:

When a PI leaves a lab, but the space will still be occupied by the same department, the incoming PI accepts the lab and the inventory in its current condition.

Outgoing Laboratory Supervisor

Name:

Signature:

Date:

Incoming Laboratory Supervisor

Name:

Signature:

Date: