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| **Protocol** | **UBC-RMS-OHS-PRO**  **14-002** |
| **Department of Risk Management Services**  www.rms.ubc.ca | Date created: April 28th, 2014  Date revised: December 4th, 2018 |

**Decommissioning Procedure for UBC Research Spaces**

**NOTE:** *Copy of checklist must be kept on file with Department/Unit Head Representative and a copy provided to Risk Management Services (*[*researchsafety@ubc.ca*](mailto:researchsafety@ubc.ca)*).*

**Scope**

This protocol is applicable to all departments with laboratories or operations where hazardous materials, or equipment that has come in contact with hazardous materials, are used.

**Purpose**

To provide a framework for Administrative Heads of Units to develop a site-specific exit plan for research faculty and staff under their supervision that are leaving the University of British Columbia.

To ensure a proper lab decommissioning process, prior to renovation or transfer of lab occupancy.

**Background**

Federal and provincial regulations,a as well as UBC Policy 7 on Hazardous Materials Management has 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 clean-up is performed;

• Lab equipment is 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 [General Nuclear Safety and Control Regulations](https://laws-lois.justice.gc.ca/eng/regulations/sor-2000-202/page-1.html) (2000); [Canadian Biosafety Standard Second Edition](https://www.canada.ca/en/public-health/services/canadian-biosafety-standards-guidelines/second-edition.html).

**Notification**

It is recommended that faculty or staff member inform their Administrative Head of Unit of their intention to leave UBC three months in advance of the anticipated departure date. The Administrative Head of Unit shall then provide a copy of the Departmental Exit Protocol and inform the Department of Risk Management Services of the researcher’s intent to leave the University. The date of this information transfer should be documented. It is then 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.

**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. A current inventory of all hazardous materials must be completed.
2. All unknowns must be identified and appropriately labeled.
3. All chemicals must be removed from the laboratory by transfer to another primary researcher/laboratory supervisor, or by disposal through the Environmental Services Facility (ESF).
4. All solid waste and glass waste containers must be emptied and properly disposed of.
5. All equipment not transferred to the future occupant of the space must be decontaminated, labelled using the form *Laboratory Equipment Clearance Form December 2018* or equivalent before removal.
6. Fume-hoods, biosafety cabinets, glove boxes and lab benches must be decontaminated and cleaned.
7. Special arrangements must be made for the disposal of potentially explosive materials and lecture bottles of hazardous gases. For assistance contact the ESF (604-822-6306)
8. The Local Safety Team should inspect the laboratory and demonstrate approval of the process by signing the inventory form.
9. An approved inventory form should be sent to the Administrative Head of Unit or Director. It is the responsibility of the Administrative Head of Unit or Director to ensure that adequate procedures are followed for the decommissioning of laboratories.
10. Access to the vacated, cleared space should be restricted to the incoming researcher or in cases of renovation, the operations staff overseeing the renovation.
11. In the case of building decommissioning, or when the area is to be renovated, or in swing spaces, the facility manager,b should participate in the lab inspection and approve lab decommissioning.

b Vancouver campus Facility Managers are represented by [UBC Building Operations Facility Managers](http://www.buildingoperations.ubc.ca/facilities-managers/). For offsite locations Facility Managers are property management and/or land owner assigned designates. (e.g. Vancouver General Hospital Site- UBC occupants must obtain approval from VCHA Safety & Prevention Services)

**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 Safety Data Sheets. The transfer of radioactive materials to another permit holder will require RMS consultation. The transfer of biological materials to another permit holder will require the recipient to update the inventory section of their biosafety permit on RISe. Please contact the RMS Research Safety Team – [researchsafety@rms.ubc.ca](mailto:researchsafety@rms.ubc.ca).

**Disposal of Chemicals**

The identity of all materials must be established before disposal. If there are unidentified materials (unknown substances), contact the ESF to arrange for materials to be classified for waste disposal purposes; there will be a cost associated with this process depending on required evaluation and TDG hazard class.

Make special arrangements for the disposal of potentially explosive materials or lecture bottles of hazardous gases by ESF approved contractor (contact ESF at 604-822-6306). Disposal costs are to be paid by the generator.

All chemicals must be disposed of via the online [Chemical Waste Inventory System](http://www.hse2.ubc.ca/wis/Login.aspx?ReturnUrl=%2fwis%2fuserapp%2fcwisApp.aspx) (CWIS). Detailed and complete information must be submitted. 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 604-822-6306 for pick-up of the material.

Return compressed gas cylinders to suppliers.

**Radioisotope Permit & Laboratory Decommissioning**

Required from the Permit Holder:

1. Notify the Radiation Safety Office (604-822-4353) and the Office of Research Services that the biohazard protocols are to be concluded and by what dat.

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 who is permitted 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.

6. Permit holder must login to [www.rise.ubc.ca](http://www.rise.ubc.ca) and apply to terminate permit.

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, via www.rise.ubc.ca, 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 (604-822-4353) 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. Destroy all biohazards not transferred to the inventory of another researcher. If using an autoclave, then documented proof of kill using biological indicators is required.

4. Decontaminate all working surfaces with appropriate decontaminate. If gas decontamination is necessary then documented proof of kill using biological indicators is required.

5. For any equipment that has been in contact with bio hazardous materials, a record of the decontamination methods, dates, and who performed the task must be kept on file with the department.

6. Permit holder must login to [www.rise.ubc.ca](http://www.rise.ubc.ca) and apply to terminate permit.

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| **EXIT PROTOCOL CHECKLIST** | | **Date:** |  | | | |
| **Room #(s):** | | |  | |
| **Item #** | **Have you:** | **Yes** | | **No** | | **N/A** |
| 1 | Created a complete inventory of all hazardous materials in the laboratory? |  | |  | |  |
| 2 | Has Administrative Head of Unit received a copy of the inventory? |  | |  | |  |
| 3 | Have all unknowns (chemicals, etc.) been identified and properly labeled? |  | |  | |  |
| 4 | Have arrangements been made for the disposal of lecture bottles of hazardous gases and potentially explosive chemicals? |  | |  | |  |
| 5 | Are MSDS sheets available for all known chemicals? |  | |  | |  |
| 6 | Have all chemicals been disposed of via the online [Chemical Waste Inventory System](http://www.hse2.ubc.ca/wis/Login.aspx?ReturnUrl=%2fwis%2fuserapp%2fcwisApp.aspx) (CWIS)? |  | |  | |  |
| 7 | Have the chemicals been transferred to another researcher's inventory or to the Environmental Services Facility? |  | |  | |  |
| 8 | Have compressed gas cylinders been returned to the suppliers? |  | |  | |  |
| 9 | Has the Radiation Safety Office (RSO) been notified of your intent to decommission the radioisotope permit or lab areas? |  | |  | |  |
| 10 | Has a complete set of wipe tests been performed in all licensed areas and submitted to the RSO? |  | |  | |  |
| 11 | Have the radioisotopes been disposed of or transferred to another permit holder? |  | |  | |  |
| 12 | Has an annual inventory record been submitted to the RSO? |  | |  | |  |
| 13 | Have all radiation inventory and contamination control records been submitted to the RSO? |  | |  | |  |
| 14 | Has the Biosafety Office been notified of your intent to terminate work with Biohazards? |  | |  | |  |
| 15 | Has bio hazardous material been disposed of and transferred to another researcher? |  | |  | |  |
| 16 | Are all working surfaces decontaminated? |  | |  | |  |
| 17 | Has the liquid nitrogen contract been terminated? |  | |  | |  |
| 18 | Has specialized lab equipment been safely decontaminated/de-energized/recycled/disposed? |  | |  | |  |
| 19 | Has the Local Safety Team inspected the laboratory? |  | |  | |  |
| 20 | If you will be transferring to a new laboratory or work area, has [new signage been requested and information for the old spaces been updated](http://rms.ubc.ca/health-safety/research-safety/chemical-safety/whmis-and-globally-harmonized-system-ghs/), specifically hazard information and emergency contact information? |  | |  | |  |
| 21 | Have all UBC permits been terminated? Biosafety Permit and/or Radiation Permit. |  | |  | |  |
| 22 | Have access control measures been implemented for the space? |  | |  | |  |

When a researcher retires, closes an entire lab or moves to another building, the form must be signed below and forwarded to Risk Management Services for approval.

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| **Leaving Principal Investigator:** | | **Administrative Head of Unit or Rep:** | |
| Name: |  | Name: |  |
| Signature: |  | Signature: |  |
| Date: |  | Date: |  |
|  |  |  |  |
| **Local Safety Team Rep:** | | **Facility Manager:** | |
| Name: |  | Name: |  |
| Signature: |  | Signature: |  |
| Date: |  | 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.

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| Incoming PI Name: |  |
| Signature: |  |
| Date: |  |

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