



Radioisotope Permit Application

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| Issued by: | Chemical Control Centre | Date issued: | 06/01/2011 |
| Approved by: | Radiation Safety Committee | Date Approved: | |

All researchers who are planning to use Radioactive Materials in buildings operated by the University of Windsor are required to apply and obtain an approved Internal Radioisotope Permit.

Section A: Applicant Information

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|--|--|----------------------|--|
| Name: | | | |
| Department: | | Staff Number: | |
| Office (Room # & Building): | | | |
| Office Phone: | | Lab Phone: | |
| Fax Number: | | E-mail: | |

| Type of application (check one) | | | |
|--|---|--|--------------------------|
| Renewal of existing permit: | <input type="checkbox"/> | New Internal Radioisotope Permit: | <input type="checkbox"/> |
| Current or previous permit number(s): | | | |
| When do you anticipate requiring an internal radioisotope permit? | <i>(Permit approval may take up-to 4 weeks)</i> | | |

Statement of Intended Use: Please provide a brief description of your work (150 words) that explains the radioactive materials that will be used and how they will be used. If you require additional space, please attach a separate sheet.



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Section B: Funding Sponsor and/or Agency Information:

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|---------------|------------------------|--------------------------|
| Title | ORS File No: | |
| | | |
| Agency | Business Unit # | Start / End Dates |
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| Title | ORS File No: | |
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| Agency | Business Unit # | Start / End Dates |
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Section C: Facilities / Project Location: Please list all Locations each radioactive materials will be used. Include all room numbers and sub room numbers if applicable. A durable and legible sign containing the radiation warning symbol and "RAYONNEMENT - DANGER – RADIAION" must be posted at boundaries and points of access. A container or device that contains a radioactive substance must also be labeled. Do not post the radiation warning symbol where there is no radiation.

| Building | Room | Classification Level | Isotope | Office Use Only Last Site Visit |
|-----------------|-------------|-----------------------------|----------------|--|
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Classification levels are (a) Basic, (b) Intermediate, or (c) High.



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Site Specific Handling & Emergency Response: Please outline the emergency response plan for each radioisotope, including specific instructions and safety protocols. This must include spills response, emergency contact numbers & action plan. Please provide standard operating procedures (SOP) that all lab workers will follow when handling each radioactive material specified in this application. If you require additional space, please attach a separate sheet.

Section E: Radioisotopes

List all isotopes that you are applying to be permitted to use or store. There are two types of permits: (a) sealed source/counting facilities; and (b) open source permits. If you require both types of permits, each type must be applied for on separate copies of this application form.

a) Sealed Source Permits^(†): Allows the purchase, use and storage of radioactive materials that are encapsulated or encased in such a way that it is extremely unlikely to be absorbed into the body. Sealed Sources may be in the form of calibration sources, moisture density gauges, electron capture chromatographs, X-ray fluorescence equipment or spectroscopy sources. Attach additional sheets if required.

| Radioisotope | Activity (MBq) | Calibration Date | Source Serial Number | Device Manufacture | Device Model # | Device Serial Number |
|--------------|----------------|------------------|----------------------|--------------------|----------------|----------------------|
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(†) Leak testing of SEALED SOURCES containing more than 50MBq (1.35mCi) is required to be completed annually.

By applying for this permit you agree to participate in the University of Windsor’s Leak Testing Program (annual charge may apply).

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b) Open Source Permits:

Allows the applicant to purchase, use and store radioactive materials in the form of a solid, liquid or gas. These sources are provided in a container designed to allow the removal or extraction of some or the entire radioactivity such as a vial, ampoule or bottle. The information supplied by the applicant will be used to access the level (Basic or Intermediate based on CNSC regulations). *Maximum activity in storage and requested possession limit include the total activity of all stock solution, samples and waste in the possession of the Permit Holder.* Attach additional sheets if required.

| Radioisotope | Maximum activity in use at a single time (MBq) | Maximum activity per vial/container (MBq) | Maximum activity in storage (MBq) | Requested Possession Limit (MBq) | Approved Limit (RSO Only) |
|--------------|--|---|-----------------------------------|----------------------------------|---------------------------|
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Section F: Designated End-Users⁽⁺⁺⁾

List all personnel who, in addition to the Permit Holder and LRD, may be working with radioactive materials. Attach additional sheets if required.

| Last Name | First Name | Sex (M/F) | Student/Employee ID Number | Email | Campus Ext | Title |
|-----------|------------|-----------|----------------------------|-------|------------|-------|
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(++) All designated end-users of radioactivity must successfully complete the University of Windsor's WHMIS (annually) and Radiation Safety Training Program for End-User's. In addition, all end-users are required to participate in the University's personal monitoring program, including indirect and bioassay monitoring (if applicable). By applying for this permit you agree to participate in the University of Windsor's personal Program (charge may apply).

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Section G: Instruments for Contamination Monitoring and Sample Counting List all instruments that you might use (yours or borrowed) - YOU MUST demonstrate that you have access to appropriate instruments for monitoring.

Bench Top Counters (beta or gamma counters)

| Make and Model | Serial Number | Location (Room # & Building) |
|----------------|---------------|------------------------------|
| | | |
| | | |

Portable Survey Meters⁽⁺⁺⁺⁾:

| Make & Model of Meter | Make & Model of Probe | Location (Room # & Building) | Calibration Date | Ownership |
|-----------------------|-----------------------|------------------------------|------------------|-----------|
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(+++)⁽⁺⁺⁺⁾ All survey meters used in contamination monitoring must be calibrated annually (CNSC regulation). By applying for this permit you agree to participate in the University of Windsor's Survey Meter Calibration Program (charge may apply).

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Section F: Site Specific Handling & Emergency Response Declarations

Applicant:

I, the Applicant, warrant the statements contained herein to be true and agree that the radioisotopes supplied against this application shall be used for the purpose and in the manner authorized by the Research Safety Committee. I hereby agree to comply with the rules and procedures outlined in the University of Windsor "Radiation Safety Manual", including responsibilities of permit holders.

Date: _____

Signature of Applicant:

Department Head Approval:

I, the supervisor of the Applicant, approve of the applied for activities including the use of the locations (listed in Section 5) and I am aware that the cancellation of the Applicant's Internal Radioisotope Permit requires the completion of a *Radioisotope Permit Decommissioning Form* and decommissioning of these areas.

Date: _____

Signature of Department Head:

Related notes:

- Requests for amendment of the following information should be submitted in writing to the Chemical Control Centre for subsequent approval by the Research Safety Committee, as per the Radiation Safety Policies of the University of Windsor.
- Records required as outlined within the conditions listed on the Internal Radioisotope Permit and the Internal Radioisotope Permit itself is the property of the University of Windsor and must be returned to the Radiation Safety Officer upon request.
- If the Permit Holder wishes to cancel a permit they are required to indicate such intent to the Radiation Safety Office as soon as possible, and submit a completed "Radioisotope Permit Decommissioning Form".

Return the completed application to:

Radiation Safety Officer,
Chemical Control Centre
University of Windsor
Phone: (519) 253 – 3000 ext. 3524

A copy of the completed application may be faxed to (519) 973-7013; however, a hard copy must follow prior to approval.



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Permit Holder Responsibilities:

- a) Be aware and comply with all safety rules and procedures as identified in the Radiation Safety Manual and conditions on the Internal Permit.
- b) Ensure that all Designated Workers as listed on their Permit are aware of all radiation safety procedures;
- c) Ensure that all Designated Workers are trained to work safely with radiation and to provide site-specific training in the safe use of radioactive materials and other sources of ionizing radiation;
- d) Regularly assess and inspect their areas for compliance with radiation safety procedures;
- e) Evaluate the potential hazard of all new laboratory procedures and provide information to service personnel in conjunction with the Radiation Safety Officer. Develop site-specific procedures to mitigate the hazards; communicate these procedures to all staff, students and visitors, and supervise the following of these procedures.
- f) Ensure resources are available to meet with the safety related requirements in order to comply with the appropriate procedures in the Radiation Safety Manual.
- g) Ensure that any incidents that occur in their area are promptly reported to the Chemical Control Centre, Division of Laboratory Safety; and
- h) Adhere to all responsibilities as listed on the Permit.
- i) Supervise all Designated Workers and visitors to ensure the safe conduct of work performed in assigned laboratories.
- j) Post and make available necessary rules and regulations, including the Radiation Safety Manual, to Designated Workers.
- k) Report to the Radiation Safety Officer all changes to information found on the Internal Radioisotope Permit.
- l) Assign duties to Designated Workers that include: regular contamination monitoring and inventory, record-keeping, receiving of shipments of radioactive materials, waste disposal, thermoluminescent dosimeter (TLD) service, cleaning and securing of labs.
- m) Maintain and update records on inventory, purchase and disposal of radioisotopes.
- n) Report to the Radiation Safety Officer, any incident in which they believe there may be:
 - i) A significant increase in the risk to the environment or the health and safety of persons.
 - ii) A threat to the maintenance of security or an incident with respect to security.
 - iii) A failure to comply with the conditions of the Internal Permit.
 - iv) An act of sabotage, theft, loss or illegal use of possession of radioactive materials or other sources of ionizing radiation.
 - v) A release to the environment above the quantities of radioactive material that has not been authorized by the Internal Permit.
 - vi) Involving a known or suspected radiation exposure or contamination that may exceed established limits

Designated Workers Responsibilities

- a) Observe and obey all conditions of the laboratory's Internal Radioisotope Permit, and all safety rules and other measures prescribed in procedures that are site specific or as identified in the Radiation Safety Manual.



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- b) Comply with measures established by the University and the Permit Holder to protect the environment and the health and safety of persons, maintain security, control the levels and doses of radiation, and control the releases of radioactive materials to the environment.
- c) Participate and follow guidance and direction as provided in radiation safety training.
- d) Use equipment, devices, facilities and clothing for protecting the environment or the health and safety of persons, or for determining doses of radiation, dose rates or concentrations of radioactive materials in a responsible and reasonable manner and in accordance with the University procedures.
- e) Must give feedback to their supervisor if a safety procedure is inappropriate, impractical or unsafe.
- f) Take all reasonable precautions to ensure their own safety, and the safety of other persons, the protection of the environment, and the maintenance of security. Perform work in a manner that will minimize radiation exposure to all laboratory personnel (ALARA).
- g) Report to the Permit Holder or Radiation Safety Officer, any incident in which the worker believes there maybe:
- h) A significant increase in the risk to the environment or the health and safety of persons.
 - i) A threat to the maintenance of security or an incident with respect to security.
 - ii) A failure to comply with the conditions of the Internal Permit.
 - iii) An act of sabotage, theft, lose or illegal use of possession of radioactive materials or other sources of ionizing radiation.
 - iv) A release to the environment above the quantities of radioactive material that has not been authorized by the Internal Permit.
 - v) Involving a known or suspected radiation exposure or contamination that may exceed established limits.
- i) Must not initiate or participate in any activity that may endanger the health and safety of anyone.

Chemical Control Centre Use Only

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|---------------------|------------|--|---|--|
| Date Received: | | | Date Completed: | |
| Permit Application: | Approved | | <i>Permit Number Issued:</i> | |
| | Declined | | Reason for decline: | |
| Approval | <i>RSO</i> | | <i>Chair – Radiation Safety Committee</i> | |