

St. Michael's Hospital
Internal Radioisotope Permit Application/Amendment Form

How to use:

If this is an application for a new permit fill check the appropriate box and fill out the entire application. If it is an amendment to an existing permit check the amendment box and fill out effected areas e.g. new rooms , new isotopes etc. Send it to the Radiation Safety Officer (RSO). The RSO will determine the status of the proposed permit/amendment and request further information if needed. Please note that any new designated radioisotope labs or rooms must also have a CNSC Design Compliance Form filled out and be inspected by the RSO prior to being commissioned and radioactive work commences. See Radiation Safety Policy and procedure Manual policy 3 for more details

New Permit *Existing permit Amendment*

Name of Prospective /Present Permit Holder: _____

Department /Laboratory Name: _____

Office Telephone No. _____

Home/Emergency No. _____

Alternate and Phone no. _____

Room Number/Wing/Building Where Radioisotopes are to be used

List all rooms where Radioisotopes are to be used and stored. Canadian Nuclear Safety Commission (CNSC) regulations require classification based on the maximum activity of radioisotope to be stored in any one container or to be used in any single experiment in the room. They are also classified by use type. These are Storage only (no manipulation of any type), manipulation and use (experimental and preparation areas), waste and nuclear medicine. Please indicate whether using Becquerel (Bq) or Curie (Ci) units and the scale of the unit (Mega, milli, etc.)

| Room# | Purpose (Storage, Work/Prep Areas, Waste Room) | Radioisotopes To be used/stored | Maximum Amount in any one container or use (Bq) or (Ci) | Room Classification and # of ALI's (office use Only) |
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Radioisotope Information: Unsealed Sources

Unsealed or open sources are sources that are not permanently enclosed and can be removed from their storage container. This includes radioisotopes in liquids, powders and capsules that can be dissolved. This covers most research and medical use. An example would be Phosphorous -32 labeled ATP used in research. Please attach an appendix describing the use protocols for each Radioisotope. Include a brief description of purpose, methodology (equipment used etc.) the quantity used per experiment and expected frequency. List any animal use involving radioisotopes. Please note that Human use is prohibited by the CNSC and must go through Nuclear Medicine.

| Radioisotope | Chemical Form | Max. Activity in one Container | Use* | Office Use only #of ALI |
|---------------------|----------------------|---------------------------------------|-------------|--------------------------------|
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* Attach appendices for each isotope.

Radioisotope information: Sealed Sources

A sealed source refers to radioactive material that is “sealed inside a sturdy capsule which is designed to be permanent. An example would be a plastic disc calibration source of a long lived Radioisotope such as Cesium-137.

| Radioisotope | Source Activity | Type | Use |
|---------------------|------------------------|-------------|------------|
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Radiation Devices

List the Radiation Devices in the following table. Radiation devices are instruments that contain a radioactive source internally that is integral to the functioning of the machine and cannot be removed. Examples: Liquid Scintillation counter with internal cesium -137 quench correction source or some Gas Chromatographs. This does include external calibration standards. Only list equipment if it is new to the hospital e.g. being bought or being transferred from outside SMH.

| Device | Radioisotope | Source Activity |
|---------------|---------------------|------------------------|
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Radiation Detection Instruments

List the type of instruments (e.g. . . Geiger-Mueller counter, Liquid Scintillation counter etc.) and information (make ,model ,serial #) to be used for contamination monitoring.

List of Personnel Handling/Working with Radioisotopes

List the personnel who are will handle/work with radioisotopes under this permit. Please note that all personnel must have either taken the SMH Radiation Safety Course or show evidence (certificate etc.) of passing a Radiation Safety/Handling course at another institution. Final decision on the acceptability of qualifications rests with the Radiation Safety Officer.

| Name | Previous Training (provide details) | Work Experience |
|----------|-------------------------------------|-----------------|
| 1. _____ | | |
| 2. _____ | | |
| 3. _____ | | |
| 4. _____ | | |

Permit Holder’s Responsibilities

1. The permit holder is responsible for all aspects of Radiation Safety in the areas under his/her supervision
2. Must conform to all conditions of the CNSC Nuclear Substances and Radiation Devices Licence under which this Internal Permit would be issued.
3. Ensure all staff are familiar with and follow all hospital policies concerning the use of radioisotopes as contained in the most recent edition of the SMH Radiation Safety Policy and Procedure Manual.
4. Shall ensure that all staff and students using radioisotopes have taken the SMH Radiation Safety Course or have equivalent certification acceptable to the Radiation Safety Officer (RSO) and have registered with the RSO before radioisotope use starts.
5. Will have purchase orders for radioisotopes signed by the RSO before ordering.

6. The permit holder must inform the RSO of any person working with unbound iodine-125 and iodine -131. Any persons working with either isotope must follow all conditions of the Radio-iodine Use policy as found in the latest addition of the SMH Radiation Safety Policy and Procedure Manual
7. The permit Holder must apply in writing to the Radiation Safety Officer to have the Internal Permit amended for any changes to the Radioisotope , Chemical form or Radioisotope possession limits
8. Human use is prohibited under this permit and CNSC licence

Latest Revision: July 2003 JF