1.0 Purpose

To control the inventory of open source radioactive materials in order to minimize the radiation exposure of all staff, students, the public and the environment and comply with all applicable regulations.

2.0 Policy

All radioactive stock vials and kits shall be registered with the Environmental Health and Safety Office. Each vial and kit will be associated with an Internal Permit and the Permit Holder shall ensure that the radioactive materials registered to the permit are used and stored in a safe and secure manner. Every transfer or order of radioactive material must be pre-approved by The University of Manitoba Radiation Safety Officer.

3.0 Responsibilities

3.1 The Environmental Health and Safety Office (EHSO):
   a) Generates a unique Radioisotope Inventory Form for every radioactive stock vial or kit. Radioisotope Inventory Forms will be prepared based on information from the transfer or purchase request. The Radioisotope Inventory Form will serve as the only required inventory record to log usage and the ultimate disposal of individual radioisotope stock vial or kit.
   b) Maintains an inventory of all scintillation counters, gamma counters and radiation survey meters.
   c) Provides radiation safety pre-approval of every transfer or order of radioactive material.

3.2 The Permit Holder is responsible to ensure:
   a) Orders are placed only for radioisotopes listed as approved on the current Radioisotope Permit and the approved container/item and possession limits must not be exceeded. The Permit Holder shall ensure that every transfer or purchase of radioactive material has radiation safety pre-approval from EHSO.
b) Every radioactive stock vial or kit in the possession of the lab has its own unique Radioisotope Inventory form as generated by EHSO.

c) Radioisotope Inventory Forms must be kept either posted or in the Radiation Safety Records binder in the room where the radioisotope is stored so they are available in the lab for inspection. The original form, on gold colored paper, shall be kept in the lab until the vial is transferred to EHSO for disposal.

d) EHSO is immediately informed of any radioactive stock vials or kits in the lab that do not have a unique EHSO generated Radioisotope Inventory Sheet on gold colored paper.

e) The required information is accurately recorded on the Radioisotope Inventory Form. Discrepancies between the original order information and the item as received shall be recorded in the space provided on the Form. Significant discrepancies (>10%) should be promptly reported to EHSO.

f) The Serial Number on the Radioisotope Inventory Form is copied onto the corresponding stock vial or kit.

g) An accurate record of each withdrawal is maintained on the Radioisotope Inventory Form (date, person and activity).

h) The Radioisotope Inventory Form is completed (date and signed by the Permit Holder or Laboratory Radiation Supervisor) and returned to EHSO with the stock vial or kit. **The only accepted method of disposal for empty vials or kits is to surrender them to EHSO along with the Radioisotope Inventory Form. A copy on white paper of the Radioisotope Inventory Form should be kept in the Radiation Safety Records Binder.**

i) An annual verification of inventory (**Annual Reconciliation Form**) is completed and returned to EHSO. At the time of annual reconciliation, a physical inventory shall be taken including stock vials in long term storage. **Contamination monitoring of the storage location is required at this time.**
j) All transfers of radioactive stock vials or kits are recorded on the Radioisotope Inventory Form including the Permit Number of the receiving permit.

k) All movement of radioactive material to and from the University is coordinated in advance with EHSO.

l) EHSO is informed of all scintillation counters, gamma counters and radiation survey meters in your department whether they are in use or not. EHSO should be informed of newly acquired equipment as well as equipment that is leaving the department. EHSO will assist in making the proper arrangements for discard or transport.

### 4.0 Procedure

#### 4.1 Open Source Radioisotope Purchasing Procedure

Orders for radioactive stock vials or kits may be placed by one of the following methods:

a) **Systems Contract with PERKIN ELMER/ formerly NEN (New England Nuclear)**

Detailed purchasing procedures for ordering radioactive material from Perkin Elmer will be distributed to all open source permit holders as amended and the current procedure will be available on the EHSO web page. Each order requires radiation safety approval by EHSO prior to being accepted by the supplier. The Permit Number must be provided at the time the order is placed.

b) **Radioisotope Purchase Requisitions**

The current [Radioisotope Purchase Requisition](#) is available from the Purchasing website or through the EHSO website. Purchasing requires that a legible Radioisotope Purchase Form be completed according to the instructions on the form. The permit holder is responsible to ensure each order has radiation safety approval as indicated by EHSO signature in the Radiation Safety Officer place on the form prior to being submitted to Purchasing. Purchasing will return incomplete or illegible forms without processing the order.
4.2 **Replacement orders:** When a replacement order is requested from the vendor, the Permit Holder or a designate shall immediately inform EHSO.

4.3 **Radioactive Stock Vials or Kits that are not arranged via Purchasing:** The transfer of radioactive materials to or from the University must be pre-approved by EHSO. Radioactive materials must be transferred from one appropriately licensed facility to another, and surface or air transport regulations must be met. Documentation, labeling and placarding may be required. EHSO will generate the required Radioisotope Inventory Forms.

4.4 **Items Transferred within the University:** Transfers within the University, from one Permit Holder’s control to another, must not exceed the recipient’s Possession limit. Inventory records must indicate if material has been transferred along with the other permit number involved.