Section 11

Procurement of Radioactive Materials

Contents
A. Authorization to Order Radioactive Materials ................................................. 11-1
B. Orders .......................................................... 11-1
C. Approval of Radionuclide Order ................................................................. 11-2
D. Radioactive Materials Inventory ................................................................. 11-2
   1. Allowed Limits .................................................. 11-2
   2. Amount On-Hand .............................................. 11-2
   3. Approved Orders ............................................... 11-2
   4. Orders Arrival .................................................. 11-2
   5. Delivered Orders ............................................... 11-2
   6. Radioactive Material Usage and Disposal Record (Form 160) .... 11-3
      a. Total Disposal ............................................... 11-3
      b. Partial Disposal ............................................ 11-3
      c. Transfer ...................................................... 11-3
E. Inventory Reports ......................................................................................... 11-4
   1. Semi-Annual Radionuclide Inventory Verification Report ............ 11-4
   2. Other Inventory Reports ........................................... 11-4

A. Authorization to Order Radioactive Materials

All individuals wishing to purchase radioactive materials at the University of Washington must first have authorization to possess such material in the type and quantity requested. The authorization for possession and use of radioactive materials is issued through Radiation Safety (see Section 4 of this manual: Authorization Process). Specific radionuclides and activity limits are indicated in the authorization.

B. Orders

Orders for radioactive materials are made through the Ariba Spend Management System. Radioactive materials must be listed as exception items and must contain an object code of 0532 (Radioactive Chemicals). In most cases, orders for radioactive materials must be shipped to the Radiation Safety Shipping and Receiving Office in the Health Sciences Building, Room T274. Orders shipped to other locations require prior approval by Radiation Safety.
C. Approval of Radionuclide Order

All radioactive material orders entered in the Ariba Spend Management System are sent to Radiation Safety for review and approval before being sent to the vendor. Radiation Safety grants approval primarily based on a comparison of the PI's current inventory to the allowed limits on his/her authorization.

D. Radioactive Materials Inventory

The University of Washington maintains an inventory of all radioactive material on campus. The running inventory is updated when researchers either order new material or submit a Radioactive Material Usage and Disposal Record (Form 160).

1. Allowed Limits

An allowed limit of radioactive material is the amount a PI is allowed to have in his/her possession at any one time. Allowed limits are listed on a PI's authorization.

2. Amount On-Hand

The amount on-hand is specific to each nuclide and indicates the activity the PI has in his/her possession for that material.

3. Approved Orders

“Approved” orders are radioactive material orders that have been sent to the vendor, but have not been delivered to the University yet. Approved orders are added to the amount on-hand on the authorization, and reduce the activity that a PI may order.

4. Orders Arrival

All radioactive material shipped to the UW must be sent to the Radiation Safety Shipping and Receiving Office, room T274. Before Radiation Safety staff deliver material to the appropriate laboratory, the packages are checked for damage, contamination, and exposure rates.

5. Delivered Orders

A Radioactive Material Usage and Disposal Record (Form 160) is attached to every delivered order. At the top of the form, identifying information is listed to verify that the correct order was received. Check this form upon receipt. Call Radiation Safety (206-543-0463) if the information on the Form 160 is incorrect or if the wrong package was delivered.
6. **Radioactive Material Usage and Disposal Record (Form 160)**

The Radioactive Material Usage and Disposal Record (Form 160) is used to remove items from the PI’s inventory by recording the disposal pathway. The PI or Laboratory Contact must fill out this form and return it to Radiation Safety. This decreases the amount on-hand for that radionuclide.

a. **Total Disposal**

Unless otherwise indicated, RS staff assumes that a returned Form 160 is a total accounting for the disposition of the original activity in the order. If the amount disposed does not equal the delivered activity, the lab will be contacted to resolve the discrepancy.

b. **Partial Disposal**

It is possible to report a partial disposal of a radionuclide, which can be used to decrease the amount on-hand. This must be indicated at the bottom of the Form 160. Partial disposals are only used in special circumstances and require prior approval by Radiation Safety.

c. **Transfer**

It is possible to transfer radioactive material to another PI or institution. However, Radiation Safety must be contacted before any material is transferred. Regulations require that the individual and/or organization receiving the material must be legally authorized to possess this material and that Radiation Safety has documentation of this authorization.

1) **Transfer Form**

A Radioactive Material Transfer and Usage Record (Form 160T), must accompany the radionuclide being transferred a PI at UW. A Form 160T is not required when transferring material to another institution.
E. Inventory Reports

The UW radioactive materials license requires that the radioactive material inventory be updated continuously. Therefore, Principal Investigators (PIs) are responsible for tracking and accounting for radioactive material used under their authorization. Radiation Safety (RS) will assist the PIs in maintaining their inventory by distributing inventory verification reports (IVRs) at regular intervals and issuing a Radioactive Material Usage and Disposal Record (Form 160) for all new radioactive material purchased under the PIs authorization. It is essential that the IVRs and Forms 160 are returned in a timely manner allowing the UW radioactive material inventory to be kept up to date.

1. Radionuclide Inventory Verification Report (IVR)

Twice per year, Radiation Safety (RS) will send each Principal Investigator (PI) a report of their current radionuclide inventory. The PI or Laboratory Contact is required to verify that the information provided on the report is accurate and then return the report to Radiation Safety. Changes can be indicated directly on the report.

The return of the Inventory Verification Report (IVR) is necessary to meet the conditions of the UW radioactive materials license, and therefore the return of the IVR will be strictly enforced. A PI will be allowed 30 days to return the IVR to RS, after which the following actions will be taken for non-compliance:

- Orders for new radioactive material will not be approved by Radiation Safety until the IVR is submitted.
- The PI will be contacted by the Radiation Safety Officer (RSO) to determine the status of the delinquent report.
- Further non-compliance will be reported to the Radiation Safety Committee (RSC) with additional notification to the PI’s department head and/or dean as necessary. The RSC may also decide to place a restriction on the PI’s authorization to use radioactive material as deemed necessary to ensure compliance.

2. Other Inventory Reports

At any time, a lab can request a current inventory report, or any other reports or information about the authorization.