

4.0 Procurement and Transfer of Radioactive Materials

4.1 Ordering Radioactive Materials

Only holders of current radiation permits may order radioactive materials. The permit specifies the conditions, limitations, isotopes and quantities, under which the approved user may possess and use the specific radioisotopes being purchased.

To purchase radioactive materials, the PI submits a completed university purchase requisition to his/her business office. The purchase requisition should be labeled "*Radioactive Material*." The PI's campus unit must initiate a purchase requisition or standing purchase order for the radioactive materials in the Banner or I-Buy System. Then the unit must enter the applicable information into DRS radioactive material purchasing database for final authorization. DRS database may be accessed from:

<https://www.drs.illinois.edu/DrsDRS/PI/PIMain.aspx>

To ensure expeditious handling of the order, the PI should provide the following information on the university purchase requisition:

- a. The name and signature of the PI responsible for the materials,
- b. The isotope being ordered,
- c. The amount of activity in millicurie (mCi) or microcurie (μ Ci) units being ordered,
- d. The chemical form of the isotope being ordered.

Unless previous arrangements have been made, all radioactive materials shall be shipped to:

Division of Research Safety
Special Materials Storage Facility, MC-612 ATTN:
PI/Permit Number
University of Illinois
2006 South Griffith Drive
Champaign, Illinois 61820

4.2 Receipt of Radioactive Materials

Unless prior arrangements have been made, DRS at the Environmental Health and Safety Building receives all campus orders of radioactive material. DRS monitors all shipments in accordance with regulations established by the Illinois Emergency Management Agency (IEMA). After each shipment of radioactive materials has been checked and found to be in compliance with all applicable rules and regulations, DRS personnel deliver it to the user's laboratory during workdays, usually between 10 a.m. and 2 p.m.

DRS provides a *Radioactive Material Receipt Record* for each package delivered. The person accepting the material is asked to sign for the package(s).

Laboratory personnel should use a wipe test to check the inner container and determine whether leaking has occurred. Shipments containing materials that may be volatile, gaseous, or readily dispersible shall be opened in a fume hood. The user shall notify DRS immediately if there is a problem with the shipment.

Upon receipt of a new shipment, laboratory personnel should enter pertinent data in a Radioisotope Use and Waste Log (see Appendix E).

Laboratory personnel must dispose of the shipping material in an appropriate manner. If contamination is present, place the material in a radioactive waste container. If the shipping material is free of contamination, remove or deface any "radioactive materials" labels or markings on it and dispose of it in the regular trash or recycle.

4.3 On-campus Transfers of Radioactive Materials

Transfers of radioactive materials within the campus may occur between mutually agreeable PIs after authorization by DRS. These are regarded as "on-campus" transfers. A PI is not permitted to dispense radioactive materials on a routine basis to other researchers. DRS will approve procedures for recurrent transfers of radioactive materials over a period of time on a case-by-case basis. The following describes the steps to transfer radioactive material:

GIVER:

1. Request permission by contacting DRS with the following:
 - a. Radiation permit number and name of the individual to receive the materials;
 - b. Location where materials will be used/stored by the recipient;
 - c. Isotopes and amounts (mCi) to be transferred.
2. Ensure that the material is properly packaged for transport.
3. Maintain written records of all transfers, including isotopes, amounts, dates, and documentation of contamination surveys of packages.

RECEIVER:

Maintain accurate records of the receipt (isotope, quantity, date, from whom that material was received). Ensure that the radioactive material is stored properly.

4.4 Off-campus Transfers of Radioactive Materials

Transfers of radioactive material to off-campus personnel may be done only via DRS. DRS personnel ensure that the radioactive material is properly packaged and in compliance with shipping regulations. All such shipments are handled on a case-by-case basis. Contact DRS personnel at 217-333-2755 for assistance.

4.5 Transfers of Radioactive Materials from Off-campus

Occasionally, a PI may receive radioactive material as a gift from another campus or institution where a purchase order is not involved. In such cases, the PI must make prior arrangements with DRS for purposes of license verification, radiation permit authorization, and receipt instructions.