

**WORCESTER POLYTECHNIC INSTITUTE
HEALTH PHYSICS PROCEDURE HP-14**

**PURCHASING AND RECEIPT OF
RADIOACTIVE MATERIAL**

1. PURPOSE: To assure the proper security of radioactive material received at WPI.

2. FREQUENCY: As requested by individual isotope users.

3. MATERIALS, TOOLS, AND EQUIPMENT:
 - 3.1. Form(s): Receipt of Radioactive Material Packages Form (HPF-7A)
<http://www.wpi.edu/Admin/Safety/RSO/Forms/>

4. PRECAUTIONS:
 - 4.1. Utilize the concepts of time, distance, and shielding to maintain exposure to radiation as low as reasonably achievable.
 - 4.2. Take all necessary precautions to avoid the spread of possible contamination.
 - 4.3. Ensure that all health physics practices are followed throughout the procedure.

5. INSTRUCTIONS:
 - 5.1. Radioisotope purchases at WPI will be made only by individuals authorized by the RHSC. The following individuals are currently authorized:
 - 5.1.1. RSO
 - 5.1.2. CBC Department Operations Manager
 - 5.1.3. BB Department Purchasing Administrator
 - 5.2. Users wishing to receive a radioisotope, will contact one of the above authorized purchasers, listing the radioisotope and amount requested.
 - 5.3. The authorized purchaser will contact the RSO or ARSO to obtain permission to purchase the specified amount of radioisotope.

- 5.4. The authorized purchaser will also ensure that approved receiving personnel (see section 5.5 below) and surveying personnel will be present on the intended receipt date to receive and survey the package.
- 5.5. Any individual receiving radioisotope packages at WPI must:
- 5.5.1. Be approved by WPI's RHSC
 - 5.5.2. Undergo an annual general isotope training by the RSO's
 - 5.5.3. Undergo an annual package receiver training by the RSO's
- 5.6. Packages must be received at places approved by the RHSC, only by authorized personnel, and must never be left unattended until locked up.
- 5.7. The package receiver will perform a visual inspection of the package, looking for obvious signs of package damage (wetness, crushing).
- 5.7.1. Emergency notification: If damage is noted, the receiver will notify the RSO, ARSO, or Approved Surveyor immediately by all means possible (see contact information below).
- 5.8. Following visual inspection, the package receiver will fill out a "Receipt of Radioactive Material Packages Form", HPF-7A (see above weblink).
- 5.9. The package receiver will then lock the package and receipt form HPF-7A in a cabinet approved by the RHSC (which is also marked with an appropriate yellow radiation sign).
- 5.9.1. Emergency notification: If the package is too large to fit in the approved cabinet, the RSO, ARSO, or Approved Surveyor will be contacted immediately by all means possible (see contact information below).
- 5.10. Routine notification: Following a routine visual inspection, and package lockup, the package receiver will then notify the RSO, ARSO, or Approved Surveyor, by email or phone so appropriate package surveys can be performed. If there is no email or phone response within 30 minutes, emergency beeper notification may be used.

Name	Email*	Office Phone	Lab Phone	Beeper**
RSO	rso@wpi.edu	x5432	x5023	(978) 488-0037
ARSO	rso@wpi.edu	x5256	x5688	
Approved Surveyor	TBD	TBD	TBD	TBD

*The email rso@wpi.edu automatically notifies the RSO, ARSO, and the Reactor Director.

**Beeper are to be used if damage is noted to the received package, if the package is too large to fit in the approved locked cabinet, or if there is no email/phone response within 30 minutes.

5.11. If the package was received during normal working hours, the RSO, ARSO, or Approved Surveyor will respond within 2.5 hours to ensure the survey is completed within 3 hours (105CMR120.246.C and 10CFR20.1906.c) of package receipt, then take the package to the PI's lab. If the package was received after normal working hours, and has no evidence of damage, the RSO, ARSO, or Approved Surveyor will respond within 2.5 hours of the start of the next normal working day, survey the package, then take it to the PI's lab.

5.12. The package survey will be performed by the RSO, ARSO, or Approved Surveyor according to Health Physics Procedure HP-15 "Survey/Inspection of Radioactive Material Packages". http://www.wpi.edu/Admin/Safety/RSO/Procedures/hp_15.html

6. RESTORATION: None

7. REFERENCES:

7.1. 10 CFR 20.1906 Procedures for Receiving and Opening Packages.

7.2. 105 CMR 120.246 Procedures for Receiving and Opening Packages.