



UNIVERSITY OF MASSACHUSETTS/AMHERST
ENVIRONMENTAL HEALTH & SAFETY
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FROM: Radiation Protection Manager (RPM)
TO: Prospective Ram user
SUBJECT: Request to Use Radioactive Material (RAM) Here at UMASS

The use of RAM is highly regulated by the Massachusetts Radiation Control Program (MRCP) at all levels from small research quantities to very large quantity irradiators. Here at UMASS our Radiation Use Committee (RUC) is responsible for assuring all regulations and license conditions are met. As RPM I am responsible to the Committee for assuring that all research uses are in compliance with all applicable MRCP requirements.

The enclosed material, our application form (along with instructions for completion) and manual is for your use in making a formal application to the Committee. Please return the completed form to me for review of safety/regulatory concerns. I am able to give you permission to begin your research with RAM as soon as my review and a follow-up preliminary inspection of your lab are complete (unless your research entails the use of very high levels of RAM which would require full Committee review).

If you need any assistance in completing your application, please do not hesitate to call me.

Revised: 03/29/04

NEW RADIOISOTOPE USER INSTRUCTIONS

1. The authorized user (principle investigator) must file an “Application for Authorization to Use Radioisotopes” through Environmental Health and Safety (EH&S), and have the application approved by the Radioisotope Use Committee.
2. The authorized user must submit a “personnel Update Form” to EH&S listing all personnel who will be using radioactive materials (RAM) in experimental procedures.
3. The authorized user must submit (item 9 of application) a copy of each experimental procedure (protocol) utilizing RAM under his/her authorization to the Radiation Safety Officer for safety review. The protocol should include instruments and equipment used during the procedure, rooms and areas of rooms where RAM work will take place, maximum specific activity of RAM labeled solution to be used and a physical step by step procedure in order to determine handling hazards. Please list reagents and amounts used.
4. All personnel to be working with RAM are required to attend a radiation safety training session conducted by EH&S prior to beginning work with RAM. Training dates and times are posted on the EH&S website: www.ehs.umass.edu Personnel may be exempted if they can show prior equivalent **safety** training and/or experience.
5. Each lab (or group of adjoining labs) where radioactive materials are in use will be supplied with a copy of the UMASS Radiation Safety Manual and the following signs posted in prominent positions where radiation workers can regularly read them:
 - a. Form MRCP “Notice to Employees”
 - b. Copies of 105 CMR 120.000 Regulations Title 10, “To Control the Radiation Hazards of RAM and of Machines which Emit Ionizing Radiation”
 - c. Pertinent safety memoranda and signs from EH&S.

In addition to the above posting, signs reading “Caution Radioactive Materials” **must** be on each entrance to the room and on refrigerators or where radioactive materials are stored. All signs and required postings are provided by EH&S.

6. Upon authorization and protocol review, the Radiation Safety Officer may request the researcher to perform a “Dry Run,” i.e. run through the experimental procedure without using RAM. In any case, a member of the Radiation Safety Office will inspect the lab before work with RAM begins to assure that adequate safety precautions have been implemented as planned.

Reminders - Reference UMASS Radiation Safety Manual

- a. When ordering radioisotopes for experimental use, the order must be placed in the name of the authorized user and EH&S must be notified of the order! (See page 6.1 of Radiation Safety Manual.) All radioisotopes are delivered to the user by EH&S after receipt and inspection. For your convenience you may now notify EH&S of a “RAM” order via phone @ 545-2682 or our “WEB” page @ http://ehs.umass.edu/ehsForms/Results/ramOrderNotification_SubmissionForm.asp
- b. Laboratories utilizing radioactive materials will be inspected for radioactive contamination on a regular basis by EH&S. If contamination is found, the lab will be notified by EH&S as to the location and nature of the contamination. Decontamination (except in extremely severe cases) will be performed by lab personnel. (See page 14.11 of Radiation Safety Manual.)
- c. Review Emergency Procedures prior to beginning RAM work, (see page 10.1 in Radiation Safety Manual). Any questions or problems should be directed to EH&S at 545-2682.
- d. Please review all applicable waste disposal procedures for your intended uses; assure that all of your staff is acquainted with them so that we may stay in compliance with very strict waste segregation and packaging requirements before shipping to our national burial sites. You may request a waste pick-up at your lab via e-mail it to our [EH&S Home Page](#). All radioactive waste pick up will be on Mondays. Pickup may take place at any time during the day so it is important that your RAM waste be properly labeled (name, isotope, activity, and date) packaged before Monday. Call EH&S for assistance as necessary.

