

UNIVERSITY OF NEW HAMPSHIRE  
OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY

APPLICATION FOR RADIOACTIVE MATERIAL USERS PERMIT

**PLEASE READ**

**INSTRUCTIONS**

(Use supplemental sheets where necessary)

- A. Permit Application:** For a new permit or full renewal, complete all items: 1 through 14. For a simple renewal either check renewal-no changes or check renewal-with amendments and just make changes as necessary.

Please send one copy to the Radiation Safety Officer, Office of Environmental Health and Safety, Perpetuity Hall, 11 Leavitt Lane, Durham, NH, 03824. Telephone: 862-3607

Upon the Radiation Safety Committee's approval of an application, the applicant will receive a Radioactive Material User's Permit. This permit is issued pursuant to statutory regulatory authority and subject to all applicable rules, regulations, and orders of all appropriate regulatory agencies now or hereafter in effect and to any conditions specified in the permit.

It is the responsibility of the Authorized User to ensure that all people entering Radioactive Material (RAM) areas have received the appropriate radiation safety training. The only exceptions to this rule are people passing through the area on a guided tour. All individuals that will actually handle sources of radiation must complete the Radiation Safety Radiation Worker training program presented by the Office of Environmental Health and Safety. Individuals not working with or handling Radioactive Materials but are in a restricted area or lab posted as a RAM area, must have awareness training. These programs may be presented as a department seminar or taken by the individual through the Radiation Safety Program of the Office of Environmental Health & Safety. All full-time maintenance and custodial personnel must receive awareness training prior to working in any radioactive material use area.

Thank you for the timely submission of this important document. Permits are granted to Authorized Users under the authority of the University of New Hampshire's Type A Broad Scope License (190R) issued by the Radiological Health Section of the Department of Health and Human Services.

If you have questions while completing this form, please do not hesitate to call the Radiation Safety Officer, at 862-3607.



**7: RADIOACTIVE MATERIAL:**

Please list the radionuclides you wish to use on campus, their chemical form, and the maximum amount of activity you wish to possess at any one time. If you are bringing radionuclides on campus from another location, the Office of Environmental Health and Safety must be informed, an inventory submitted, and the transfer approved.

**FOR SEALED SOURCES ONLY:** For sealed sources requiring replacement on a regular basis, list maximum anticipated activity not current source activity. Also include an inventory of sources listing radionuclide, activity and serial number.

Element and Mass Number	Name of Manufacturer, Model and serial numbers (if available)	Maximum number of sources and maximum activity per source which will be possessed at any one time.
A		
B		
C		
D		
E		

**FOR UNSEALED SOURCES ONLY:**

Element and Mass Number	Chemical and Physical Form	Maximum number of millicuries which will be possessed at any one time – including waste
A		
B		
C		
D		
E		

**8: RADIATION DETECTION INSTRUMENTS:**

Type of instrument	Purchase date	Manufacturer	Model #	Serial #	Radiation Detected	Last calibrated	By whom	Location bldg & rm#	Meter range	Owner
A										
B										
C										
D										
E										
F										
G										
H										
I										

**INFORMATION TO BE SUBMITTED ON SUPPLEMENTAL SHEETS:****9. DESCRIBE THE PURPOSE FOR WHICH RADIOACTIVE MATERIAL WILL BE USED.**

The Radiation Safety Committee requires that all protocols using radioactive material be submitted including the radionuclide, the activity (uCi) used per procedure, the frequency the procedure will be conducted and the specific procedures for the use of radioactive materials during each experiment. The focus here should be on the steps taken to reduce exposures and limit the spread of contamination- in short, how you will conduct your science, safely?

For each radioisotope summarize your research in layman's terms in one paragraph. Spell out acronyms. Briefly describe your research for each radioisotope with the answers to the following questions included.

Will a fume hood be used?

Will you use bench pads or spill trays?

Will you use lead or Plexiglas shielding?

Will you use wipe tests or a survey meter?

Will you use lab coats, safety glasses, and double gloves?

Will radioisotopes be locked in a refrigerator?

Sufficient detail should be provided to allow for evaluation of the potential for exposure to radiation and radioactive materials both for those working with the materials and for the public. The Materials and Methods section of referenced journal articles may be used as a model. Published methods may be submitted by providing a copy of the published article. Be sure to include the Journal name, month, year, and page numbers.

**For sealed sources:** If special storage is required, or if the source is used in an instrument, include the type, manufacturer, model number and serial number of the storage container and/or device in which the source will be stored and/or used. For installed devices, please also describe arrangements for performing initial radiation survey, servicing, maintenance and repair of the device. Note that leak testing is provided by this office and does not need to be addressed by the applicant.

**10. PERSONNEL MONITORING:**

Indicate what devices and/or procedures are necessary (film badges, bioassays, etc.) and any special criteria you will use to determine the need for monitoring.

Will badges be worn?

Will bioassays such as thyroid scans be performed?

Will Geiger counter surveys be performed after each experiment for P-32 or I-125?

**11. FACILITIES AND EQUIPMENT:**

Describe, in detail, your laboratory facilities including: work areas, waste storage areas, remote handling equipment, refrigerators/freezers used for storage, waste containers, shielding, fume hoods, glove boxes, etc. Be sure to include an explanatory sketch of the facility showing pertinent features.

Where will you use radioactivity?

**12. RADIATION PROTECTION PROGRAM:**

Describe the radiation control program, including control measures.

Include a written emergency procedure specific for your area and the work being done.

Include a written training plan. EH&S provides basic radiation safety training but you must provide laboratory specific training for techniques, procedures and radiation safety related items. This should include programs for technicians, graduate students, undergraduates, work study students, etc. Specify how you will determine the competency of the trainee.

**13. WASTE DISPOSAL:**

Submit detailed description of methods that will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.

Justify the type and amount of waste generated. This information is needed for waste minimization reports. The UNH Radiation Safety Committee has prohibited the generation of mixed waste – that is, waste which is both a radioactive and chemical hazard.

Will wastes be stored in trays or steel drums?

Will liquid wastes be stored with secondary containment?

**CERTIFICATION**

(This item must be completed by the applicant.)

14. The applicant, and any official completing this certificate on behalf of the applicant named in item 1, certify all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Applicant

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Department Chair