



APPLICATION FOR LABORATORY/NON-HUMAN USE OF RADIONUCLIDES

Name: _____ Title: _____
_____ MD or _____ PhD _____
Department: _____ PO Box: _____
Section: _____ Department Chair: _____
Office Rm #: _____ Location & Rm #: _____
Off Phone: _____ Lab Phone: _____
Fax: _____ Email: _____

I understand the authorization to use such materials is a privilege granted by the WVU Non-Human Use of Radiation and Radionuclides Committee and is regulated by the laws of the State of West Virginia and the US Nuclear Regulatory Commission. I agree to abide by the applicable laws and to follow safe practices in the use of radioactive materials. I have received previous instruction in radiation safety practices, a copy of the applicable regulations and Radiation Safety Manual. I also understand that to obtain full authorization I must pass the PI radiation safety training exam administered by the Radiation Safety Department.

_____ **New application.**

_____ **Modification** to previously approved application and/or authorization.
(Only complete the sections that require modification and review.)

Signed: _____ Date: _____
(Applicant)

(All materials must be provided as indicated in the application before review by the RSO)

RADIONUCLIDES REQUESTED AND POSSESSION LIMITS

Please list all radionuclide(s) you wish to be authorized to purchase, possess and use. Enter the maximum activity that you wish to possess **at any one time** (Note: Allow for more than one experiment, waste storage, etc.)

Symbol & Mass Number	Possession Limit Requested (mCi)	Use Requested

Use Requested:

1. Describe the particular chemical forms of the radionuclides which you wish to use and the types of procedures which you plan to perform.
2. Note if there will be volatile products or specific requirements for storage or disposal.

1. Enclose additional information (e.g. reprints or copies of papers, to help us evaluate the radiation protection needs of your program.)
2. Attach copy of your current research protocol.
3. Attach copy of your research grant/funding approval (identify your funding source).

WASTE GENERATED AND DISPOSAL

Complete the attached financial assurance form for radioactive material waste, irradiators and sealed source disposal; decontamination and facility decommissioning.

1. Describe the type(s) of radioactive waste that will be produced.
2. Estimate the amount of waste you expect to produce in one quarter or one year both in activity and volume units.
3. Will your procedures result in any volatile radioactive compounds? (If yes, describe.)
4. Hazardous chemicals? (If yes, describe compounds.)

Type Of Waste	Chemical Compound	PH Level	Half-Life	Activity per (mth, qtr, yr)	Volume per (mth, qtr, yr)
Solid					
Liquid					
Liquid scintillation vials					
Animal carcasses					
Volatile compounds					
Hazardous chemicals					

(Note: The Radiation Safety Waste Disposal Policy strictly prohibits mixed waste.)

LOCATION OF RADIATION USE/ STORAGE & SECURITY PLAN

US NRC and WV RHP regulations require that all radioactive materials be secured against unauthorized access or removal. You are responsible for maintaining the security of radioactive materials under your control.

1. List each location where you plan to store or use radioactive materials (including waste). Describe your level of security and any additional safeguards, such as locked cabinets or card reader locks that you will take to guarantee the materials are properly secured. (eg rooms must be locked at all times unless a trained worker is in the lab **and** is maintaining surveillance of the radioactive material, use of locked boxes or refrigerators).
2. Attach floor plan of each room showing the areas where radioactive materials and waste will be used and/or stored.

- ⊕ All radioactive materials should be clearly labeled. The label should indicate the radionuclide, activity, date of activity, chemical form, name of the Authorized Radiation User/PI, and any additional information that would helpful.
- ⊕ Always maintain accurate records of the waste disposed in each container.

Indicate Bldg & Rm No	Radionuclides Used & Activities	Use

RADIATION PROTECTION PLAN

- Describe the facilities and procedures that you will use to maintain personnel exposures (ALARA) as low as reasonably achievable (e.g. utilizing shielding, wipe tests, surveys, labeling, and personnel monitoring)

- ✦ Read and study the Radiation Safety Manual for specific requirements of license.
- ✦ Individual radiation monitoring devices should be worn at all times during the completion of experiments and located on the area of the body expected to receive the highest deep-dose equivalent. This is normally the collar, chest or waist. However, users working with H-3, C-14, or S-35 and not exposed to any other source of radiation do not require a radiation monitoring device.
- ✦ Extremity monitors (ring badges) are required for personnel using more than 1 mCi of gamma or high energy beta emitting radioactive material.
- ✦ Contamination surveys and wipe tests are required after daily radionuclide use, after each experiment is completed or monthly if the radionuclides were unused during the period.
- ✦ Prior to using a survey meter: 1) check the battery condition, 2) the calibration date is current, 3) and the meter responds to a check source.

Describe Monitoring Or Survey Equipment

(Be sure your survey procedures and equipment are appropriate for the radionuclides you will be using.)

	#1	#2	#3
Type Of Survey			
Instrument			
Use			
Manufacturer			
Model #			
Unit Serial #			
Probe Serial #			
Date Last Calibrated:			
Calibrated By:			

LABORATORY PERSONNEL

(You must document the training of each worker and maintain a list of those you have approved to work in your laboratory)

1. Please complete the attached form to register all lab workers.
2. Describe your procedure for certifying that your laboratory personnel are instructed in the safe use of radionuclides.
3. Describe lab personnel(s) previous training and certifications.

EDUCATION AND TRAINING

1. Attach a copy of your CV to the application.



2. Describe your specific education and training for the radionuclide uses you requested. Include your actual experience in these procedures and list any board certification (attach documents verifying completion of special training and courses, etc.) Be specific.

	Training Location	Dates	Type of Training (on the job; formal course, etc.)
Principles And Practices Of Radiation Protection			
Instrumentation And Measurement Of Radiation			
Biological Effects Of Radiation			
Basic Mathematics Of Radioactivity/Physics			

Radionuclide Handling Experience

Nuclide	Location	Dates	Activity.	Use

REFERENCES

Provide an attestation letter from your previous Radiation Safety Officer (RSO) or Institution who can verify your previous training and lab experience with radioactive materials.

NOTE: If you previously used radioactive materials under another NRC or Agreement State's radioactive material's license, you can include a copy of the license and/or the name of the licensee and address, along with any other pertinent information with your application.

Attestation letter should accompany the application and be addressed to:

**Stephen Root
Radiation Safety Officer
Radiation Safety Department
G-139 HSCN, PO Box 9006
Morgantown, WV 26506**

RADIATION SAFETY DEPARTMENT

WEST VIRGINIA UNIVERSITY • HEALTH SCIENCES CENTER • WVU HOSPITALS • JEFFERSON MEMORIAL HOSPITAL • BLANCHETTE ROCKEFELLER NEUROSCIENCES INSTITUTE

G-139 Health Sciences Center • PO Box 9006 • Morgantown, WV 26506-9006 • Phone: 304-293-3413 • Fax: 304-293-4529

LABORATORY/NON-HUMAN USE OF RADIONUCLIDES
"FINANCIAL ASSURANCE PLAN"

Changes in regulatory guidelines and decommissioning costs have led West Virginia University and the Health Sciences Center to revise the criteria for financial assurance requirements in the area of decontamination, decommissioning and waste disposal under the institutions' radioactive materials broad scope license (WVU 47-23035-01 Exp. 09-30-2036) and WVRHP materials license.

All new applications for non-human use of radiation and radionuclides materials now requires financial assurance from the applicant and applicant's department that funding will be available for all decontamination, decommissioning and radioactive material waste disposal costs associated with the authorization requested for radiation use.

Please read the statement below and provide both signatures as indicated:

- 1) I hereby certify and make a commitment that either the applicant and/or his WVU department can provide adequate funding (present and future) to cover all radioactive waste disposal (including sealed sources), decontamination and decommissioning costs connected with the attached non-human use of radiation and radionuclides application.
- 2) The department and/or PI will be responsible for the payment of any abnormal radioactive waste removal (mixed waste, biohazardous waste, sealed source, etc).

Print Applicant's Name: _____

Applicant's Signature: _____ Date: _____

Print Department Chairs Name: _____

Department Chairs Signature: _____ Date: _____

**RADIATION SAFETY DEPARTMENT****WEST VIRGINIA UNIVERSITY • HEALTH SCIENCES CENTER • WVU HOSPITALS • JEFFERSON
MEMORIAL HOSPITAL • BLANCHETTE ROCKEFELLER NEUROSCIENCES INSTITUTE**

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RSD Form #602

LAB WORKER REGISTRATION FORM

PI Name _____ Department _____

Room # _____ PO Box _____ Phone # _____

Key: (A=Add; D=Delete, or NC=Name Change)

Name Of Lab Worker	Email Address	Radiation User	Action	Phone #
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	
		Y ☐ N ☐	A ☐ D ☐ NC ☐	

The Radiation Safety Department requires the authorized user to document training for non-radiation users. Radiation users are required to complete the radiation safety courses on SOLE.

Lab workers using radiation may be required to use radiation monitoring devices. The Application for Radiation Monitoring Device can be found at <http://www.hsc.wvu.edu/rsafety/Forms>.

Authorized User Signature_____
Date



RADIATION SAFETY DEPARTMENT

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RSD Form #602

**Application for Laboratory Use of Radionuclides
Processing Data (Office Use Only)**

Applicant Name _____ **Department** _____

Date Application Requested: ____/____/____

Date Application Mailed ____/____/____

Items distributed/provided to lab by RSD upon application review/approval:

Part 19 ____ Part 20 ____ Part 21 ____ Part 35 ____ NRC Form 3 ____ Application for Radiation Monitors ____
WVDDHR/RHP Form X (if required) ____ Radiation Safety Manual ____ Radiation Safety Manual Read Slip ____
Radiation Monitoring Policy Statement ____ Radiation Safety Waste Management Policy ____ Laboratory
Postings/Signage ____

For RSD Purposes Only:

Date Application Received By RSD: ____/____/____

Date Returned to PI for Additional Info: ____/____/____

Date Returned: ____/____/____

Date Returned to PI for Additional Info: ____/____/____

Date Returned: ____/____/____

Date Temp Approval Granted by RSO: ____/____/____

Effective Dates of Temp Approval: ____/____/____ ____/____/____

Date PI Successfully Completed On-Line Course: ____/____/____

Committee

Approval Date: ____/____/____

Denied Date: ____/____/____

Additional Comment(s):
