

Application for Authorization to Use Radioactive Materials

Office Use Only
Permit # _____

1. Principal Investigator Information

Name	_____	Title/Position	_____
Department	_____	E-mail	_____
UW Box #	_____	Office Phone #	_____
Lab Phone #	_____	Cell Phone #	_____

2. Laboratory Contact

Must be knowledgeable about the proposed research. Will act as the primary contact with Radiation Safety.

Name	_____	Title/Position	_____
E-mail	_____	Office Phone #	_____
		Cell Phone #	_____

3. Laboratory Registration

An Application for Certification of Laboratory for Radioactive Materials ([Form 50](#)) must be attached for each lab.

Building and Room Number	Generic Lab Type (e.g., Research Lab, Equipment Room, etc)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Personnel

A Radiation Worker and Dosimetry Application ([Form 20](#)) must be attached for each person. Attach extra sheets if necessary.

Name	Does Not Need Dosimetry	Already Has Dosimetry	Needs Dosimetry (Requires App. for Dosimetry)
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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5. Unsealed Radioactive Materials to be Used

Attach procedures, including waste handling, for each planned experiment. Additional nuclides can be added later if needed.

Radionuclide	Chemical & Physical Form (e.g., NaI, liquid)	Activity per Order (mCi)	Activity per Experiment	Number of Experiments per Month

6. Use of Unsealed Radioactive Material

Provide a 1-2 sentence "executive summary" of the intended use of each radionuclide.

Radionuclide	Description

7. Uranium and Thorium Compounds

Attach procedures, including waste handling, for each planned experiment. Additional nuclides can be added later if needed.

Item	Radionuclide	Chemical & Physical Form (e.g., Uranyl Acetate, powder)	Maximum Mass on hand (g)	Mass used per Experiment (g)	Number of Experiments per Month
1					
2					
3					

8. Use of Uranium and Thorium Compounds

Provide a 1-2 sentence "executive summary" of the intended use of each Uranium or Thorium Compound.

Radionuclide	Description

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9. Radioactive Sealed Sources

Attach procedures, including security and shielding, for each source in planned experiments. Additional sources can be added later if needed. Attach additional pages for greater than four sources.

Source	Radionuclide	Make/Model	Activity (mCi)	Serial Number	Storage Location
1	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____
4	_____	_____	_____	_____	_____

10. Use of Sealed Sources

Provide a 1-2 sentence "executive summary" of the intended use of each source.

Source	Radionuclide	Description
1	_____	<div style="border: 1px solid black; height: 50px;"></div>
2	_____	<div style="border: 1px solid black; height: 50px;"></div>
3	_____	<div style="border: 1px solid black; height: 50px;"></div>
4	_____	<div style="border: 1px solid black; height: 50px;"></div>

11. Radiation Detection Instruments

Attach a Radiation Detection Instrument Registration Form ([Form 51](#)) for each instrument.

Manufacturer	Model	Location (Building and Room)
_____	_____	_____
_____	_____	_____
_____	_____	_____

12. Radiation Producing Devices and Non Ionizing Radiation Devices

Does your work/lab involve other radiation hazards such as radiation-producing devices and/or non-ionizing radiation devices?

- Radiation-producing device (*x-ray for radiography, PET/CT imaging, X-ray irradiator, diffraction spectroscopy, fluorescence units, particle accelerators, etc.*). Complete and attached a [radiation-producing device registration form](#).
- Laser (*Any Class 3B or Class 4 laser system including microscopy station, loaner from manufacturer, demo units and inactiveness/storage*). Complete and attach a [Laser Registration Form](#).
- RF producing devices (*diathermy medical device, broadcasting radio and TV antenna, cell antennas, radar, etc.*)
- Ultraviolet (UV) light
- MRI, NMR, industrial electrolysis, welding devices, etc.

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13. Animal Use Information

Please complete the section below only if your radioisotope work involved the use of animals.

Title(s) of Research Project(s):

IACUC Protocol Number(s):

Contact Person:

Phone Number:

Email:

Please complete the tables and answer the associated questions.

Species	Average Weight of Animal (kg)	Number of Animals/Experiment	Number of Experiments per Year

Radioisotope and Chemical Forms(s)	Activity (mCi/Kg)	Route of Administration	Frequency of Administration	Duration of Experiment (hours)

Radioisotope Lab Locations		Location Type (Research Area, Vivarium Housing, Waste Storage)
Building	Room	

Will Radioactive material be injected into the live animal? Yes No

Will the animal(s) be euthanized immediately after injection? Yes No

Please describe the arrangements for care and contamination control:

Please describe shielding and safety measures for workers/animal handlers:

Please describe the waste storage and disposal procedures for excretions, bedding, cages and animal tissue.

Please describe any special containment, such as laminar flow hoods or metabolic cages:

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14. Responsibilities

A check in each box signifies that you agree to the following requirements. Click on the hyperlinks for more information.

- Applicant has read and agrees to the policies set forth in the UW [Radiation Safety Manual](#).
- Applicant will pay all charges and follow current UW policies associated with [radioactive waste disposal](#).
- Applicant will maintain an up-to-date inventory of all radioactive materials and return Inventory Verification Letters within the specified time frame. Radiation Safety may conduct inventory audits.
- Applicant will maintain an up-to-date Radiation Use Authorization. Radiation Safety may conduct authorization audits.
- Applicant will complete the Radioactive Material Usage Record to document all waste disposals.
- Applicant will notify Radiation Safety of any transfers of radioactive material.
- Applicant will enroll the thyroid bioassay program if using 1 mCi or greater of radioiodine.
- Applicant will enroll the tritium bioassay program if using 100 mCi or greater of tritium.
- Applicant will establish a [survey program](#) appropriate to the type of RAM use in the lab. Monthly and after-use surveys must be documented. If no material was used in a given month, a statement such as "no use" will be recorded for the survey.
- Applicant will follow established procedures for [ordering radioactive materials](#). All orders will be shipped to the Radiation Safety Shipping and Receiving Office in the Health Sciences Building Room T274. Any deviation from these procedures requires permission from Radiation Safety.
- Applicant will submit procedures, including waste handling, for the use of RAM listed in Items 5, 7 and 9. Applicant agrees to send significant procedure updates to Radiation Safety as they are available.
- Applicant will establish security for all radioactive materials, including waste. Personnel responsible for lock-up must be designated.
- Applicant will provide all personnel with training in the health protection considerations commensurate with working in the laboratory. All personnel are required to take the UW [Radiation Safety Training Class](#), or other appropriate specialized radiation safety training, within 90 days of beginning work.
- For irradiator users only:*
Applicant understands that all individuals requiring unescorted access to the device must first complete the University's access authorization process to be deemed trustworthy and reliable.

15. Certification

The applicant accepts full responsibility for the safe use of radioactive material, will conform to the Rules and Regulations for Radiation Protection (WAC 246), conditions of the UW's license to use radioactive materials, conditions specified in this authorization, and UW Radiation Safety policies. The applicant has reviewed the proposed uses with her/her department chair.

Applicant's Signature

Date

16. Reviewed by Health Physicist

Approve Disapprove

Health Physicist, Reviewer

Date