



Environmental Health and Safety

Radiation Protection Services
110 Suffolk Hall
Stony Brook, NY 11794-6200

RADIOACTIVE MATERIALS PERMIT APPLICATION

The Radioactive Materials Permit Application is to be filled out by the Senior Investigator. Senior Investigator Authorizations are granted to qualified individuals who are principal investigators of research projects involving radioactive materials, and/or qualified individuals responsible for supervising radioactive materials used by associate users in laboratories.

Permit Holders should review, print out and retain copies of the following:

[OBTAINING AUTHORIZATION TO USE RADIOACTIVE MATERIALS](#)

[PERMIT HOLDER TRAINING REQUIREMENTS](#)

Please complete this application, in its entirety, and remit to the Stony Brook University Radiation Safety Office.

Proposed Permit Holders must submit:

- Permit Holder's most recent CV resume showing radioactive materials experience.**
- User authorization request for each faculty member or student working with radioactive materials. FORM EHSF0002 [Personnel Authorization Request](#)**
- Completion of radiation safety training SBRS 001 for the permit holder, staff, and students.**
- Diagram / map of all radioactive material locations to be used for radioactive research. Include location of radio-isotope storage, waste storage, areas of use, accelerators, etc. Include windows and door locations in each space.**
- This application, completed in its entirety.**

All proposed users of radiation or radioactive materials must complete radiation safety training here:
[SALUTE LMS](#)

All users must also complete the following forms and submit it the Radiation Safety Office @ ehsafety@stonybrook.edu

1. [Personnel Radiological Authorization Request](#)
2. [Previous Radiation Exposure History](#)

Please call or contact the Radiation Safety Officer at 631-632-6410 if you need assistance completing this application.

Completed applications may be sent via campus mail to:

Environmental Health & Safety

Attn: RSO

Z=6200

Applications may also be faxed to 631-632-9683 or scanned and e-mailed to ehsafety@stonybrook.edu

SECTION 1: CONTACT INFORMATION

PERMIT HOLDER	
Name	
Department	
Office Address	
Email	
Office Phone	
Lab Phone	
Emergency Contact Phone	

ALTERNATE CONTACT	
Name	
Department	
Office Address	
Email	
Office Phone	
Lab Phone	
Emergency Contact Phone	

SECTION 2: TYPE OF RADIATION PERMIT (CHECK ALL THAT APPLY)

- Radioactive Material: Research: *Complete sections 1 – 8 & 12*
 Radioactive Material: Animal Use: *Complete sections 1 – 8, 9 & 12*
 Accelerator: *Complete Sections 1- 8, 10 & 12*
 Human Research Facility: *Complete Sections 1- 8, 11 & 12*

2A. TYPE OF APPLICATION

- Initial Application
 Renew Application Please Enter Permit #:
 Amend Existing Permit (Check all that apply) Please Enter Permit #:
- Add / Remove Isotope
 - Change isotope possession limit
 - Add / Remove authorized space
 - Other

SECTION 3: RADIOISOTOPE USE INFORMATION

Protocol #	Radio-nuclide	<u>Activity/ Experiment (mCi)</u>	Number of Experiment s/ Month	<u>Maximum Possession Limit Requested (mCi)</u>	<u>Chemical Form</u>	<u>Physical Form (liquid, solid, gas, sealed source)</u>	<u>Will experiment with requested radionuclide result in volatile releases to air?</u>	<u>If Yes, please indicate activity per experiment will be volatile (uCi/ experiment)</u>
1								
2								
3								
4								
5								
6								
7								
8								
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10								
11								
12								
13								
14								
15								

SECTION 4: EXPERIMENTAL PROTOCOLS

You may enter your experimental protocol(s) here or **append** them to this application, if additional space is needed. Each radioisotope and use must have an associated protocol. Please indicate any hazardous chemical use and/or any hazardous procedure (e.g. potentially explosive, inhalation hazard, etc.). All protocols must include information regarding the PPE that will be utilized, the maximum activity used per experiment (please include the activity contained in the stock vial, if applicable), segregation and storage of radioactive waste (including secondary containment), the use of fume hoods and shielding (as applicable), the frequency of contamination monitoring, and any other protective measures that will be applied in order to ensure that contamination and radiation exposure are kept **ALARA (As Low As Reasonably Achievable)**.

Check here if Protocol(s) are attached:

Protocol #1	
Protocol #2	
Protocol #3	
Protocol #4	

SECTION 5: LABORATORY / FACILITY INFORMATION

Areas you are requesting for radioactive authorization.

Building	Room Number	Use (e.g, Waste storage, inventory storage, cold room, freezer, main work area, etc.)

SECTION 6: SAFETY EQUIPMENT AVAILABLE

Lab Coats	Gloves	Safety Eyewear	Safety Shower / Eyewash	Fume Hood	Adsorbent Pads/Paper	Spill Supplies	Remote Handling Tools
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 7: RADIONUCLIDE STORAGE SHEILDING & SECURITY

Please Describe how radionuclides will be stored, shielded (as applicable), and secured.

Type of Material	Storage & Security (e.g., refrigerator, freezer, cabinet)	Shielding Type (e.g, Lucite, acrylic, lead, none)	Containment (e.g., plastic/lead pig, beta box, carboy)
Sealed Sources			
Stock Material			
Samples			
Liquid Waste			
Dry Waste			
Liquid Scintillation Waste			

Other			
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Additional Comments regarding storage, shielding and/or security

Check here if you certify you will abide by the Laboratory Waste Management Guide provided as an attachment to this application.

SECTION 8: RADIATION DETECTION EQUIPMENT

Please indicate all radiation detection equipment.

Survey Meter:

Manufacturer	Model	S/N	Detector Model	Detector S/N

Wall Monitor:

Manufacturer	Model	S/N	Detector Model	Detector S/N

Dose Calibrator:

Manufacturer	Model	S/N	Building	Room #

Well Counter:

Manufacturer	Model	S/N	Building	Room #

SECTION 9: ANIMAL USE INFORMATION

Please complete the section below only if your radioisotope work involves the use of animals and attach a copy of the approved IACUC protocol.

Check here if IACUC protocol is attached:

Title of Research Project:

IACUC Protocol Number:

Species	Average Weight of Animal	Number of Animals/Experiment	Number of Experiments / Year

Radioisotope and Chemical Form	Animal Body Weight (grams)	Activity per Animal to be injected (uCi)	Total Number Animals injected per experiment	Total Number of Experiments Expected

Experiment Location (Building & Room#):	
Animal Carcass Storage Location:	
Animal Housing Location:	

Will radioactive material be injected into the live animal? Y N

Will the animal be euthanized immediately after injection? Y N

Please describe the arrangements for animal care and contamination control:

Please describe shielding and safety measures for radiation workers/animal handlers.

Please describe the waste storage and disposal procedures for excretions, bedding, cages and euthanized animals/tissue, as appropriate.

SECTION 10: ACCELERATOR INFORMATION

10A. FACILITY MANAGER INFORMATION

Name	
Office Address	
Email	
Office Phone	
Lab Phone	
Emergency Contact Phone	

10B: Please Identify each Accelerator

Manufacturer	Model / Serial No.	Location	Type of Device	Purpose of Accelerator	Number of Targets (if applicable)

10C: Please check any additional hazards associated with your accelerator

- Magnetic Field
 Radio Frequency Field
 Neutrons

SECTION 10D: PROPOSED USE OF ACCELERATOR

Please describe how you will use the accelerator listed in the inventory above. A general summary is acceptable.

SECTION 10E. SAFE OPERATING PROCEDURES

You may enter the manufacturer's safe operating procedures here or append them to this application. Each model of accelerator must have associated safe operating procedures. Additionally, please include information regarding the shielding equipment that will be utilized and personnel dosimetry requirements.

Check here if safe operating procedures are attached

SECTION 10F. EMERGENCY PROCEDURES

You may enter the manufacturer's emergency procedure procedures here or append them to this application. Each model of accelerator must have associated emergency procedures.

Check here if safe operating procedures are attached

SECTION 10G: ACCELERATOR OPERATOR INFORMATION

Please indicate laboratory personnel who will be operating radiation producing devices in your laboratory. All operators must complete appropriate training and be formally authorized before operating any accelerator.

Last Name	First Name	MI	SBU ID#	Role

10H: ACCELERATOR TRAINING

Name (Last, First, MI)	Date of Training	Where Trained	Type of Training (Operator, Engineer, etc.)	Accelerator Model

***Please attached training documentation to this permit application**

SECTION 11: HUMAN RADIOACTIVE RESEARCH FACILITY**11A. FACILITY MANAGER INFORMATION**

Name	
Office Address	
Email	
Office Phone	
Lab Phone	
Emergency Contact Phone	

11B. (Areas requesting for radioactive authorization)

Building	Room Number	Use (e.g Patient holding, camera room, source storage, metabolite lab, etc.)

11C. HUMAN SUBJECT IMAGING CAMERA INFORMATION

MODEL	TYPE (PET/SPECT, etc.)	SERIAL NO.

11D: PHYSICIAN AUTHORIZED USER INFORMATION

Name (Last, First, MI)	NYS Medical License #	HAS THE PHYSICIAN-AUTHORIZED USER BEEN APPROVED TO ORDER RADIOPHARMECEUTICAL INJECTION AS PER 10 NYCRR 16.123?

11E: CERTIFIED NUCLEAR MEDICINE TECHNOLOGIST INFORMATION

Name (Last, First, MI)	NYS NMT License #	NYS License Expiration Date

SECTION 12: PRINCIPAL INVESTIGATOR CERTIFICATIONBy checking this box:

The undersigned certify that the use of all radioactive materials shall be in accordance with pertinent State and Federal regulations, in addition to SBU, Office of Environment, Health and Safety and Radiation Safety Program policies, procedures, permit conditions and within the limits of this application. I certify that I have reviewed and understand the requirements as outlined in the University Radiation Safety Manual. I understand that any changes or amendments to this permit application must be performed in a separate amendment application and approved by the RSO.

Principal Investigator:

Date:

SECTION 13: REVIEW – DO NOT USE**13A. PERMIT MODIFICATIONS REQUIRED**

THE ABOVE APPLICATION HAS BEEN REVIEWED BY THE RADIATION SAFETY OFFICER AND THE RADIATION PROTECTION COMMITTEE AND IS NOT APPROVED UNTIL MODIFICATIONS ARE COMPLETED AS DETAILED BELOW.

Comment #	Modifications Required

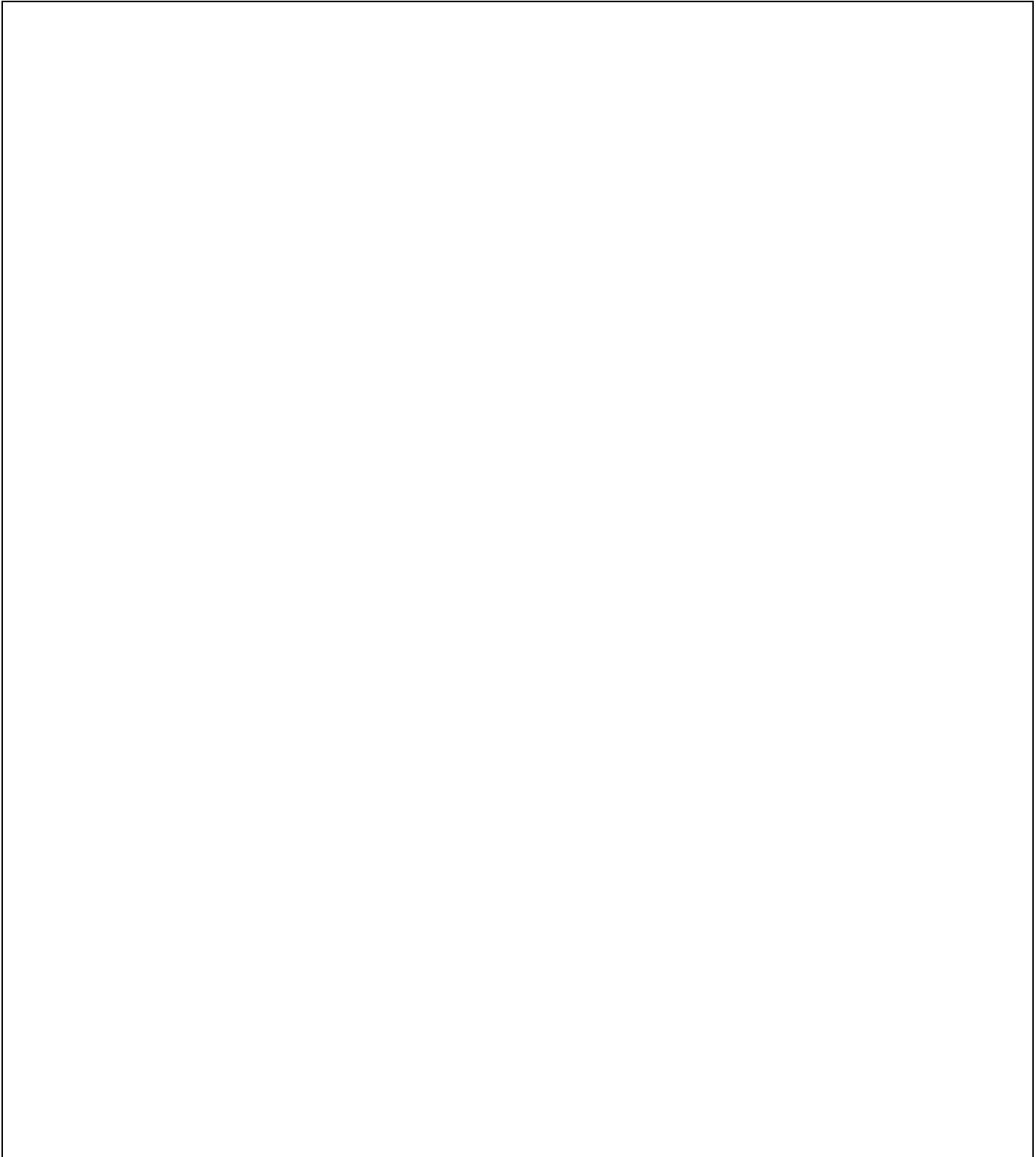
13B. PERMIT APPROVAL

1. THE ABOVE APPLICATION HAS BEEN REVIEWED BY THE RADIATION SAFETY OFFICER AND THE RADIATION PROTECTION COMMITTEE AND IS HERBY APPROVED.
2. THE PRINCIPAL INVESTIGATOR MUST ABIDE BY ALL THE CONDITIONS OF THE PERMIT.
3. THE PERMIT SHALL BE ACTIVE FOR A PERIOD OF FIVE (5) YEARS FROM THE APPROVAL DATE INDICATED.
4. FAILURE TO ABIDE BY THE CONDITIONS OF THE PERMIT AND/OR APPLICABLE REGULATIONS CAN RESULT IN THE SUSPENTION OR REVOKATION OF THE PERMIT

Date Approved	Permit Number	Expiration Date

cc. Principal Investigator
 Radiation Safety File
 Department Chair\
 University Radiation Protection Committee (URPC)

PERMIT CONDITIONS:

A large, empty rectangular box with a thin black border, occupying most of the page below the 'PERMIT CONDITIONS:' header. It is intended for the user to enter specific conditions for the permit.

ATTACHMENT #1

**Low Level Radioactive Waste Management in the
Laboratory**

Radiation Protection Services

POLICY

This document describes the differing types of radioactive waste generated on campus and their respective management requirements in the laboratory setting.

PROCEDURE

Waste Type	Description	Containers Available	Isotopes	Wastes prohibited	Management
DAW (Dry, Solid Waste)	Paper, plastic, glass and non-biohazardous absorbed liquids used in radioactive research.	55 gallon, 30 gallon & 5 gallon drums.	Any isotope with a half-life greater than 90 days (H-3, C-14)	Any wastes in liquid form. These include liquid scintillation vials, radioactive liquids, sharps and hazardous chemical wastes.	All long-term isotopes (H-3, C-14, etc.) can be mixed in the same waste container. These wastes are picked up by RPS and shipped off-campus for disposal. Waste will not be picked-up without isotopic contents noted on supplied waste inventory card.
DIS Solid	Paper, plastic, glass and non-biohazardous absorbed liquids used in radioactive research.	Lucite container, 30 gallon and 5 gallon containers.	Any isotope with a half-life less than 90 days. (P-32, S-35, I-125, Cr-51, etc.)	Any wastes in liquid form. These include liquid scintillation vials, radioactive liquids, sharps and hazardous chemical wastes.	Segregate waste containers according to isotope. These wastes are decayed 10 half-lives and disposed in the municipal waste stream. All radioactive symbols must be defaced or removed.
DIS Liquid	Aqueous solutions of radioactive isotopes	1 gallon plastic or 5 gallon plastic containers. (Glass containers prohibited)	Any isotope with a half-life less than 90 days. (P-32, S-35, I-125, Cr-51, etc.)	Any non-aqueous organic solutions. Any solutions with a pH less than 6 or greater than 8.	Segregate waste containers according to isotope. These wastes are decayed 10 half-lives and disposed in the municipal waste stream.
Non-DIS Liquid Wastes	Aqueous solutions of radioactive isotopes.	1 gallon plastic or 5 gallon plastic containers. (Glass containers prohibited)	Any isotope with a half-life greater than 90 days (H-3, C-14)	Any non-aqueous organic solutions. Any solutions with a pH less than 6 or greater than 8.	Long-term isotopes can be mixed in the same waste container. Picked up by RPS.
DIS Mixed Liquid Wastes	Non-aqueous solutions of radioactive isotopes	Any 1 or 5 gallon container compatible with the contents.	Any isotope with a half-life less than 90 days. (P-32, S-35, I-125, Cr-51, etc.)	Any solid materials. (Vials, pipette tips, etc.)	Segregate according to isotope. Short lived isotopes are decayed 10 half-lives. Waste can then be disposed of as chemical waste without consideration of radioactive component.
Non-DIS Mixed Liquid Wastes	Non-aqueous solutions of radioactive isotopes	Any 1 or 5 gallon container chemically compatible with the contents.	Any isotope with a half-life greater than 90 days (H-3, C-14)	Any solid materials. (Vials, pipette tips, paper, glass, syringes)	Isotopes with half-lives greater than 90 days can be mixed in the same container.
Liquid Scintillation Vials	Wastes generated through utilization of liquid	55, 30 or 5 gallon containers supplied by RPS.	Any isotope	Any solid materials. (Vials,	All isotopes can be mixed in the same container.

	scintillation counting equipment.			pipette tips, paper, glass, syringes)	
Animals	Animal carcasses and/or tissues generated through the injection of radionuclides. Includes bedding and animal waste.	55, 30 or 5 gallon containers supplied by RPS.	<p>For isotopes with a half-life <90 days, the animals may be radiologically decayed for a minimum of 10 half-lives. Decay must be documented and certified.</p> <p>All animal tissue containing 0.05 uCi/gm or less of H-3 and C-14, when averaged over the weight of the entire animal, may be incinerated in an approved pathogenic incinerator. Animal tissue containing more than 0.05 uCi/gm of H-3, C-14, or other isotopes will be collected for disposal in Environmental Health and Safety supplied containers in the DLAR freezer room.</p>	Only animals, bedding and waste products allowed.	Separate waste containers according to isotope and half-life.