

APPLICATION FOR NON-HUMAN RESEARCH PROTOCOLS THAT USE RADIOACTIVE MATERIAL AND RADIATION PRODUCING DEVICES

PART A. General Information

Complete this form if you intend to conduct non-human research that utilizes radioactive material and radiation-producing devices. If you require assistance in completing this form, contact the Radiation Safety Office at (706)721-9826 or RADIATIONSAFETYOFFICE@augusta.edu.

Principal
Authorized
User:

Department:

Email
Address:

Phone number:

Campus
address:

Title and any identifying numbers of the research study:

Expected
start date:

Radioactive material/radiation
work location:

PART B. Application to Utilize Radiation Producing Devices

Complete Part B for non-human use research proposals involving radiation producing devices, such as diagnostic x-ray systems, CT scanners, and fluoroscope systems. If you are not using radiation producing devices, check the N/A box and skip to Part C.

N/A

I propose to use:

Standard radiographic system

CT Scanner

Cone beam CT Scanner

Micro CT Scanner

Fluoroscopy

Linear Accelerator

NOMAD Hand-held X-ray

I propose to use the following radioactive material:

Radionuclide:	Chemical Form:	Physical form:	Requested Possession Limit (mCi):
Radionuclide:	Chemical Form:	Physical Form:	Requested Possession Limit (mCi):
Radionuclide:	Chemical Form:	Physical Form:	Requested Possession Limit (mCi):

Typical activities used (mCi uCi) or on a daily basis:

Maximum activities used for special operations (i.e. iodinations, dilutions). If a stock solution of a radionuclide is to be diluted or separated into aliquots, describe the following in detail: (1) method of dilution, (2) subsequent aliquot amounts, (3) and the facility where this is to be done-room, hood, etc. All containers must be properly labeled - radionuclide, amount, when used, who, etc. Describe subsequent labeling procedures indicating (1) what is to be labeled, (2) how it is to be accomplished, (3) where it is to be used, and (4) assay procedures to be used. (Attach additional pages as necessary.)

Justify your requested possession limit for each isotope based on above description of typical and maximum use:

Describe equipment available for protection of workers from radioactive contamination and from external radiation fields (i.e. tabletop shields, lipped trays, etc.):

Will the experiment generate gases or vapors?

YES NO

If yes, describe:

Will steps be taken to trap and collect radioactive vapors or gases?

YES NO

If yes, describe:

Will there be any vapor/gas release to the environment?

YES NO

If yes, provide quantitative upper limit for each release as well as yearly total (Approval by RSO required).

Radioactive waste; Check applicable categories. If item is not checked, it will be understood that no such waste will be generated.

Describe waste container(s) to be used in laboratory:

Solid Waste

Approximate number per month:

State supplier and product name of scintillant:

Non-hazardous liquid scintillation vials

Approximate number per month:

Hazardous liquid scintillation vials

(Approval by RSO required.) Note: Disposal costs are assessed to the Principal Investigator.

Approximate monthly volume:

Will bulk liquid meet EPA/RCRA criteria for disposal?

Bulk liquid

YES

NO

Maximum activity per animal:

Maximum specific activity by isotope:

Radioactive animal carcasses

Maximum number of carcasses per week:

Average weight per animal:

Expected number of carcasses per year:

Estimate freezer capacity required:

Characterize the waste by activity, isotope, maximum specific activity, biological description, and storage requirements:

Other radioactive contaminated biological waste

If the waste will be stored in your lab for the purpose of decaying to a non-radioactive level before transfer to RSO, describe storage facility:

Disposal by radioactive decay

Mixed waste (Radioactive waste that includes chemical, biological, or hazardous waste.) Note: Mixed waste disposal costs are assessed to the Principal Investigator.

Mixed waste (i.e. carcinogenic, infectious, explosive, etc.) may present handling problems for the RSO staff, and may also require prior clearance with the commercial rad waste disposal facility. Describe nature of hazard and precautions/procedures to be used to identify, package, and safe handling of the material. **(All waste containing biohazards must be detoxified before it is transferred to Radiation Safety.)**

Use of radioactive material in animals

Will radioactive material be used for in-vivo animal experiments?

YES NO

Types of animals to be used: Activity to be administered: Route of radionuclide administration

What fraction of the radioactivity will present in:

air urine feces carcass

Maximum number of radioactive animals housed at one time:

Where will radioactive animals be housed?

How long will the animals contain radioactivity?

I am familiar with the Radiation Safety Guide requirements for handling radioactive animals.

YES NO

Identify any other procedures under this protocol that involve hazardous operations or present special problems (i.e. grinding, work with loose powders under mechanical agitation, potential for large energy releases, plant studies). Give sufficient detail on methods of use of radioactive material to provide a basis for an evaluation of health hazards and contamination potential.

List all the rooms where radioactive materials will be used or stored.

Attach a diagram of each room indicating the locations of radionuclide use, desks, fume hoods, hot sinks, storage areas, and radioactive waste storage. State if lab is lockable.

Part D. Training and Experience of the Principal Authorized User

Note: If this is an initial AU/AU Health proposal application, please attach a copy of your resume to the proposal.

Training

List below any courses you have had that covered such topics as radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity and radiation biology.

Institution: Course Title/Number: Total hours: Date of Attendance:

Institution: Course Title/Number: Total Hours: Date of Attendance:

Institution: Course Title/Number: Total Hours: Date of Attendance:

Experience

List below all experience you have had working with radiation sources, particularly with the types and activities requested in this application.

Isotope: Max. Activity: Institution: Dates: Type of Use:

Isotope: Max. Activity: Institution: Dates: Type of Use:

Isotope: Max. Activity: Institution: Dates: Type of Use:

Were you ever approved as a Principal Authorized User to use radionuclides or listed on an NRC or agreement state radioactive materials license?

NO

YES - Where?

Part E. Signature and Submittal

If this electronic application and supplementary information are submitted to the Radiation Safety Office as email attachments **from the applicant**, a written signature is not required. If this application is submitted by someone other than the applicant, the applicant should be copied on the email submission or the applicant may send a separate email to the Radiation Safety Office (radiationsafety@augusta.edu) indicating the applicant's approval of the submitted information.

Signature:

Date: