GUIDANCE ON IUPUI RSO FORM A-1: RADIONUCLIDE USE PERMIT APPLICATION FOR NON-HUMAN USE

It is advised to use the following guidance in conjunction with the ***Radiation Safety Procedures Manual*** to aid in completing the RSO Form A-1, *Radionuclide Use Permit Application for Non-Human Use*. Any questions can be directed to the Radiation Safety Office (RSO) by e-mailing radsafe@iupui.edu or by calling (317) 274-4797.

1. **Applicant Information.**

   Enter the name of the person who will become the Permit Holder. This should also include any post-nominal title(s) the applicant has, the primary department in which the applicant represents as well as the campus address of the applicant. This is usually the office in which the applicant resides. Also include an IU-associated e-mail address and pertinent phone numbers that will allow the RSO to contact the Permit Holder for various issues (inventory, ordering, questions) regarding to the Permit.

2. **Project Information.**

   Enter the anticipated start date. Note that this may be several weeks or months in the future of the projected start date. It is typically desired that the projected start date be several weeks in advance of the application submission – delays can arise for various issues in the permit approval process. The duration of the project should also be indicated, if it is known. If it is unclear, check the *Indefinite* box.

   The RSO imposes more rigorous standards for those who will use animals, rDNA, cells, or other biohazardous materials in their projects. The use of such shall be indicated. Note that animal use will require the submission of the *Animal Use Addendum* located on Page 3 of the application in addition to a copy of an IACUC Application. Any projects using rDNA will require a copy of an Institutional Biosafety Committee (IBC) application.

   When detailing the summary of the project, indicate the purpose and title of your project. Take care to focus on the radionuclide use and handling methods while conducting the study/experiment. It should include what materials will be used for shielding or to contain/confine any contamination that may occur during the project. The projected amount of material per procedures shall also be indicated. Equally important to describe is how the lab will label and track radioactivity as it is used.

   Use supplemental pages as necessary if the project summary exceeds the area provided. Note in the section that supplemental page(s) have been included with the submission.

3. Radionuclide Use.

Indicate the radionuclides that will be used in the project as well at the physical and chemical forms that will be used. This information must be accurate as the RSO will discriminate any radionuclides ordered for the permit with the information provided. If discrepancies occur, an amendment may need to be filed before the material is provided to the lab. The maximum activity per procedure, in millicuries, should also be indicated as well as a reasonable possession limit. If no possession limit is indicate, the RSO will designate one based off of what work has been described as being done.

4. Monitoring Equipment.

As is noted in Sections H. and K. in the *Radiation Safety Procedures Manual*, specific monitoring equipment is required to be available for use for various monitoring/sampling. Every lab must have at least one survey meter that is capable of detecting the radionuclide that will be used in addition to a gamma counter and/or a liquid scintillation counter for processing monthly or waste wipe testing. The Make, model and serial number, and what the device will be used for shall be indicated.

5. Radioactive Waste Generation.

Check any boxes that represent the waste that will be generated during your experiment. Specific conditions may be indicated in an approved radionuclide use permit for materials that may require special handling/processing (such as cells and biohazardous materials).

6. Laboratories.

Any laboratory that will be used for the project must be added to the permit. To do so, include an RSO Form A-4, *Application for Facility Approval for Radionuclide Use* to the A-1 application for each room that is desired to be used.

7. Personnel.

Any personnel that will handle or use radioactive material must complete a RSO Form A-3, *Authorization to Use Radioactive Material* form prior to using or handling RAM. Training courses may be required depending on the user's previous experience. The applicant (Permit Holder) must also complete and submit an A-3 form in addition to attaching a copy of his/her curriculum vitae (CV).

8. Personnel Monitoring.

Personnel monitoring may be required depending on the radionuclides and activities used in the course of research. See Section F. of the *Radiation Safety Procedures Manual* for more information and whether a RSO Form A-5, *Request for Personnel Monitoring Service*, is required.

9. Applicant Statement of Compliance.

The applicant is required to sign and date this section. Electronic signatures are permitted.

10. Animal Use Addendum.

The *Animal Use Addendum* is required to be submitted in conjunction with a RSO Form A-1 or A-2 for any researcher/applicant who will use animals in the course of their research involving radioactive materials.

a. Researcher Information.

Indicate the Researcher's Name, Department, and the IACUC/LARC study number. Don't forget to include a copy of the IACUC/LARC application.

b. Animal Information.

Note the breed of animal(s) that will be used in addition to the average weight of each animal and the total number of animals that will be used in the study.

The activity that will be injected into each animal, route of administration, and the estimated animals that will be disposed in either of the indicated time periods shall also be included.

Information regarding the estimated activity that will be excreted per animal and the route of excretion, if applicable, is needed to determine whether additional training will be required for LARC staff members.

The same applies for the length of study. Chronic studies will require a holding room location to be indicated. Acute studies in which the animals will be sacrificed within one day of injection of radioactive material do not require a holding room location, but the applicant should ensure that the location in which the animal will be processed is added to the protocol by submitting a RSO Form A-4, *Application for facility Approval for Radionuclide Use*.

c. Additional Information.

Any additional information pertaining to the animal study involving radioactive material that is not otherwise covered in the addendum or an attached copy of the IACUC/LARC application shall be discussed and/or disclosed here. Information pertaining to the processing of animals and waste should also be noted.

d. Applicant Signature.

Sign and date the Addendum. Electronic signatures are acceptable.