This instructional guide is intended to be used when completing the "Application for the Possession and Use of Radioactive Materials." Please refer to this guide for definitions of items contained in the application, or for clarifying what information is being requested. Please complete the form in its entirety and return it to the address listed on the cover page. Use additional pages as necessary.

Section 1. Radioactive Material Protocols: Titles and waste distribution.

Provide a title for each protocol, and complete the radioactive waste distribution section. The values entered should represent the percentage of the total radioactivity amount that ends up in the various waste streams. The sum should equal 100%.

Protocol descriptions.

On a separate sheet of paper, describe the handling, use and disposal of the radioisotopes for each protocol listed in **Section I**. Include in this description the radiolabeled compounds used, any chemicals added or dilutions performed, and the volumes and types of radioactive wastes generated. If any of the characteristics in **Section II** apply to the protocol, please discuss the inactivation or neutralization of the applicable hazards and/or discuss the management and control of potentially contaminated animal by-products (excretions, bedding, etc.) or field use by-products (air release, run-off, etc.). Also describe the precautions, safe handling procedures and equipment that will be used to reduce exposure to the ionizing radiation.

These desriptions must be type written.

Section II. Radioactive Materials Protocols: Frequencies and characteristics.

Identify the radioisotopes to be used in the protocols listed in **Section I** and give an estimate of the radioactivity used per protocol (in mCi) and the number of times that protocol is likely to be conducted on a monthly average. Check the appropriate box (yes or no) for each characteristic/attribute listed, and give details in the protocol description for those that apply.

Chemical Hazard:	Chemically hazardous materials (flammable, shock-sensitive, etc.).
Bio Hazard:	Biologically hazardous materials (virus, bacteria, etc.).
Toxic:	Carcinogenic, teratogenic, and/or mutagenic materials.
Volatile:	The radioisotope is in a form, or will be converted to a form, that is potentially volatile.
Mixed Waste:	Radioactive wastes are generated in combination with hazardous chemical wastes (flammable solvents, chlorinated solvents, heavy metals, PCB's, pesticides, etc.).
Animal Use:	The radioisotope is to be administered to animals.
Field Use:	The radioisotope is to be used in field applications, growth chambers greenhouses, etc.

Section III. Radioactive Materials: Possession limits and inventories.

List the radioisotopes to be used and an estimate for a possession limit. This limit will be the maximum amount (in mCi) that may be accumulated under the permit. This includes stock material, materials in use, and materials in waste.

List all sealed sources and provide their storage locations. If the sources are to be transported and used at remote locations (i.e. field use) you must list the locations in **Section IV**. Discuss the transport and control procedures to be followed in your protocol description.

Section IV. Radioactive Material Use Areas: Labs, storage areas, animal rooms and field locations.

List all the areas where radioactive materials will be handled. This includes all labs, cold rooms, counting rooms, animal rooms and waste rooms where radioactive materials will be used, stored or disposed. List any alternate door numbers assigned to those areas. Also, list the radioactive material protocol(s) that will be conducted in the restricted areas. If radioactive materials will be used in field applications, give the locations of these sites.

List the main laboratory, or other restricted area, that should be used as the default delivery location for radioactive material packages.

Section V. Personnel.

If someone other than the applicant will be responsible for maintaining records (inventory, personnel, training, waste, etc.), please provide their name, phone number and E-mail address. List the names and the Univeristy of Minnesota ID numbers of all personnel (including the applicant and contact person) who will be working with radioactive materials in the restricted areas listed in **Section IV**. Provide places and dates (years) of previous training or experience in the handling of radioactive materials when applicable.

If you have questions, or you require assistance with the application form, contact the Radiation Protection Division, Department of Environmental Health and Safety, at (612) 626-6002.