

## Application to Use Radioactive Materials

**Procedure: 7.502**  
**Version: 1.0**

**Created: 5/9/2014**  
**Revised:**

### A. Purpose

Use of radioactive materials (RAM) for non-human research requires review and approval by the Radiation Safety Committee (RSC). Principal Investigators (PI) must complete and submit an application to: obtain initial permission to use RAM, add or delete isotopes, change permission limits and/or rooms, locations or facilities where RAM is/will be used.

### B. Applicability/scope

This policy applies to all areas, laboratories and facilities where RAM is used or stored that are under the cognizance of Columbia University Radiation Safety Program. This includes, but is not limited to

- Columbia University Medical Center
- Morningside campus
- Manhattanville campus
- Lamont Doherty Earth Observatory
- Nevis Lab
- Barnard College
- New York State Psychiatric Institute

### C. Definitions

CUMC: Medical Center Campus

MS: Morningside Campus, NEVIS, LDEO, Manhattanville, Barnard

PI – Principal Investigator – The individual who has a permit to order, use and store radioactive materials.

RAM – radioactive materials

RSC – Radiation Safety Committee – This term includes the Joint Radiation Safety Committee

RSO - Radiation Safety Officer – This term includes the Chief RSO, RSO for Research Programs and the RSO for Clinical Programs.

### D. Procedures

Any individual who wishes to purchase, use or work with radioactive materials or radiation-generating devices requires written authorization from the applicable RSC (or designee thereof) prior to any such activity. The purpose of such authorization process is to assure the applicable RSC that the individual has the appropriate experience and training for the intended activity. Once

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approved, the individual is issued a permit as an Authorized User and is responsible for controlling all radioactive materials and radiation generating devices covered by the permit from the time of receipt until transfer to the applicable Radiation Safety Program office as waste, shipment to another location or transfer to another Authorized User.

An Application for Non-Human Use of Radioactive Materials must be submitted to the applicable Radiation Safety Program office before any radioactive material can be acquired by purchase, transfer, loan or otherwise. This Application gives information relating to the intended use of the material, the locations of use and storage, protective equipment and facilities available, and plans for the disposal of radioactive wastes.

The application is reviewed by a RSO. Once the RSO and the Chair of the RSC approve the Application, it is effective. Notice of its effectiveness is given to the applicable RSC at its next meeting.

Permits expire after a period of five years. Non-Human Use Authorized Users may request renewal by written application to the applicable Radiation Safety Program office prior to expiration. Approval of the renewal will be reported at the next scheduled meeting of the applicable RS Committee.

The quantity of radioactive materials allowed under all permits for non-human use should be consistent with the actual needs of the laboratory. The Radiation Safety Officer will verify that the requested quantities are consistent with the University's applicable radioactive materials licenses. Based on a review of the proposed use(s), the reviewing Radiation Safety Officer may require special equipment, shielding or facilities or that a special laboratory be used.

At a minimum, the permit will list

- The Non-Clinical Authorized User as the permit holder;
- Room(s) where the radioactive material will be used or stored;
- The permitted use(s) of the radioactive material or radiation;
- Type, form and quantity of radioactive materials that can be acquired; and
- Limits on the amount of radioactive materials that may be purchased or acquired at any one time and the maximum possession limits.

The permit may also impose additional restrictions or requirements such as bioassays when radioiodine or tritium is used.

Requests to change specific provisions of a permit shall be made by the Non-Clinical Authorized User submitting the same Application form as is used for initial permit application to the applicable Radiation Safety Program office, together with a cover letter indicating the changes in the Application and the rationale for each change.

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Authorized Users may request inactivation of a permit by written application to the applicable Radiation Safety Program office. If a permit is inactivated, all radioactive materials used under the permit will be surrendered and laboratories and/or facilities cleared of all waste and contamination by EH&S personnel. Secure storage of radioactive materials may be granted on a case-by-case basis. However in no case will the materials be removed from storage without the consent of a Radiation Safety Officer. Inactivation will be reported at the next scheduled meeting of the applicable RS Committee.

Permits may be reactivated at any time by written application to the applicable Radiation Safety Program office and approval by a Radiation Safety Officer.

Inactive permits will not be renewed upon expiration unless the Authorized User requests renewal in writing.

The RSO may add conditions, suspend or cancel a permit at any time based on lack of compliance with safety or regulatory requirements, subject to subsequent ratification by the applicable RSC.

## E. Emergency contact

N/A

## F. Medical Surveillance

N/A

## G. Recordkeeping

All survey records must be kept for the duration of your permit at Columbia University.

## H. Appendices

N/A

## I. Forms

<http://www.ehs.columbia.edu/ApplicationForInVitroUseOfRadioactiveMaterials.pdf>

## J. References

N/A

## K. Acknowledgements (optional)

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