

**EMORY UNIVERSITY - RADIOISOTOPE COMMITTEE II
GUIDE FOR THE PREPARATION OF APPLICATION
AUTHORIZATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIAL**

This guide describes the type and extent of information needed by Committee II, non-human use of radioactive material committee, to evaluate an application for an authorization for the possession of radioactive materials and its use on animals or in vitro. This authorization is issued through License GA 153-1 which is administered by the Department of Natural Resources under provision of Rules and Regulations for Radioactive Materials, Chapter 391-3-17.

- Item 1: (a) Enter name.
- (b) Enter interoffice mailing address.
- (c) Enter laboratory number(s) and building where radioactive material will be used and/or stored.
- Item 2: Principal investigator and others responsible for the safe use of radioactivity and the supervision of other radioactivity users. Attach form Supplement A for each. NOTE: an alternate supervising user must be named for any period of absence of the Principal Investigator for more than 30 days.
- Item 3: Indicate if this application is for a new or renewal authorization.
- Item 4: Person responsible for record-keeping and general radiation safety in the laboratory who can converse knowledgeably with Committee II members, Radiation Safety personnel or Georgia Department of Natural Resources personnel.
- ~~Item 5: Attach Personnel History Forms for all supervised radioactivity users. (disregard this item)~~
- Item 6. (a) Chemical forms: For H-3 and C-14, "any stable and non-volatile form" is acceptable. For other isotopes, use categories such as nucleotides, amino acids, etc.
Maximum Activity: Request possession limit sufficient to cover any waste which may be held. Also consider quantities which are most economical to order and materials which may arrive prior to calibration date.
Maximum activity in any one experiment: Self-explanatory.
- (b) List protocol titles or general uses of radioactivity. (Ex: Protein iodination using I-125)
- (c) List all sealed radiation sources including calibration sources of sub-microcurie strength.
- Item 7: Attach description of methodology to be used in handling the radioactive material, focusing on those steps which will promote the safe use of the radioactivity. Include protective equipment to be used (e.g., hood, shielding, etc.) and acknowledge special safety procedures to be employed with use of volatile material (some S-35 and I-125 compounds). Reprints may be attached for reference purposes only.
- Item 8: Attach Appendix A.
- Item 9: Attach laboratory diagrams corresponding to Item 1.C.
- Item 10: Attach specific procedures to be used under this authorization to promote safe use of radioactivity.

- Item 11: Attach procedures to be followed under this authorization in an emergency, and emergency contact phone numbers.
- Item 12: May use Appendix D for broad description of waste handling. Attach an additional sheet for detailed comments.
- Item 13: Indicate if radioactivity is used in animals and attach Appendix E if so.
- Item 14: List types of badges used and circumstances under which each will be used. Also describe where personnel monitoring devices will be stored to avoid exposure of badge when it is not being worn.
- Item 15: All personnel using radioactive material or frequenting an area where radioactive material is used must receive training upon employment and not less than every three years thereafter. Record of training and performance evaluation must be maintained for each employee, and records must be available for inspection in the laboratory.