

\* See note on last page for qualifications before completing application.

**APPLICATION FOR PERMIT TO USE RADIOISOTOPES AND/OR IONIZING RADIATION GENERATORS**

NAME	EXT #	ORGANIZATIONAL UNIT	PERMIT NUMBER
RESEARCH USE	INSTRUCTION USE	DATE	EXPIRATION DATE

FOAPAL:	FUND	ORGANIZATION	ACCOUNT	PROGRAM	ACTIVITY
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**1. RADIOISOTOPES**

Isotope	Chemical Form	Physical Form	Maximum # uCi/Exp	Maximum # uCi/Order	Possession Limit -uCi	Use Location
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

**2. RADIATION GENERATORS**

Number	Make	Model	Maximum Voltage	Maximum Current	Location
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**3. DESCRIPTION OF PROCEDURES & TECHNIQUES FOR USE OF RADIOISOTOPES AND/OR GENERATORS**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NAME: \_\_\_\_\_ SEX: M \_\_\_ F \_\_\_ PHONE #: \_\_\_\_\_, PI \_\_\_\_\_

START DATE: \_\_\_\_\_ LEAVE DATE: \_\_\_\_\_ INDEPENDENT USER \_\_\_ DEPENDENT USER \_\_\_\_\_

**A. Training:**

(1) Highest Degree: \_\_\_\_\_ College or Univ: \_\_\_\_\_

OR (2) Equivalent: \_\_\_\_\_

(3) Education specifically applicable to use radioactive material or generators:  
\_\_\_\_\_

**B. If dosimetry (personal monitoring badges/rings) is required while working at UCSC , please complete the following #1 and #2:**

(1) Have you ever worn dosimetry during previous employment or study?

Yes \_\_\_ No \_\_\_ **If "yes", please list places and addresses on back of form.**

(2) Birthdate \_\_\_\_\_ Soc Sec # \_\_\_\_\_

**C. Experience:**

(1) List all experience with radioactivity beginning with the most recent:

(a) Dates: From: \_\_\_\_\_ To: \_\_\_\_\_

Title and Duties: \_\_\_\_\_

\_\_\_\_\_

Where: \_\_\_\_\_

(b) Dates: From: \_\_\_\_\_ To: \_\_\_\_\_

Title and Duties: \_\_\_\_\_

\_\_\_\_\_

Where: \_\_\_\_\_

(c) Dates: From: \_\_\_\_\_ To: \_\_\_\_\_

Title and Duties: \_\_\_\_\_

\_\_\_\_\_

Where: \_\_\_\_\_

(d) Dates: From: \_\_\_\_\_ To: \_\_\_\_\_

Title and Duties: \_\_\_\_\_

\_\_\_\_\_

Where: \_\_\_\_\_

(2) Radioactive materials or machines previously used. Cite typical isotopes.

	MICROCURIES	MILLICURIES	CURIES
SEALED SOURCES			
UNSEALED ALPHA EMITTERS			
UNSEALED BETA GAMMA EMITTERS			
NEUTRON SOURCES			
RADIATION GENERATORS	<u>TYPE</u>	<u>KV</u>	<u>MA</u>

(3) Describe procedures similar to those proposed in Part 3 with which you have had experience. Indicate months or years for each.

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(4) Indicate which type of facilities you have used.

- ( ) Ordinary chemical laboratories
- ( ) "Control Area" laboratories
- ( ) Glove boxes
- ( ) Shielded glove boxes
- ( ) Caves with remote manipulators
- ( ) Field operations with portable equipment

5. NAMES OF ALL PERSONS INVOLVED WITH RADIOACTIVITY

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6. RADIATION PROTECTION PROGRAM

a) Special work procedures

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b) Material storage and labelling

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c) Monitoring (Instruments \* Schedules \* Calibrations)

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d) Personal protective measures

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e) Personnel dosimetry/bioassays

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7. **WASTE**

FORM	ISOTOPES	DISPOSAL TECHNIQUES

8. THE FOLLOWING QUESTIONS ARE TO BE ANSWERED BY THE EH&S OFFICE:

I. ARE EQUIPMENT AND FACILITIES AVAILABLE TO ADEQUATELY SUPPORT

a) The work program?

b) The waste disposal program?

Yes \_\_\_\_\_

Yes \_\_\_\_\_

c) The radiation protection program?

Yes \_\_\_\_\_

II. HAVE THE SMALLEST AMOUNTS OF THE LEAST HAZARDOUS MATERIALS BEEN SELECTED THAT WILL ACCOMPLISH THE OBJECTIVES?

Yes \_\_\_\_\_

III. ARE THE EQUIPMENT AND LOCATION COMPATIBLE WITH OTHER ACTIVITIES IN THE AREA?

Yes \_\_\_\_\_

IV. IS THE PERMITTEE AVAILABLE TO SUPERVISE THE RADIATION PROTECTION PROGRAM?

Yes - Should the Permittee be absent for any significant period of time, (greater than one week), he will notify EH&S and appoint an alternate Permittee to supervise operations during his/her absence.

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V. PERMIT CONDITIONS

1. A diary is to be maintained that records dates and amount of receipt, use and disposal of radioactive material. Methods of disposal are to be included also. Diary summaries will be submitted quarterly to the Campus Radiation Safety Officer.
2. The following are to be reported to the Radiation Safety Officer:
  - A. Any change in personnel.
  - B. Any changes in program that materially effect safety procedures.
  - C. Any losses of radioactive material that may expose personnel or increase radiation levels in the lab.
  - D. Prior notification of intended termination of this permit.
3. A suitable survey instrument must be maintained in the lab.
4. Periodic wipe tests are to be made on all working surfaces and equipment.
5. Known radioactive waste shall be collected and packaged for waste disposal.
6. Comply with all pertinent regulations of the Campus Radiation Safety Manual. A copy of the manual is to be maintained by the Permittee. All personnel listed in this permit are required to read and be knowledgeable regarding provisions of the manual. All personnel listed in this permit are required to read and be knowlegeable regarding the contents of California Radiation Control Regulations booklet issued to this lab.
7. Radioactive materials may not be acquired for transshipment without prior approval from the Campus Radiation Safety Officer.
8. No food, drink or smoking permitted in radioisotope use laboratory or storage areas.
9. No radioactive materials are to be transferred between authorized users without prior approval of the Radiation Safety Officer.

\* Applicant must have:

- 1) A college degree or an equivalent in the physical or biological sciences or engineering and
- 2) At least 40 hours of training or practical experience in the characteristics of ionizing detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used.

\_\_\_\_\_  
Reviewed by Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Reviewed by Radiation Safety Officer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Approved by RSBC Committee

\_\_\_\_\_  
Date