Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM) GENERAL INFORMATION FORM

Office use only: PLG #_____ PI#_____

This application is ○ new
● an amendment to an existing application

1. Name of Applicant: _____ Employee ID #_____
Title: _____ Department: _____
Laboratory Office: Building _____ Room _____
Dept. Office (if different from above): Building _____Room_____
Phone #'s: Office_____ Lab _____ FAX #_____Email _____

---

2. Location of use and storage of Radioactive Material:
Building: _____ Rooms: _____ Rooms: _____
Rooms: _____ Rooms: _____ Rooms: _____ Rooms: _____
Building: _____ Rooms: _____ Rooms: _____
Rooms: _____ Rooms: _____ Rooms: _____ Rooms: _____

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3. Radiation Monitoring Devices
Liquid Scintillation Counter Used:
Manufacturer: _____ Model: _____ Serial #: _____
Internal Std: _____ Activity: _____ Assay Date: _____
Location: _____ Responsible AU: _____
Gamma Counter Used:
Manufacturer: _____ Model: _____ Serial #: _____
Location: _____ Responsible AU: _____
Hand Held Survey Meter: (owned by you)
Mfg: _____ Model: ____ Serial #: _____ Probe: _____
Mfg: _____ Model: ____ Serial #: _____ Probe: _____
Check Source Available: Y _____ N _____ Type _____

(CIRCLE ONE) I <u>AM / AM NOT</u> currently using radioactive materials on the University Hospital ODH license or a license held by another institution. I signify that I have read the Radiation Safety Manual issued by the Radiation Safety Committee of CASE governing the use of radiation sources and radioactive material, and agree to comply with all applicable regulations.

APPLICANT _____ **DATE** _____
Signature

FORM 1

11/20/2014

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
NUCLIDE REQUEST FORM
(USE ONE FORM FOR EACH NUCLIDE REQUESTED)

Office use only: PLG #_____ PI#_____

1. Name of Applicant: _____
(Consult the Authorized User section of the Radiation Safety Manual for instructions on completing the following sections.)

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2. a. Radionuclide: _____
b. Estimated to be ordered per shipment: _____ mCi
c. Maximum to be possessed at any one time: _____ mCi
(The possession amount should be at least twice the amount ordered per shipment.)

---

3. Chemical Compounds or Physical Forms: _____
_____

4. Isotope storage/security (Lab location/how secured): _____
_____

5. Waste storage location: (Room number): _____

6. Shielding requirements: _____

7. Bioassay requirements: _____

8. Will any infectious agents be used with this protocol? Yes ◯ No ◯

I acknowledge the Chairperson's authority to allow review of my application by upper administration officials at the University.

_____ _____ _____ _____
APPLICANT **DATE** **DEPT. CHAIRPERSON** **DATE**

FOR RSOF USE ONLY APPROVAL

_____ _____ _____ _____
RSO DATE CHAIRPERSON RSC DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____(If Applicant is AU at UHCMC)
UHCMC RSO DATE

FORM 3

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
NUCLIDE REQUEST FORM
(USE ONE FORM FOR EACH NUCLIDE REQUESTED)

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_____

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5. Waste storage location: (Room number): _____

6. Shielding requirements: _____

7. Bioassay requirements: _____

8. Will any infectious agents be used with this protocol? Yes No

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FOR RSOF USE ONLY APPROVAL

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RSO DATE CHAIRPERSON RSC DATE

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RSC MEMBER DATE RSC MEMBER DATE

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RSC MEMBER DATE RSC MEMBER DATE

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RSC MEMBER DATE RSC MEMBER DATE

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RSC MEMBER DATE RSC MEMBER DATE

_____ _____(If Applicant is AU at UHCMC)
UHCMC RSO DATE

FORM 3

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
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APPLICANT **DATE** **DEPT. CHAIRPERSON** **DATE**

FOR RSOF USE ONLY APPROVAL

_____ _____ _____ _____
RSO DATE CHAIRPERSON RSC DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____(If Applicant is AU at UHCMC)
UHCMC RSO DATE

FORM 3

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
REQUEST FOR USE OF A SEALED SOURCE

Office use only: PLG #_____ PI#_____

1. Name of Applicant: _____

2. Sealed Sources:
   a. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   b. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   c. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

APPLICANT	**DATE**	**DEPT. CHAIRPERSON**	**DATE**

FOR RSOF USE ONLY APPROVAL

RSO	DATE	CHAIRPERSON RSC	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE

FORM 4

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
REQUEST FOR USE OF A SEALED SOURCE

Office use only: PLG #_____ PI#_____

1. Name of Applicant: _____

2. Sealed Sources:
   a. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   b. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   c. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

APPLICANT	**DATE**	**DEPT. CHAIRPERSON**	**DATE**

FOR RSOF USE ONLY APPROVAL

RSO	DATE	CHAIRPERSON RSC	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE

FORM 4

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
REQUEST FOR USE OF A SEALED SOURCE

Office use only: PLG #_____ PI#_____

1. Name of Applicant: _____

2. Sealed Sources:
   a. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   b. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

   ---

   c. Radionuclide: _____ Form: _____
      Activity: _____mCi Assay Date: _____
      Serial number: _____
      Location: Building_____ Room: _____

APPLICANT	**DATE**	**DEPT. CHAIRPERSON**	**DATE**

FOR RSOF USE ONLY APPROVAL

RSO	DATE	CHAIRPERSON RSC	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE
RSC MEMBER	DATE	RSC MEMBER	DATE

FORM 4

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
LABORATORY PERSONNEL LIST

Office use only: PLG #_____ PI#_____

Name of Applicant: _____

List the names of all personnel in your laboratory who will use radioactive materials. Indicate the most recent training date for each, and designate those to whom you delegate isotope-ordering privileges. This list must be updated when personnel join or leave your laboratory

NAME	DATE OF MOST RECENT RADIATION SAFETY TRAINING	INDICATE ORDERING PRIVILEGES BY "√"
		☐
		☐
		☐
		☐
		☐
		☐
		☐
		☐
		☐

Chemical Hygiene Plan Current Date _____
Exposure Control Plan Current Date _____

All personnel must be current in Lab. Saf. and/ or BBP Training.

APPLICANT _____ _____
SIGNATURE **DATE**

FORM 5

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

APPLICATION FOR NON-HUMAN USE OF RADIOACTIVE MATERIALS (RAM)
APPLICATION FOR USE OF RADIOISOTOPES IN ANIMALS

Applicant: _____ Office Telephone No: _____
Title: _____ Department: _____

Animal species to be used (circle one): Mouse Rat Cat Dog Other: _____

Description of isotope(s) physical and chemical form (Circle as appropriate):
If infectious agent(s) will be used along with radioactivity, please list under #3

1. **H-3 C-14 P-32 S-35** other: _____
2. **Solid Liquid Gas** Chemical form:_____
3. Infectious agent(s) used: _____

Amount administered per animal: _____ mCi/ animal

Maximum number of animals to be housed on any given day: _____

Number of animals per cage: _____

Describe experimental protocol for the use of the radioisotopes:

1. Mode of administration:
   ___ **Intraperitoneally**
   ___ **Per oral**
   ___ **Subcutaneous**
   ___ **Intra dermal**
   ___ Other _____

   Room where administration will take place: _____

2. Housing - Where will the animals be held following administration of the isotope?
   _____

3. On a separate sheet describe the elimination of radioactivity from the animal. (Provide support from your data indicating the need for monitoring is non-existent or plan to monitor the elimination of the radioactivity in the feces, urine, or breath from the animal.)

FORM 6-1

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

Experience of involved personnel in the use of isotopes with animals:

Involvement of CWRU Animal Resource Center personnel in project:

1. Isotope administration:

2. Post injection care:

A room for radioisotope use must be scheduled with the Animal Resource Center and Radiation Safety Office prior to the administration of radioisotopes to the animals.

Room: _____
Scheduled dates of use: from _____ until _____

_____ _____
APPLICANT **DATE**

FOR RSOF USE ONLY APPROVAL

_____ _____
RSO DATE CHAIRPERSON RSC DATE

_____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____ _____
RSC MEMBER DATE RSC MEMBER DATE

_____ _____
ARC Representative DATE

FORM 6-3

- Contaminated Skin
  - Wash with mild soap and running water (or wet towels).
  - Do not abrade skin.
  - Survey after each washing and drying.
  - Notify RSOF if any skin contamination remains

- Contaminated Clothing
  - Remove the contaminated clothing carefully to avoid or minimize contaminating the skin.
  - Check the skin for possible contamination.
  - Notify RSOF

- Floor Contamination
  - Secure access to general area.
  - Define boundary of contaminated area.
  - Check for personnel contamination.
  - If a major spill, notify RSOF.
  - If a minor spill, decontaminate. Use a spray cleaning solution and wipe up with paper towels or other absorbent material to remove contamination. Be careful not to flood the area with cleaner since that will wash contamination into cracks, making it harder to remove.

- Equipment Contamination
  - If contamination removable, decontaminate to comply with contamination limits.
  - If fixed contamination remains, label equipment with isotope, activity and date.
  - Contact RSOF if assistance required.

EMERGENCY RESPONSE PROCEDURES
[ ] as described below [ ] other - see attached

For any situation perceived as an emergency involving radioactive materials, notify the Radiation Safety Office at (**368-2906**) during office hours (8:30 a.m. - 5:00 p.m.) or Security (**368-3333**) after hours. Fire and Medical emergencies should be directly referred to security at (**368-3333**) at all times. They will coordinate emergency response communications and notifications with hospital, ambulance, and fire personnel.

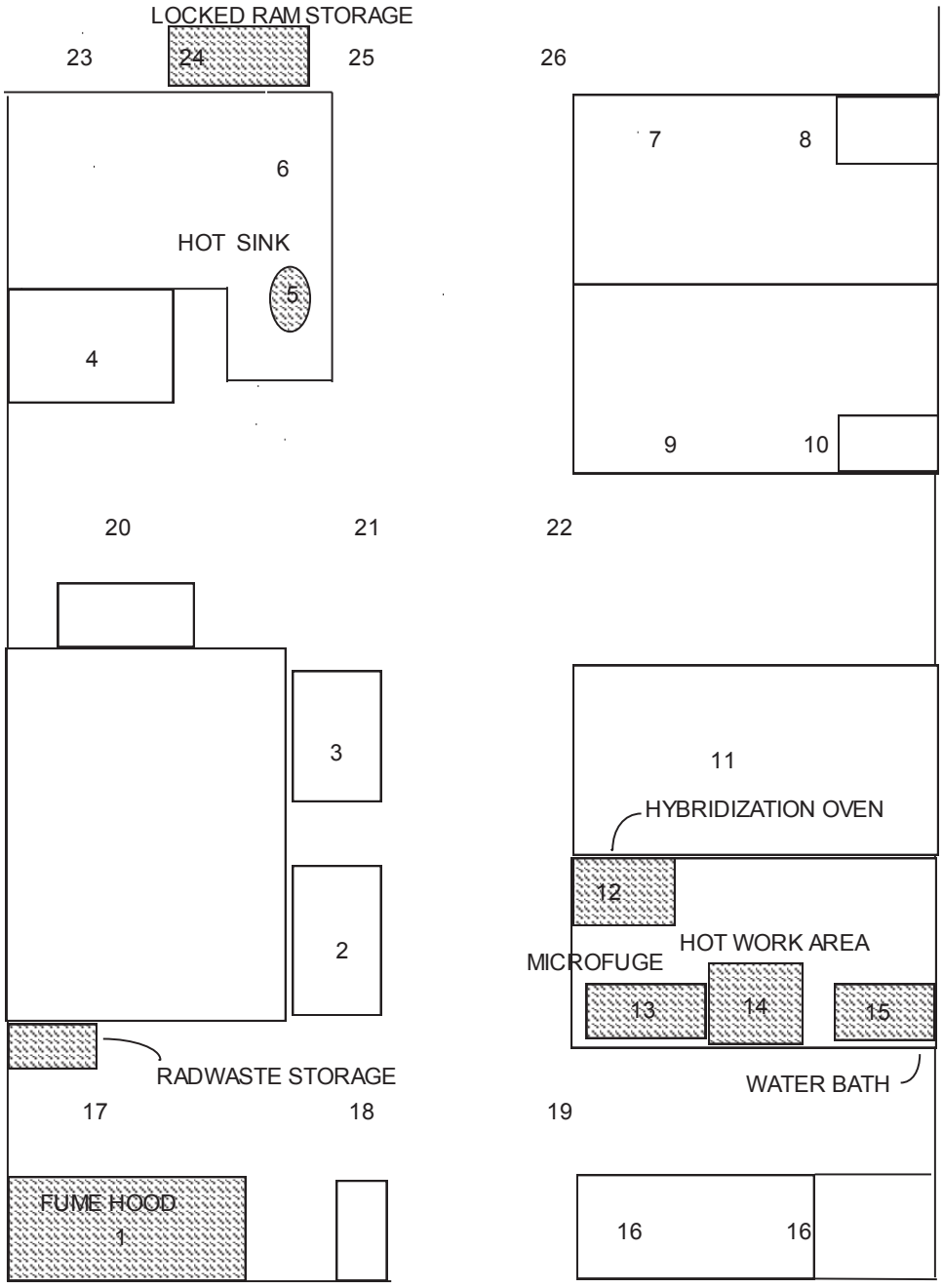
- Fire or Medical Emergencies
  - If practical, secure radioactive material.
  - Follow CWRU emergency response procedures.
  - Inform Security if radioactive material involved.
  - Call RSOF (confirmatory).

I will abide by these procedures to implement safe use of radioactive materials in compliance with regulations as communicated by the Radiation Safety Office.

_____	_____	_____
Printed Name	**Signature**	**Date**

FORM 7-4

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)



SAMPLE SURVEY MAP

Case Western Reserve University (CASE)
Department of Environmental Health & Safety (EHS)
Radiation Safety Office (RSOF)

#	Location	Probe, cpm	Probe Activity, dpm *	Wipes, net cpm	Wipe Activity, dpm/100 sq cm
1	**Fume Hood**				
2	Freezer, In/Out				
3	Refrigerator, In/Out				
4	Table				
5	**Sink**				
6	Counter				
7	Bench				
8	Desk				
9	Bench				
10	Desk				
11	Bench				
12	**Hybridization Oven**				
13	**Microfuge**				
14	**Hot Work Area**				
15	**Water Bath**				
16	Bench and Desk				
17	Floor				
18	Floor				
19	Floor				
20	Floor				
21	Floor				
22	Floor				
23	Floor				
24	**Freezer, In/Out**				
25	Floor				
26	Floor				

√ = Indistinguishable from background * dpm = (cpm - bkg) / efficiency

Surveyed by: _____ Date: ___/____/___

Handheld Meter/Probe Information:

Make: _____ Model: _____ SN: _____ Cal Due Date: ___/___/___

Probe type: GM NaI Other Model:_____ SN: _____

SAMPLE SURVEY DATA SHEET