

Precautions for Handling Radioactive Animals

Animals in this room are (circle one): RADIOACTIVE NON-RADIOACTIVE

Animals contain the following isotope(s):

Animals contain the following activity (mCi): Date:

PRECAUTIONS ACCORDING TO ISOTOPE

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| <p>Isotope:</p> <p>C-14 H-13 Ca-41 Ca-45 S-35</p> | <p><u>CONTAMINATION HAZARD ONLY. NO EXPOSURE HAZARD UNLESS INGESTED- THESE ISOTOPES CANNOT BE EASILY DETECTED WITH A SURVEY METER</u></p> <p><u>Personal Protective Equipment:</u></p> <p>Handlers should wear double gloves, lab coat, and eyewear. Any equipment coming into contact with bodily fluids from these animals should either be disposable or be decontaminated before released from the area. Waste generated from these animals must be disposed of in proper radioactive waste containers.</p> |
| <p>Isotope:</p> <p>P-32 Cs-137 Zn-65 I-125 Cr-51</p> | <p><u>EXPOSURE HAZARD AND CONTAMINATION HAZARD- EXPOSURE LEVELS CAN BE DETERMINED WITH A SURVEY METER</u></p> <p><u>Personal Protective Equipment</u></p> <p>Handlers should wear double gloves, lab coat, and eyewear. Any equipment coming into contact with bodily fluids from these animals should either be disposable or be decontaminated before released from the area. Waste generated from these animals must be disposed of in proper radioactive waste containers.</p> <p><u>Exposure Reduction Methods</u></p> <p>Time - Try to minimize the time spent with animals containing this isotope. Distance- Increasing distance between you and exposure source, greatly minimizes exposure levels. Do not hold animals for extended periods of time. Shielding - When possible, use shielding between you and the exposure source. Plexiglas or plastic should be used for beta isotopes like P-32. Lead or aluminum should be used for gamma isotopes like Cs-137, I-125, Zn-65 and Cr-51.</p> |

Standard Operating Procedure for Handling of Radioactive Animals

1. Before working with radioactive animals, don the proper personal protective equipment. All users should wear double gloves, lab coat and protective eyewear.
2. Only rooms with a REM – applied Caution Radioactive Materials sticker on the door may be used for handling and storage of radioactive materials.
3. Prepare a radioactive waste container with the proper REM supplied bag and container for easy disposal of radioactive waste. All disposable materials used with radioactive animals should be disposed of as radioactive waste.
4. When working with isotopes easily detected with a Geiger counter (P-32, Cs-137, Zn-65 or Cr-51), place the Geiger counter next to work area and turn it on. This will allow you to check hands and equipment without worrying about contaminating the meter when turning it on.
5. While working with animals, check hands and sleeves regularly to assure no contamination has occurred. Change gloves often and check feet before leaving the area.
6. Label all equipment, cages and containers that are used with radioactive materials. It should be obvious to any individual entering the room what is contaminated or contains radioactivity.
 - a. Containers, beakers, etc. Must have a label on them identifying the isotope, activity in mCi and date of material inside.
 - b. Cages containing radioactive animals must have a “Caution Radioactive Material” sticker on them. Complete the Radioactive Animals Poster hanging on the wall next to the cages and identify the isotope used, activity and date.
7. **When finished working with animals and/or radioactive material, survey the area to assure that no contamination has occurred. Survey work areas, waste areas and floors to prevent spread of contamination. Once survey is complete, fill out survey log.** If contamination is found, contact facility manager and REM at 46371.
 - a. If using P-32, Cs-137, Zn-65 or Cr-51, a Geiger counter will be appropriate.
 - b. If using C-14, H-3, Ca-41, Ca-45, S-35 or I-125, swipe tests and counting in a liquid scintillation counter is required.
8. Before leaving area, survey hands and feet and assure no contamination is present. Close waste containers and label with isotope, activity and date.

Survey Log

| Date | Areas Surveyed | Survey Method | Results | Initials |
|-------------|---------------------------|----------------------|----------------|-----------------|
| 12/5/02 | Floor, waste area, cage 1 | Meter/LSC | OK | ECL |
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