

FORM RC-10 (Rev. 11/95)

## EMERGENCY PROCEDURES

The following Radioisotope Use Emergency Procedures must be followed in all incidents involving radioactive materials.

### 1. TRAUMATIC INJURIES

If the incident involves traumatic injury to any individual, first aid should be given without regard to any possible radiation contamination. Emergency personnel should, however, be notified immediately of such potential so that appropriate precautions can be taken in the course of treatment to minimize the impact of contamination. This policy is promulgated on the act that radiation contamination of the levels potentially found at the University of Miami are not immediately life threatening.

### 2. MINOR SPILLS

(less than 10  $\mu\text{Ci}$  in a volume less than 10 ml or at a concentration less than .00045  $\mu\text{Ci/ml}$  and not involving personnel contamination or injury)

- a. NOTIFY: Notify persons in the area that a spill has occurred.
- b. PREVENT THE SPREAD: Cover the spill with absorbent paper.
- c. CLEAN UP: Use disposable gloves. Use remote handling tongs when possible, if an external exposure hazard is involved. Decontamination should proceed from the outer edges of the spill in toward the center. Carefully fold decontamination materials with absorbent paper and pad and insert into a plastic bag for disposal with radioactive waste.
- d. SURVEY: Survey the area for residual contamination as appropriate for the isotopes involved and if contamination in excess of the established decontamination limit (1000 dpm per 100  $\text{cm}^2$ ) is found continue to decontaminate the area and resurvey.
- e. REPORT: Report the incident in writing to the Radiation Control Center along with the results of all surveys.

### 3. MAJOR SPILLS

(More than 10  $\mu\text{Ci}$  or a volume of more than 10 ml at a concentration of greater than .00045  $\mu\text{Ci/ml}$  or any incident involving personnel contamination or injury or any spill occurring outside of an approved area of use)

- a. CLEAR THE AREA: Notify all personnel not involved in the spill to vacate the area.
- b. TREAT INJURIES: Treat any injured personnel or call for emergency personnel as required.
- c. PREVENT THE SPREAD: Cover the spill with absorbent pads, but do not attempt to clean it up. Limit the movements of all potentially contaminated individuals to prevent the spread.
- d. SHIELD THE SOURCE: If an external radiation is involved an attempt should be made to shield the spill if it can be done without further contamination or significant radiation exposure to the individual placing the shield.
- e. CONTROL ACCESS: Prevent access by any personnel to the area of the spill.

- f. CALL FOR HELP: Notify the Radiation Control Center immediately and await specific decontamination instructions.
- g. PERSONNEL DECONTAMINATION: Contaminated clothing should be removed and held for evaluation by R.C.C. personnel. If the spill is on the skin, flush thoroughly and then wash with mild soap and lukewarm water.
- h. FACILITY DECONTAMINATION: Decontamination will be performed by laboratory personnel under the direction of the R.C.C. Protective clothing, supplied by the R.C.C. will be used as appropriate and personnel monitors as appropriate will be issued by the R.C.C. as needed.
- i. SURVEYS: Surveys to determine the effectiveness of the decontamination procedures will be performed by laboratory personnel with R.C.C. personnel performing confirmatory surveys. Under no circumstances will the area be cleared for use until such surveys indicate that the contamination level is below 1000 dpm per 100 cm<sup>2</sup>

#### 4. INCIDENTS INVOLVING VOLATILE RADIOISOTOPES

(Any incident involving the potential release of volatile radioisotopes outside of an approved fume hood)

- a. CLEAR THE ROOM: Notify all personnel that a potential release has occurred and after closing any windows and if possible shutting off air conditioners vacate the room but not the area.
- b. SECURE THE ROOM: Close and lock all doors to the room and seal edges with tape.
- c. ISOLATE THE ROOM: Notify physical plant so that any common air handling equipment serving the room can be shut off.
- d. CALL FOR HELP: Notify the Radiation Control Center and await instructions. Under no circumstances is anyone to re-enter the room except under the direct supervision of the Radiation Safety Officer or his designee.
- e. DECONTAMINATION AND SURVEYS: Decontamination and surveys should proceed in the manner indicated previously for major spills.

**PLEASE NOTE THAT DECONTAMINATION IS THE RESPONSIBILITY OF THE INDIVIDUAL LABORATORY INVOLVED IN THE INCIDENT AND WILL BE PERFORMED BY PERSONNEL FROM THAT LABORATORY IN ALL CASES. IN THE CASE OF MAJOR SPILLS OR INCIDENTS INVOLVING VOLATILE RADIOISOTOPES R.C.C. PERSONNEL MAY SUPPLY EQUIPMENT AND DIRECTIONS AND WILL PERFORM CONFIRMATORY SURVEYS. THESE DO NOT REPLACE THE SURVEYS TO BE PERFORMED BY THE PERSONNEL PERFORMING THE DECONTAMINATION.**

**UNIVERSITY OF MIAMI RADIATION CONTROL CENTER PHONE NUMBER:(305)243-6360**