

## RADIATION SAFETY GENERAL OPERATIONAL PROCEDURES

**Principal Investigator (PI)** is the person whose name appears on the approved application and who is responsible for maintaining the training of individuals working in the program and the inventory of materials used. They are responsible for assuring that appropriate radiation safety measures are implemented regarding exposures, surveys, decontamination, and emergency procedures as needed. The PI is to cooperate with the Radiation Safety Office in fostering ALARA principles.

**All individuals** who work with radioactive materials must be trained in handling them. The Radiation Safety Office @ ext. 5753 or the Environmental Health and Safety Office @ 335-8501 can provide information regarding training and pertinent regulations. Plan experiments, use the principles of time, distance, and shielding to reduce exposures, dispose of radioactive waste properly, and keep current records of receipts, disposals, transfers, and surveys performed. Contact the Radiation Safety Office for guidance if procedural or operational difficulties are encountered.

**Health and safety** require that eating, drinking, food storage and preparation, etc. be prohibited in areas where radioactive materials are used. No mouth pipetting is allowed. Wash hands and monitor your clothing for contamination.

**Protective clothing and equipment** including disposable gloves and lab coats should be used when handling radioactive materials. Cover work surfaces with plastic-backed absorbent paper and use spill trays when handling large volumes. Work with volatile materials in a hood. When working with gamma-emitters or high energy beta-emitters, wear a film badge and use a survey meter to check for contamination.

Radioactive materials signs are required for areas where radioactive materials are used or stored. Radioactive material containers, refrigerators and freezers, contaminated equipment, and sinks used for washing contaminated items should also be labeled. Spill procedures, the names of responsible individuals, and the amounts of material stored should be posted in the lab. Complete the items under "Laboratory Information" below and post this card near the lab entrance.

Security of radioactive materials must be maintained. If a responsible individual is not present in an area where there are radioactive materials, the materials must be locked in the room or otherwise secured from unauthorized removal.

**Monitoring and surveys** of use areas should be conducted after each day of material use. Use a survey meter to check bench tops, equipment, refrigerator handles, the floor, your hands and lab coat. Decontaminate surfaces immediately to prevent the spread of contamination. Use wipe testing to detect areas of minor contamination and to evaluate decontamination effectiveness.

## **Radiation Emergency Guidelines**

**SPILLS**: Inform personnel in the area of the spill and evacuate to a safe location, if necessary. Confine movement of personnel that may have become contaminated. If possible, limit the spread of contamination with the use of absorbent materials.

**PERSONNEL CONTAMINATION**: Contaminated individuals should remove contaminated clothing and wash affected body areas. Contact the **Radiation Safety Office** @ ext. 5753 in the event that a spill, excessive exposure, personnel contamination, or loss or theft of material occurs or is suspected. After hours contact the telephone operator.

**Laboratory Information** 

PI	Office #	Lab#	Bldg		
Room#	Room#	Room#	Room#		
Room#	Room#	Room#	Room#		

Isotope	Auth. Amt. (mCi)	Isotope	Auth. Amt. (mCi)	Isotope	Auth. Amt. (mCi)