Cleaning Up Spills of Radioactive Materials

Important numbers
RADIATION SAFETY OFFICER __Frank Masse__. Consultant Health Physicists (24-hour emergency number) 978-283-4888
OFFICE PHONE _______________ PAGER _______________.  
PI of this lab _____________________________ home phone ________________  
Rad. Hazards COMMITTEE CHAIRMAN: Ross Feldberg . OFFICE PHONE ____________ HOME ____________
If additional emergency assistance needed you can call the MASSACHUSETTS RADIATION CONTROL PROGRAM (24-hour emergency number) 617-727-9710

I. PROCEDURE FOR MINOR SPILLS (less than 1 mCi)

A. NOTIFY. Notify persons in the area that a spill has occurred.

B. PREVENT THE SPREAD. Cover the spill with absorbent material, and prevent access to the area by unauthorized personnel.

C. CLEAN UP. Use disposable gloves and remote handling tongs. Carefully fold the absorbent material. Insert into a plastic bag and dispose of in the radioactive waste container. Also insert into the plastic bag all other contaminated materials such as disposable gloves.

D. SURVEY. With a low range, thin window GM survey instrument, check the area around the spill, hands, and clothing for contamination. For alpha and low-energy beta emitters, conduct wipe tests at the spill area.

E. REPORT. Report incident to the Chair of the Radiation Hazards Control Committee by phone and by written summary.

II. PROCEDURE FOR MAJOR SPILLS (involving 1 mCi or more)

A. CLEAR THE AREA. Notify all persons not involved in the spill to vacate the room.

B. PREVENT THE SPREAD. Cover the spill with absorbent material, but do not attempt to clean it up. Confine the movement of all personnel potentially contaminated to prevent the spread.

C. SHIELD THE SOURCE. If possible, the spill should be shielded, but only if it can be done without further contamination or without significantly increasing radiation exposure.

D. CLOSE THE ROOM. Leave the room and lock the door(s) to prevent entry.

E. CALL FOR HELP. Notify the RSO immediately.

F. PERSONNEL DECONTAMINATION. Contaminated clothing should be removed and stored for further evaluation by the RSO. If the spill is on the skin, flush thoroughly and then wash with mild soap and lukewarm water. Injured persons should be decontaminated and first aid performed as necessary. If life-threatening injuries are present, the individual should be given immediate life-saving first aid and transported to a hospital for further medical treatment.
regardless of any contamination present. The hospital should be given prior notification that the patient is contaminated so that the appropriate controls can be implemented.

G. REPORT. Report incident to the Chair of the Radiation Hazards Control Committee by phone and by written summary.

III. NOTES ON CLEAN-UP PROCEDURE

A. All spills should be cleaned up as soon as practical.
B. Clean-up is done only by persons registered with the Radiation Safety Office -- preferably by the person responsible for the spill.
C. Any household detergent and water may be used. Products such as Count-off and Radian wash work well.
D. Take precautions to prevent personal contamination during the clean-up procedure by wearing gloves, lab coat, and shoe covers.

V. LOSS, THEFT, OR DAMAGE TO A SOURCE OF RADIOACTIVE MATERIAL

In addition to following the applicable procedures outlined above, notify the RSO immediately and the Mass Dept of Public Health Agency at 617-727-6214.

Important numbers

RADIATION SAFETY OFFICER: Frank Massé
OFFICE PHONE: 617-253-9217 or 978-283-4888(24 hrs)

PI of this lab ________________ Home phone _________

Rad. Hazards COMMITTEE CHAIRMAN: Ross Feldberg
OFFICE PHONE: 617-627-3196 HOME PHONE: 617-969-5515

HEALTH PHYSICS CONSULTANT: F.X. Massé Associates, Inc.
Gerald Fallon, CHP
OFFICE PHONE: 617-253-9217 or 978-283-4888 - 24 hrs