

Appendix 13 cont'd

DECONTAMINATION PROCEDURES

All spills of radioactive material must be cleaned promptly. The responsibility for cleaning up the spill rests on the individual working in the area involved and responsible for the spill. Under no circumstances should an untrained person attempt to examine or clean up a spill of radioactive material. Please call radiation safety for assistance if necessary at 593-1666. No spill/accident is too small for outside help.

The following general procedures should be followed when dealing with spills of radioactive material:

Major Spills (> 1 uCi) - Those spills involving significant radiation hazards to personnel shall be decontaminated under the direct supervision of the radiation safety staff or appointed individual. Radiation Safety must be notified immediately.

1. Notify all personnel not involved with the spill to vacate the area at once. Have an evacuee notify radiation safety of the incident.
2. Affected persons should limit their movement to confine the spread of contamination.
3. Stop further spread, contain the spill. If the material is liquid, place an absorbent material such as paper towels, tissues, sponges, etc. over the spill to prevent its spread. If the material spilled is powdered solid, attempt to contain its spread by covering the area with a protective barrier such as a drip tray, empty beaker, dampened material (paper or towels). If appropriate, close doors and windows, turn off room ventilation fans to prevent the spread of the powdered material.
4. Remove contaminated clothing at once, if necessary. Flush contaminated skin areas thoroughly with water, See "*Personnel Decontamination*" procedures. Use emergency showers and eye washes, if necessary.
5. Be sure the hood is on to draw the contamination out of the lab; close doors and windows, if appropriate. If possible, shut off ventilating equipment that may transport contaminated air from the contaminated area to other parts of the building. Remember that the fire alarm can be used for emergency purposes to vacate the building, if necessary.
6. Vacate and post/cordon off the contaminated area, if necessary.
7. Assemble in a nearby safe or clean area and begin monitoring and decontamination of affected persons. Do Not Leave the Area unless adequately decontaminated or with the permission of Radiation Safety.
8. The person responsible for the spill shall prepare a report* of the incident and follow-up procedures for the Radiation Safety Office. See "*Spill Notification Action Limits*" in the *Radiation Safety Handbook Appendix 13*.

Record pertinent information in the survey logbook [*incident, including activity and complete survey results, both pre and past surveys (meter and wipes), who was involved, etc.]

Minor Spills - Spills involving little or no radiation hazard to personnel may be decontaminated by laboratory personnel under the direction of the laboratory supervisor. Wear film badge and ring dosimeter and appropriate protective clothing including rubber gloves and lab coat. Radiation Safety must be notified in a short period of time.

1. Contain the spill. If the material is a liquid, place an absorbent material such as paper towels, tissues, sponges, etc. over the spill to prevent its spread. If the material spilled is powdered solid, attempt to contain its spread by covering the area with a protective barrier such as a drip tray, empty beaker, dampened material (paper or towels). If appropriate, close doors and windows, turn off room ventilation fans.
2. Inform others of the spill. Adjust your response to the seriousness of the spill. Instruct those personnel present in the room at the time of the spill to remain in an evacuation area to prevent contamination spread. Evacuated personnel should not

eat, drink, or smoke until they are monitored and found free of contamination.

3. Decontaminate the area. Plan ahead. Provide adequate protection and supplies for personnel involved in the contamination. Cover cleaned areas with plastic or paper to prevent its recontamination. Place all contaminated items in the proper waste containers.
4. Monitor the area. Using appropriate survey techniques, monitor the progress of the decontamination. Monitor all personnel and materials before releasing them to clean areas. See "*Laboratory Decommissioning*" in the *Radiation Safety Handbook Appendix 14* for approved decontaminated levels. Record spill* and follow-up procedures taken, into logbook.