

APPENDIX K

Emergency Procedures

STOLEN, LOST OR MISSING RADIOACTIVE MATERIAL

1. Immediately notify the Radiation Safety Officer (RSO).
2. RSO will notify management and appropriate local authorities.
3. Conduct a complete search of the area with an appropriate survey meter capable of detecting the radioactive material.
4. RSO will contact the Bureau of Radiation Control at (407) 297-2095.
5. Within 30 days after making the initial report, submit a written report to the bureau that includes all of the information identified in subsection 64E-5.343(2), Florida Administrative Code (F.A.C.)
6. Subsequent to filing the written report, the licensee or registrant shall also report additional substantive information on the loss or theft within 30 days after the licensee or registrant learns of such information as required by 64E-5.343(3), F.A.C.

SPILLS OF RADIOACTIVE LIQUIDS AND SOLIDS

MINOR SPILLS

1. Notify persons in the area that a spill has occurred.
2. Prevent the spread of contamination by covering the spill with absorbent paper.
3. Wearing disposable gloves and protective clothing such as a lab coat and booties, clean up the spill using absorbent paper. With the clean side out, carefully fold the absorbent paper and place in a plastic bag for transfer to a radioactive waste container. Put contaminated gloves and any other contaminated disposable material in the bag.
4. Survey the area with a low-range radiation detector survey meter sufficiently sensitive to detect the radionuclide. Check for removable contamination to ensure contamination levels are below trigger levels. Check the area around the spill. Also check hands, clothing, and shoes for contamination.
5. Report the incident to the radiation safety officer (RSO).
6. The RSO will follow-up on the cleanup of the spill and will complete a Radioactive Spill Contamination Survey as specified in subsection 64E-5.621(8), F.A.C.

MAJOR SPILLS

1. Clear the area. Notify all persons not involved in the spill to vacate the room.
2. Prevent the spread of contamination by covering the spill with absorbent paper, but do not attempt to clean it up. To prevent the spread of contamination, clearly indicate the boundaries of the spill and limit the movement of all personnel who may be contaminated.
3. Shield the source if possible. This should be done only if it can be done without further contamination or a significant increase in radiation exposure.
4. Close the room and lock or otherwise secure the area to prevent entry.
5. Notify the RSO immediately.
6. Decontaminate personnel by removing contaminated clothing and flushing contaminated skin with lukewarm water and then washing with mild soap. If contamination remains, induce perspiration by covering the area with plastic. Wash the affected area again to remove any contamination that was released by the perspiration.
7. The RSO will supervise the cleanup of the spill and will complete a Radioactive Spill Contamination Survey as specified in subsection 64E-5.621(8), F.A.C.

MAJOR SPILL OR MINOR SPILL

The decision to implement a major spill procedure instead of a minor spill procedure depends on many incident-specific variables such as the number of individuals affected, other hazards present, likelihood of spreading contamination, types of surfaces contaminated, and the radiotoxicity of the spilled material. For some spills of short-lived radionuclides, the best spill procedure may be to restricted access pending decay to background levels.

Estimate the amount of radioactivity spilled. Initiate a major or minor spill procedure based on the following dividing line. Spills above these millicurie amounts are considered major, below are considered minor.

RELATIVE HAZARDS OF COMMON RADIONUCLIDES

Radionuclide	Millicuries	Radionuclide	Millicuries
P-32	1	Tc-99m	100
Cr-51	100	In-111	10
Co-57	10	I-123	10
Co-58	10	I-125	1
Fe-59	1	I-131	1
Co-60	1	Yb-169	10
Ga-67	10	Hg-197	10
Se-75	1	Au-198	10
Sr-85	10	Tl-201	100
Sr-89	10	Sm-153	10
F-18	100	Y-90	10

SPILL KIT

Assemble a spill kit that may contain the following items:

- Disposable gloves and housekeeping gloves;
- Disposable lab coats;
- Disposable head coverings;
- Disposable shoe covers;
- Roll of absorbent paper with plastic backing;
- Masking tape;
- Plastic trash bags with twist ties;
- "Radioactive Material" labeling tape;
- Marking pen;
- Pre-strung "Radioactive Material" labeling tags;
- Contamination wipes;
- Instructions for "Emergency Procedures";
- Clipboard with copy of Radioactive Spill Report Form;
- Pencil; and
- Appropriate survey instruments, including batteries.

POSTING REQUIREMENTS

- A. A copy of our emergency (spill) procedures (Appendix K), general laboratory safety procedures for working with radioactive materials (Appendix J), our emergency notification notice, and a Notice to Employees document 3/01 will be conspicuously posted at our facility as required by 64E-5.901, F.A.C. Current copies of Part III and Part IX, the license, conditions or documents incorporated into the license by reference and amendments thereto, and operating procedures applicable to activities under the license are not required to be posted provided that a notice is posted which describes the documents and states where they may be examined.
- B. The radiation safety officer's name and phone number and our 24 hour emergency notification number are listed in our emergency procedures.
- C. The location of use for radioactive material will be posted with the proper signage as described in 64E-5.323, Florida Administrative Code.