

1. INITIAL ACTIONS

- SWIM
 - Stop work and keep calm.
 - Warn others in area that there has been an incident.
 - Isolate and control the site: Individuals may not leave or enter area (unless medical emergency*), until confirmed free from contamination.
 - Minimize the spread of contamination.
- Identify if this is a minor or major spill/contamination event (see criteria in table below). If the incident is considered to be a major spill/contamination event, you *MUST* contact Radiation Safety.

If one or more of the following criteria are involved, then the incident is considered to be a Major Spill/Contamination Event	
Materials of Concern	Alpha, neutron, and/or compromise of any sealed source
	Volatile material
	Activity amounts exceeding 500 μ Ci
Locations of Concern	Floor and/or outside of control area
	Personnel (external and/or internal)
	Environment (unauthorized release through drain, stack)
	Transportation event/potentially compromised package
Individuals of Concern	Non-radiation workers (i.e., public, visitors, facilities maintenance, etc.)
	Minors (i.e., individuals who are < 18 years old)
	Declared pregnant workers
Other	Any contamination event in which employees feel they need assistance

- Contact required personnel/services. *If medical assistance is needed, contact those services first.*
- Begin appropriate decontamination procedures (see Step 2).

2. DECONTAMINATION

- In a major spill/contamination event, follow Radiation Safety's instructions (provided in person or over the telephone).
- Wear appropriate Personal Protective Equipment (PPE).
- Starting with individuals in area, check for extent of contamination. Document findings.
- Perform personal decontamination prior to surface decontamination. Document progress.
- The decontamination phase is considered complete if:
 - Minor spill/contamination event: affected area is < 3 times background readings, or
 - Major spill/contamination event: when Radiation Safety has declared the affected area/personnel to be decontaminated

3. WRAP-UP

- Ensure the event is documented as appropriate.
- Laboratory Manager/PI/RU should consider:
 - Conducting a post-event briefing with personnel. Include discussions regarding what went right/wrong.
 - Maintaining a laboratory safety practices book which includes incident reports, for training of new/current personnel.
- If any material in the laboratory spill kit was used, ensure it is promptly restocked.

SUPPORT INFORMATION

Personnel should be aware that spills always have the potential to occur. To be best prepared to handle spills/contamination events, personnel should:

- Be trained in spill response.
- Understand the hazards associated with the materials which are used in the area.
- Have an Emergency Contact Posting in the area (see table below).
- Have a spill response kit, know its location and how to use the items within.

Note: In all spills or contamination events, the lab personnel, RU/PI or Lab Designee are responsible. However, during the decontamination phase of the event, the Radiation Safety representative(s) will be in an advisory role. In the event of any type of spill/contamination, the following are recommended:

1. Wear PPE as appropriate (chemical resistant gloves, shoe cover, lab coat, safety eyewear).
2. Medical issues should be addressed first (e.g., First Aid by trained personnel).
3. Alert people in the area of spill. The spill area must be identified to warn other personnel of its location.
4. Prevent the spread of the radioactive materials.
 - a. Dry materials: Lightly dampen paper towels and wipe from outer edge of contaminated area towards the middle; or use duct tape (or similar type of tape) to collect loose material.
 - b. Wet materials: Cover area with absorbent material.
5. Minimize movement in the area and remove all persons from vicinity of spill.
6. Decontamination: Priorities are (1) personnel, (2) floor/lab area, and (3) equipment. Dispose of waste in the appropriate waste containers:
 - a. Dry waste: Transparent trash bags,
 - b. Liquids: Plastic jugs or buckets, and
 - c. Sharps: Boxes or bins (all sides of container should prevent penetration of sharps).
7. Apply an appropriate survey meter for checking hands, clothing, and shoes. Repeat cleanup until contamination is less than 3 times of background.
8. If there is any doubt about cleaning up the spill or the spill involves volatile radioactive material, contact Radiation Safety (see table below).
9. Any spill must be reported to the PI/RU (see table below).

Spill Kit must be appropriate to the materials used in the lab.

PPE is required for all workers in the laboratory, must be appropriate for the hazard(s), and is to be provided by the Principal Investigator.

Contact	Telephone Number
Emergency (Medical, Fire, Missing/Stolen Material)	911
Radiation Safety	(801) 581-6141
Occupational & Environmental Health & Safety (OEHS)	(801) 581-6590
RU/PI	
Lab Manager	