

Spill Procedures

Spills or contamination involving microcuries amounts and small volumes of liquid may be cleaned up by lab personnel. However, any time you are not sure how to proceed please contact RADIATION SAFETY for assistance (Tom Boyle 856-701-3648 and Rosemary Roberto 856-562-5397).

- **Notify others in the area**
- **Prevent the spread of contamination**
Until it can be cleaned, cover the spill with absorbent material and limit access to the area.
- **Clean up the spill**
 - Use disposable gloves, lab coats, shoe covers and tongs (if applicable). Proceed from the outermost edges of the contaminated area inwards, reducing systematically the area that is contaminated. Take care not to spread the contamination. Put all contaminated objects into RAM waste.
 - Normal cleaning agents should be adequate. Keep cleaning supplies to the minimum needed to do the job. Place ALL supplies used to clean the spill in a blue plastic bag (provided by Radiation Safety) and into a clearly labeled RAM waste container.
- **Survey**
 - Following decontamination, monitor all personnel and the area for removable contamination with a wipe test.
 - If the floor was contaminated, be sure to monitor the bottom of shoes.
 - Continue decontamination until wipe test results are less than 600 cpm per 100 square centimeters* Document results in lab records.
 *The liquid scintillation counter's lowest efficiency for any radionuclide used is assumed to be 60%. Since the $\text{cpm} / 0.60 = \text{dpm}$, and $1000 \text{ dpm} / 100 \text{ cm}^2$ is removable contamination limit based on NRC NUREG 1556 vol 7, the maximum cpm that will yield 1000 dpm of removable contamination is 600 cpm.
600 cpm is the removable contamination trigger value for all wipe tests (after experiments, spill clean up, monthly surveys, and package receipt)
- **Report the spill to Radiation Safety**
If you need assistance, if there is personnel contamination, if the contamination is outside the licensed area, or if you cannot decontaminate to below 600 cpm / 100 cm² contact Radiation Safety immediately.
- **For skin or body contamination**
Notify Radiation Safety. If possible, note the original survey meter reading, the location of the contaminated area, and the time the contamination was discovered. Radiation Safety will use this information to calculate dose. Wash skin using mild soap and warm water. Do not abrade the skin. Measure and record the count rate. Survey and repeat until the count rate cannot be reduced any further.