

UNC Charlotte – Radiation Safety Program - Responding to Radioactive Material Spills in Laboratories – 11/2013

SPILL HAS OCCURRED – Authorized Personnel ONLY -- Take a Geiger Survey Meter, Dosimeter Badge and Spill Kit (Fantastik/Detergent/White Vinegar, PPE, RAM waste bags, Empty Containers for Liquid Waste) and Scintillation Vials with LSC fluid for Swipe Tests – Call EH&S 7-1111

Containable Fire
Airborne RAM Release (e.g. volatile Iodine 125 or 131 isotopes)
Large Area Contamination
Major Spill (millicurie amounts or greater)

All personnel must leave the spill area/room and remain together – do not re-enter spill zone/room – Get a copy of the Nuclide Safety Data Sheet for the Isotope spilled – do not track spill materials around

Call campus police at 7-2200 and EH&S Radiation Safety Officer at 7-1111

Standby for the Radiation Safety Officer from EH&S and Campus Police to arrive. Police and EH&S will determine further actions as necessary.

Personal Injury with Contamination

Authorized Personnel -- Secure the Area (shut the lab door) and Call Campus Police - Get a copy of the Nuclide Safety Data Sheet for the Isotope spilled – do not track spill materials around

Administer First Aid – Decontaminate Person by removing clothing/washing with detergent/water solution – ONLY if the severity of the injury allows action to be taken.

Standby for the Radiation Safety Officer from EH&S and Campus Police to arrive. Police and EH&S will determine further actions as necessary.

Minor Spill (Microcurie amounts) with contaminated personnel & area contamination

Authorized Personnel - Secure the area, ALL unnecessary personnel must leave spill area – Get a copy of the Nuclide Safety Data Sheet for the Isotope spilled - do not track spill materials around – keep spill isolated

Monitor spill area with Geiger Counter (Geiger not for H3/Tritium) – Complete cleanup with detergent, fantastik or White Vinegar - Complete LSC swipe samples for each 100cm² of spill material area, check all affected areas (door knobs, refrigerator, sink, etc.) ALL swipe sample results MUST equal background results. If results are high – re clean affected area

Standby for the Radiation Safety Officer from EH&S, EH&S will determine further action as necessary

Please Note: ONLY the laboratory RAM Authorized User, trained laboratory radiation workers or the Radiation Safety Officer (Authorized Personnel) can complete RAM spill cleanups in the laboratory. You may only attempt spill cleanups if you are fully aware of the hazards produced by the RAM isotope being used in the laboratory (see nuclide safety data sheet).

After incident has been brought under control and area cleaned up, complete a post incident report to EH&S and Radiation Safety Committee detailing followup actions to prevent reoccurrence of the incident. EH&S will begin the post incident report process through the Principal Investigator