

APPENDIX Q – UNSEALED SOURCE RADIATION EMERGENCY PROCEDURES

PERSONNEL INJURY

WITH SIGNIFICANT OR LIFE-THREATENING INJURIES, MEDICAL ATTENTION IS THE FIRST PRIORITY

Call 911. If necessary, report a potentially contaminated injury. Describe the extent of injuries and the radioactive material(s) involved. If the injury is minor, remove contaminated clothing and wash potentially contaminated areas with running water. Contact the RSO.

MINOR SPILLS: USUALLY LIQUID OR SOLIDS SPILLS CONFINED TO SMALL, LOW-TRAFFIC AREAS

- Notify persons in the area that a spill has occurred.
- Open the spill kit and remove the needed supplies and personal protective equipment.
- Prevent the spread of contamination by covering the spill with absorbent paper (paper should be dampened if solids are spilled).
- Clean up the spill, wearing disposable gloves and using absorbent paper.
- Carefully fold the absorbent paper with the clean side out and place in a bag for transfer to a radioactive waste container. Put contaminated gloves and any other contaminated disposable material in the bag.
- Survey the area with an appropriate low-range radiation detector survey meter or other appropriate technique (such as a wipe test analyzed on a liquid scintillation analyzer). Check the area around the spill for contamination. Also check hands, clothing, and shoes for contamination.
- Promptly report the incident to the RSO and let him/her know if you need assistance.
- Allow no one to return to work in the area unless approved by the RSO.

MAJOR SPILLS: USUALLY LIQUID OR SOLIDS SPILLS OVER LARGE OR HIGH-TRAFFIC AREAS

- Clear the area. Notify all persons not involved in the spill to vacate the room.
- Open the spill kit and remove the needed supplies and personal protective equipment.
- Prevent the spread of contamination by covering the spill with absorbent paper (paper should be dampened if solids are spilled), but DO NOT attempt to clean it up. Confine the movement of all potentially contaminated personnel to prevent the spread.
- Shield the source only if it can be done without further contamination or significant increase in radiation exposure.
- Close the room and lock or otherwise secure the area to prevent entry. Post the room with a sign to warn anyone trying to enter that a spill of radioactive material has occurred.
- Notify the RSO immediately.
- Survey all personnel who could possibly have been contaminated. Decontaminate personnel by removing contaminated clothing and flushing the contaminated skin with lukewarm water and then washing with a mild soap. The spill kit also has Radcon hand cleaner or similar.
- Allow no one to return to work in the area unless approved by the RSO.

MINOR FIRES

- Immediately attempt to put out the fire by approved methods (i.e., fire extinguisher) if there is NO immediate danger from either the fire or radiation and if you have been properly trained in the use of a fire extinguisher.
- Notify all persons to vacate the area and have one individual immediately set off the fire alarm at the nearest pull station, call 911 and the RSO.
- Once the fire is out, isolate the area to prevent the spread of possible contamination.
- Survey all persons involved in combating the fire for possible contamination.
- Decontaminate personnel by removing contaminated clothing and flushing contaminated skin with lukewarm water, then washing with a mild soap.
- Consult with the RSO to determine a decontamination plan.
- Allow no one to return to work in the area unless approved by the RSO.

MAJOR FIRES, EXPLOSIONS, OR MAJOR EMERGENCIES

- Notify all persons in the area to leave immediately.
- Set off fire alarm at the nearest pull station
- Call 911 and notify them there is a potential radiation hazard in addition to the emergency.
- Immediately notify the RSO.
- Upon arrival of firefighters, inform them where radioactive materials are stored or where radioisotopes were being used; inform them of the present location of the licensed material and the best possible entrance route to the radiation area, as well as any precautions to avoid exposure.
- Allow no one to return to work in the area unless approved by the RSO.

LOSS OR THEFT

Report the LOSS or THEFT of radioactive material immediately to the Authorized User and the Radiation Safety Officer.
If there is no answer, call the WKU Police

Authorized User _____ Phone _____
Radiation Safety Officer, Sarah Grant, 270-745-3597 (O), 270-535-4822 (C)

WKU Police: 270-745-2548