Radiological Incident and Emergency Response

OVERVIEW

The University seeks to safeguard the welfare of students, faculty, staff, and visitors and to protect the University's essential functions before, during, and after any type of emergency situation (EP25; BPPM 50.39), including an emergency that may involve radiological hazards.

The University's executive management is committed to comprehensive emergency management and public safety planning to encompass all campuses, research stations, and other facilities throughout the state. Emergency plans are to be structured to be implemented with emergency management programs of federal, state, and local jurisdictions when needed.

EMERGENCY RESPONSE

Life Safety is Always Priority Number One

In all cases of physical injury, even minor injuries, medical attention takes precedence over contamination concerns. In the event of a medical emergency that involves an individual who may be contaminated with radioactive material, radiation workers must make all reasonable efforts to control the spread of contamination and to warn first responders of the radiological hazards and risks.

Assistance to Emergency Responders

The Radiation Safety Office (RSO), authorized users, and radiation workers have an obligation to respond to and provide assistance and consultation to first responders in situations that may put an emergency victim or first responder at risk of injury from a source of radiation.

First responders include local area fire and police department personnel and University public safety officers.

Facilities Services, Operations

Facilities Services, Operations maintains a 24/7 dispatch unit that is able to notify RSO technical personnel when assistance is needed outside of normal business hours.

Radiation Safety Office (RSO)

Radiation Safety Office staff respond and provide consultation and expertise, if requested or as needed, following a spill of radioactive materials or during an emergency situation that has the potential to involve a radiological hazard.

Pullman Campus Locations

To ensure the containment of contamination and reduction and control of potential effects on members of the public, the RSO is to be notified and responds immediately to any Pullman campus locations where:

- An individual's skin and/or clothing has become contaminated with one or more radionuclides (any quantity).
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Pullman Campus Locations (cont.)
- A spill is uncontained, or has spread or been tracked into an unrestricted, unposted public area.
- Airborne radioactive material (RAM) is thought to be present.
- A mixed hazard spill is present that requires a coordinated response from Environmental Health and Safety (EH&S) and the RSO.

Decontamination and Documentation
The RSO must ensure that:
- Proper decontamination is completed and documented; and
- Records of any potential external or internal radiation exposure to an individual are appropriately prepared and retained.

Liaison with Federal and State Agencies
If notification or assistance of a federal or state agency is required, the RSO makes such notifications. The RSO serves as a liaison between agencies responding to assist in a radiological emergency or contamination event at a University facility.

Licensing Agency Notification Required
The federal Nuclear Regulatory Commission (NRC) requires the licensee notify the applicable licensing agency within 24 hours after the discovery of any of the following events involving licensed material:
- An unplanned contamination event that requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours. Access may be restricted by imposing additional radiological controls or by prohibiting entry into the area.
- An unplanned contamination event that involves a quantity of material greater than five times the lowest annual limit on intake specified in Appendix B of 10 CFR Part 20.1001-20.2401.
- An unplanned contamination event that restricts access to the area for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.
- An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.
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Licensing Agency Notification Required (cont.)

- An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:
  - The material involved is greater than five times the lowest annual limit on intake specified in Appendix B of 10 CFR Part 20.1001-20.2401; and
  - The damage affects the integrity of the licensed material or the container.

EMERGENCY PREPAREDNESS

Office of Emergency Management

The Office of Emergency Management within Finance and Administration at WSU Pullman coordinates University efforts regarding the following emergency measures:

- Planning
- Mitigation
- Preparedness
- Response
- Recovery

University Units

Each University unit that uses or stores radioactive material or uses radiation machines (including each campus, college, division, department, and office) and each authorized radiation user is to have an emergency response plan in place. The response plan is to be appropriate to:

- The specific hazards associated with the storage and use of radiation held under the authorization.
- The population that may be put at risk by an emergency at the location of use.

At non-Pullman University locations, departments and authorized users must provide ongoing and up-to-date information concerning the radiation use area hazards, emergency response plans, and 24/7 authorized user contact information to safety and emergency management personnel affiliated with the locations.

Authorized Users

Spill and Emergency Response Plans

Each authorized user (e.g., laboratory manager) must have written spill and emergency response plans for his or her facilities, workers, and hazardous materials, including radiological stock materials and sealed sources.
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*Emergency Call List*  
Each authorized user ensures that a current radioactive materials incident or spill assistance call list is conspicuously posted in each facility where radioactive materials are actively used and/or stored.

*Unit Personnel*  
Personnel are to be familiar with the authorization's spill and incident response plans and requirements.

*Radiation Safety Committee*  
At the time of authorization review, the Radiation Safety Committee ensures that each authorized user has written safety guidelines and an emergency response plan appropriate for the specific hazards associated with the planned use of radiation and the use location.