

## Section 9: Emergency Response Equipment

Lead States: Idaho, Utah

**The Issue:** Emergency responders need specialized equipment to respond to a WIPP transportation incident.

**The Objective:** Acquire and maintain adequate equipment to respond to a WIPP transportation incident.

**The Approach:** Emergency responders need proper equipment for response to a WIPP transportation incident. Proper equipment includes primarily radiation detection equipment and personal protective equipment (PPE).

These equipment needs vary depending on the role of the emergency responder and the agencies' requirements. For example, first responders would likely enter the immediate incident scene only to conduct lifesaving and rescue. The "bunker gear" and self-contained breathing apparatus that most fire departments have is sufficient for this task. This entry could be conducted without radiation detection equipment, if none is immediately available.

Secondary responders, such as State Response Teams are responsible for assessing the nature and extent of the incident and identifying contaminated individuals. These tasks would require PPE, such as Tyvek suits and respirators, as well as radiation detection instruments. The organizations responsible for cleanup would require more sensitive instruments to complete the area radiation and contamination surveys.

Each state has approached the issue of equipment acquisition, distribution, and maintenance in a different manner. Most states have limited amounts of radiation detection equipment capable of detecting the alpha radiation emitted by transuranic waste. Some states have chosen to purchase alpha detection instruments and provide them to secondary responders.

There is a wide range of equipment types and brands available to meet these needs. In selecting which equipment to purchase, states should consider such issues as cost, compatibility, effectiveness, portability, reliability and durability under field conditions.

**Evaluation:** Exercises will be used to evaluate whether emergency responders have the proper equipment for responding to a WIPP transportation incident. Each Western state will consider this as a key objective during any exercise involving a transuranic waste shipment. The states are responsible for evaluating whether emergency responders have adequate radiation detection equipment that is properly calibrated and whether the responders are properly trained in its use. The states are also responsible

for determining whether responders have the proper PPE. Finally, states are responsible for evaluating and selecting specific types or brands of equipment.

If a state is involved in an actual response to a WIPP transportation incident, the after-action evaluation should consider the issues of equipment performance, training and the proper use of PPE. The evaluation should also review whether any injuries occurred as a result of inadequate equipment, training on the use of equipment, or PPE.

Table 9: Emergency Response Equipment

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Documents	Responsible for Updates	Status
<b><i>Documents included in Guide</i></b>		
<i>American National Standard Performance Criteria for Hand-held Instruments for the Detection and Identification of Radionuclides, IEEE, January 2007</i>	WGA	Final
Radiation Detection Equipment for WIPP Incidents, Utah, December 2005	UT	Final
<b><i>Reference material</i></b>		
Energy compensated probes letter	NM	Final