

Section 10: Training and Exercises

Lead States: Colorado, New Mexico, Utah

The Issue: The WIPP program significantly increased the number and size of radiological shipments through many states. Emergency responders in affected jurisdictions need training to adequately manage the risks associated with these shipments.

The Objective: Provide affected emergency responders the knowledge and skills necessary to protect themselves and the public from the hazards associated with WIPP shipments. Use training and exercises to build public confidence in the program.

The Approach:

Training Responsibility

Employers are responsible for providing training required by OSHA 1910.120 to emergency responders. Specifically, it is the employer's responsibility to determine the appropriate level of training required, provide the required training, and certify that the employee demonstrates the competencies following initial training and annual refresher training. To help emergency response organizations meet their responsibility, The Land Withdrawal Act required WIPP to provide training for responders that might be required to respond to a WIPP transportation incident. The WGA WIPP TAG shares the responsibility with WIPP to insure training is appropriate, adequate, and effective.

STEP Program

WIPP created the States and Tribal Education Program, (STEP), in 1988 to fulfill its training responsibilities. The TAG has worked with WIPP, since the beginning, to review, update and improve the training. The TAG also works with WIPP to promote and coordinate training with state and local responders. Some member states also participate in delivering training by providing state specific information to attendees. This cooperation between WIPP and WGA has created a model training program for radiological emergencies. Since the acceptance of MERRTT, this program has become the core of the STEP Program.

MERRTT Program

This two-day, 16 hour course includes hands-on practical exercises using radiological survey instruments. The MERRTT program was developed by the DOE as a nationwide program to ensure training consistency in responding to transportation incidents involving radioactive material. MERRTT exclusively covers Hazard Class 7 radioactive material and builds on information taught in other hazardous material

courses. MERRTT is designed to provide emergency responders with the fundamental knowledge and skills required to respond with confidence to incidents involving radioactive material.

Training Plans

Each state has specific training needs that must be addressed. An assessment should be the first step in any training program. The assessment will determine the current versus necessary radiological response capabilities in affected areas. Elements such as personnel training, personnel experience, response equipment and available resources should be evaluated in the assessment.

A long range training plan should be developed based on the assessment results. The planning process should begin early, at least three years in advance of shipments. Training plans should address the following:

- Location, type, and number of classes and exercises required
- Suggested background or prerequisite training
- Duration of shipping campaign and training program
- Administration and funding requirements
- Certification requirements
- Quality control and review methods
- Instructor Qualifications

DOE's Transportation Emergency Preparedness Program (TEPP) provides some additional training resources that supplements STEP resources. Model response procedures, Needs Assessments and Exercise plans are available. Some of these resources are available on the TEPP website while others are available from DOE's regional coordinators.

Training Content

Training as a minimum should meet regulatory requirements. NRC, OSHA and EPA have specific training requirements for personnel responding to radiological accidents. State and local jurisdictions may have additional regulations that apply to training requirements. The Land Withdrawal Act requires that DOE emergency response training programs provided by WIPP be reviewed for compliance with 29 CFR 1910.120. This review does not alter the responsibility of each employer to ensure their employees are trained according to these regulations.

Many government and professional organizations have developed standards and guidelines for developing radiological emergency response training. These standards provide an excellent guide for developing and reviewing training.

Training Resources

Fortunately, there is a wealth of radiological emergency training resources available at little or no cost. The Department of Transportation provides annual grants to states, Indian tribes, and localities for emergency response planning and training for hazardous materials transportation accidents. Those grants, although not aimed specifically at shipments of highly radioactive material, would be expected to increase the general emergency response capabilities of local officials. The Federal Emergency Management Agency (FEMA) provides a variety of resident, non-resident and self study radiological emergency courses. Other DOE transportation programs also provide radiological training materials to support transportation activities. Many of the training courses are very similar. Each has advantages and disadvantages that should be evaluated against the local responders needs.

Training Delivery

Methods and capabilities for delivering training vary widely from state to state and even from local jurisdiction to local jurisdiction. Training programs developed to support WIPP program shipments need to be flexible enough to support this diversity. Training should be tailored to each individual jurisdictions needs.

WIPP's cadre of trainers have been essential to the training program's success to date. These trainers conduct ongoing "Train the Trainer" programs to help build state and local training capabilities. This helps to ensure consistency among the different states' training programs. Additionally, WIPP supplied instructors provide an invaluable pool of qualified instructors to supplement state or local instructors.

WIPP supplied instructors are also vital to the success of the exercise program. They provide invaluable advice and assistance to local jurisdictions that may have little or no experience planning major exercises.

Many emergency responders are volunteers with limited time to meet a variety of training requirements. Training time can be used more efficiently by incorporating WIPP material into existing hazmat and radiological training curricula. State and local instructors will need Train the Trainer courses to facilitate this.

Instructional material should be supplied to instructors in a format (electronic, video, slides, overheads, etc.) that simplifies incorporation into existing courses. Financial or other incentives may be necessary for instructors, especially if they are in volunteer status.

Exercises

Exercise programs are an integral part of a training program. Exercises can enhance

learning, test systems, increase awareness and evaluate training. Exercises should begin small and build to a full scale one. Exercise programs, like training programs, should be multi-year efforts.

Small tabletop or functional exercises are easy, low cost and brief. More small exercises are possible with limited resources, allowing all affected communities to participate. The majority of exercises conducted should be in this category.

Full scale exercises are useful and should be run. Because of the large expense of resources, it may not be possible to conduct one for every community. A full scale exercise will be the most challenging and comprehensive exercise run.

Other Training Requirements

Preparing for potential WIPP transportation accidents is a necessity. Emergency responder training is always the first priority, but other types of training are also required to ensure safe routine transport. Inspectors need training to identify unsafe vehicles. Training should also be given to Public Information personnel that might have to respond to news media requests during an incident. Hospital staffs also need training to handle possible WIPP incidents. Citizens, public officials and emergency professionals demand the training be provided. Cooperation between DOE and states is necessary to ensure training is effectively and efficiently accomplished.

Evaluation: The truest evaluation of any training program is an evaluation of how the trainee performs following course completion. Since we hope accidents are rare, other methods of evaluation must suffice. Periodic radiological emergency assessments of affected communities can be useful in evaluating a training program. A standard assessment form would make data compilation and analysis easier.

Each state should routinely evaluate whether it is providing sufficient training and exercise opportunities to its emergency responders. States may wish to set goals to train a certain percentage of state and local emergency responders annually. Each state should also ensure that responders all along its portion of the route have been trained, and eliminate “gaps” where no or few emergency response personnel have received training. States should also continue to evaluate whether responders are receiving refresher training on a regular basis.

States should share any important lessons learned from their individual evaluations with the lead states. A summary of this information will be compiled by the lead states as appropriate and provided to the other states and DOE.

Training and exercise requirements change due to changes in regulations, procedures, policies and other factors. Changes may be needed in courses to ensure they are accurate, current and appropriate. The training and exercise programs should have

provisions for regular evaluations, reviews, updates and revisions. Review and evaluation should be a joint effort between DOE, states and other relevant agencies.

Table 10: Training and Exercises

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Documents	Responsible for Updates	Status
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<i>Documents included in Guide</i>		
WIPP Emergency Response Training, DOE, April 2003.	DOE	Final
<i>WIPPTREX Planning Procedures</i> , April 1998.	DOE-CBFO	Final
U.S. Department of Labor Letters. 1993 and 1997	U.S. Department of Labor	Final

<i>Reference material</i>		
National Incident Management System. Federal Emergency Management Agency. Revised March 2007	FEMA	Final
Guidance for Developing State, Tribal, and Local Radiological Emergency Response Planning and Preparedness for Transportation Accidents, FEMA-REP-5, Rev.2., November 2000	FEMA	Final
Guidelines for Public Sector Hazardous Materials Training, Federal Emergency Management Agency, March 1998.	FEMA	Final
U.S. Department of Labor letters by Mary Ann Garrahan, 8/19/02; by David Zeigler, 4/27/93; by Frank Frodyma, 7/19/93; by Steven Witt, 11/5/97; regarding OSHA review of WIPP Training.	OSHA	Final