

## **Level of Training Issue Paper**

### **A. Introduction**

This paper discusses the level(s) of training that recipient jurisdictions will be allowed to access using their Section 180(c) funds. In accordance with the language in Section 180(c) of the Nuclear Waste Policy Act, training must cover procedures for emergency response and safe routine transportation for state, tribal, and local public safety officials.

The decision on the appropriate level of training for shipments to a repository is influenced by several factors. Among these is the applicability of national training standards to Section 180(c), the public safety officials eligible for training, and the mechanisms for delivery of the training. In choosing how prescriptive DOE should be on training levels, a balance must be struck between DOE's need to verify that funds are used to meet Section 180(c) program goals and the need for a flexible program responsive to the variety of emergency response systems that vary from state to state.

This paper contains a discussion on training standards, background on other training program's approach, and the training options available to the Department.

### **B. Recommendation to OCRWM Management**

*The recommendation is still under consideration by the TEC Topic Group on Section 180(c).*

### **C. Discussion**

Training Standards for Emergency Response Procedures: There are training standards that provide guidance on this issue. These standards are for general hazardous materials response, not for radioactive materials specifically.

For emergency response procedures, OSHA's 29 CFR 1910.120(q) and the National Fire Protection Association's Standards 471, 472 and 473 apply to hazardous materials emergency response. Specific information about each standard follows.

#### **OSHA Standard 29 CFR 1910.120**

OSHA regulations state the employer is responsible for deciding which functions their employees have in an emergency and therefore what level of training they must receive. Even though it leaves a jurisdiction legally vulnerable, some emergency response organizations choose to have minimal functions in an emergency, resulting in minimally trained responders.

The training level required for each responder is based on the duties and functions to be performed by each responder as defined by the employer. State and local fire departments, including volunteers, are required to follow OSHA regulations for

## Preliminary Draft – For Discussion Purposes Only

responding to hazardous materials emergencies (40CFR311). Urban fire departments (that cover the majority of the population distributed along a route) often have hazardous materials teams trained at all OSHA levels. Some departments choose to only train to the awareness level, citing lack of sufficient funds, despite hazards located in their community. The standard defines the skills and knowledge levels required for various responders before they are permitted to take part in actual emergency operations on an incident:

- First responder awareness level
- First responder operations level
- Hazardous materials technician
- Hazardous materials specialist
- On scene incident commander

The OSHA standard also establishes requirements for emergency response trainers and for refresher training.

See attached fact sheet from the National Volunteer Fire Council describing the applicability of OSHA standards.

### **National Fire Protection Association (NFPA) Standards**

**NFPA 471** – Recommended Practice for Responding to Hazardous Materials Incidents

**NFPA 472** – Standard for Professional Competence of Responders to Hazardous Materials Incidents

**NFPA 473** – Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents

These standards are derived from OSHA Standard 1910.120 and have been widely adopted in the emergency response community. The standards for competencies are tied to the duties and functions of the responder, and a jurisdiction with limited resources may choose to limit the duties and functions of its responders.

### **Presidential Initiatives Related to Training Standards**

If OSHA and NFPA remain the standards for emergency response to a hazardous materials accident depends on how the Department of Homeland Security implements Homeland Security Presidential Directives #5 and #8. These Directives require that Federal agencies “shall establish and maintain a comprehensive training program to meet the national preparedness goal. The program will *identify standards* and maximize the effectiveness of existing Federal programs and financial assistance and include training for the Nation’s first responders, officials, and others with major event preparedness, prevention, response, and recovery roles.”

**Homeland Security Presidential Directive (HSPD-5):** The Secretary shall develop, submit for review... and administer a National Incident Management System (NIMS). This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and

recover from domestic incidents, regardless of cause, size or complexity. To provide for interoperability and compatibility among Federal, State and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi-agency coordination systems; unified command; **training**; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources. Beginning in FY2005, federal departments and agencies shall make adoption of the NIMS a requirement, to the extent permitted by law, for providing federal preparedness assistance through grants, contracts or other activities.

**Homeland Security Presidential Directive (HSPD-8):** The Secretary, in coordination with the Secretary of HHS, the Attorney General, and other appropriate Federal departments and agencies and in consultation with State and local governments, ***shall establish and maintain a comprehensive training program to meet the national preparedness goal.***\* The program will ***identify standards*** and maximize the effectiveness of existing Federal programs and financial assistance and include training for the Nation's first responders, officials, and others with major event preparedness, prevention, response, and recovery roles. Federal departments and agencies shall include private organizations in the accreditation and delivery of preparedness training as appropriate and to the extent permitted by law.

*\*(The national preparedness goal will be submitted to the President for review and approval prior to, or concurrently with, the Department of Homeland Security's Fiscal Year 2006 budget submission to the Office of Management and Budget.)*

#### **DOE/EM – Transportation Emergency Preparedness Program (TEPP)**

The DOE's Transportation Emergency Preparedness Program (TEPP) worked with the TEC Topic Group on Training and others to develop a training and technical assistance program specific to radioactive materials shipments, as opposed to all hazardous materials. This effort did not define the standard to which emergency responders should be trained but rather developed training modules that a jurisdiction can select according to the roles and responsibilities of their emergency response personnel as defined in the local and state emergency response plans.

While TEPP does not issue standards, the planning tools TEPP provides represent widely accepted stakeholder agreement on emergency response procedures for transportation related radiological incidents. The planning tools available are Model Needs Assessment, Model Planning Annex, Model Initial Response Procedures; Drills-in-a-Box, and Training Materials (Modular Emergency Response Radiological Transportation Training (MERRTT)) for fire service, law enforcement, emergency medical service, public works, emergency management, and hazardous materials teams. These materials are based on OSHA 1910.120(q), NFPA standards, and the DOT's North American Emergency Response Guidebook (ERG).

Picking the appropriate training level is influenced by the structural limitations of the nation's emergency response system and the differences in emergency response infrastructure from State to State. The structural limitations have to do with whether the

## Preliminary Draft – For Discussion Purposes Only

responding agency is a volunteer or professional agency. Ninety percent of fire fighters in the U.S. are volunteers who are estimated to have a 50% annual turn over rate, limited time available for training, limited resources to access training, and therefore have limited emergency response capability. The training level most often mentioned for these responders is the awareness level because it frequently fits with the response capabilities of a volunteer force – they can conduct lifesaving operations, isolate the scene, and call a hazardous materials response team – and can be offered economically. Effective methods suggested for reaching these emergency responders have been on-line courses, having trainers offer training in the jurisdiction frequently enough to address the high turnover rate, and providing information cards for every emergency response vehicle that could identify the shipment and the steps to take in case of emergency.

Professional fire fighters often are called upon to have a higher level of hazardous materials training but have limited time available for training because of multiple training requirements. The training requirements for a fire fighter depend on the hazards and population of a jurisdiction and the responder's role in an emergency. The focus on WMD training has further strained the training schedule of professional departments. Requiring operations or technician level training specific to radioactive materials could be met with resistance from jurisdictions with too little time available to train to higher risk hazards than these shipments. Allowing jurisdictions to decide the level of training could provide sufficient flexibility to ensure recipient's can fold shipment-specific information into their existing training programs. On the other hand, too broad a definition of what training levels are allowable and Section 180(c) funds could be misused to train for emergencies other than shipments to a repository.

The TEPP's MERRTT program is an example of a curriculum that was constructed to accommodate the structural and systemic variations across the country. The curriculum is in modular form (a curriculum module for each level of training offered) and offered on-line for maximum flexibility. It is also specific to radioactive materials transportation.

Training for safe routine transportation procedures: There are no training standards from which to draw upon for safe routine transportation. However, inspections for rail and highway shipments have generally been considered as safe routine transportation procedures. Training for these procedures has generally included training to conduct safety and enforcement inspections for truck and those rail measures that are part of DOT's Federal Railroad Administration inspection procedures. The truck inspections range from an inspector walking around an en route shipment to the Commercial Vehicle Safety Alliance Level VI inspections developed specifically for spent fuel shipments. For rail, inspections are conducted by either the FRA or by inspectors from those states that participate in the FRA State Participation Program. Only a few States and no Tribes participate in the FRA State Participation Program, which raises the question of what, if any, training for safe routine transportation on rail could Section 180(c) fund.

Definition of Public Safety Official: The emergency response personnel eligible to receive Section 180(c) training depends on the definition of "public safety official" as used in the text of Section 180(c) of the NWPA. In the *1998 Policy and Procedures*,

DOE's General Counsel ruled that hospital emergency room personnel were not considered eligible for Section 180(c) funding. The Waste Isolation Pilot Plant does offer a class for hospital emergency room personnel, covering decontamination procedures and patient isolation procedures. (*Don Flater – could you summarize your argument as to why hospital personnel should be included in the definition of public safety personnel.*)

#### **D. Background**

This section reviews what other programs have allowed for training levels and activities.

1998 Revised Proposed Policy and Procedures: The following summarizes the training levels allowed under the *1998 Proposed Policy*.

##### Variable Grant

- Travel and tuition costs for those receiving training
- Drills and exercises associated with training
- Training on a satellite tracking system

##### Training Activities

- Emergency response – awareness level training for all local jurisdictions, operations or technician level if funds available
- Safe routine transportation – training for safety and enforcement inspections for highway and rail
- Refresher training
- Emergency response personnel – recipients choice regarding who gets trained, where, and with what curriculum
- Emergency medical responders

Waste Isolation Pilot Plant: WIPP now offers training through the DOE's TEPP program. Initially WIPP offered six training classes specific to transuranic waste. They included:

- First Responder – an eight-hour course for the first emergency people arriving at an incident scene.
- First Responder Refresher
- Command and Control
- Train-the-trainer
- Mitigation Course for state health, safety, environmental, and radiological professionals.
- Medical Management for hospital emergency room doctors and nurses.

The TEPP training program and the MERRTT training modules offer planning and training tools that, while not expressly arranged according to OSHA's Hazardous Materials Emergency Response requirements (29 CFR 1910.120(q)), offer a range of training from first responders, to command and control, to decontamination techniques, to public information officer, and medical personnel. Grant recipients may select from among the eighteen MERRTT modules available and work with their regional TEPP coordinator to schedule training and exercises that meet their individual needs.

Consolidated Grant: Although DOE halted consideration of the Consolidated Grant, the training activities that would have been allowed under the grant are listed below:

- Training and retraining of emergency responders and development and conduct of exercise programs.
- Medical planning, training, and exercises.
- Participation in DOE’s Transportation Emergency Preparedness Program (TEPP).
- Participation and support for Commercial Vehicle Safety Alliance (CVSA) activities, including inspection training and training assessment, delivery, and monitoring.

**E. Options Considered**

The table below lists all the options the Topic Group considered when making its recommendation on training levels. The table includes all potential recipients of training and the level of training they could be eligible to receive.

Eventually this section will reflect the options discussed in the Topic Group discussion.

Potential Recipient(s)	Potential Training Level(s)	Issues
<p><b>Elected and appointed officials</b></p> <ul style="list-style-type: none"> <li>▪ Local</li> <li>▪ State</li> <li>▪ Tribal</li> </ul>	<p>General information about shipments, arrangements.</p>	
<p><b>Emergency Response Personnel</b></p> <ul style="list-style-type: none"> <li>▪ EMS personnel</li> <li>▪ Emergency room personnel</li> <li>▪ First responders</li> <li>▪ Hazmat teams</li> <li>▪ Public information officers</li> <li>▪ 9-1-1 operators</li> <li>▪ Local emergency management agency</li> <li>▪ State emergency</li> </ul>	<ul style="list-style-type: none"> <li>▪ Medical training for EMS personnel</li> <li>▪ Medical training for emergency room personnel</li> <li>▪ OSHA 29 CFR 1910.120 awareness level.</li> <li>▪ OSHA operations and/or technician level training.</li> <li>▪ Template for SNF response or general awareness training (non-OSHA).</li> <li>▪ General awareness training (non-OSHA).</li> <li>▪ Operations/technician level, drills and exercises</li> <li>▪ Operations/technician level,</li> </ul>	<ul style="list-style-type: none"> <li>▪ GC ruled hospitals ineligible.</li> </ul>

Preliminary Draft – For Discussion Purposes Only

<p>response personnel</p> <ul style="list-style-type: none"> <li>▪ Tribal emergency response personnel</li> <li>▪ State, Tribal, and local law enforcement personnel</li> </ul>	<p>drills and exercises</p> <ul style="list-style-type: none"> <li>▪ Awareness/operations/technician level, drills and exercises</li> <li>▪ Awareness, operations, technician level, drills and exercises</li> <li>▪ Refresher training on above listed items</li> <li>▪ Train-the-trainer</li> </ul>	
<p><b>Safe Routine Transportation Personnel</b></p>		
<ul style="list-style-type: none"> <li>▪ Truck inspectors</li> </ul>	<ul style="list-style-type: none"> <li>▪ State-required inspection training.</li> <li>▪ CVSA training.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Rail inspectors</li> </ul>	<ul style="list-style-type: none"> <li>▪ FRA’s State Participation Program.</li> <li>▪ Satellite tracking system training.</li> <li>▪ Awareness training – not OSHA-related but general information about the shipments.</li> <li>▪ Refresher training as needed on above items.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tribes are not eligible to participate in FRA’s Program</li> </ul>
<p><b>Public Information</b></p> <ul style="list-style-type: none"> <li>▪ Media</li> <li>▪ Civic Groups</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fund State and local officials to respond to inquiries, public presentations about their jurisdictions emergency response and safe routine transportation preparations.</li> </ul>	<ul style="list-style-type: none"> <li>▪ These activities could be funded through the cooperative agreements, or DOE could choose to not fund them at all.</li> </ul>