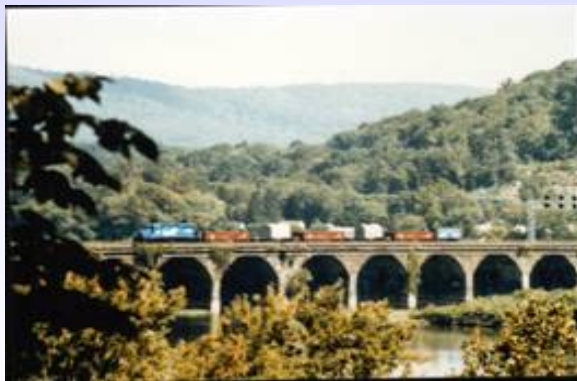


# Are You Prepared? Response to a Radiological Transportation Accident, Simplified

**Ken Keaton**

**Transportation Emergency Preparedness Program  
Technical Resources Group, Inc.**

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# Transportation by Air, Rail & Highway



# Transportation by Air, Rail, Water & Highway

- **Annual Estimates of United States Hazardous Materials Shipping Activities**
  - 500 Billion packages
  - 400 Million are hazardous material
  - 3 Million are radioactive
  - DOE ships ~20K





What do you do when an accident happens?





How can responders prepare for accidents involving radiological material?

- 44 CFR 351.1 assigns Federal Agency responsibilities for assisting state and local governments in emergency planning and preparedness for radiological/nuclear emergencies.





# DOE Implemented the Transportation Emergency Preparedness Program (TEPP)



[www.em.doe.gov/Transportation/TEPP\\_Home.aspx](http://www.em.doe.gov/Transportation/TEPP_Home.aspx)



# *TEPP's Mission*

*TEPP will assist Department of Energy (DOE)  
and other federal, state, tribal and local  
authorities to prepare for response to  
a transportation incident involving  
DOE shipments of radioactive  
material.*





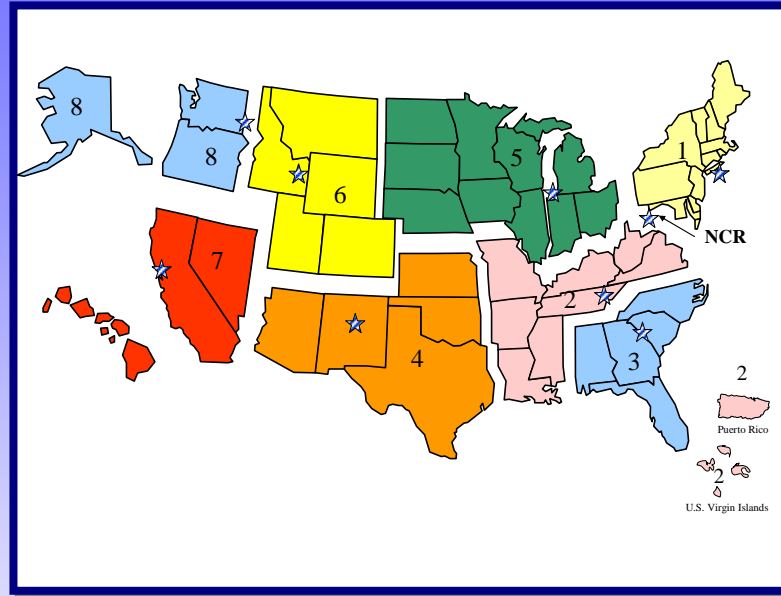


# TEPP Goals

- Serve as a Department-wide program
- Provide planning and technical assistance to promote a coordinated response to transportation incidents involving radioactive material
- Provide training assistance and promote development of flexible, low-cost, high-quality training materials
- Serve as a link between emergency preparedness and transportation planning



# TEPP Implementation



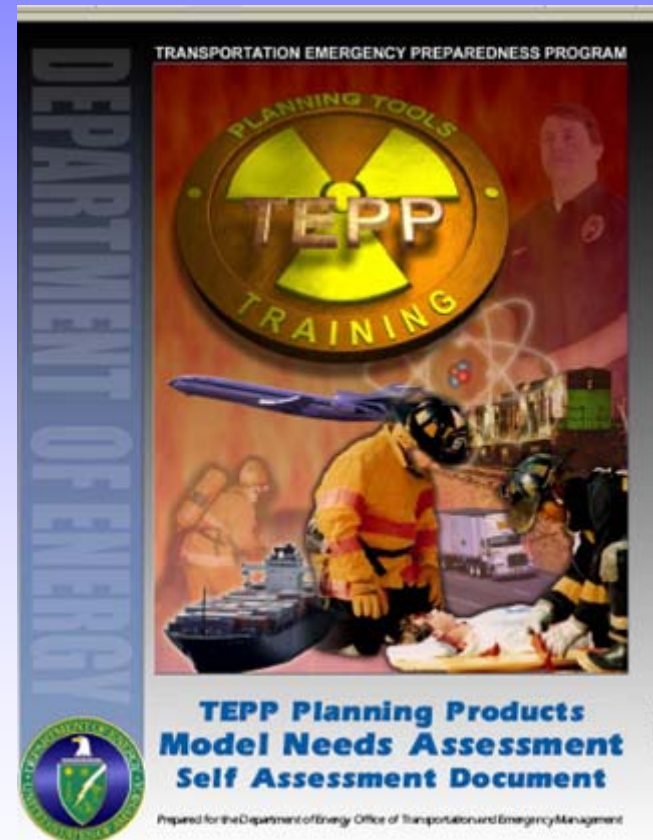
- Through eight Regional Coordinating Offices
- TEPP Regional Coordinator located with each DOE region





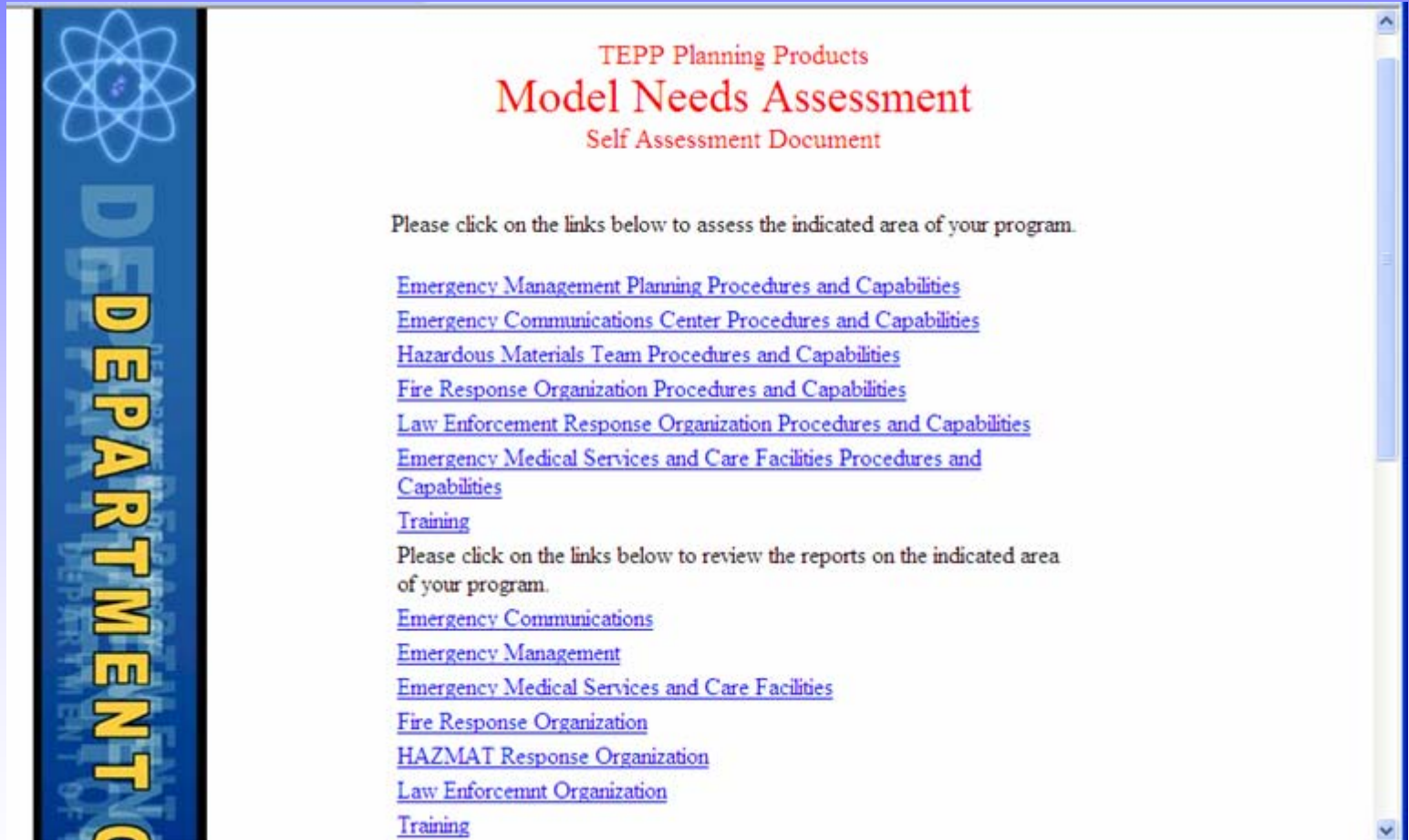
# The first step to preparedness. . .

- Determine applicability and conduct a needs assessment
- The Needs Assessment will:
  - assist in determining readiness
  - identify strengths & weaknesses





# What does the Needs Assessment cover?



TEPP Planning Products  
**Model Needs Assessment**  
Self Assessment Document

Please click on the links below to assess the indicated area of your program.

- [Emergency Management Planning Procedures and Capabilities](#)
- [Emergency Communications Center Procedures and Capabilities](#)
- [Hazardous Materials Team Procedures and Capabilities](#)
- [Fire Response Organization Procedures and Capabilities](#)
- [Law Enforcement Response Organization Procedures and Capabilities](#)
- [Emergency Medical Services and Care Facilities Procedures and Capabilities](#)
- [Training](#)

Please click on the links below to review the reports on the indicated area of your program.

- [Emergency Communications](#)
- [Emergency Management](#)
- [Emergency Medical Services and Care Facilities](#)
- [Fire Response Organization](#)
- [HAZMAT Response Organization](#)
- [Law Enforcement Organization](#)
- [Training](#)



# Model Needs Assessment

**Fire Response Organization Procedures and Capabilities**

1. Are all emergency response vehicles equipped with the latest copy of the Emergency Response Guidebook?  
 Yes  No  
Discussion

2. Please indicate which Incident Management System training you have completed

ICS	<input checked="" type="radio"/> Yes <input type="radio"/> No	NIMS 300	<input type="radio"/> Yes <input checked="" type="radio"/> No
NIMS 100	<input checked="" type="radio"/> Yes <input type="radio"/> No	NIMS 400	<input type="radio"/> Yes <input checked="" type="radio"/> No
NIMS 200	<input checked="" type="radio"/> Yes <input type="radio"/> No	NIMS 700	<input type="radio"/> Yes <input checked="" type="radio"/> No

Discussion

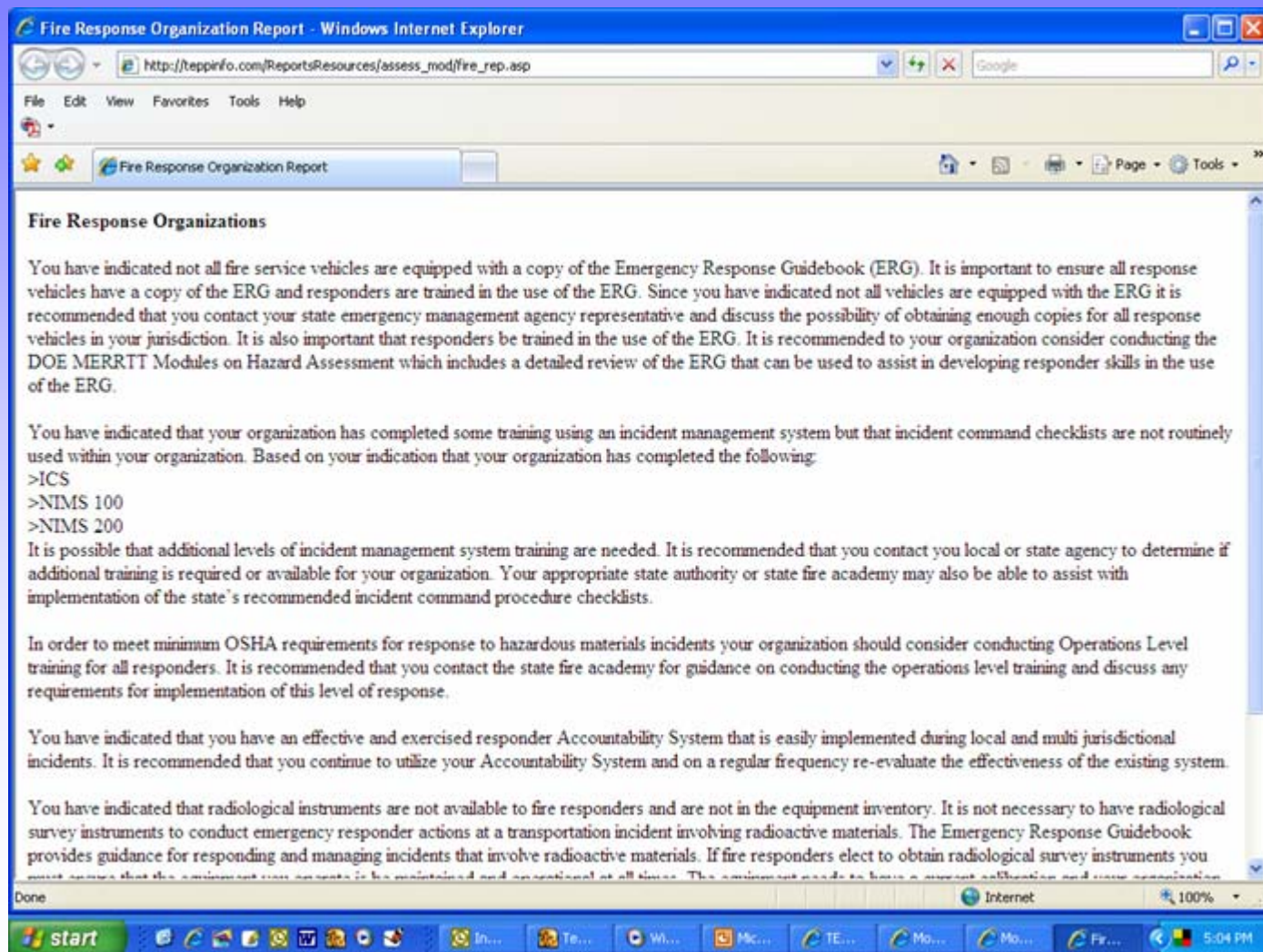
3. Do fire response organizations utilize an incident command procedure/checklist?  
 Yes  No  
Discussion

4. Have fire response organizations been trained to the OSHA 29 CFR 1910.120 Operations Level?  
 Yes  No  
Discussion

Done Internet 100%



# Model Needs Assessment



**Fire Response Organizations**

You have indicated not all fire service vehicles are equipped with a copy of the Emergency Response Guidebook (ERG). It is important to ensure all response vehicles have a copy of the ERG and responders are trained in the use of the ERG. Since you have indicated not all vehicles are equipped with the ERG it is recommended that you contact your state emergency management agency representative and discuss the possibility of obtaining enough copies for all response vehicles in your jurisdiction. It is also important that responders be trained in the use of the ERG. It is recommended to your organization consider conducting the DOE MERRTT Modules on Hazard Assessment which includes a detailed review of the ERG that can be used to assist in developing responder skills in the use of the ERG.

You have indicated that your organization has completed some training using an incident management system but that incident command checklists are not routinely used within your organization. Based on your indication that your organization has completed the following:

- >ICS
- >NIMS 100
- >NIMS 200

It is possible that additional levels of incident management system training are needed. It is recommended that you contact you local or state agency to determine if additional training is required or available for your organization. Your appropriate state authority or state fire academy may also be able to assist with implementation of the state's recommended incident command procedure checklists.

In order to meet minimum OSHA requirements for response to hazardous materials incidents your organization should consider conducting Operations Level training for all responders. It is recommended that you contact the state fire academy for guidance on conducting the operations level training and discuss any requirements for implementation of this level of response.

You have indicated that you have an effective and exercised responder Accountability System that is easily implemented during local and multi jurisdictional incidents. It is recommended that you continue to utilize your Accountability System and on a regular frequency re-evaluate the effectiveness of the existing system.

You have indicated that radiological instruments are not available to fire responders and are not in the equipment inventory. It is not necessary to have radiological survey instruments to conduct emergency responder actions at a transportation incident involving radioactive materials. The Emergency Response Guidebook provides guidance for responding and managing incidents that involve radioactive materials. If fire responders elect to obtain radiological survey instruments you must ensure that the equipment you acquire is maintained and operational at all times. The equipment needs to have a current calibration and your organization





# Second step – address weaknesses in plans & procedures

## TEPP Plans & Procedures


- Model Initial Response Procedures
- Model Annex for Preparedness and Response to a Radiological Transportation Incident
  - provides basic structure and annotated guidance for transportation addendum to existing plans

**planning tools** Transportation Emergency Preparedness Program (TEPP) REV 2 - 8.1.2002


**Model Procedure for Properly Handling and Packaging Potentially Radiologically Contaminated Patients**

12. At the Hot Zone Contamination Control Line, responders should pass the patient across the contamination control line to waiting responders.

*Note: Care providers within the Hot Zone should not cross the Contamination Control Line until monitoring conducted by the radiation authority determines care providers to be free of contamination. If additional responders are not available, the treating responders should remove protective clothing at the Hot Zone Contamination Control Line and provide transportation of the patient to the appropriate medical facility. Based on local procedures, the patient may require additional transfers at each of the contamination control zone lines.*




13. After transferring the patient to the clean area, Emergency Medical Service Care Providers should cover the patient with the protective barrier that was placed over the transport device.



14. Load patient into the ambulance and transport to hospital.

*Note: To reduce/prevent possible contamination of the ambulance, consider the following additional precautions: Open the protective barrier only to administer necessary patient treatment, place floor covering (paper or plastic, etc.) on ambulance floor, and treat all items used in the treatment of the patient as potentially contaminated.*



**DEPARTMENT OF ENERGY**











# TEPP Exercises

- **Tabletop, Drill & Exercise Program Manual (Drills-In-A-Box):**
  - Guidance For Planning, Conducting and Evaluating Transportation Emergency Preparedness Tabletops, Drills and Exercises





# TEPP Exercises





# Want to know more?

- The TEPP web site provides one-stop shopping
  - MERRTT Training Schedule
  - 24-Hour Points of Contact
  - Case Histories
  - TEPP Coordinators

[www.em.doe.gov/Transportation/TEPP\\_Home.aspx](http://www.em.doe.gov/Transportation/TEPP_Home.aspx)



# 2007 Updates

- Module consolidation
- Addition of the Decontamination Dressdown training video

[www.em.doe.gov/Transportation/TEPP\\_Home.aspx](http://www.em.doe.gov/Transportation/TEPP_Home.aspx)



# Questions

