

# States address nuclear transport

*State and federal officials are considering how to protect shipments of radioactive waste from terrorists.*

BY LAURIE CLEWETT

**W**hen state and federal officials registered for the third Tri-Regional Radioactive Materials Transportation Committee meeting last fall, they had no way of knowing it would take place six weeks after the worst terrorist attacks in American history — attacks that would shock the world, transform American politics and mark a new era in planning for the safe transport of radioactive materials.

State, local, tribal and federal officials have been working together for years to ensure that radioactive materials are safely transported throughout the country. Whether they are dealing with medical waste or high-level nuclear waste from weapons facilities or power plants, federal and state governments have implemented inspections, laws and regulations designed to protect the public.

In the past, such measures have been aimed at preventing or responding to events that might expose people to radiation accidentally, since most people involved in transportation of waste did not consider terrorism a primary concern.

Since Sept. 11, the possibility that terrorists might target nuclear facilities or radioactive materials in transport is no longer just a dramatic Hollywood scenario; it suddenly seems very real.

“After Sept. 11, we really have taken on an additional set of burdens and considerations,” said David Huizenga, deputy



*The U.S. Department of Energy will use this cask to ship remote-handled transuranic waste from a former weapons site in Columbus, Ohio to another facility for storage as part of a cleanup of the Ohio site. Photo by James Eide, Battelle.*

assistant secretary with the U.S. Department of Energy’s Office of Integration and Disposition. Following the attacks and the subsequent bombing campaign in Afghanistan, the department temporarily suspended shipments of radioactive materials. Huizenga said the department later began “making a number of shipments under exception, but we’re doing it carefully and on a case-by-case understanding of what’s on the road.”

“Because of those attacks, we’re faced with the possibility — the probability — of having to rewrite the book on how to ship radioactive materials in a safe and secure manner,” said Frank Moussa, Tech-Hazard’s Administrator, Kansas Division of Emergency Management. “The Midwestern committee recognizes that we cannot continue to do business as usual. We can, however, preserve the elements of the established process that work well, and modify or dispense with those that do not.”

Moussa and Huizenga both made their comments during the Tri-Regional Radioactive Materials Transportation Committee meeting, held last October in Orlando, Fla. The conference was the third held since 1995, with 37 states represented. The meeting was an unusual opportunity to exchange information, interact with state and federal officials and discuss states’ common interests in transporting radioactive materials.

Attendees included members of the Midwestern committee, the CSG Northeast High-Level Radioactive Waste Transportation Task Force, the Southern States Energy Board’s Transuranic Waste Transportation Working Group, SSEB’s Radioactive Materials Transportation Committee and various federal officials.

## **Yucca Mountain selection**

The threat of terrorism is not the only

issue that has recently brought increased attention to transportation of radioactive materials. Energy Secretary Spencer Abraham announced Jan. 10 that, after 14 years of study, the Department of Energy had decided to recommend Yucca Mountain, Nevada, as the site of a permanent repository. If approved by the president and Congress, nuclear waste from around the country eventually will be shipped to Yucca Mountain for permanent disposal.

This would dramatically increase the number of nuclear-waste shipments moving across the country.

Both proponents and opponents of the plan have cited the possibility of terrorist attacks to bolster their arguments. Abraham, in announcing Yucca Mountain as the choice, said, "We should consolidate the nuclear wastes to enhance protection against terrorist attacks by moving them to one underground location that is far from population centers." Some opponents, however, argue that it is dangerous to move large amounts of nuclear waste across the country.



*State officials are conferring on ways to protect shipments of radioactive waste from possible attacks by terrorists. Photo by James Eide, Battelle.*

### Coordination needed

The post-Sept. 11 environment has made an already sensitive and complex activity even more complicated. Under normal circumstances, planning for shipments of radioactive materials involves coordination among dozens of organizations — including state, local and tribal agencies with responsibility for law enforcement, public health and safety, nuclear safety, emergency management, transportation and public utilities. At the federal level, the planning process involves representatives of the Departments of Energy and Transportation, the U.S. Nuclear Regulatory Commission, and the Federal Bureau of Investigation. A variety of private parties also are involved, including transportation carriers, shipping-cask manufacturers and nuclear-reactor operators.

To coordinate some of the relevant

parties, the Department of Energy has established cooperative agreements with regional organizations such as CSG. These agreements are intended to help the states and the department to develop plans for shipping radioactive materials through a cooperative process. Each of the regional groups represented at the meeting has a cooperative agreement with the department.

Throughout the two-day meeting, par-

ticipants stressed that now, more than ever, cooperative planning is essential. The threat of terrorism poses new challenges. In the weeks following the Sept. 11 attacks, state officials often found themselves frustrated and confused when trying to obtain and share information about radioactive materials shipments. Many state and local officials felt they were shut out of communications because of security concerns.

"The Department of Energy had spent years trying to open its doors, make information available and involve stakeholders," said Captain Bruce Bugg, special projects coordinator with Georgia's Department of Motor Vehicle Safety. "Suddenly, the nature of the beast has changed, and DOE (and the Nuclear Regulatory Commission) find themselves evaluating the entire spectrum of information available. Now, security has

become the paramount issue, and I think we're still wondering how much security concerns will affect that openness."

### Secrecy and security

State and local governments have the primary responsibility for responding to accidents in their jurisdictions. State personnel also are involved in training, inspections, permitting, establishing travel routes, escorting shipments and preparing public information materials. Timely and accurate information is critical to help the states complete these activities.

After the attacks many state and local officials found themselves with more questions than answers. As federal agencies limited what was available on their web sites or shut the sites down altogether, people used to relying on them were not sure where to turn. Meanwhile, the Department of Energy temporarily restricted e-mail communication with the states after the attacks.

Although some participants at the state and local levels had security clearances that allowed them to obtain information, most — especially those not involved in law enforcement — did not. Access to classified information was limited not only by the lack of security clearances among state and local personnel, but also by the lack of infrastructure, such as secure phone lines, necessary to communicate classified information.

Moreover, when states did receive updates from federal agencies, they received different, sometimes conflicting, information. "Each federal agency operates a little differently," said Thomas Hughes, radiological officer with Pennsylvania's Emergency Management Agency.

Hughes, who is co-chair of the CSG Northeast High-Level Radioactive Waste Transportation Task Force, said that one of the task force's current challenges is

“understanding the differences in threat levels generated by the different federal agencies and the preparation activities that are associated with each.” Similarly, Georgia’s Bugg said his agency’s biggest priority is “making sure we get good, timely intelligence about the potential threats, and deciding what our posture will be for the various shipments.”

“From a state’s perspective, a few federal agencies need to work together more closely,” said Hughes. He also noted “the federal partners do not have the same type of forums [as the states] to encompass an all-hazard radiological response approach.” Throughout the Tri-Regional meeting, participants expressed the hope that the new Office of Homeland Security might help improve federal coordination.

### Funding shortages

Aside from the need to ensure good communication and preserve cooperative planning, the most common topic of discussion during the meeting was resources: both dollars and personnel are stretched thin. Many participants came from agencies that found themselves overwhelmed after the attacks. They have had to deal with numerous security issues, including anthrax scares, threat assessments and risk analyses, and safety at nuclear-power plants. One participant said his agency had been doing “everything but” radiological work since Sept. 11.

Even before September, many states were calling for more federal dollars for training, equipment and other needs related to transporting radioactive materials. But with the increased demands, the calls have grown louder. “Funding is necessary to accomplish training and equipping first and secondary responders that are affected by radiological/nuclear transportation, storage, and terrorism,” Hughes said. He emphasized the need to hold exercises that simulate radiological accidents or terrorist threats. “Exercising, although expensive, is badly needed to bring all concerned parties away from the ‘feel



*The prospect that terrorists might attack radioactive materials in transport is getting attention. Photo by James Eide, Battelle.*

good’ table-top forum,” he said. “You can either do the job or you can’t, and exercising sheds light on shortfalls and improvements needed real quick.”

As state and federal officials continue to adapt, there will likely be more changes and more expenses. The Department of Energy, along with virtually every other state and federal agency involved, is re-evaluating its security policies and daily practices. The agency is looking into establishing a task force of state and federal officials to review security protocols and procedures.

Two issues that may be re-examined are when to use armed escorts and how to monitor shipments. The Department of Energy has developed TRANSCOM, a satellite-based system to follow the progress of certain shipments. Authorized users can access information about the shipments by computer while they are en-route. “We may see a requirement for continuous escort, and perhaps a requirement for more escorts, and other monitoring systems besides TRANSCOM,”

Bugg of Georgia speculated. “The decisions will be driven more by perception than actual danger, unless we get very good information and realistic, credible threat evaluations.”

Although participants at the Tri-Regional Meeting identified some obvious immediate needs and speculated on what will change, they recognized that they were just beginning to understand the new challenges they will face. During a panel discussion on security, Tim Runyon, chief of the Division of Environmental Monitoring in Illinois’ Department of Nuclear Safety, reminded members that they were entering new territory. Runyon became chair of the CSG Midwestern High-Level Radioactive Waste Committee in January. “Not only do we not have a lot of the answers yet,” he said, “we probably haven’t even developed a lot of the questions.” ★

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