



The Council of
State Governments
**MIDWESTERN
OFFICE**

September 8, 2003

Patrice M. Bubar
U.S. Department of Energy
Office of Environmental Management
EM-20
1000 Independence Ave. S.W.
Washington, DC 20585

641 East Butterfield Road
Suite 401
Lombard, Illinois 60148-5651
Tel: 630.810.0210
Fax: 630.810.0145
E-mail: csgm@csg.org
Web: www.csgmidwest.org

Regional Director
Michael H. McCabe

Lexington
P.O. Box 11910
Lexington, Kentucky 40578-1910
Tel: 859.244.8000

Atlanta
P.O. Box 98129
Atlanta, Georgia 30359
Tel: 404.266.1271

New York
14 Wall Street, 20th Floor
New York, NY 10005
Tel: 212.912.0128

Sacramento
1107 9th Street
Suite 650
Sacramento, California 95814
Tel: 916.553.4423

Washington
444 North Capitol Street, NW
Suite 401
Washington, DC 20001-1512
Tel: 202.624.5460

Dear Ms. Bubar:

At the CSG Midwestern Radioactive Materials Transportation Committee meeting in Lincoln, the states and DOE engaged in a lengthy discussion on the subject of training for both first responders and hospital staff. This issue has come up several times at previous meetings, as well. The committee thought it might be helpful to you and your staff if we articulated our position on training in writing. I am writing to convey the answers to what seem to be DOE's "frequently asked questions" regarding training.

Why do the states conduct training in connection with DOE shipments but not private sector ones?

Most states would conduct training for both first responders and hospitals for shipments of all hazardous materials — including radioactive materials — if they had the means to do so. Since we do not have the means, we must scale back our activities, identify new sources of funding, or both.

Scaling back our activities means targeting our resources to get the greatest "bang for the buck." We have the responsibility of being prepared for all emergencies, everywhere in the state, all the time. Clearly, it is difficult to meet this challenge with the available resources. DOE's radioactive materials shipments only add to the burden, both because of the type of material being shipped and because they tend to attract more public attention than private shipments.

Ms. Patrice M. Bubar

September 8, 2003

Page 2

In terms of new funding sources, financial assistance from DOE is much needed and appreciated. For some states, fees are another source of revenue. In fact, the proliferation of state fees reflects the states' desire to have a steady source of revenue available so that they can provide training along shipping routes. The fees are charged not only on DOE shipments, but on private shipments, as well. As a result, they have the potential to provide a significant, consistent source of training funds for the states that see the most shipments.

Why do the states request training for spent fuel and transuranic waste shipments, but not for low-level waste shipments?

Through its contractor, DOE did provide first responder training along the shipping corridor for low-level waste coming from Fernald. If DOE were to offer such training for other low-level waste shipments, many of the states would gladly accept. For other low-level waste shipments traveling by truck, the routes often run close to those used for spent fuel or transuranic waste shipments. As a result, the states have already conducted training in handling radiological emergencies. In effect, the funding DOE provides the states helps to prepare the routes for all shipments, not just for some.

In addition, two of the states in the Midwest now charge fees on low-level waste shipments. They will use that revenue to train responders to handle all types of transportation accidents involving radioactive materials, including low-level waste.

Why do the states need to conduct training every year?

Training is an ongoing activity in the states. We train every year because OSHA, EPA, and DOT all require refresher training annually for those working with hazardous materials (29 CFR 1910.120q(iv)(8), 40 CFR 311.1, and 49 CFR 172.704, respectively). In addition, most of the local responders are volunteers, and turnover rates can be as high as 80% annually. In any given year, therefore, the states will need to train new personnel at the local level. We'll also need to provide refresher training on an annual basis.

Why do some states feel hospital training is necessary?

Before answering this question, I want to make two points. First, although the states have different priorities with regard to emergency preparedness, all states recognize the value of training hospital personnel to handle radiologically contaminated patients. When setting their priorities, some states focus on first responder training, others buy equipment, and still others prefer to include hospital training in the mix. The fact that, to date, only a small number of states have identified a need for hospital training should in no way be interpreted as indicating that it is not necessary.

Ms. Patrice M. Bubar

September 8, 2003

Page 3

Second, hospital personnel often exhibit the same fear of radiation as volunteer first responders. For both first responder and hospital training, an important component of the training is to educate people not to fear for their own safety when responding to an accident or handling contaminated patients.

The states conduct hospital training because emergency room doctors, nurses, and emergency medical technicians are not routinely trained to deal with radiological incidents. These health care workers need to know what to do and how to do it when caring for the victim, dealing with the victim's wounds, and decontaminating the victim. In addition, they need to know how to prevent the spread of radioactive contamination in the emergency room area, throughout the hospital facility, and on themselves.

Radiological training is not only for the doctors, nurses, and emergency medical technicians, but also for hospital administrators, security personnel, and janitorial personnel. The training educates administrators that the hospital can continue to function in spite of receiving contaminated patients. It teaches the hospital public information officers how to respond to questions about incidents. It assists the hospital safety department in developing plans so that the incident can be managed safely and effectively — protecting the other patients, the staff, and the victim(s), while the rest of the hospital continues to function normally.

Hospital training educates security personnel in what additional functions they will have to perform during an incident, and it educates janitorial services personnel on what additional actions they will have to take prior to the arrival of contaminated patients. Finally, it educates the radiation technical specialists in what actions they may have to take to support the emergency room staff during such an incident.

If a hospital has a radioactive materials program, doesn't that mean it is prepared to handle contaminated accident victims?

It is true that, in order to obtain a license, a hospital with a radioactive materials (RAM) program must ensure that those working with radioactive materials are thoroughly trained in the use of and decontamination procedures for medical isotopes. This training, however, only deals with patients who are receiving doses of RAM for medical reasons.

The technical specialists on staff work with short-lived medical isotopes. They are not familiar with the type of radioactive material typically found in a DOE shipment, which usually requires additional protective measures because of the higher activity levels, the amount of material, and the much longer half-lives.

To deal with small amounts of spilled RAM in a laboratory setting, the technician would wipe up any loose contamination and throw an absorbent pad over the spill to prevent the spread of loose contamination that could not be removed. He or she would then secure any contaminated

clothing and equipment, take a shower (or wash the exposed skin), and secure the area until the radiation, through decay, no longer constituted a hazard (typically less than eight days).

These technical specialists are not trained to deal with traumatized, injured victims of an accident, nor are they trained in procedures for decontaminating such patients, preventing the contamination of emergency rooms, or preventing emergency room health care specialists from spreading contamination. When we conduct hospital training, we broaden their knowledge by teaching them about the treatment of trauma victims who may have been contaminated. We also help them to understand what their role might be in the overall response to an accident.

Even if there are properly trained nuclear medicine technologists on staff at a hospital, they may not be available for service. Nuclear medicine procedures are normally done during daytime hours only. Technologists are not always available, even then, to abandon their procedures for other duties not covered by their RAM license.

It should be noted that many smaller hospitals do not even have a RAM program other than an x-ray program, which requires even less training than other radiation programs. Not all radiologists are licensed to use radionuclides, nor are they trained in contamination control as it relates to the type of material in question. Even if such radiologists happen to be trained, they are not always immediately available 24 hours a day.

Why not just airlift contaminated accident victims to a hospital that can handle such patients?

The states have looked into the possibility of flying injured victims to properly trained and equipped trauma centers. Unfortunately, there are several reasons not to do so.

First, life-flight companies will generally only transport patients with life-threatening injuries. The service is not designed to transport a patient who is contaminated but otherwise in good condition. Second, some companies would refuse to transport a contaminated patient due to the potential for contamination within the helicopter. If the company did agree to transport the victim, then the helicopter would need to be surveyed and possibly decontaminated prior to further use, which means it might be out-of-service when a real life-threatening situation occurs. Third, life-flight helicopters are designed to carry one or two passengers, not large passenger loads. Accidents might result in a large number of contaminated people (both victims and emergency responders), which would entail several trips or more than one helicopter.

Why do the states feel it is necessary to conduct hospital training at each site instead of using a regional approach and covering several at once?

Faced with few options, some states have tried out a regional approach to conducting hospital training. Based on their experiences, it is clear that hands-on practical training in the setting of a

Ms. Patrice M. Bubar

September 8, 2003

Page 5

given hospital is optimal for ensuring the maximum benefit from the training provided. This includes retention of information, applicability of the information to existing resources in a familiar setting, and reaching maximum staff available. Because only select staff can attend training off-site, regional courses do not reach all the staff that is in need of hospital training. This greatly reduces the impact and success of the training effort.

I hope that this information sheds some light on many of the topics we discussed in Lincoln. Please do not hesitate to contact either Lisa Sattler (920.803.9976) or me (217.786.6365) if you have any questions or would like to discuss these matters further. Thank you for your continuing support of the committee and the Midwestern cooperative agreement.

Sincerely,

A handwritten signature in cursive script, appearing to read "Timothy A. Runyon".

Timothy A. Runyon
Division of Nuclear Safety,
Illinois Emergency Management Agency, and
Chair, CSG Midwestern Radioactive Materials
Transportation Committee

cc: Members of the CSG Midwestern Radioactive Materials Transportation Committee
Kent Hancock
Judith Holm
Ella McNeil
Noelle Kostecki
Carol Peabody
Alex Thrower