

NMSU facility to start dirty-bomb training



First responders from the Washington, D.C., area take part in an October 2004 training exercise based on a "dirty bomb" scenario. Imaging radiation levels was the first responders' top priority.

By Tom Meier, Staff Reporter

LABORERS — New Mexico State University's Institute for Energy and the Environment (IEE) has implemented a first-responder training program targeted toward "dirty bomb" attacks.

Dirty bombs, a class of weapons also known as radiological dispersal devices (RDDs), are viewed as one of the greatest anticipated terrorist threats facing the United States and other nations. The principle type of dirty bomb would contain a conventional explosive such as dynamite with radioactive material to create economic and social disruption well beyond the physical/inmediate lethality of the radiological dispersion. A second type of RDD would build a powerful radioactive source hidden in a public place, such as a bank lot or subway station, where passersby are likely to get a significant



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dose of radiation.

According to the U.S. Nuclear Regulatory Commission's public affairs office, a dirty bomb is in many similar to a nuclear weapon. The presumed purpose of its use would be not as a "weapon of mass destruction" but rather as a "weapon of mass disruption."

The Central Environmental Monitoring and Research Center (CEMRC), a division of IEE, is playing a critical role in the dirty-bomb threat reduction program and is doing so with high regard.

"Because the general public is so frightened about anything radioactive, fear must be anticipated even if there is no real health threat from the radioactive component," said CEMRC Director Jim Cozza. "Given a phantom RDD, where no radioactive material was used but an implication or emergency tip indicates there was, could still cause considerable fear with large economic consequences."

In training first responders such as firefighters and emergency medical personnel, Cozza stresses the importance of risk perception and education. He also trains emergency personnel to recognize that all bombs are

dirty and to follow the first priority at the scene — defusing the hot zone.

"This is the most important first response, and a simple alarming detector is the most useful piece of equipment for a dirty bomb attack," Cozza said. A detector is a device used to measure an individual's exposure to radiation and can weigh as little as an ounce and cost as little as \$20.

CEMRC's ability to implement effective first-responder training for dirty bombs comes from its years of experience in environmental training and education, nuclear energy issues and insect handling Homeland Security. The unique radiochemistry facility has a special photonics-remote lab, mobile laboratories, computing operations and office.

"We have probably the broadest detection limits of any lab the radiochemists and have been monitoring the Waste Isolation Pilot Plant site for 18 years — people, air, water and soil — making WIPP the only nuclear facility in the world with a better and safer on its population and its environment," Cozza said. "These kids [local students] it had that!"

WIPP is the world's first

underground repository licensed to permanently dispose of radioactive waste left over from the research and production of nuclear weapons.

"CEMRC's solid experience in nuclear waste management and environmental monitoring of radiological and inorganic materials is a great foundation for implementing first responder training at NMSU," said IEE Executive Director Allan Chassey. "As an IEE division, the CEMRC group complements our strengths in the environment and renewable energy. We're building a group focused on maintaining and protecting sustainable resources for our nation, which in many ways is identical to our national security."

The IEE comprises NEMC, a Consortium for Environmental Education and Technology Development, the Southwest Technology Development Institute and CEMRC.

For more information, contact Chassey at (505) 648-2000 or visit www.iewe.net.

"Eye on Alamogordo" is provided by New Mexico State University. This week's feature was written by Thomas Butler, media relations specialist for IEE.