TNEC Training Helps Police Identify Hazards at Emergency Sites

Several years ago, a tanker truck rolled over on a traffic rotary in Lowell. In addition to the usual considerations of medical needs and safety, police officers were concerned about an unidentified liquid leaking from the truck’s tank. Was it dangerous to breathe the fumes? What were the risks of stepping into the liquid to get to the truck driver? What distance from the liquid would be safe for emergency workers?

Police, often the first responders to an emergency, routinely face potentially hazardous situations with little information on the kinds of contaminants involved. In February, that situation began to change, as members of the Lowell Police Department (LPD) participated in an Emergency Response Awareness Course delivered by The New England Consortium (TNEC) at UMass Lowell.

TNEC annually trains hundreds of municipal workers, emergency responders from industry, and others. They provide hazardous materials training and refresher courses to the 200 members of the Lowell Fire Department.

The LPD course helps officers anticipate the chemicals and hazardous wastes they might face at emergency sites. “Officers need to know the potential risks, what action is required immediately, and how to find more information,” said Tom Estabrook, manager of police training for TNEC.

The course was developed by Estabrook, LPD Chief Edward F. Davis III, and Charles Ouellette, LPD’s director of training. Twenty members of the department participated, including detectives, investigators, dispatchers, detention attendants, members of the traffic bureau, and officers—who are the first responders to encounter potentially hazardous materials at the scene of an emergency—to the training.

Coalition Urges Use of Alternatives to Hazardous Chemicals

For those who fear that terrorists in the future might target facilities that use hazardous chemicals, there is a simple solution: Find safer alternatives.

That was the essence of one of Alainard Stewart’s recent environmental columns in The Telegraph of Nashua, N.H. Stewart reported that Safe Hometowns Initiative, a coalition of public interest groups meeting in Concord, had urged that local communities and the federal government persuade businesses to find alternatives to hazardous chemicals — rather than beefing up security around their facilities.

For example, the group suggested that sewage treatment plants use bleach rather than chlorine gas to sanitize water. The logic was that this would make the plants safer and also reduce the risk to the trains that carry chlorine to the plants. Another chemical the coalition took aim at, says Stewart, was anhydrous ammonia, a poison with a range of uses from farms to power plants. As an alternative, the group suggested that the users substitute nitrogen oxide to its basic, nonpollut-
ing elements, and that the utility had recently passed state and federal safety audits. Moreover, Murray said, urea would cost about a third more than the alternative and these costs would raise rates to customers. According to the Telegraph account, Jan Pendlebury of National Environmental Trust agreed that urea would cost more but said that added health risk associated with cyanazine would be worth it. And, she continued, using safer chemicals could actually reduce the costs of insurance, workers’ compensation, security and waste disposal.

Stewart reports that Paul Doherty of Hampshire Chemical concurred with many coalition points, saying, “If you were not using a hazardous material you would have an inherently safer situation.” But, while his company is producing only about five percent of the hazardous chemicals it produced a decade ago, it has not eliminated them entirely because of economics. According to Stewart, Tom Ratbrock, a special projects manager for the New England Consortium at EMass Lab, likened a broad-based campaign to convert to safer chemicals to the preparations made for the dawn of 2000 — an estimate of the time needed to limit or stop preventative measure that could save much more money than it costs.

Estabrook, who trains emergency responders, says they would be much to encounter fewer dangerous chemicals at accident sites. In the same vein, Sandi Chabot of the New Hampshire Coalition for Occupational Safety and Health highlighted the benefit of such a change to the workers who handle the hazardous chemicals.

“Thousands of people have been protected from chemical explosions or leaks when facilities have eliminated or reduced the use of hazardous materials,” she said.

The Chemical Security Act of 2001, legislation being considered by the U.S. Senate, calls for storing fewer hazardous materials at fewer facilities, finding less hazardous alternative chemicals and improving security and mitigation plans.

EPA Employee Charges Agency Downplayed Post-Sept. 11 Health Risks

Cate Jenkins, an employee of the Environmental Protection Agency’s Hazardous Waste Identification Division has charged that, in the wake of the Sept. 11 attack, the agency “misinterpreted safety levels and standards for asbestos” and failed to accurately detect possible health risks to the public.

In a 43-page memo, Jenkins alleges that the standards the EPA published as benchmarks for judging asbestos contamination in both dust and air were intended only to measure the presence of asbestos in building materials, according to a story in the Daily News in New York.

An EPA spokeswoman, Mary Means, rejected the charges, saying, “We have a number of scientists in the agency who looked at Catie’s approach and none of them agree with her view.”

The Daily News story by Juan Gonzalez says that in the days after Sept. 11, federal officials repeatedly referred to two “standards,” one for asbestos in dust and debris and another for asbestos fibers in the air. For dust and debris, the standard was one percent, and for air it was 70 asbestos fibers per square millimeter of a testing filter.

Jenkins reports that in the first few days after Sept. 11 “around 35 percent” of samples taken were above one percent.

Moreover, Jenkins says in her memo that the one percent figure was meant to be considered a health standard or even to be applied to measure dust. It was, she maintains, a way to gauge whether any building material such as floor tiles or pipe insulation contained asbestos and should be considered hazardous waste requiring professional abatement.

But any dust released by the breakup of such materials must be considered hazardous, Jenkins claims, because it came from asbestos-containing products in the Trade Center.

Jothu, executive director of the New York Committee for Occupational Safety and health, agrees: “She’s absolutely correct. This is not a health standard,” Shuto said. “People exposed to one percent or less can have significant adverse health impacts.”

In response, Means said, “We have never said it was a health standard. We’ve only used it as a guideline. We say clean up the dust and get rid of the dust regardless of whether it’s one percent or below one percent — it doesn’t matter.”

One person whom Jenkins has convinced is Rep. Jerrold Nadler, D-Manhattan, who said, “A lot of New Yorkers have been exposed to very bad health risks, particularly from asbestos, from now on, because EPA put out these standards as if they had anything to do with health risks.

News Briefs

Congress and White House Debate Shift in Superfund Cleanup

WASHINGTON — Senate Democrats last month accused the Bush administration of dramatically slowing the pace of toxic waste cleanups under the Superfund program, partly to help fund a three-year study of much of the associated costs.

A Senate Environment and Public Works Subcommittee, which finalized officials of the Superfund program to explain why the administration struck 25 sites from the list designated for restoration this year and why it shifted the bulk of the cost from industry to taxpayers.

“The Superfund program has made excellent progress over the years,” said Sen. Barbara Boxer (D-Calif.), chair of a Superfund oversight subcommittee. “Unfortunately, the most important parts of the program — the pace of the cleanup and the principle that the polluter must pay — are now under attack by this administration.”

The Bush administration denies that its policy change is motivated by a desire to help chemical and oil companies and other businesses responsible for much of the toxic waste. Marianne L. Horinko, Environmental Protection Agency assistant administrator for solid waste and emergency response, testified that fewer sites had been targeted for completion because the EPA is facing more challenging, costly “megacleanup” than the more routine projects of the past. (Washington Post)

Five Workers Injured in Chemical Spill

PORTSMOUTH, N.H. — Two workers were lifted by helicopter to Massachusetts General Hospital last month after a chemical explosion at Pease International Tradeport.

Three other employees were treated at Portsmouth Regional Hospital. Fire officials said the Lonaus Roligecs workers were transferring sodium bisulfite from one container to another when some of it spilled, burning two workers and releasing toxic fumes.

The chemical was over-pressurized.

The two workers suffered first- and second-degree burns, but their injuries were not considered life-threatening, said Larry Thomas, director of operations for Lonaus. (Associated Press)

Chemical Is Found in Bourne Well

BOURNE, Mass. — A well supplying this town with drinking water has been closed indefinitely after traces of a chemical used in rocket fuel and suspected of causing cancer were found in the water.

While the level of contamination is barely measurable, military officials are concerned that the chemical perchlorate has migrated from Camp Edwards to water supplies in this town at the gateway to Camp Edwards.

Perchlorate has been found throughout the camp, part of the Massachusetts Military Reservation. For decades, the base has been used for military training.

The federal Environmental Protection Agency considers perchlorate a carcinogen. The chemical can affect the thyroid gland, which can slow metabolism, growth, and development. (Boston Globe)

Fall River Case Shows Flaws in State’s Toxic Waste Cleanup Law

FALL RIVER, Mass. — In the stunning real estate market of 1998, it was all a middle-aged couple living on disability checks could afford: a vinyl-sided raised ranch close to prime lines and a four-lane highway.

Maria and Bernardo Figueredo stalked $50,000 on a down payment and turned the house into a home.

The ground beneath the house had been home to a century’s worth of industrial companies using toxic chemicals. But the contamination had been cleaned up, the Figueredos were told, and the land had been certified for housing by the city of Fall River.

More than three years later, a routine state audit revealed a plume of potentially dangerous solvents still in the ground. Driven from their home by toxic fumes, the Figueredos spent three weeks in a hotel and have hired a lawyer to sue the developers who sold them the house.

The case exposes what critics say are gaps in the state’s decade-old system for cleaning up contaminated waste sites, a system that has resulted in the redevelopment of 1,250 contaminated sites and been touted as a national model. (Boston Globe)

You may also request a paper catalogue for Occupational Health and Safety Training, Law and Public Policy—TNEC training facility and managed by the University of Massachusetts Lowell. For more information on the Quarterly, call 978.934.3257, or e-mail us at t nec@uml.edu.

TNEC Staff

Craig Stein, Ed. D, MPH

Project Director

Jean Domansky

Outreach Coordinator

Thomas Czerniak, Ph.D.

Western MassCOSH

Health Educator

Charles Leventhal, Ph.D.

ConnectiCOSH

Professor of Work Environment

Judy Martinez

Staff Assistant

Paul Morse

Training Manager

Bernard Mandel

Workers Health Educator / Staff

Richard Sienkewicz

Training Resources Coordinator

Wayne Sweeney

Training Manager

Western MassCOSH

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