

NICS to hold national conference this fall

California event to focus on protecting the public in chemical emergencies

A national conference on preparing safety officials to protect the public during hazardous materials accidents or toxic chemical releases will be held in Concord, California (near San Francisco), October 4-5, 1999.

The conference will be a follow up to the "Protecting the Public" event held in Charleston, West Virginia, in September 1995.

The conference is designed for industry representatives, emergency planners and responders, government regulators, and interested citizens.

Presentations will highlight recent research and case studies on protective actions and decision-making, particularly the use of in-place protection or "sheltering in place."

The focus on these issues will be particularly relevant as a follow up to companies' submission of risk man-

agement plans by mid-June.

A post-conference training session will be held for emergency management personnel on October 6.

Planning is now underway for the conference. If you want to be put on the mailing list for the conference

announcement, call NICS at (304) 346-6264 or send an e-mail with your name, address and Zip Code to nicsinfo@aol.com. Updates will be on NICS' internet site at: <http://members.aol.com/nicsinfo> nn

nics news

Summer 1999

Published by the National Institute for Chemical Studies

Volume 8

Baltimore groups see dialogue as key to improving emergency response

Team visits Kanawha Valley to learn from NICS, others

Improve emergency response to toxic chemical accidents by first improving dialogue among affected groups. That's the goal some environmental and citizen groups in Baltimore want to achieve.

Nine people representing those groups, emergency planners and re-

sponders, and regulators visited Charleston in late April to learn from those who have used dialogue to improve relations between the public and chemical companies.

The need for better emergency response coordination in Baltimore has been apparent since a series of chemical accidents began in late 1996,

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School near chemicals is serious about its shelter-in-place drills

Students and staff at Poca High School take shelter-in-place drills very seriously. And well they should.

Major chemical plants are just a few miles away from this Putnam County, WV, school. Barges carry plant products up and down the nearby Kanawha River. Tanker trucks run along a busy interstate. Railroad tank cars loaded with chemicals zip through the area.

The possibility of a chemical accident is not lost on the Putnam County board of education or Poca High

See School, p. 7

Sara Janey, a sophomore at Poca (WV) High School, gives classmates an impromptu talk about how to shelter in place.



Photo by Randy Snyder, Huntington Herald-Dispatch
A fire at this medical supplies storage building gave residents in Kenova and Ceredo, WV, a scare. A shelter-in-place alert was issued although responders learned later that no toxic chemicals were in the building.

Incident reveals strengths, weaknesses for W.Va. LEPC

Beth Richmond can tell you that experience — especially the unexpected kind — is a good teacher.

Richmond is director of the local emergency planning committee which serves Cabell and Wayne counties (C/WLEPC) in western West Virginia. She is also director of the Wayne County Office of Emergency Services (WCOES), which includes the 911 Call Center.

She has been the LEPC director for two years and is putting her managerial stamp on the unit. A March 17 chemical accident gave her a chance to evaluate how she's doing.

The incident

Three explosions and a fire of unknown origin erupted in mid-morning in a storage building in a west side residential area of Kenova. Black smoke and noxious fumes alarmed about 2,000 residents there and in neighboring Ceredo.

The first water firemen applied

to the wreckage ran out colored orange. As soon as they learned that powdered iodine was coloring the water, they called ChemTrec, the Chemical Transportation and Emergency Response Center, for advice on extinguishing the blaze.

ChemTrec is a national service of the Chemical Manufacturers Association to help responders at transportation accidents cope with hazardous materials. The building also contained plastic bottles and other non-hazardous chemicals.

Shelter advisory issued

The fumes prompted Richmond to issue a shelter-in-place advisory. She did so as County Emergency services director and after consulting with the fire departments. She lifted the advisory at 9 p.m., almost ten hours later. The fire re-ignited several times during the incident.

Five volunteer fire departments from West Virginia, Kentucky and Ohio responded. A hazmat team

from the nearby Marathon-Ashland refinery also assisted.

The response

The C/WLEPC's emergency response plan worked well, except for traffic diversion, Richmond said. "There was good cooperation among all the response units. The hazmat team from Marathon-Ashland was really helpful with advice on how to deal with the hazmat aspects of the incident. We didn't have any problems with communications between the units."

The weather helped, too. "We were fortunate to have a very gusty wind," Richmond said. "It carried the smoke away rather swiftly."

Traffic wasn't diverted from the area quickly enough, Richmond said. Sightseers came in to see what was going on. They drove through the iodine runoff and spread it with their tire tracks.

Schools, rail traffic affected

Fumes from the fire passed over Kenova Elementary School. Principal Ken Cathell said he kept students indoors after he smelled the

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fumes outside. Although the ventilation system was not on that day, some fumes did get into hallways, he said.

Cathell said school ended for the day as usual and that no fumes were in the outside air at the time.

"By the time we were notified to shelter in place, parents were about to start arriving, as they normally do, to pick up their children, he said. "There was no panic among parents, some of whom had heard the alert on radio or television," Cathell said.

"About that time, we called the WCOES to find out if we could let students go, and were told we could," he said. Smoke from the fire had diminished by then although re-ignition was still possible.

Cathell said the school conducts shelter-in-place drills for events such as high wind. With no obvious chemical threat nearby, there have been no drills based on a chemical emergency, he said.

On another front, the WCOES phoned managers at a large railroad marshaling yard and told them of the shelter alert. One company kept its trains in the yard during the entire shelter-in-place, Richmond said. Another company decided to continue operations but told the engineers to shut the windows.

Public concerned

The mayor's office received a flurry of calls during the fire, according to a newspaper report.

After the incident, some residents said they don't know what to do when a shelter-in-place alert is issued, Richmond said. Those who did know

what to do were confused as to why others did not heed the warning. No one complained about the length of the alert, she said.

An editorial in the Huntington *Herald-Dispatch* said residents and fire fighters deserve to know what's stored in buildings.

Since the chemicals in the building were not toxic, the owners were not required by community right-to-know laws to notify the public through the C/WLEPC, Richmond noted.



Beth Richmond is director of the Wayne County Office of Emergency Services and director of the Cabell/Wayne LEPC.

At a meeting after the incident, members of a Citizen Advisory Panel (CAP) expressed concern about parents who may want to pick up their children at school during a chemical emergency. They agreed that once a school is sealed shut, it should remain that way for the protection of all students, Richmond said.

Public education to increase

"The C/WLEPC has a public relations campaign about sheltering in place, as do fire departments, the CAP and Marathon-Ashland," Richmond said.

However, more public education about sheltering in place is needed and is high on the C/WLEPC's agenda. Information needs to go to residents,

the news media, emergency response units and especially the schools, Richmond said.

"Most residents near the fire either ignored the shelter-in-place alert, didn't know about it or didn't know what to do," Richmond said.

"Emergency Alert System messages appeared on radio and television, but, in mid-morning, a lot of people didn't have them turned on or were away from home.

"We had a few firemen there with no protective gear. They were relatively new and weren't aware of the danger until later on.

"We also had news reporters in the direct path of the smoke trying to get footage and interviews with the fire in the background. We should have had them stand further away, and we should get information to them quicker.

"Schools need to learn how to conduct a shelter-in-place for chemical emergencies, and we have to get information to them earlier in an emergency," Richmond said.

The information campaign will also focus on new warning sirens the C/WLEPC is installing in Cabell and Wayne counties.

"Had those been in place, I think people who were away from a television or radio would have known something was wrong. The new sirens will be tested weekly when they become operational," Richmond said.

One thing for certain, the event provided Richmond, the C/WLEPC, and Wayne County Office of Emergency Services with some valuable, real-life experience for managing future incidents. nn

A community has the right to know who's polluting the environment, by how much and what is being done to minimize it.

If the public interest is to be served, information about environmental problems has to be objective and complete. The fact is, it's often hard to deliver clear information to the public through the mass news media.

The difficulties of communicating risk information were apparent in a *Charleston (WV) Gazette* story about air quality in West Virginia. It appeared April 20 and was headlined: "Report: Air fails health test."

The story was based on a study the US EPA conducted using a computer model to estimate levels of toxic chemicals in the nation's air. The study was conducted as an internal exercise and was not intended as a public report on the status of air quality. However, the Environmental Defense Fund made it public.

Story misleading

The story is misleading. For example, it suggested that West Virginians face a higher-than-normal risk of getting cancer because toxic chemicals in the air greatly exceed levels Congress set in air pollution laws.

Caution: On this issue, the West

Virginia Cancer Registry "Cancer in West Virginia—Incidence and Mortality 1993-1996" says:

"Caution should always be used in attributing differences in [cancer] rates to any particular factor or set of factors. Many variables may influence rates; valid interpretation of the reasons for rate differences requires extensive research."

The story suggests that the EPA

down 98 percent and carbon tetrachloride emissions were down 99 percent from 1987 to 1997.

The story suggests that West Virginia is in pretty bad shape compared to the rest of the country.

Caution: The EPA data show that West Virginia ranks in the bottom 40 percent of states when it comes to exposure to toxic chemicals in the air. The study suggested that people in most surrounding states had a higher risk of cancer.

Both the EPA and EDF warned against using the data to draw conclusions about risk.

The EPA said: "EPA strongly cautions against

using the results of this modeling exercise alone to draw real-world conclusions about current local conditions. Providing the public with information they can use to protect the health and the environment of their communities is a guiding principle of EPA's work, but that information must be timely if it is to be valuable for characterizing current conditions."

The EDF said: "Exposure estimates using 1990 data may not accurately predict current exposure to HAPs [hazardous air pollutants]. Models using 1990 data may not predict current contributors to air pollution problems. Exposure modeling is uncertain. Uncertainties increase with focus on small geographic areas or individual sources. Health risk assessment also involves

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Health risk information poses communication challenge

Accurate, complete risk information is needed by, but difficult to deliver to, the public through the mass media

by Mark A. Scott

NICS President and CEO

study represents today's air quality.

Caution: In fact, the study is based on 1990 data, some of which were actual but most of which came from computer-generated estimates of conditions.

The story suggests that big chemical plants continue to emit massive amounts of cancer-causing chemicals, particularly butadiene, benzene and carbon tetrachloride.

Caution: The study says vehicles and smaller businesses are bigger contributors to hazardous air pollution. That fact did not appear until the end of the story on another page.

Furthermore, data used to create the latest West Virginia *Scorecard*, which is published annually by the National Institute for Chemical Studies, shows that state manufacturers' butadiene emissions were down 87 percent, benzene emissions were

Risks, cont. from p. 4

very important uncertainties.”

Do we need to be concerned about toxic air pollution? Yes.

It is important to learn all we can about actual levels of chemicals in our air and where they come from, to continue research on understanding the health effects, including the risk of cancer, from environmental exposure, and to reduce the sources of pollution that we do know about.

For the last 14 years, the National Institute for Chemical Studies has worked hard to help bring industry and communities together to address issues of risk involving the manufacture, storage, and transportation of chemicals. We've learned a lot about communicating risk during that time.

Above all, we've learned how important it is for citizens to have credible, objective, understandable information about risk in their communities. With sound information, we better understand how things really are. We also have more control over our destiny.

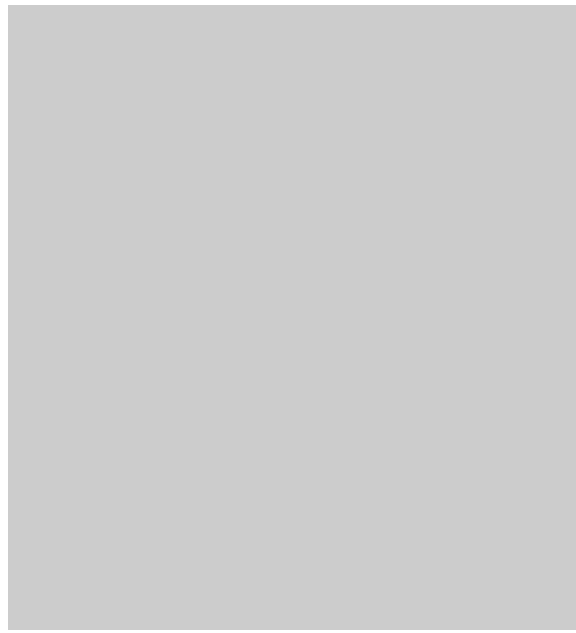
Without sound information, we feel fear and uncertainty, and may act in ways that are not best either for ourselves or for the future of our community.

The factors affecting the health and environmental quality of our communities are neither simple nor clear.

We continue to learn every day about links between pollution and health risks. We also learn about how our quality of life is affected by the choices we make and by events happening around us.

We cannot jump to conclusions about environmental health risks. We need good complete, objective information to help us make smart choices about our future and to participate effectively in decisions about our community. We deserve nothing less.

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Five community meetings, such as this one sponsored by Rhone Poulenc, Union Carbide and Lyondell Chemicals at Institute, WV, were held as part of the Kanawha Valley's RMP rollout. Left, Rhone Poulenc's Pat Hinojosa hosted visitors at one of the displays about features of plant operations. Below, plant neighbors Florence Haston (l), Arlene Manns (c) and Alberta Haston gave their views of the event to a local television station.



Kanawha Valley completes RMP rollout

Kanawha Valley chemical firms kicked off their rollout of risk management plans (RMP) on April 28.

About 150 members and guests were on hand at the regular Kanawha Putnam Emergency Planning Committee (KPEPC) meeting where the event was held.

The purpose was to give the news media and community leaders a first look at the RMPs. Each company provided literature and answered questions about their plans for preventing and responding to chemical emergencies.

Reporters and photographers from most area news media were on hand. News stories were straight

forward and appeared to cause no undue public concern.

Elizabeth Sharman, KPEPC chair, told the group that lessons learned from a 1994 voluntary worst-case disclosure exercise in Charleston were incorporated into federal rules for mandatory disclosures nationwide this year.

Visitors included a group from Baltimore who were in town to learn how dialogue has improved relations between chemical plants and the public in the last 15 years.

Rollout of RMP information to the community at large took place in a series of five neighborhood meetings after the kickoff event.

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“We came to a place that is way ahead of us in thinking through difficult problems to get ideas. We got ideas and inspiration.”

Rena Steinzor
Director, Environmental Law Clinic
University of Maryland

Baltimore, *cont. from p. 1*
said Rena Steinzor, director of the Environmental Law Clinic at the University of Maryland and counsel for the Cleanup Coalition (CC).

The CC is an umbrella organization of environmental and citizen groups concerned about emergency planning issues.

The last accident in October 1998 at the Condea Vista plant was the last straw for Steinzor.

“The fire department did a fine job of fighting the fire,” she said. “What was missing was any kind of effective interaction with the public.”

As it turned out, the chemicals weren’t toxic. But that wasn’t clear at the beginning. “This was a wake up call,” Steinzor said.

Determined to see some change, Steinzor called the EPA Region III office for advice about using dialogue to build relations between industry, planners, responders, regulators and citizens. The EPA suggested that she and her colleagues visit the Kanawha Valley and talk to people with experience in what she wanted to know. NICS hosted their visit.

The CC team heard first from the South Charleston Fire Department and emergency response officials

from Union Carbide and Clearon who related their close working relationship in emergencies.

Later that day, the group attended the Kanawha Valley’s risk management plan rollout. When that was over, they sat down for a roundtable discussion with several of the principals who were on opposite sides of the fence during years of often-bitter confrontations over community right-to-know issues. Out of the fray, the industry and citizen groups forged what they say is a good relationship today.

Pam Nixon, now the Environmental Advocate for the West Virginia Division of Environmental Protection, and Mildred Holt, a long-time community activist, told of their early efforts to initiate dialogue with chemical companies.

It was Nixon who asked the local emergency planning committee for help getting worst-case data from plants about chemicals being made and stored locally. Her request led to the plants’ voluntary disclosure of worst-case scenarios at the *Safety Street* event in 1994.

Thad Epps, retired regional public affairs manager for Union Carbide and a NICS founder, saw relations

improve between the groups. Based on his experience, he said communication evolves between groups in four stages.

“First is the Stonewalling Stage. That’s when nobody talks to anybody,” he said. Heads nodded in agreement as he spoke.

“Next is the Missionary Stage,” he continued. This is where a chemical plant, for example, will preach or dictate to outsiders in meetings. The outsiders are offended by that.

“The third stage is the Dialogue Stage,” Epps said. This is where I [the chemical plant] talk to you, but you also talk to me. And I listen.

“Fourth is the Cooperative Stage. Not only do I listen to you, but I do something about it,” Epps said.

Participants discussed the value of a third-party facilitator in getting groups together. Nixon, Holt, Epps and others agreed that NICS has played a pivotal role in that respect in the Kanawha Valley.

The visitors were pleased with their trip. It was good to see “the example of people working together cooperatively,” Steinzor said. “We also got some concrete ideas and established ongoing relationships with people we met.”

She said “We came to a place that is way ahead of us in thinking through difficult problems to get ideas. We got ideas and inspiration.

“Our next step is to work with [Baltimore Fire Department] Chief [William] Martin on the plan and to come up with some ideas on what we need to do about training of citizens,” Steinzor said.

“Our goal is to share our experience with others,” said NICS President Mark Scott. “We look forward to a good working relationship with our friends from Baltimore.”

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"The drill was well coordinated. Each person on the staff had a checklist of things to do, and students had a positive attitude about it."

Jan Taylor

NICS Vice President and Project Director

School, cont. from p. 1

Principal John T. Cunningham. Other county schools are also located near one or more chemical sources.

County schools conduct three drills a year as part of a shelter-in-place plan. Area chemical plants and the Kanawha Putnam Emergency Planning Committee (KPEPC) help the school board implement the plan.

One form of help is feedback from drill monitors. The KPEPC assembled a team 13 of volunteer monitors from chemical companies, fire departments, emergency services units, the KPEPC and NICS for a

drill in March. Monitors attend only one of the three annual drills.

Their report went to Jack Welton, county assistant superintendent of schools. "We improve our plan based a lot on what we learn from each drill," Welton said. He passes the recommendations along to school principals.

The drills have led to several improvements at Poca High School, Cunningham said. "Instead of taping around doors to reduce the amount of outside air that gets in, we'll tape plastic sheets over the entire door," he said. "It's faster and makes a better seal."

He also ordered that circuit breakers be marked with red labels so they can be located quickly to shut off the ventilation system. The pager for getting alerts from the 911 center failed and is to be replaced.

The monitors' report for the March drill reminded schools to air out the buildings after a shelter event has ended. The report also recommended that supply kits for sheltering be checked regularly to be sure items haven't been taken for other purposes.

Poca High has had to shelter a few times, Cunningham said, although the school has never been totally sealed. "We shelter for events other than chemical emergencies, such as bad weather," he said. "We could also shelter if there's somebody walking around the hallway carrying a weapon.

"You learn something new each time," Cunningham said. During a shelter-in-place caused by a chemi-

cal plant leak a couple of years ago, parents who heard the alert on radio or television came to the school to pick up their children.

"At the next principals' meeting, we agreed we couldn't have parents coming to doors that have been sealed in an actual emergency and demanding to pick up their children. Breaking the seal would put the entire school at risk," Cunningham said.

"We now put signs on the doors saying the building is sealed and that entering is prohibited until further notice," he said. "That applies to actual shelter events and drills as well.

"Nobody will get in," the principal said. "Parents may get mad at me, but we have over 500 students to protect, and we have to do what's best for everyone."

Parents are advised of the schools' sheltering policies in publications such as the student handbook which is handed out at the beginning of each year. Parents are asked to sign the book, indicating they have read it and understand it, Cunningham said. The next edition will probably have more details about sheltering policies, he said.

The March drill went well according to all accounts. "There was a very professional attitude," said NICS Vice President Dr. Jan Taylor. "The drill was well coordinated. Each person on the staff had a checklist of things to do, and students had a positive attitude about it."

For information about Putnam County Schools' shelter-in-place program, call (304) 586-0500, fax: (304) 586-0553 or e-mail sentell@access.mountain.net. Send mail to 9 Courthouse Dr., Winfield, WV, 25213. On the Web: <http://www.citynet.net/putnam/>. nn



nics news

Summer 1999

Published by the
National Institute for
Chemical Studies

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NICS Board welcomes new members

Three new members have joined the NICS board of directors.

They are: **David J. Bauer**, president of Airgas-Mountain States; **Betsy Ennis Dulin**, associate dean and associate professor of environmental engineering in Marshall University's Graduate School of Information Technology and Engineering, and **Steve Martin**, president of the West Virginia Safety Council.

In ten years with the company, Bauer has helped Airgas increase sales from \$4 million to \$1.2 billion. In three years as president, he has acquired five companies and

expanded operations into nine new locations.

Dulin is active in various law and environmental activities. She is a registered professional engineer in West Virginia and a member of state bars in West Virginia and Ohio. She holds a J.D. degree, *summa cum laude*, from Washington and Lee University, an M.S. degree in environmental engineering from Virginia Polytechnic Institute and State University, and a B.S. degree in civil engineering, *summa cum laude*, from West Virginia Institute of Technology.

Martin has worked in the safety

field for 16 years. He is president and board member of the West Virginia Safety Council. He is also a member of the Workmen's Compensation Loss and Control Board.

He is employed at Rhone Poulenc Ag Co., Institute (WV) plant, and is a member of the International Association of Machinists and Aerospace Workers, Local 656.

"NICS is very fortunate to have such talented people on its board," said Michael A. Albert, chairman. Their broad experience will be valuable in guiding the organization in the next few years." nn



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