



Our Neighborhoods

Citizens, government and industry working to effectively promote public understanding and involvement in chemical risk management

Preventing Pollution In Your Community

Line striping paint. Not something you might consider hazardous, but this solvent-based compound found on our nation's highways and parking lots often contains toxic contaminants such as volatile organic compounds and lead. So, when the City of Cincinnati switched to an environmentally friendly, water-based line striping paint in the mid-1990s, it reduced lead pollution by 33,000 pounds a year, decreased volatile organic air pollutants by 36,000 pounds a year, avoided the disposal of leftover paint as hazardous waste and reduced exposures for City employees.

Although the new paint required new equipment and retraining of City employees, it is applied and cleaned up easier than the old paint and has lasted longer on the pavement. And best of all, the switch has saved the City money.



What is Pollution Prevention?

Pollution prevention (P2) is defined as the prevention of pollution through source reduction, recycling or waste treatment. For purists though, pollution prevention is only source reduction, or the prevention of pollution before it is created. Recycling and waste treatment deal with pollution after the fact, but are still more desirable than disposal or release to the environment. Examples of source reduction include switching to an environmentally friendly product (like the

City of Cincinnati) or changing an industrial process to eliminate a certain chemical. Examples of recycling include recovering and reusing a solvent used to clean paint lines at an auto manufacturing plant or burning waste fuel to generate steam or heat. Examples of waste treatment include incineration of air pollutants before their release to the air or neutralization of acids and bases in wastewater. See sidebar on page 2 for examples of P2 from local companies.

P2 Not Required But Great Idea

The U.S. annually generates millions of tons of pollution — released to the air, water and land — and spends tens of billions of dollars a year trying to control it. As a result, Congress passed the federal Pollution Prevention Act (PPA) in 1990, making pollution prevention and waste minimization a national priority. The Act, however, does not require or enforce the prevention of pollution by industries, governments or other entities. It only encourages pollution prevention as a means of reducing hazardous or toxic chemical releases and waste generation. It also promotes P2 through several secondary benefits, such as:

- Financial savings
- Improved regulatory compliance and efficiency
- Reduced liability
- Improved relationships with the public and the media.

Ohio Prevention First Program

Since P2 is voluntary, the U.S. Environmental Protection Agency, most state environmental agencies and many local governments have initiated voluntary pollution reduction programs for industry, government, schools and community groups. More than 166 Ohio facilities participate in the Ohio Environmental Protection Agency's

(Ohio EPA) Ohio Prevention First program, which has a goal of reducing pollution in Ohio by 50 percent by the end of this year. (Note: The results won't be available until 2002 because data collection and processing is two years behind.)



Since the program started in 1994, participating facilities have reduced hazardous waste by 48,895 tons, solid waste by 1.7 million tons and toxic chemical releases by 93,000 tons. More than \$181 million in costs savings also have been realized since that time.

Participants are encouraged to pledge pollution reduction goals and provide indepth details of P2 efforts at their companies. The following Alliance for Chemical Safety industry members participate in this program:

- Bayer Corporation in Addyston
- Cincinnati Specialties in St. Bernard
- DuPont in North Bend
- GRACE Davison in Bond Hill
- Cognis Corp. in Winton Hills/Place
- Rohm and Haas in Reading
- Procter and Gamble in St. Bernard

Governor's Award Winners

In addition to Ohio Prevention First, the Ohio EPA has sponsored the

(Continued on Page 2)

Local Companies Making P2 Progress

Around the Greater Cincinnati area, many facilities, organizations, governments and universities are implementing pollution prevention (P2) to help the environment and save money. Here are some examples of P2 projects being conducted by Alliance members:



- Bayer Corporation, a manufacturer of plastic pellets and liquid resins in Addyston, has reformulated more than 150 color products to eliminate cadmium and mercury pigments. The company also has reduced waste resins by 97% since 1996 through improved maintenance on gaskets.
- Cincinnati Specialties, a specialty chemicals manufacturer in St. Bernard, has eliminated the use of three toxic chemicals: trichlorobenzene, methylene chloride and toluene. The facility also recycles large quantities of waste ammonia and methanol.
- Cognis Corp., a specialty chemicals manufacturer in Winton Hills/Place, reduced air emissions of methanol by tens of thousands of pounds by installing a new scrubber. The methanol is recovered for reuse by the plant.
- General Mills, a cereal products producer in Sharonville, sends most of their waste cereal to farmers for animal feed.
- Metropolitan Sewer District (MSD) of Greater Cincinnati eliminated the use of chlorine at its Muddy Creek Treatment Plant by switching to an ultraviolet disinfection process.
- Pilot Chemical in Lockland, a manufacturer of industrial detergents, installed a new unloading system for sulfur trioxide to prevent air releases to the environment.
- Royster-Clark Nitrogen, a North Bend manufacturer of agricultural chemicals, spent \$100,000 on a project to reduce nitrogen oxide emissions by 50% during hot weather.
- RUETGERS Organics Corp. of Crosby Township produces chemicals for use in soaps and detergents. Between 1995 and 1999, the facility annually cut 1.3 million pounds of hazardous waste by improving recovery methods and fine tuning operations.
- Shepherd Chemical, a producer of metal-based specialty chemicals, invested in a major project to remove sodium nitrate from wastewater discharged to MSD. The sodium nitrate recovered is converted to a saleable form for other industries.
- Steelcraft, a Blue Ash manufacturer of steel doors and frames, recently eliminated a chromium rinse bath used to coat the steel for improved paint adhesion and corrosion resistance.

Preventing Pollution (continued from page 1)...

Governor's Awards for Outstanding Achievement in Pollution Prevention since 1986. The City of Cincinnati's Office of Environmental Management won an award in 1996 for the line striping paint project and other P2 activities. Greater Cincinnati's Regional Ozone Coalition was recognized in 1999 for its vehicle gas cap replacement program, which tested and replaced 23,000 leaky gas caps to improve local air quality.

Local Organizations Push P2

Locally, a number of organizations offer P2 assistance to companies and the government.

The City of Cincinnati's Office of Environmental Management provides P2 education and assistance. The Office is currently pursuing an initiative to encourage City departments to buy environmentally preferable products.

"We try to help by providing case studies of companies that have been able to reduce pollution and save money by doing so," said J. Bruce Suits, the Office's P2 manager.

The Institute of Advanced Manufacturing Sciences (IAMS), a not-for-profit, resource center, provides P2 training, P2 assessments to determine where pollution can be prevented and recommends management or equipment changes to reduce waste at the source. Low cost P2 assessments are sometimes available to IAMS clients due to state and federal grant funding.

"We try to reduce waste at the source, not the end of the pipe," said Mary Beth Holley, the center's P2 contact. "Our driving force is making companies more competitive by saving money through P2."

Ohio Citizen Action, a local environmental group, pushes for P2 by targeting local companies located near residential neighborhoods.

"We encourage P2, but real P2 as opposed to just pollution controls (i.e., scrubbers)," said Rachael Belz, the group's director. "We work with local companies within their limits. We may look to other companies for P2 ideas, but we understand that each company's processes are very specific."

For More Information About P2...

Cincinnati's Office of Environmental Management: (513) 352-4682

Institute of Advanced Manufacturing Sciences: (513) 948-2000

Kentucky Pollution Prevention Center: (502) 852-0965

Ohio Citizen Action: (513) 221-2100

Ohio EPA, Office of Pollution Prevention: (614) 644-3469

Ohio EPA's P2 website: www.epa.state.oh.us/opp

U.S. EPA's P2 website: www.epa.gov/opptintr/p2home

National Pollution Prevention Roundtable website: www.p2.org

New Chemical Emergency Alert System In The Works For Hamilton County

About 60,000 potentially dangerous commercial chemical incidents were reported across the nation between 1987 and 1997, according to the most recent data available from the Chemical Safety & Hazardous Investigation Board. Dr. Paul Hill, chairman and CEO of the board, stated that "in 1996, chemical incidents claimed the lives of the equivalent of two fully loaded 737 passenger jets (256 people)."

Locally, the Greater Cincinnati metropolitan area experiences about 100 chemical incidents a year. In the last 10 years, three people have died, two during a plant explosion in Evanston in 1990 and one during a propane gas explosion in Batavia in 1998.

Most chemical accidents are minor and don't even make the evening news. Others — more rarely — require facility employees or local residents surrounding a plant to shelter in place inside their homes until the danger has passed. And most rare of all, employees and neighbors are instructed to evacuate the area.

Current System Uses Sirens

To date, Hamilton County has utilized traditional warning methods such as outdoor sirens (AKA civil defense), door to door notification, public address system announcements and the Emergency Alert System on TV and radio to alert the public to potential dangers associated with a chemical release.

The most common warning method is the outdoor warning siren. Once sounded, citizens are supposed to tune in to local TV or radio for information and instructions. Over the last several years, concerns have arisen about the sirens, which are difficult to hear indoors and are more commonly associated with bad weather. During past chemical incidents, citizens have left the safety of their homes to investigate weather conditions, the worst thing you can do during an airborne chemical release.

As a result, the Alliance for Chemical Safety, the Hamilton County Emergency Management Agency (EMA)

and other local emergency response and planning agencies are taking steps to implement a new alert system that will move public notification and protection to a higher level.

New System Uses NOAA Weather Radios

The proposed program ties the usage of weather radios to the present emergency alert system. In the event of a chemical release, the outdoor warning sirens will sound in conjunction with an area notification via weather radio. The



weather radio will then broadcast information about the release or request that citizens tune in to local TV or radio for information on actions to be taken, such as shelter in place, evacuation, etc.

According to Mr. Charles Perry, chairman of the Alliance's Emergency Response Committee, the protocols for the weather radio have been developed for and approved by the Hamilton County Fire Chiefs Association. Mr. Perry is still working on protocols with the Hamilton County Communications Center, which dispatches all area emergency response personnel, and the Hamilton County EMA, which is responsible for ensuring that the weather radio system is integrated into existing emergency warning and public information systems. Mr. Perry, who is also the unit director for the Greater Cincinnati Hazardous Materials Unit, said all protocols must undergo final approval by the Hamilton County EMA, Ohio EMA and the National Oceanic and Atmospheric Administration (NOAA) which broadcasts over the weather radios.

Once approval is granted, Hamilton County will serve as a pilot site for the new weather radio alert system for one year. If the project is successful, Ohio EMA may implement it state-wide.



Company Contacts

Bayer Corporation
Duane Day, (513) 467-2217

Cincinnati Specialties
Jim McKenna, (513) 482-7350

Cincinnati Water Works
Bill Phelps, (513) 591-7971

Cinergy
Steve Brash, (513) 721-5400

Cognis Corp. (formerly Henkel)
Mike Groh, (513) 482-2425

DuPont Specialty Chemicals
John Ferguson, (513) 941-4121, x12

Fierro Technologies, Inc.
Ed Jackson, (513) 563-0786, x105

General Mills
Michele Smith, (513) 612-5518

GRACE Davison
John Terbot, (513) 482-5717

Hillshire Farm & Kahn's
Jared Henthorn, (513) 853-1353

Interplastic Corporation
Mike Flannery, (859) 292-7462

Metropolitan Sewer District
Ann Newsom, (513) 557-7110

Pilot Chemical
Tom Melhorn, (513) 733-4880, x30 (Cinti)
Dennis Callison, (513) 424-9700, x224
(Middletown)

P&G's Ivorydale site
Brian Bachman, (513) 627-4346

Queen City Terminals
Gary Sampson, (513) 871-9018

Rohm and Haas
(formerly Morton Int'l)
Robin Cole, (513) 733-2132

Royster-Clark Nitrogen
Bill Chokran, (513) 941-4100, x14

RUETGERS Organics Corporation
Frank Canepa, (513) 738-1255, x118

Shepherd Chemical
Bayard Pelsor, (513) 731-1110

Steelcraft
Leon VanDerzee, (513) 745-6428

Please call these Alliance industry contacts if you have questions about chemicals in your neighborhood.

Local Industries Look to Community for Advice

Over the past year, Alliance facilities have continued to talk to their neighbors about environmental and operational issues. Seven facilities currently sponsor or participate in community-facility dialogues, including three newly established relationships. These are:

- The Paddy's Run Community Advisory Panel (CAP) — a combined CAP for RUETGERS Organics Corporation and PCS Purified Phosphates of Crosby Township — held their first meeting in January of this year. The membership is currently made up of two employees each from

RUETGERS and PCS and eight community representatives. The CAP meets monthly. Current topics include remedial actions occurring at both facilities, transportation issues and how to improve communication between the facilities and the community.

- Rohm and Haas (formerly Morton International) in Reading is working with the Reading Fire Department to revive a CAER (Community Awareness and Emergency Response) group. The organization will serve the communities of Reading, Lockland and Wyoming and address concerns about Rohm and Haas and

other Reading companies. Startup is expected by the end of the year.

- Cincinnati Specialties, which previously participated in the Three Hills CAP, began its own CAP in November 1999. The group meets monthly and is comprised of citizens from St. Bernard, Elmwood Place, Bond Hill, Paddock Hills and North Avondale. The group has tackled topics such as odors, toxic releases and risk management planning. The Three Hills CAP, whose sole purpose was to discuss risk management issues, disbanded in summer 1999. It was comprised of five local companies.

New Website, New Meeting Location...

If you want to learn more about the Alliance for Chemical Safety, attend our monthly meetings, visit us online at www.acs-online.org or call us at (513) 612-3074.

The Alliance recently changed its monthly meeting location from the St. Bernard City Hall to the Avon Woods Nature Center (Preserve), 4235 Paddock Road. The center is located off the Norwood Lateral (Rte. 562) and is part of the Avon Fields Golf Course. In exchange for using the facility and in an effort to expand our community

involvement, the Alliance participated in a cleanup of the nature center grounds.

The Alliance's new website was designed by recent Seton High School graduates Lirie VanShaik and Elizabeth Otten. Check it out for a list of members and member profiles, past newsletters and a calendar of events.



If you are interested in chemical safety in your neighborhood, please consider joining the Alliance. We welcome all new community members!

Our Neighborhoods

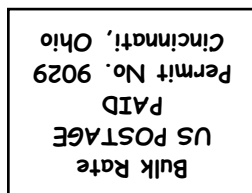
This newsletter is a publication of the Alliance for Chemical Safety, a Greater Cincinnati non-profit organization dedicated to promoting public understanding and involvement in chemical risk management. The Alliance holds monthly meetings from 3-4:30 p.m. the third Wednesday of each month at the Avon Woods Nature Center, 4235 Paddock Road. Please call (513) 612-3074 or visit our website at www.acs-online.org if you would like more information.



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Our mission is to effectively promote public understanding and involvement in chemical risk management.

Read me for neighborhood news on chemical safety!



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