New Name for Second Decade of Service

The Hazardous Waste Research and Information Center will begin its second decade of service to the industries of Illinois as the Waste Management and Research Center (WMRC). This name change reflects the Center’s expanding role in helping companies wherever they are in the waste management hierarchy—from pollution prevention, to recycling, to treatment, remediation and disposal. Our emphasis remains on reducing waste at the source through pollution prevention, responsibly managing those wastes that cannot be eliminated, and increasing the efficiency and competitiveness of Illinois business.

WMRC, a non-regulatory division in the Department of Natural Resources, takes a multi-media approach to Illinois’ waste problems. Our goal is to preserve our natural resources by working with others to efficiently use raw materials, better manage solid and hazardous waste, and minimize toxic releases to our air and water. To accomplish this goal, WMRC undertakes information collection and distribution, technical assistance, and research.

Research on the nature and extent of the state’s waste problems, on environmental transport and fate, and on strategies and technologies to reduce and better manage waste are central to WMRC’s efforts. Our full-service analytical support capabilities and clean technology laboratories complement both our research and technical assistance efforts, enabling the Center to provide our clients with information they need to make informed pollution prevention and waste management decisions.

Please contact us with any questions about the services we provide or if you wish additional information or assistance. We look forward to working with you.

Pollution Prevention Efforts Recognized

Gov. Jim Edgar commended 23 businesses and community organizations for their achievements in reducing hazardous waste and toxic air emissions at the 10th annual Governor’s Pollution Prevention Awards held September 10 in Springfield.

“To put it simply, pollution prevention is good business,” the Governor said. “These organizations stand out as leaders in their fields because of their ongoing commitment to the environment, their employees and their communities. Many have sustained pollution prevention programs over a period of several years while continually finding new ways to reduce waste.”

Department of Natural Resources Director, Brent Manning, and WMRC Director, David Thomas, also participated in the award ceremony.

The 23 organizations reported a combined yearly savings of more than $1.1 million from reduced disposal costs and lower raw material costs last year. Their efforts prevented 1,833 tons of hazardous, toxic, and solid waste from entering the environment last year.

Award applicants were judged in a statewide competition that evaluated innovative pollution prevention strategies and use of alternative technologies to reduce the volume and toxicity of waste. Judging criteria included technological innovation, environmental significance, economic benefits and a long-term commitment to pollution prevention.

Gov. Jim Edgar and DNR Director Brent Manning present a Certificate of Recognition to 3rd graders from Raymond Marquith Elementary School in East Galesburg.

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10th Annual Governor's Pollution Prevention Awards

Award Winners
Chrysler Corporation, Belvidere Assembly Plant
Ethyl Petroleum Additives, Inc.
General Electric Company, Cicero Plant
Harris Corporation, Broadcast Division
Hevi-Duty Electric
Madison County Transit District
Navistar International Transportation Company
Northwestern University Recycling Program

Certificate Winners
Central Illinois Light Company
Commonwealth Edison Company
DuPage County Solid Waste Education Center
Honeywell's MICRO SWITCH Division
Raymond Marquith Elementary School
St. Clair County Health Department
State Farm Insurance, Illinois Regional Office
Streator Township High School
Tenneco Packaging, Specialty Products

Continuous Improvement Award Winners
Abbot Laboratories
Baxter Healthcare, Inc., Drug Delivery Plant
Case Corporation, East Moline Plant
Chemical Industry Council of Illinois
Chrysler Corporation, Belvidere Assembly Plant
Ethyl Petroleum Additives, Inc.
Harris Corporation, Broadcast Division
Hevi-Duty Electric
Highland Supply Corporation
Motorola, Inc. IL02 Facility
Navistar International Transportation Corporation

Tis the Season:
Proposals for Research Funding Due November 1

The WMRC is soliciting proposals for research projects addressing the following two topics:

- **Metals in the Environment**: including environmental fate and transport; successful remediation efforts; innovative remediation efforts such as natural attenuation, augmented bioremediation, and constructed wetlands; health risks to humans living on or near contaminated sites; and risks to humans and animals using these sites; and

- **Pollution Prevention in Illinois Industries**: with a particular emphasis on innovative management methods for highly corrosive streams (e.g. pickling baths) generated in industries such as metal fabricators, equipment manufacturers, primary and secondary metals producers and printed circuit board manufacturers; and management of lubricants and coolants, including source reduction and effective recovery/recycle practices.

WMRC has approximately $150,000 available in fiscal year 1997 (July 1, 1996 through June 30, 1997) to begin funding new projects. Project terms are typically two years with average funding for each year between $40,000 and $60,000. Proposals received in response to this solicitation will be reviewed by WMRC staff and external peer reviewers. Anticipated starting dates for new projects are no sooner than January 1, 1997.

Proposals will be due to WMRC's Research Program by the close of business November 1, 1996. More detailed requests for proposals (RFPs) for each of the two solicited topic areas and proposal submission guidelines are available by faxing your request to 217/333-8944. Indicate your topic preference, metals or P2, and provide your name, address, fax, and phone numbers. Additional information may also be obtained by contacting WMRC's research program staff at 217/333-8940.

Exchange P2 Expertise via E-mail

USEPA's Office of Pollution Prevention and Toxics in Washington, DC, sponsors an e-mail listserver managed by WMRC. P2Tech is a listserver dedicated to the free discussion of technical strategies for implementing pollution prevention. Subscribers post questions or responses to questions to <p2tech@great-lakes.net> using any e-mail software. The questions or responses are then automatically distributed to all subscribers via e-mail.

Currently P2Tech has about 375 subscribers from 11 countries. Over the last six months, discussion topics have included P2 material for college courses, reduction of pickling plant effluents, EPA Greenstar programs, dry cleaning with carbon dioxide, and many other subjects.

Subscription requests or questions should be e-mailed to <listman@sun2.hazard.uiuc.edu>. Daily traffic on P2Tech averages 5 to 15 messages. Past P2Tech discussions can be searched on-line. The archives are located on the Internet at <http://www.great-lakes.net:2200/1s/glina/majordomo/p2tech>.

Other pollution prevention listservers available include NPPR and P2Trainer, dedicated to regulatory discussions and P2 education, respectively. For professionals specifically interested in printing industry related questions, PrintTech and PrintReg are also available. For more information, please e-mail <listman@sun2.hazard.uiuc.edu>, or call Lisa Morrison at 217/244-8989.
When Paul Zoubeck, Environmental Health and Safety Manager for Penray Companies, Inc., walked his shop floor, he saw money being disposed of as hazardous waste. Money, that is, in the form of reclaimable raw materials.

Penray blends, fills, and packages aerosol products for the automotive aftermarket. Mr. Zoubeck initially contacted WMRC through the US EPA Pollution Prevention Incentive for States project. WMRC engineers were invited to tour the Penray facility to scout out pollution prevention opportunities for the company's two hazardous waste streams.

One waste stream, a solvent waste resulting from line flushing and tank cleaning, is recycled off-site and reused in Penray's blending process. The other waste stream, off-spec aerosol cans containing toluene, solvent, surfactants, and compressed gas is collected in 55-gallon drums and manifested as "compressed gas" hazardous waste. Penray generated over 240 drums of this hazardous waste annually and was disposing of it through off-site thermal destruction.

In February 1995, WMRC received a request from Penray for advice pertaining to installation of an aerosol recovery system. This system removes propellants from off-spec aerosol cans. The propellant moves through the system's carbon filter which collects the volatile organic compounds (VOCs) in a 55-gallon drum. The remaining liquids (raw materials) are safely collected in another drum for reuse. The resultant empty cans are considered empty by RCRA standards and are disposed as solid waste. The raw material collected is kept segregated and reused in Penray's blending process. The collected VOCs are manifested as hazardous waste.

A recovery system that met Penray's safety standards was located and ordered. WMRC worked with Mr. Zoubeck to determine the regulatory and permitting implications of the project. The required permits from the Illinois Environmental Protection Agency (IEPA) were completed and submitted. In August 1995, the new system became operational.

This technology has reduced the targeted hazardous waste stream by 85 percent and has eliminated 204 55-gallon drums of hazardous waste that would have entered the environment. Project costs included the cost of the system, replacement carbon filter cartridges, waste segregation containers, and installation labor.

Penray's waste disposal savings in the first three-quarters of the project have exceeded $39,000 and projections indicate savings of over $61,000 annually. Pay-back for the project was immediate. Because of the success of this project, the company plans to implement pollution prevention projects in other departments. For example, Quality Control hopes to dispose of retained quality assurance samples, while Shipping/Receiving will look for a better method to handle off-spec or damaged products returned by customers.

Databases Provide Wide Variety of P2 Information

Are you looking for vendors of pollution prevention equipment? Need a reference on a particular pollution prevention technique or technology? Is Internet access at your fingertips? Then you are in luck and can search two databases maintained by WMRC that may meet your information needs.

The VendInfo database contains over 1400 vendors and service providers from the US and Canada who manufacture equipment that can be used for pollution prevention. The database can be searched by process (e.g., cleaning or metal finishing) or by equipment type (e.g., acid recovery equipment or air filters). Records for each vendor include company name, address, phone number, type of equipment, and applicable industrial processes.

TechInfo is a bibliographic database that lists over 14,000 pollution prevention references. The database compiles materials from the libraries and clearinghouses of NEWMOA states, WRRC in North Carolina, and the entire Great Lakes region to provide one comprehensive, easy-to-access source of pollution prevention literature. It is searchable by subject, title or author. Each record provides a citation including a brief abstract and the location holding the work.

Both databases were initially developed by David Liebl at the Solid and Hazardous Waste Education Center in Madison, Wisc. WMRC took over their continued development and maintenance functions as part of the Center's commitment to the Great Lakes Regional Pollution Prevention Clearinghouse. VendInfo will be further developed through anticipated funding from the US EPA Office of Research and Development and the Dept. of Energy. TechInfo is supported by funding from US EPA Region V.

Internet Addresses:
VendInfo
http://es.inel.gov/cgi-bin/vendinfo.pl
TechInfo
http://es.inel.gov/cgi-bin/techinfo.pl
WMRC Hosts Technology Fair

WMRC hosted a Technology Fair in conjunction with the Illinois Environmental Protection Agency’s 7th Annual Pollution Prevention (P2) Conference on October 7. The Technology Fair was held in a large tent located in the parking lot of the Radisson Hotel Lisle-Naperville. Twelve industrial vendors participated in the event, demonstrating pollution prevention technologies in action. Four vendors made up a makeshift industrial production line that cleaned parts using an aqueous cleaning system, recycled the aqueous cleaner using membrane filtration, painted the parts using powder coating technology, and cured the parts with an infrared oven. The parts, golf divot replacement tools, were given to attendees as souvenirs.

Other displays included electro-coagulation separation technology, electro-phoretic surface coating, membrane filtration, and ultraviolet/electron beam curing. This year’s cosponsor, Commonwealth Edison, also provided a wealth of technological information for attendees.

The Technology Fair was well attended for a blustery, rainy Chicago day. Participants of the conference and other invited guests visited with vendors, spoke with WMRC engineers and scientists, and came away with new ideas and ways to reduce or eliminate waste.

Next year’s fair is tentatively schedule to be held at ComEd’s Technology Center. For further information contact Ken Barnes at WMRC at 217-244-9940.

Calendar

November 1 Proposals for WMRC research funding due

Illinois WMRC Update is a quarterly publication of the Waste Management and Research Center, a division of the Illinois Department of Natural Resources. Single copies are free. To subscribe or order copies, call 217/333-8940. ISSN# 1058-4439