



# LINK

**The Newsletter of the Great Lakes Regional  
Pollution Prevention Roundtable (GLRPPR)**



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## **A NOTE FROM THE EXECUTIVE DIRECTOR**

*by Bob Iverson*

It's a new day for us with a different name, different leadership, and a renewed commitment to our values.

The Waste Management & Research Center is now known as the Illinois Sustainable Technology Center (ISTC). The new name better represents the goals and direction of the organization.

The name change is part of even larger changes at ISTC. The Center is now part of the University of Illinois. It joined the other scientific surveys (Illinois State Water Survey, Illinois State Geological Survey, and Illinois Natural History Survey) in moving out of the Illinois Department of Natural Resources. The four organizations are now part of the Institute of Natural Resources Sustainability at the University of Illinois.

“We are excited about the move to the University of Illinois,” said ISTC Acting Director Gary Miller. “The research, knowledge, and educational goals of the scientific surveys will be greatly enhanced by the strong research and academic excellence of the University of Illinois.”

The ISTC staff remains committed to providing real world solutions to real world problems—solutions that bridge the gap between the natural resources and the human ones. Sustainability examines how to make human economic systems last longer and have less impact on ecological systems, and particularly relates to concern over major global problems such as climate change. By putting “Sustainable Technology” in our name, ISTC is showing its commitment to providing the ideas and systems to reduce environmental impacts and enhance the bottom line.

ISTC will continue to offer direct technical assistance from specialists, energy and pollution prevention assessments, a sophisticated analytical laboratory, research funding to explore a wide range of environmental issues, and information on environmental and pollution prevention issues. In addition, ISTC will continue to serve as the coordinating agency for regional and national programs including the Great Lakes Regional Pollution Prevention Roundtable and the Printers’ National Environmental Assistance Center.

Becoming part of the University of Illinois and changing our name will require ISTC to make a variety of changes to our Web site, letterhead, forms, e-mail address, etc. Please bear with us in the coming weeks and months as we make these needed adjustments. ISTC will continue to maintain office on the University of Illinois campus in Urbana-Champaign, and in OakBrook, Peoria, and Brighton.

## **IN THIS ISSUE**

A Note From the Exeuctive Director	1
Script for Troubled Waters	2
Green Procurement Exhibit & Conf	2
Tox-Minus Update	3
8 Companies Host MnTAP Interns	3
MnTAP Intern Addresses Raw Material Waste	4
Pharmaceutical Waste Reduced Thru Grant Work	4
IN Partners for P2 to Host Conf	5
Clean Diesel Grants & Loans	6
Biofuels & Sustainability Conf	6

## A PRESCRIPTION FOR TROUBLED WATERS: IMPROPER DISPOSAL OF UNWANTED MEDICINES

If you are subject to Ohio's environmental regulations, doing business with Ohio EPA is a fact of life. With the introduction of Ohio EPA's eBusiness Center, your life may just get a little easier. The eBusiness Center is designed to provide an easy-to-use, reliable and secure one-stop shop for Ohio EPA services.

Through the eBusiness Center, regulated facilities and consultants can complete reports and permit applications electronically. In the future, you will even be able to pay fees online.

To ensure a smooth transition to electronic filing for customers, Ohio EPA has been rolling out different applications in the eBusiness Center on a staggered schedule.

### Coming Soon...Fall 2008 Edition

The LINK fall 2008 article solicitation will be sent to GLRPPR members via e-mail on or about September 2; articles will be due September 30. Send article ideas or questions to Wayne Duke at [wduke@wmrc.illinois.edu](mailto:wduke@wmrc.illinois.edu).

In 2007, the Division of Surface Water (DSW) integrated their e-DMR (Electronic Discharge Monitoring Report) application into the eBusiness Center, which will completely replace the SWIMs reporting system. Users can now file monthly NPDES discharge monitoring reports through the more user-friendly, Web-based e-DMR system.

The Division of Air Pollution Control (DAPC) will also make electronic permit filing available through the eBusiness Center (both for minor sources and Title V facilities) at the end of June 2008.

Other divisions planning to integrate their business services into the eBusiness Center include the Division of Drinking and Ground Waters; the Division of Solid and Infectious Waste Management; and the Division of Hazardous Waste Management.

Because services will come online at different times, Ohio EPA is working hard to ensure that users receive information and resources to help them ensure a smooth transition into electronic reporting and transactions. Some helpful eBusiness Center resources currently available to you include:

- eBusiness Center Ohio EPA's Business Portal (fact sheet): [www.epa.state.oh.us/eBusinessCenter/factsheet.pdf](http://www.epa.state.oh.us/eBusinessCenter/factsheet.pdf)
- DSW Electronic Discharge Monitoring Report Submission System (e-DMR's) Web site: [www.epa.state.oh.us/dsw/swims/eDMR/eDMR.html](http://www.epa.state.oh.us/dsw/swims/eDMR/eDMR.html)
- DAPC Air Services Web site: [www.epa.state.oh.us/dapc/airservices/](http://www.epa.state.oh.us/dapc/airservices/)

[back to top](#)

## GREEN PROCUREMENT EXHIBITION & CONFERENCE

U.S. EPA Region 5 had an exhibition booth at the first Green Procurement Exhibition <http://www.thegreenexposition.com/> held at Navy Pier in Chicago on June 4-5, 2008. The booth had materials on EnergyStar, WaterSense, Design for Environment Formulator Program, Buy Recycled, Electronic Product Environmental Assessment Tool (EPEAT), and resources for recycling electronics. There were over 600 attendees, 68 exhibitors, and 24 education sessions. A number of GLRPPR partners made presentations including the Delta Institute, MPCA, MDEQ, and IEPA. Information from the sessions is available at <http://www.thegreenexposition.com/handouts.html>.

[back to top](#)

## Tox-Minus Update

The 55 facilities that volunteered to participate in Ohio EPA's Tox-Minus initiative include some of Ohio's largest manufacturers and a broad range of industries, including auto manufacturers, steel plants, and utilities. The Tox-Minus program has focused on 100 of the top toxic chemical reporters based on 2005 Toxic Release Inventory (TRI) data, but is open to any company that wants to participate. In March 2008, participating companies submitted their voluntary reduction goals. Here are some highlights:

- A manufacturing plant intends to reduce chemical releases by 25 percent by 2011.
- A company proposes a 90 percent reduction in TRI reported emissions by 2013.
- A chemical manufacturer aims to reduce TRI listed chemical carbonyl sulfide emissions by five percent below 2007 TRI reports by 2012.
- A company aims to reduce overall TRI numbers by 10 percent, while reducing the amount of sulfur dioxide emissions from two coal-fired boilers by 58 percent.
- A corporation will reduce zinc/nickel plating residue emissions and paint waste by five percent.

Reducing Ohio's TRI emissions will result in a cleaner environment and help Ohio attract businesses and workers who value clean land, air and water.

The Office of Compliance Assistance and Pollution Prevention (OCAPP), a nonregulatory office within Ohio EPA, oversees the program and is available to assist companies in identifying pollution prevention and reduction opportunities. More information about the companies participating, including a statewide list, is available at [www.epa.state.oh.us/ocapp/toxminus.html](http://www.epa.state.oh.us/ocapp/toxminus.html).

[back to top](#)

## Eight Companies Host MnTAP Interns

In 2008, seven companies are hosting MnTAP student interns to help them solve a variety of pollution prevention and energy efficiency issues. These companies include:

- Atritech, Inc., Plymouth. This medical device manufacturer is wants to develop a new packaging concept to reduce packaging waste.
- Granite Falls Energy, Granite Falls. The intern will work at the ethanol plant to determine the feasibility of installing a steam turbine to recover energy lost through the pressure-reducing valve.
- Hitchcock Industries (a CPP Company), Bloomington. In this metal casting facility, interns will determine feasibility of using a fluidized bed system and the capability of replacing sulfur hexafluoride in the process.
- Metropolitan Council Waste Water Treatment Plant, Saint Paul. An intern will investigate the efficiency of the current blower operation and how that operation could be improved with different controls or strategies.

### GLRPPR Steering Committee

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- Minnesota Energy, Buffalo Lake. An intern will conduct testing to determine appropriate treatment to recycle water within the process.
- St. Luke's, Duluth. The goal of this project is to minimize hazardous materials by incorporating environmentally preferable purchasing protocols for the health care facility.
- Twin City Die Casting, Minneapolis. The facility wants the intern to recommend ways to reduce energy use in facility including in the compressed air system.

[back to top](#)



### **MnTAP INTERN ADDRESSES RAW MATERIAL WASTE**

Ultra Image Powder Coating of Big Lake, Minnesota, is a custom powder coating job shop that finishes large and small metal parts for a variety of companies. The company was operating a conveyORIZED powder coating system in a spray-to-waste mode for its wide variety of part profiles. While several of the parts can be coated by automatic powder application, a significant percentage of the company's products are deep parts with complex geometries that can only be hand-sprayed.

Ultra Image was spraying an average of 55,000 lbs. of powder each year, while almost 32,000 lbs. of the sprayed material was wasted. This corresponds to a transfer efficiency of 42.3%, which means that over half of the powder purchased and sprayed by Ultra Image was wasted. To help reduce waste, Ultra Image applied for a MnTAP intern who worked to economically justify operational changes in the powder coating process.

Through research and observation, the MnTAP intern identified two major causes of low transfer efficiency for Ultra Image's coating process: high booth airflow and poor operator training. Several different options were suggested and implemented to address the low transfer efficiency. These options included precise airflow control, powder room pressurization, and suitable manual operator training.

The MnTAP intern also explored the feasibility of installing a new powder booth to further increase transfer efficiency and recommended an option that Ultra Image ultimately implemented. The booth that Ultra Image installed was developed to accommodate the company's need to both automatically and manually apply powder to parts.

By implementing the procedural and equipment changes from the MnTAP intern project, Ultra Image estimates their annual powder savings to be 15,000 pounds a year. The new powder coating spray booth has also reduced the time spent on booth maintenance. The raw material savings, lower booth maintenance labor, and reduced disposal costs save them approximately \$63,000 annually.

[back to top](#)

### **PHARMACEUTICAL WASTE REDUCED THROUGH GRANT WORK**

MnTAP was awarded an EPA grant to identify the top pharmaceutical waste problems and educate healthcare facility staff about pollution prevention options for pharmaceuticals. Ultimately, the project was focused on reducing pharmaceutical waste using pollution prevention techniques. The project included obtaining information from focus groups, hosting educational workshops, developing and administering surveys, and sponsoring web casts. From these resources, MnTAP was able to ascertain that waste samples, epinephrine, and ninety-day doses are top waste concerns and then educate over 200 health care facility workers about proper disposal and pollution prevention for these and other wastes.

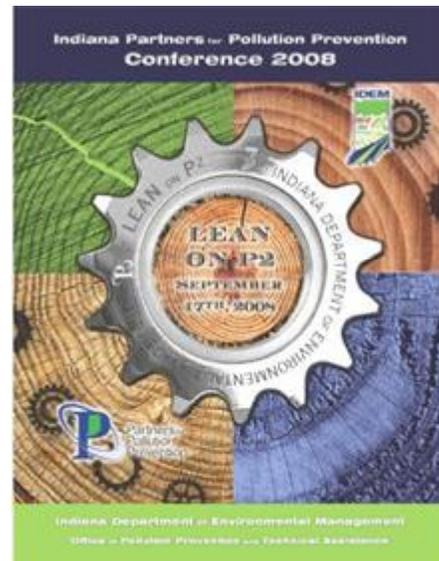
Using the information gained through this project, MnTAP provided technical assistance aimed at addressing the top waste concerns through phone calls, site visits, and intern projects. With these technical assistance approaches, MnTAP was able to help health care facilities engage in pollution prevention practices such as inventory management and pharmaceutical quantity reduction techniques. Three Minnesota health care facilities documented reductions in pharmaceutical waste of over 300 pounds and cost savings of over \$145,000.

[back to top](#)

## INDIANA PARTNERS FOR POLLUTION PREVENTION TO HOST 11TH ANNUAL CONFERENCE & TRADE SHOW

Mark your calendars for the 11th Annual Pollution Prevention Conference and Trade Show sponsored by the Indiana Partners for Pollution Prevention. This year's conference will be held on Wednesday, September 17, 2008 at Primo's Conference Center in Plainfield, Indiana.

The Partners for Pollution Prevention (Partners) is a group of organizations including manufacturers, not for profits, institutions, and government agencies invested in promoting pollution prevention efforts in Indiana. The Indiana Department of Environmental Management (IDEM) created the Partners in 1996 to assist industries in sharing pollution prevention experiences and to advise IDEM on pollution prevention policies and programs. The 53 organizations that are currently members of the Partners have shown a proven interest in promoting and developing pollution prevention programs to achieve measurable reductions in pollution in Indiana.



The theme for this year's conference is *Lean on P2* and the focus will be on linking pollution prevention activities with lean practices. The keynote speaker is Richard Guimond, Vice President of Environment, Health and Safety—Carrier Corporation. He will present on *Using Lean and P2 at Carrier Corporation*. Laura Pyzik, U.S. EPA, is the plenary speaker and will present on *Seeing All the Wastes—Achieving Environmental Savings Through Lean Implementation*. Attendees will also learn more about:

- Common Sense Manufacturing
- City of West Lafayette—Going Green
- Putting the “E” Into Lean
- Focusing on Performance-Based Programs for Environmental Management
- Reduction of Copper Levels in Wastewater at DePuy Orthopedics
- Using Lean and P2 to Drive Environmental Improvements
- Greening Your Suppliers
- Zero Discharge

The conference is honored to host the Governor's Awards for Environmental Excellence presentations this year. These awards are open to all Indiana facilities, state and local units of government, individuals, and technical assistance organizations that operate or support environmental protection efforts of outstanding quality. Awards presented at the conference may include Energy/Renewable Resources, Pollution Prevention and 5 Years' Continuous Improvement.

For registration and additional conference information log onto [www.in.gov/idem/4451.htm](http://www.in.gov/idem/4451.htm) or contact Cara Cyrus at 812-273-6000 or by e-mail at [cara.cyrus@madchem.com](mailto:cara.cyrus@madchem.com).

[back to top](#)

## CLEAN DIESEL GRANTS AND LOANS AVAILABLE

Funding to help reduce emissions from heavy-duty diesel engines, including trucks is available under the Energy Policy Act (2005). Only regional, local, and State governments, and certain nonprofit companies are eligible to apply. For-profit companies should work with these organizations in their region to participate. Eligible projects include:

- retrofitting an existing truck with a pollution control device or idling reduction equipment
- using a cleaner fuel
- repowering or upgrading an existing engine to a cleaner standard
- replacing an older engine or vehicle with a newer, cleaner engine or vehicle
- creating a low-cost loan program to finance diesel emissions reduction projects

The EPA will issue its awards to the organizations whose proposals have been accepted in October, 2008. These organizations will establish grant and/or loan programs to assist truck owners with eligible projects. To apply or get information about these programs visit [www.epa.gov/otaq/diesel/truckers.htm](http://www.epa.gov/otaq/diesel/truckers.htm).

[back to top](#)

## BIOFUELS AND SUSTAINABILITY CONFERENCE

Illinois Sustainable Technology Center, Natural History Survey, Illinois Water Survey, and Geological Survey at the University of Illinois will be holding a joint conference that will take an in-depth look at today's biofuels lifecycle on October 21 - 22, 2008. Speakers for the conference will include individuals from the U.S. Department of Agriculture, U.S. Department of Energy, Argonne National Laboratory, as well as university researchers, industry leaders, environmental leaders, and political leaders. The conference will concentrate its focus in the following areas:

- Sustainability perspectives and approaches for the biofuels industry
- Biofuels impacts on environmental and societal resources
- Sustainability of the biofuels business
- Biofuels innovations and future sustainability

To learn more about and register for the conference visit <http://www.wmrc.uiuc.edu/BiofuelsConference/>.

[back to top](#)

## FINE PRINT

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