

LINK

THE NEWSLETTER OF THE GREAT LAKES REGIONAL
POLLUTION PREVENTION ROUNDTABLE



winter 2007 volume 13 number 1

In This Issue

Spring GLRPPR Meeting	1
Project Reduces Phosphorus	1
Steam Efficiency	2
GLRPPR Blog	2
Pharmaceutical Waste Collection	2
OH Auto Salvage Yards Mercury Switch Removal Program	3
OH Small Business Energy Saver	3
Innovations Award Winner	3
P2 Results Data System	4
IN Environmental Stewardship Program	5
Publicly Owned Treatment Works & P2	5
Diesel Idling	6
2nd Lake Superior Watershed Festival	6
Auto Assembly Plant Water Analysis	6

2007 SPRING GLRPPR MEETING

Join GLRPPR for the 2007 Spring meeting to be held March 13-14, 2007, at U.S. EPA Region 5's offices in Chicago at 77 West Jackson. The meeting will be held in conjunction with the pollution prevention (P2) roundtable from U.S. EPA Region 7, so it will be a good opportunity to network with fellow professionals from throughout the Great Lakes and Great Plains area.

A variety of interesting topics will be explored during the conference including mercury reductions programs, storm water issues, lean & green programs, waste management in health care, and the EPA's P2 intern program. There also will be a hands-on session about the P2 measurement tool and how to use it. And there will be discussion about the possibility of developing a Midwest Product Stewardship Council.

Arrangements have been made for rooms at the Club Quarters Hotel (a short walk from the EPA building). A block of rooms has been set-aside at \$126 per night (plus tax). Please mention group code EPA312 to get the rate. The cut-off date for the block is January 31, 2007. Call the Club Quarters, Central

Loop, at 212-575-0006, or go on-line at http://www.clubquarters.com/club_quarters_loop.asp.

For more information about the meeting and to view the tentative agenda, go to <http://www.glrppr.org/meetings/Spring2007/>.

CITY-WIDE SURVEY PROJECT REDUCES PHOSPHORUS

Businesses in the Brainerd/Baxter area of Minnesota have a start on phosphorus reduction well in advance of the new wastewater treatment plant coming online in 2009. The new plant is required to meet an effluent limit of 1 mg/L or 1 ppm set by the Minnesota Pollution Control Agency (MPCA).

A student worker hired by the Minnesota Technical Assistance Program (MnTAP) visited 112 businesses in the Brainerd/Baxter area last summer to identify and assist with phosphorus reduction practices. Businesses visited included restaurants, car washes, schools, healthcare and dental facilities, and manufacturers.

Of the 112 businesses visited, 35 had phosphorus in one or more of the products they were using. By the end of the summer, eight area businesses had switched to no or low-phosphorus products, resulting in an estimated reduction of 880 pounds of phosphorus per year to the wastewater treatment plant. If the remaining businesses made a switch to no/low phosphorus products, an additional 6,900 pounds per year of phosphorus would be reduced. These reductions, if fully implemented by the businesses, would reduce the total amount of phosphorus going to the plant by 5%.

New phosphorus reduction resources are online at: <http://www.mntap.umn.edu/potw/phosphorus.htm>.

- Brainerd/Baxter Project—Complete news release—December 2006
- Phosphorus Reduction from Businesses: Using a City-wide Inventory—Fact sheet
- Phosphorus Sources and Reduction Opportunities Walk-through Checklist—Checklist for WWTF operators

STEAM EFFICIENCY

Minnesota Technical Assistance Program's (MnTAP) recent newsletter featured a number of articles on energy efficiency related to steam use: Rock-Tenn Company's insulation plan, 3E Plus Insulation Thickness Computer Program, assessing steam traps, and the Metropolitan Airports Commission's steam trap monitoring system. See articles online at <http://www.mntap.umn.edu/source/index.htm>.

[back to top](#)

GLRPPR BLOG AVAILABLE ONLINE AND IN RSS FORMAT

The Great Lakes Regional Pollution Prevention Roundtable (GLRPPR) has announced the release of the GLRPPR Blog, a new service designed to help keep members and other interested parties informed about pollution prevention resources from throughout the Great Lakes region and beyond.

A "blog" or "weblog" is a type of web site that includes frequently updated entries that provide commentary, news, or information highlights. In some sense, it's like an informal newsletter, with more interaction between the authors and readers than is possible in a standard electronic newsletter. In a blog, readers can leave comments on posts (the equivalent of articles in a newsletter), creating a discussion around the topic of the post.

The GLRPPR Blog is meant to facilitate and encourage networking and information exchange among P2 professionals and others in the Great Lakes region who are interested in promoting sustainability principles in industry and everyday life. The blog will allow readers to stay up-to-date on environmental issues and to share ideas and techniques with colleagues.

The GLRPPR Blog is available online at <http://www.glrppr.org/blog/>. For more information about blogs and answers to commonly asked questions about the GLRPPR Blog, see the [FAQ](#) page.

You may send questions or comments to Joy Scrogum, jscrogum@wmrc.uiuc.edu.

[back to top](#)

PHARMACEUTICAL WASTE COLLECTION

Collection of household pharmaceuticals made a major leap forward in Wisconsin in 2006. Six communities have offered one-day collections, generating over one ton of material from participating households (see table). In addition, a number of one-day collection events are being planned for 2007, including new ones in Dane and Jefferson counties. The primary goal of all of these programs is to keep unwanted pharmaceuticals from being either flushed to the waste water systems or disposed of in landfills.

Jefferson County recently hosted a workshop regarding this issue at the December meeting of the County's solid waste and air quality committee. A number of options were discussed, including a one-day collection event, a joint program with pharmacies and the sheriff department as collection points, and use of the existing pharmaceutical reverse distribution network. Solid and Hazardous Waste Education Center (SHWEC) will be hosting a discussion session in late January to explore these options further, with the goal of finding a longer-term solution for managing unused pharmaceuticals.

Wood County	418 lbs.	114 participants
Brown County	300 lbs.	175 participants
Milwaukee County	824 lbs.	128 participants
Winnebago Co.	184 lbs.	114 participants

[back to top](#)

Coming Soon...Spring 2007 Edition

The LINK spring 2007 article solicitation will be sent to GLRPPR members via e-mail on or about March 1; articles will be due March 30. Send article ideas or questions to Wayne Duke at wduke@wmrc.uiuc.edu.

OHIO LAUNCHES VOLUNTARY MERCURY SWITCH REMOVAL PROGRAM FOR AUTO SALVAGE YARDS

In September 2006, Ohio EPA launched a voluntary mercury switch removal program for auto salvage yards. The program, sponsored by Ohio EPA and End of Life Vehicle Solutions (ELVS), encourages auto switch recycling to help reduce mercury releases to air, water, and soil.

This program is completely voluntary. As long as funds are available, participating salvage yards will receive \$3.00 for every switch turned in. The Agency has established a \$60,000 fund for the program that equates to collection of 20,000 mercury auto switches for recycling. As the program progresses, additional funding will be sought.

Participating in the program is easy. If you need more information or are interested in the program, please contact Bill Narotski, Office of Compliance Assistance and Pollution Prevention (OCAPP) at (614) 728-1264 or by e-mail at bill.narotski@epa.state.oh.us. If you send e-mail, please provide your name, company name, address, and phone number. After sending an e-mail, you can expect to receive more information and your first collection bucket within a few weeks. Funding is now available for this program, contact OCAPP soon.

[back to top](#)

OHIO SMALL BUSINESS ENERGY SAVER

Businesses that spend less than \$150,000 on their annual energy bill now have a tool to help them reduce energy waste and hold costs down. The Ohio Department of Development has developed a free online tool that is confidential and easy to use. By using this tool, you can:

- quickly identify basic energy-saving opportunities;
- create a project plan with estimated paybacks on implementing recommendations;
- get information on project assistance resources;
- target specific aspects of your operation to work on first;
- get a checklist to review, track and evaluate progress;
- compare your energy use to similar businesses; and
- view examples of how similar businesses save energy.

If you are looking for ways to save on energy expenses at your business, visit the Small Business Energy Saver at www.business.ohio.gov/. Grant funding is available for business owners who are ready to implement measures suggested by the Ohio Small Business Energy Saver. For more information, visit www.odod.state.oh.us/cdd/oeel/ELFGrant.htm#NOFA_07-05.

[back to top](#)

“MUD TO PARKS” PROJECT WINNER OF INNOVATIONS AWARD

The “Mud to Parks” project in Illinois is a winner of an Innovations Award presented by the Council of State Governments (CSG) for the Midwest region. The office of Illinois Lt. Governor Pat Quinn and the Waste Management and Research Center (WMRC), a division of the Department of Natural Resources, coordinates the project.

Sediment has been clogging the Illinois River in the Peoria area for centuries. This soil has reduced the navigation channel on the Illinois River and affected wildlife habitats in the area.

WMRC’s John Marlin realized that this high quality soil could be used in other locations where good soil is lacking. He and other scientists from the Department of Natural Resources worked with federal, state, and local officials as well as private companies to develop a way to successfully dredge the sediment. Marlin said that a new dredging technique had to be developed so that the material removed was useable. Most dredging techniques bring up a mixture that has too much water. Once the new mechanical dredging technique proved effective, the mud—which had the consistency of pudding—was loaded onto barges.

The barges took the mud to a slag field on the edge of Lake Michigan. This area is a redevelopment site for the former US Steel South Works on the south side of Chicago. The mud was placed on the slag field and allowed to weather. After a few months, bulldozers spread the soil and the area was seeded with rye grass.



Today what had been a brownfield is filled with plant life.

The Lt. Governor's office got involved in the project and in 2004 granted \$75,000 to WMRC for the project. The program continues to be funded through grants and general research funds. The project has generated national attention, and officials in Louisiana are considering bringing some of the Illinois River soil to their state in an effort to restore wetlands.

Details on winners of the Council of State Government Innovations Awards winners can be found in the November/December 2006 issue of *State News*, or online at <http://www.csg.org/pubs/Documents/SNnovdec.pdf>.

[back to top](#)

MARK YOUR CALENDARS!!

The 2007 Spring GLRPPR Meeting will be held in Chicago, Illinois at the Metcalfe Federal Building on March 13 and 14. For meeting updates, visit <http://www.glrppr.org/meetings/Spring2007>.

P2 RESULTS DATA SYSTEM

What is the P2 Results Data System?

Recently, funding was awarded to roll out regional P2 results measurement modules to each Pollution Prevention Resource Exchange (P2Rx) regional center from the National Environmental Information Exchange Network (NEIEN). These modules are part of a national P2 results measurement effort called the P2 Results Data System.

Each regional center's module will allow organizations and

agencies within that region to enter data from pollution prevention programs. The regional modules will feed into the national database, and aggregated data at the national level will be reported to the U.S. Environmental Protection Agency (EPA). This information will be used to demonstrate the value of publicly supported Pollution Prevention (P2) programs and will assist policymakers, government agencies, and P2 programs in setting priorities, goals, and plans for improvement. The Great Lakes Regional Pollution Prevention Roundtable (GLRPPR) is developing a system that will be of the most benefit to participants in our area.

This effort was designed to collect available data on waste reduction and resource efficiency efforts from public agencies. The National P2 Measurement Results Task Force, comprised of representatives from State P2 programs, U.S. EPA Headquarters and Regions, P2 Resource Exchange Centers (P2Rx), and the National Pollution Prevention Roundtable (NPPR), contributed greatly to the process by developing a core set of P2 measures—the Data Dictionary—that is the foundation for this project. The Task Force also identified and addressed barriers and opportunities for P2 results measurement. State representatives on this regional task force will be asked to represent their state and agency in sharing opinions and existing activities within their state. They will also help coordinate opinions, collect data, and share regional and national measurement activity information with organizations and representatives within their state.

What are the benefits of participating in this initiative?

The data will help demonstrate the activities of agencies, as well as the positive changes of their clients as a result of their activities. In addition, the data will help quantify P2 progress related to air, water, waste, and energy resources. It is hoped that in the future, this model will be able to translate P2 progress into the context of bigger-picture issues such as climate change, habitat, and sustainability.

Also note that many U.S. EPA grantees are currently obligated to enter measurement data into this system. The U.S. EPA is under increasing pressure to show demonstrable results from programs that it funds, and the estimation of outcome results or the reporting of such results is likely to be emphasized in future RFPs from U.S. EPA.

The plan is to add additional regional measures of interest to the system later. GLRPPR also has added a feedback form to the Web site for suggested modifications to the module.

What kinds of data can be entered?

The measures sought are divided into three types:

- Activity measures from agencies (such as trainings conducted)
- Behavioral results (such as clients reporting compliance improvements)
- Outcome measures (such as Hazardous Waste reduced)

Participants do not have to enter something in every field on the forms. They only enter information that is available or

applicable. An aggregated report for the entire region that includes all data submitted from all agencies is available to all viewers. This information can give managers, funders, and the public a better sense of the benefits of pollution prevention. Registered users have a user name and password that allows them to input data and view a report that summarizes all the data from their agency.

A “test” module is available on the P2Rx Web site at <http://www.p2rx.org/measurement/index.cfm>. Use “region5test1” as both the user name and password. If you want to enter real data to include in the measurement initiative, you must contact Tyler Rubach for an account to use with the module available on the GLRPPR Web site at <http://www.glrppr.org/measurement/>.

Tracking results from another system can not be transferred. The technical issues in transferring such data are still being worked on, and that should be available in the future.

To become an active participant, you need to contact Tyler Rubach at trubach@wmrc.uiuc.edu or call 217-244-6553.

[back to top](#)



BETTER ENVIRONMENT, BETTER BUSINESS: INDIANA ENVIRONMENTAL STEWARDSHIP PROGRAM

In August 2006, the Pollution Prevention Program announced its newest voluntary recognition program, the Indiana Environmental Stewardship Program (ESP). For more than a year, IDEM developed rules creating this program and providing regulatory incentives to its members. In addition, IDEM received \$225,000 from U.S. EPA to implement ESP.

This exciting new program is the first of its kind in Indiana, offering incentives with positive environmental and financial impacts, thus the program’s slogan: Better Environment, Better Business! Incentives range from meetings with the commissioner to reduced inspection frequency to reduced monitoring requirements.

For details about this program please refer to www.in.gov/idem/prevention/esp/.

[back to top](#)

PUBLICLY OWNED TREATMENT WORKS AND POLLUTION PREVENTION

A grant to the Indiana Department of Environmental Management (IDEM) from U.S. EPA to reduce mercury in wastewater produced several workshops on topics such as The New Mercury Limits, Household Hazardous Waste Management, and Proper Disposal of Pharmaceuticals. In total, 186 people were trained on these topics. The grant, which ended in June 2006, also saved POTWs more than \$40,000 in educational and promotional costs by creating universal outreach materials for all POTWs rather than requiring each to create and produce their own materials.

In addition to mercury, household hazardous waste, and pharmaceutical outreach, IDEM developed promotional brochures for biosolids as well as a “Pollution Prevention Field Guide for Publicly Owned Treatment Works Pretreatment Personnel.” IDEM inspectors and other operators of wastewater treatment plants are requesting and using the guide as an educational tool.

For additional information about pollution prevention efforts at POTWs, refer to www.in.gov/idem/your_environment/mercury/potw/.

[back to top](#)

Upcoming Events

P2 Results Data System Training, Jan. 24, 2007

USDA-CSRESS National Water Conference, Jan. 28 - Feb. 1, 2007

7th National Conference on Science, Policy, and Environment, Feb. 1 - 2, 2007

Alternative Fuel Vehicles Seminar, Feb. 3, 2007

Creating a Sustainable Future, Feb. 10, 2007

Watershed-Based Planning Workshop, Feb. 12, 2007

2007 Joint Winter Conference of Associated Recyclers of Wisconsin, Feb. 21 - 22, 2007

International Conference on Stormwater & Urban Water Systems Modeling, Feb. 22 - 23, 2007

Take It Back! 2007, Mar. 12 - 13, 2007

5th Annual Renewable Energy Conference, Mar. 17, 2007

National Green Building Conference, Mar. 25 - 27, 2007

For more information on these upcoming events visit <http://www.glrppr.org/calendar/>

DIESEL IDLING (BIG TRUCKS DON'T HAVE TO BURN BIG BUCKS)

Indiana Department of Environmental Management's (IDEM) offices of Pollution Prevention & Technical Assistance and Air Quality teamed up with IDEM's Media Group to further expand awareness and education of the agency's Voluntary Idling Program (VIP) through the development of a standardized information brochure and web site. The information is designed to alter driver's habits to stop unnecessary idling. Visit www.in.gov/idem/vipchallenge for an overview of the innovative programs and their charter member listing.



[back to top](#)



By Sydney, 2005 Coloring Contest winner

2ND LAKE SUPERIOR WATERSHED FESTIVAL

The Regional Stormwater Protection Team (RSPT) is proud to announce the second Watershed Festival, on June 2, 2007. The Watershed Festival combines a week of stormwater education in regional schools, culminating in a community festival to raise awareness on stormwater pollution prevention. The festival is designed for all ages, but especially reaches out to children, supporting lifelong watershed awareness and protection. Nicole Barg, Conservation Specialist with the South St. Louis Soil and Water Conservation District explains, "we create an atmosphere of learning for the children by providing entertainment and fun hands on activities; it is important to get the children interested in stormwater at a young age."

The 2007 Festival theme is "Zaagidawaa", Ojibwa for "Flow Into the Lake." The theme was chosen to help spread awareness of the Lake Superior Basin, which festival committee members identified as a crucial gap in public awareness. Mindy Granley, a Minnesota DNR Coastal Nonpoint Specialist with the Lake Superior Coastal Program explains: "our goal is to get people to understand that the water that runs off our rooftops, driveways, lawns, parking lots, and sidewalks will eventually end up in Lake Superior—that runoff carries pollutants, like fertilizer or pesticides, sediment from erosion, and even dog poop, with it."

"Dr. T" stars as the headline entertainer, and stormwater-friendly presentations, activities, and vendors will be set up from 10am-3pm. This project was funded in part by the Coastal Zone Management Act, by NOAA's Office of Ocean and Coastal Resource Management, in cooperation with Minnesota's Lake Superior Coastal Program. Presenters are still needed, and applications for vendors and booth space are still being accepted. For more information about RSPT or updates on the 2007 Watershed Festival, see www.lakesuperiorstreams.org/stormwater/rspt.html and www.lakesuperiorstreams.org/Zaagidawaa.



Dr. T & Rex the Stormwater Dog at the 2005 festival

[back to top](#)

WATER ANALYSIS AT AN AUTOMOTIVE ASSEMBLY PLANT

A study by the Illinois Waste Management & Research Center (WMRC) has shown that misunderstanding the true cost of utilizing raw materials such as water can result in poor management choices regarding the use of raw materials.

Metal finishing operations are notorious for using large quantities of water in their processes because of the common perception that "water is cheap" so, it can be used liberally throughout the plant in cleaning and coating processes. While it may be true that the actual purchase of the water itself is relatively inexpensive, the cost for using the water within the processes may be considerably more expensive.

A 2004 assessment performed by WMRC on a major Midwest automotive assembly plant's phosphating processes revealed that the company perceived its water costs to be only \$2.20 per 1,000 gallons (the cost to purchase water from the city). Consequently, conservation measures were difficult to justify from an economic standpoint. However, when the process was broken down on a step-by-step basis and all costs associated with using the water were

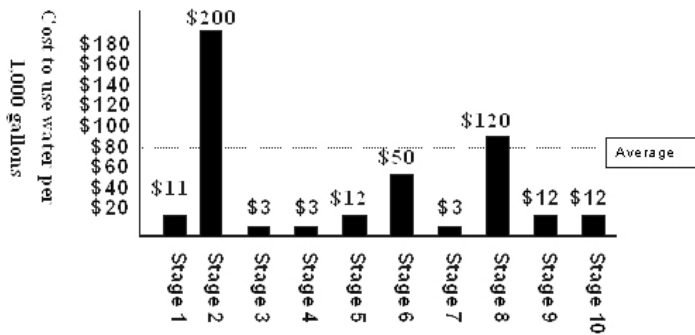


Figure 1. Cost to Use Water in an Automotive Plant Phosphate Line

1,000 gallons.

Prior to performing this analysis, the plant had been using about 90 million gallons of water annually because they perceived that water was cheap and conservation measures were not warranted. They estimated that the water cost them about \$200,000 per year. The results of the assessment showed them that using this quantity of water was actually costing them over \$7 million dollars per year. Within 1 year of the assessment, numerous conservation measures had been implemented such that water usage was reduced by nearly one-third, resulting in cost savings of over \$2 million per year. Understanding the full cost of using raw materials such as water—not just the cost of purchasing the raw materials—can provide the necessary incentives and justification for making changes that improve both economic and environmental performance.

For more information, contact Dr. Tim Lindsey, WMRC, 217-333-8940.

[back to top](#)

Fine Print

LINK is a free quarterly publication of the Great Lakes Regional Pollution Prevention Roundtable. For subscription information, please contact the editor or see our Web site at www.glrppr.org.

Bob Iverson, GLRPPR Executive Director, One Hazelwood Dr., Champaign, IL 61820, 217-333-5793, 217-333-8944 (fax), biverson@wmrc.uiuc.edu.

Wayne Duke, LINK Designer & Editor, One Hazelwood Dr., Champaign, IL 61820, 217-333-5793, 217-333-8944 (fax), wduke@wmrc.uiuc.edu.

considered, it was concluded that the true cost of using the water was much higher. Including the value of process chemicals, energy, water purification measures, and wastewater treatment in the total cost of using water, increased the average cost to \$80 per 1,000 gallons (a 36 fold increase).

Figure 1 shows the breakdown of water use costs on a stage-by-stage basis. As shown, some stages were considerably more costly than others. In general, rinsing stages that used municipal water (Stages 3, 4, and 7) were the cheapest while the most expensive step was the degreasing stage (Stage 2) costing \$200 per

GLRPPR Steering Committee

Jack Annis
University of Wisconsin—Stevens Point
jack.annis@uwsp.edu

Lori Boughton
PA DEP
lboughton@state.pa.us

David Cera
MN Office of Environmental Assistance
david.cera@state.mn.us

Thomas Corbett
New York Dept. of Environment and Conservation
tacorbet@gw.dec.state.ny.us

Sheelagh Hysenaj
Environment Canada—Ontario Region
sheelagh.hysenaj@ec.gc.ca

Marth Beth Holley
TechSolve, Inc.
holley@techsolve.org

Bob Iverson
IL Waste Management & Research Center
biverson@wmrc.uiuc.edu

Robert Jackson
Michigan Dept. of Environmental Quality
jacksorc@michigan.gov

Phil Kaplan
USEPA Region 5
kaplan.phil@epa.gov

Becky Lockart
Illinois EPA, Office of P2
becky.lockhart@epa.state.il.us

Tom Markowitz
Ontario Ministry of the Environment
Tom.Markowitz@ene.gov.on.ca

Marta Panero
New York Academy of Sciences
mpanero@nyas.org

Laura Rauwerda
Michigan Dept. of Environmental Quality
rauwerdl@michigan.gov

Mary Rossi
Erie County Dept. of Environment & Planning
rossim@erie.gov

Edwin (Ted) Smith
USEPA Great Lakes National Program Office
smith.edwin@epa.gov

Karen Teliha
Indiana Dept. of Environmental Management
kteliha@idem.in.gov

Tom Ustanik
Lansing Cleaners Inc.
lcleaners@aol.com