



# Environmental Assistance Bulletin

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follow the directions.

## ANNOUNCING THE OFFICE OF POLLUTION PREVENTION AND COMPLIANCE ASSISTANCE

The pollution prevention and compliance assistance programs have been organized into a stand-alone office that will report directly to the Executive Office of the Michigan Department of Environmental Quality (MDEQ). This change was necessitated by the elimination of the Environmental Science and Services Division and the restructuring of the services provided by this division into other divisions within the MDEQ. The changeover to the Office of Pollution Prevention and Compliance Assistance (OPPCA) will not affect the pollution prevention and environmental assistance programs currently being provided by MDEQ. The Office always had a department-wide mission, and now will be working more closely with MDEQ Director Steven Chester and Deputy Director Jim Sygo to ensure that businesses, institutions, and the public continue to receive support in our mutual goal to protect Michigan's environment.

The **Environmental Assistance Center** remains the entry point for receiving OPPCA services and serves as a single point of entry into all DEQ environmental programs. By calling 1-800-662-9278 from 8 a.m. to 5 p.m., Monday through Friday, business, industry, local units of government, and the general public can receive direct one-on-one assistance or referral to a network of technical staff within the DEQ.

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## HEALTHY SCHOOLS GUIDE A SUCCESS

The Michigan Department of Environmental Quality (MDEQ) has taken leadership roles in pollution prevention (P2) programs affecting schools, including mercury awareness/reduction and radon awareness. The MDEQ, in cooperation with the Michigan Department of Education, published a multi-media Environmental Education Curriculum for all middle schools called *The Healthy Schools Guide*. The guide, building upon MDEQ pollution prevention programs and our most recent in-state grant activities, is a comprehensive package of information and tools designed to help schools achieve the highest standards of health and safety for all students.

The overarching goal of this project was to provide education professionals in Michigan a tool that would help them “green” their school. In doing so, the MDEQ sought to provide information specific to the variety of professionals found in the education system, to make the guide as user friendly as possible and to provide the most up-to-date information specific to Michigan.



Through the Michigan Community P2 Grant program, MDEQ grant managers completed case studies for Grand Rapids and Blissfield Public Schools to be included in the guide. These case studies outline the process each school used to not only clean out and properly dispose of hazardous, out of date and surplus chemicals, but also the P2 methods put in place to reduce the likelihood of future chemical stockpiles. The methods employed by the schools include inventory and database systems to better track chemical supplies and purchasing, introduction of new curriculums using micro-scale chemistry techniques, and implementing chemical hygiene plans.

By the numbers:

- 1,700 Healthy Schools Guide CDs were printed and most were distributed by the end of March 2009.
- 777 CDs were mailed directly to public and private middle and high schools in Michigan and to Intermediate School District offices.
- 121 CDs were mailed in response to direct requests from Michigan schools.
- 65 CDs were sent to a variety of entities that serve student populations, including health departments, community organizations, and non-profits focused on children’s health issues.

The creation and distribution of *The Healthy Schools Guide* was made possible by a grant from the U.S. EPA. The guide has been very well received. A limited number of CDs are still available for distribution. To request a CD, email **Audrey Wierenga** at [WierengaA@michigan.gov](mailto:WierengaA@michigan.gov). To download *The Healthy Schools Guide*, visit

[www.michigan.gov/documents/deq/deq-ess-p2-healthyschoolsguide\\_248605\\_7.pdf](http://www.michigan.gov/documents/deq/deq-ess-p2-healthyschoolsguide_248605_7.pdf)

## THE GREEN SUPPLIERS NETWORK



**Green Suppliers Network**

The Green Suppliers Network (GSN) in West Michigan successfully demonstrates that innovative collaboration among industry, their suppliers, and local Manufacturing Extension Partnerships (MEP) influences the participation of manufacturers in State and Federal pollution prevention activities to protect the environment while simultaneously increasing those companies’ efficiency, productivity, and profitability.

Participating GSN suppliers and their customers have realized substantial cost savings and recovery in water conservation, energy efficiency through compressed air and natural gas use, and materials flow within their processes.

### Michigan Suppliers and Customers Aggregate Realized Annual Cost Savings

	Water Conservation	Energy Efficiency
Suppliers	\$30,000	\$116,655
Customers	\$80,000	\$ 28,276

Nationwide, the potential value of environmental impact savings reported by the National Institute of Standards and Technology (NIST) in February 2009 for all GSN assessments completed to date was \$18,237,174. From its inception in 2004, GSN offered small and medium-sized companies an Environmental Protection Agency cost buy-down to offset a portion of the cost of the review. The purpose of this buy-down was to encourage enough participation in the GSN so that the program's value could be demonstrated. To date, the program has realized success. Suppliers are currently reporting a 3:1 return on investment.

It is anticipated that the EPA buy-down will permanently end on February 1, 2010. The current price of a GSN review is \$7,500. Any company that registers to be a GSN Partner via the GSN Web site on or before January 31, 2010, will be eligible for the current \$1,000 buy-down as funds remain available. In addition to being registered on the GSN Web site at [www.greensuppliers.gov/gsn/](http://www.greensuppliers.gov/gsn/), MEP Centers must have a GSN Project Contract signed with their client by January 31, 2010, and all deliverables must be met by March 30, 2010. All cost buy-downs are available on a first-come, first-served basis. If all buy-down funds are exhausted before January 31, 2010, MEP Centers will be notified and the buy-down credit will not be applied to the GSN review cost.

For more information on the Michigan GSN, visit the Great Lakes Sustainable Suppliers Environmental Network at [www.michigan.gov/deq/0,1607,7-135-3585\\_4129\\_40313---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3585_4129_40313---,00.html).

### COMMUNITY P2 GRANT PROGRAM FOCUSES ON HEALTH CARE FACILITIES IN MICHIGAN

Hospitals and health care facilities generate in excess of one percent of all the solid waste in the United States. In addition, hospitals are unique by comparison to other waste producing entities because they generate such a diverse variety of wastes. A typical health care facility waste stream may be comprised of solid, hazardous, radioactive, biological, regulated medical, and other specialized chemical wastes that are ultimately discarded or released to the air, land or water. Another distinct feature of these facilities is the rate of waste generation calculated per hospital patient, which can typically exceed four times that of an average citizen.

A total of \$200,000 in funding is being made available through the Michigan Community Pollution Prevention (P2) Grant Program to implement P2 practices at health care facilities across the state. The MDEQ will provide matching grants to hospitals, clinics, local health departments, municipalities, and regional planning agencies. The goal of the Community P2 Grant Program is to promote local P2 initiatives that foster partnerships and sustainability. This grant seeks to bring health care, local government, business, planning agencies, and residents together to create change through P2. Organizations receiving grants are required to match total project costs by at least 25 percent.

Implementing sustainable P2 strategies at health care facilities have been shown to yield major benefits, including significantly reducing cost and health and environmental risks. For more information on the

Healthcare Community P2 Grants Program and to download a funding application, visit the DEQ Web site at [www.michigan.gov/documents/deq/deq-oppca-communityp2-2009-rfp\\_276104\\_7.pdf](http://www.michigan.gov/documents/deq/deq-oppca-communityp2-2009-rfp_276104_7.pdf); or call the MDEQ's Environmental Assistance Center, at 800-662-9278.

## MICHIGAN GREEN CHEMISTRY GOVERNOR'S AWARD APPLICATION DEADLINE EXTENDED FOR STUDENTS



The deadline for students to apply to the Michigan Green Chemistry Governor's Award competition has been extended to July 15, 2009. The awards were announced by the Green Chemistry Roundtable and will honor industrial, academic, student, and non-profit efforts to green Michigan's economy. The award program is open to individuals, groups, and organizations in Michigan, both nonprofit and for profit, including academia, educators, nonprofit advocacy groups, and industry. Award recipients will be honored at a special dinner at the Detroit Institute of Arts in Detroit on September 24, 2009.

The award program recognizes advances that either incorporate the principles of green chemistry into chemical design, manufacture, or use; or that promote activities that support or implement those technologies. The Roundtable will present one or more awards in each of the following categories:

- Business: individual efforts, team efforts, and/or corporate efforts for a green chemistry technology in any of the four focus areas identified in the nomination packet.
- Academic: academic research and development efforts in any of the identified four focus areas.
- Education: green chemistry education efforts at any level, from high school to post graduate, in any of the identified four focus areas
- Public: community reform that recognizes efforts from advocates, local government, service organizations, and/or the general public, in any of the identified four focus areas.

## GREEN LAKESHORE LANDSCAPING METHODS TOPIC OF NEW STATEWIDE INITIATIVE

By Jane Herbert  
District Water Quality Educator  
MSU Extension Land & Water Unit  
Kellogg Biological Station

By John Skubinna  
Compliance Assistance Specialist  
Michigan Dept. of Environmental Quality  
Office of Pollution Prevention and Compliance Assistance

Marine contractors and landscape professionals looking to add lakescaping as a business service will be interested to learn about the new Michigan Natural Shoreline Partnership. One objective of the partnership is to develop and administer a training and certification program in natural shoreline landscaping and erosion control techniques for landscape and seawall contractors. Graduates of the program will have the option of being included on an internet-posted list of certified contractors. This list will be promoted with lakefront property owners, municipal officials, and others searching for lakescaping and natural shoreline erosion control services. Plans are being made to offer the program during the 2009-2010 winter meeting season.



The Michigan Natural Shoreline Partnership, facilitated by the MDEQ and Michigan State University Extension (MSUE), follows in the footsteps of other environmentally friendly business certification programs such as *Clean Marina* and the *Michigan Turfgrass Stewardship Program*, designed for the boating and golf industries respectively. The landscape industry is well represented on the partnership by Michigan Nursery and Landscape Association and several private companies experienced in lakescaping methods. Other participating organizations and agencies include

Michigan Native Plant Producers Association, Michigan Association of Conservation Districts, Michigan Chapter of North American Lake Management Society, Michigan Lakes and Streams Association, and Michigan Department of Natural Resources. Also represented are Michigan State University Department of Horticulture and Department of Fisheries and Wildlife.

Objectives of the partnership are:

1. Training contractors and landscape professionals in natural shoreline technologies and bioengineered erosion control.
2. Educating property owners about natural shorelines and methods that can benefit lake ecosystems.
3. Research, demonstration, and development of natural shoreline technologies that benefit lake ecosystems.
4. Encouraging local and state policies that promote natural shoreline management.

For more information on the Michigan Natural Shoreline Partnership, please contact **Jane Herbert** at **269-671-2412 x 222** or [jherbert@msu.edu](mailto:jherbert@msu.edu), or **John Skubinna** at **517-241-8370** or [skubinnaj@michigan.gov](mailto:skubinnaj@michigan.gov).

Note: A slide show of natural shoreline case studies is now available at [www.shoreline.msu.edu](http://www.shoreline.msu.edu). Click on *Resources*. On that same page is a downloadable four page brochure entitled, *Answers to Homeowner Questions about Lakescaping*. This colorful brochure was designed for landscape professionals to share with lakefront clients who are considering a more natural approach to shoreline landscape design and erosion control. Printed copies are available at a price of \$0.50 each with no charge for shipping and handling. Please contact MSU Extension at **269-671-2412, extention 222** for more information.

### COMPLIANCE ASSISTANCE CORNER

**Question: Why did the fish in my pond die? How do I prevent this from happening again next year?**

**Answer:** Fish kills are often reported to the Environmental Assistance Center, especially in the spring. Often, the suspected cause of the fish kill is directed at a neighbor or some toxin. Yet, more often than not, fish kills are caused by natural processes, such as low oxygen levels, spawning stress, and sudden changes in water temperature.

Common naturally caused fish kills include:

- **Spring kills:** Rapid changes in temperature and spawning stress are two common causes of fish kills in the spring. Rapid temperature changes can kill a variety of fish species. With spawning stress, usually dead fish of the same species will be found. In addition, fish that died during the winter may float to the surface due to certain water temperature changes within the pond. These fish that died during the winter are often large and may appear somewhat bloated.
- **Winter kills:** Fish use oxygen that is dissolved in water to survive. When ice covers a pond, there is less oxygen introduced into the pond from contact with the air. Under the ice, dead plant material is broken down by bacteria on the pond bottom; these bacteria use the oxygen available in the pond water to respire. Generally, the presence of dead plant materials in the pond (such as leaves,

*Compliance assistance staff are experienced department personnel in OPPCA that specialize in another environmental program division. Staff provide one-on-one and referral assistance on calls received by the Environmental Assistance Center. If you have any environmental question on which you need assistance, call 1-800-662-9278.*

grass clippings, and dead weeds from lake treatments) will reduce the amount of available oxygen. In addition, a thick snow cover over the ice will further reduce oxygen by blocking the sun light needed by live pond plants to produce more oxygen. When there is not enough oxygen in the pond then a fish kill will result. In the case of winter kills, large fish are usually the first impacted.

- Summer kills: Fish kills also occur in late summer due to low oxygen levels in shallow or small ponds. Low oxygen levels are often attributed to high levels of nutrients, excessive plant and algae growth, and the associated bacteria consuming the dead or dying plant materials. This type of kill often affects large fish first.

Because oxygen levels and temperature have a significant impact on fish, it is useful to consider the activities that you've undertaken in the pond's vicinity and how those activities could have impacted the water chemistry in the pond. Since temperature and lack of oxygen are the most common causes of fish kills, expensive water testing for unknown toxic pollutants is not recommended.

Fish kills due to the introduction of toxic material often impact only small fish and multiple fish species. If you suspect a fish kill due to the introduction of a pollutant into waters, contact the Pollution Emergency Alerting System at **800-292-4706**.

Learning more about how to manage your pond may help you prevent future fish kills. Michigan State University Extension (MSUE) has a document entitled *Managing Michigan Ponds for Sport Fishing*, Extension Bulletin E-1554. You can obtain a copy of this document by calling the MSUE Bulletin Office at **517-353-6740**. There is a fee of \$3.50 per copy.

## MICHIGAN OFFICE OF STATE EMPLOYER ANNOUNCES FURLOUGH DATES FOR STATE GOVERNMENT

The Office of the State Employer announced details on plans to implement furlough days for some state employees as required under Executive Order 2009-22 approved by the Michigan House and Senate Appropriations committees on May 5. The executive order requires the unpaid furlough (temporary layoff) of state employees to achieve a savings of \$21.7 million before September 30, the end of the fiscal year. Therefore, the Michigan Department of Environmental Quality, including the Environmental Assistance Center, will be closed on the following days: Friday, June 19; Monday, July 6; Friday, July 24; Friday, August 7; Friday, August 21; and Friday, September 4. For more information and Governor Jennifer M. Granholm's press release, please visit [www.michigan.gov/gov/0,1607,7-168-23442\\_21974-214883--00.html](http://www.michigan.gov/gov/0,1607,7-168-23442_21974-214883--00.html).

## EVENTS

### 2009

**JUNE 25, 2009**

#### **MICHIGAN NO CHILD LEFT INSIDE SUMMIT, KELLOGG CENTER, EAST LANSING, MICHIGAN.**

The Michigan No Child Left Inside Coalition was established to ensure that programs and policies are put in place for our children to have access and opportunity to experience Michigan's natural wonders. Sign up to hear a keynote from **Cheryl Charles**, president of the Children & Nature Network. Find out more about the success stories of organizations working to reconnect children to nature in Michigan. Join other individuals and organizations who are responsible for implementing No Child Left Inside programs and policies in Michigan to participate in workgroup meetings that will take place immediately following the summit. Registration is \$50 and includes



lunch. A full brochure and online registration will soon be available on the Web at [www.michigan.gov/deqworkshops](http://www.michigan.gov/deqworkshops), click on "Upcoming DEQ Workshops." Registration Information: Environmental Assistance Center, 800-662-9278, or [deq-ead-env-assist@michigan.gov](mailto:deq-ead-env-assist@michigan.gov).

**SEPTEMBER 9, NOVEMBER 4****8:30 a.m.-12:00 p.m.**

**AIR PERMIT APPLICATION WORKSHOP FOR FIRST-TIME APPLICANTS, CONSTITUTION HALL, LANSING, MICHIGAN.** For most first-time applicants, completing the Permit to Install application is a daunting task. However, submitting a complete and timely application can be more manageable if you know what's expected. The Michigan Department of Environmental Quality is offering this workshop designed to give information on how to submit a complete permit application. Since this workshop is geared to first-time applicants, a significant portion of the session is devoted to your specific application. Air Quality Division permit engineers will be available to discuss your permit application with you one-on-one. To take full advantage of this time with the permit engineer, it is recommended you bring detailed information about your project to the session. This training is designed for first-time air permit applicants who need help completing their permit application; however, those who have applied before and need a refresher are welcome to attend as well. Online registration is available on the Web at [www.michigan.gov/deqworkshops](http://www.michigan.gov/deqworkshops), click on "Upcoming DEQ Workshops". Registration Fee: \$25, which includes parking in the Ellis Parking Lot on the east side of Constitution Hall and training manual. Information Contact: **James Ostrowski**, Office of Pollution Prevention and Compliance Assistance, 517-241-8057, or [ostrowskij2@michigan.gov](mailto:ostrowskij2@michigan.gov). Registration Information: Environmental Assistance Center, 800-662-9278, or [deq-ead-env-assist@michigan.gov](mailto:deq-ead-env-assist@michigan.gov).

**SEPTEMBER 25, 2009**

**MICHIGAN'S GREEN CHEMISTRY CONFERENCE, FORT SHELBY/DETROIT DOWNTOWN DOUBLETREE, DETROIT, MICHIGAN.** Save the date for the first annual Michigan Green Chemistry Conference! Leading experts in the fields of business technology, chemistry, engineering, and business process improvement will inspire and inform as business leaders discuss ways to advance and sustain green products and processes in Michigan. Check out [www.michigan.gov/deqworkshops](http://www.michigan.gov/deqworkshops) for updated information on this event. Information Contact: **Karen Edlin**, Office of Pollution Prevention and Compliance Assistance, 517-373-0604, or [edlink@michigan.gov](mailto:edlink@michigan.gov).

If you are interested in participating in the development of any Office of Pollution Prevention and Compliance Assistance event, please call *Mary Goodhall* at 517-241-7968 or email at [goodhallm@michigan.gov](mailto:goodhallm@michigan.gov).