

Rick Snyder, Governor Dan Wyant, Director

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# ANNUAL REPORT ON ENVIRONMENTAL ASSISTANCE

The Michigan Department of Environmental Quality (DEQ), Office of Environmental Assistance (OEA), strives for sustainable, long-term protection of the environment by providing assistance with environmental compliance, pollution prevention, and environmental education. The OEA offers businesses, schools, and individuals the information they need to meet and surpass Michigan's environmental regulations. The following report summarizes the OEA accomplishments for fiscal year 2013 (FY13).

It is with great pleasure that we provide the 2013 Annual Report for the Department of Environmental Quality (DEQ), Office of Environmental Assistance (OEA).

The OEA provides excellent customer service by offering compliance assistance and encouraging stewardship practices that go beyond compliance. This is accomplished in concert with our internal and external partners, through technical assistance, incentive and recognition programs, financial assistance, environmental education, and pollution prevention services.

Our many partnerships with businesses demonstrate that sound environmental practices promote economic development and prosperity. For these reasons, the number of OEA partners continues to increase.

I invite you to review the entire report paying particular attention to the pollution prevention and cost reduction metrics. If you would like to learn more about any OEA programs, please contact the DEQ.

Sincerely,

Bryce Feighner, P.E., Chief

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For additional details on these activities, visit www.michigan.gov/deqoea



Protecting Michigan's environment through pollution prevention (P2) is a key element in preserving Michigan's natural resources for future generations. The state's P2 programs are administered by the DEQ in accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

This legislation entrusts the DEQ with key responsibilities:

- Educating and serving as a catalyst for change within the business community to bring about reductions in the generation of environmental wastes; and
- Providing technical and financial assistance to small businesses and institutions to facilitate P2.

This annual report fulfills the reporting requirements to the Legislature, showcases Michigan's P2 and compliance assistance programs, and highlights the importance of taking care of Michigan's resources.

## Clean Corporate Citizen Program

The Clean Corporate Citizen (C3) Program is a program for businesses, municipalities, and nonprofit organizations demonstrating environmental stewardship and a strong environmental ethic. The C3 Program is built on the concept that C3-designated facilities carry out their environmental protection responsibilities without rigorous oversight and should enjoy greater permitting flexibility than those who have not demonstrated environmental leadership. The C3s must establish an Environmental Management System, implement P2 activities, and demonstrate compliance with their environmental requirements. Participants awarded a C3 designation receive public recognition and are



entitled to certain regulatory benefits, including expedited permits. There are currently 135 active C3 participants in the program. Partners engaged in a variety of activities including energy efficiency and conservation, waste reduction/elimination, recycling many different types of materials, wildlife habitat projects, and community partnering and mentoring. In FY13 C3 partners reported annual savings of over \$10.9 million as a result of sustainable P2 activities they have implemented at their facilities.

The C3 Program welcomed the following new members this fiscal year:

American Transmission Company (ATC), Kingsford	DTE Gas - Petoskey CBO/Center, Petoskey
AW Transmission Engineering USA Inc., Plymouth	DTE Gas - River Rouge Service Center, Melvindale
DTE Gas - Allen Road Service Center, Melvindale	DTE Gas - Sault Ste. Marie Service Center, Sault Ste. Marie
DTE Gas - Alpena Service Center, Alpena	DTE Gas - Taggart Service Center, Six Lakes
DTE Gas - Columbus Station, Columbus	DTE Gas - Washington 10 Station, Washington
DTE Gas - Coolidge Service Center, Detroit	DTE Gas - Willow Run Compressor Station, Ypsilanti
DTE Gas - Escanaba Service Center, Escanaba	Federal-Mogul Powertrain Systems, Sparta
DTE Gas - Gaylord Service Center, Gaylord	Hemlock Semiconductor Corporation, Hemlock
DTE Gas - Kalkaska Service Center, Kalkaska	Robert Bosch Corporation - Automotive Group, Farmington Hills
DTE Gas - Kingsford Service Center, Kingsford	Robert Bosch Corporation - Bosch Engineering Group, Novi
DTE Gas - Lynch Service Center, Detroit	Robert Bosch Corporation - Bosch Proving Grounds, Flat Rock
DTE Gas - Michigan Avenue Service Center, Ypsilanti	Robert Bosch Corporation - Plymouth, Plymouth
DTE Gas - Milford Station, Milford	

## Clean Diesel Grant Program

Diesel exhaust has been linked to health problems, including increased risk of premature mortality, cancer, cardiovascular disease, and asthma. The Clean Diesel Grant Program funds projects that prevent or reduce diesel emissions from on-road, stationary, and non-road diesel engines. Since 2008, Michigan has received more than \$3 million in federal clean diesel grant funds under the Diesel Emissions Reduction Act, which has been used to clean up diesel engines in fleets throughout Michigan. In FY13 the Michigan Clean Diesel Program affected over 500 vehicles ranging from school buses to long-haul trucks. Activities ranged from replacing old diesel engines with newer, cleaner burning diesel engines to installing technologies that control diesel emissions. Through these actions, 215 tons of nitrogen oxide, 33 tons of particulate matter, 85 tons of hydrocarbons, 318 tons of carbon monoxide, and 3,560 tons of carbon dioxide will not be released to the environment over the lifetime of the affected vehicles. This results in cleaner air for Michigan residents.



## **Community P2 Grants**

The Community P2 Grant Program brings together local governments, businesses, planning agencies, and residents to achieve measurable pollution reductions using innovative, sustainable P2 practices. In FY13 the DEQ completed several grant projects that focused on sustainable communities. These grants resulted in the development of the following projects:

- Muskegon County Sustainability Plan www.co.muskegon.mi.us/sustainability
- Oakland County Sustainability Plan www.ftch.com/woodward5
- Regional Sustainable Commerce Framework http://wmsbf.org/programs-and-events/tools-resources-initiative-deq
- Green Communities Network www.mml.org/green

In FY13 the DEQ focused on the problem of unused pharmaceuticals entering the environment and partnered with the Great Lakes Clean Water Organization to create a documentary to highlight this issue. This documentary, The Yellow Jugs Old Drugs Program, A Solution to the Emerging Issue of Pharmaceutical Compounds in Ground, Surface and Municipal Water, highlights the environmental issues associated with drugs in the environment. The documentary was broadcast on public television stations across Michigan and can be viewed on YouTube at http://youtu.be/oy4zgVtNPbo.



The Yellow Jug Old Drugs Program documentary



Drug collection event at the State capitol.

The Community P2 Grant Funds will continue to support projects in Michigan that implement pharmaceutical collection programs. This round of grants furthers the program goal of providing free and convenient drug collection resources to all Michigan residents by expanding drug collection programs into previously unserved and underserved areas.

Organizations that received funding in FY13 include:

- Marquette County Solid Waste Management Authority
- Superior Watershed Partnership
- Tip of the Mitt Watershed Council
- Resource Recovery and Recycling Authority of Southwest Oakland County

The DEQ's focus on the problem of unused drugs in the environment resulted in 29,607 pounds of pharmaceutical waste collected throughout Michigan and disposed of in an environmentally sound manner.

## **Green Chemistry**

The Michigan Green Chemistry Program is a state effort led by the DEQ to advance the use of the green chemistry principles in Michigan. The program is supported by the Michigan Green Chemistry Roundtable, a multi-sector advisory group, which continues to advise and contribute on a number of initiatives.



The Green Chemistry Program hosted the fourth annual Green Up: Michigan Green Chemistry and Engineering Conference on the campus of Wayne State University in Detroit. The theme of the conference was "Driving Sustainable Manufacturing," providing attendees a chance to explore research and application examples, opportunities, and implications of greening chemical products and processes in Michigan. The fourth annual Michigan Green Chemistry Governor's Awards were given to promote excellence in innovation, economic development, and public health risk reduction by businesses and institutions, with a focus on the benefit to Michigan. The award ceremony took place during a breakfast ceremony at the Green Up Conference. Winners of the 2012 Michigan Green Chemistry Governor's Award were:

- The Dow Chemical Company
- · Vijay Mannari, PhD, Eastern Michigan University

In addition to the Green Up Conference and Michigan Green Chemistry Governor's Awards, the Green Chemistry Program had the following accomplishments in FY13:

- Two Michigan higher education institutions, which are Green Chemistry Roundtable members, showed national leadership by being among the first signers of the Green Chemistry Commitment. Information available at http://greenchemistrycommitment.com.
- With financial assistance provided by the U.S. EPA, the DEQ launched the Michigan Green Labs Initiative. This initiative delivers resources to implement green laboratory practices. Future partner opportunities include: contributing to a network of green lab practitioners via the Michigan Green Chemistry Clearinghouse, providing input on materials, piloting methods, and applying for a competitive pool of funding through the grant project.
- The DEQ continued participation in regional and national green chemistry related efforts, including the Green Chemistry and Commerce Council and the National Pollution Prevention Roundtable's Safer Chemistry Challenge Program, as well as helping plan the second Great Lakes Green Chemistry Conference.



## **Mercury P2**

For decades, mercury has been a pollutant of concern due to its toxic and bioaccumulative properties. The DEQ has several programs that reduce mercury discharges and emissions in order to protect the health of residents as well as the fisheries and tourism industries. The significant P2 efforts to reduce mercury impacts in FY13 include the following:

- Grant work continues with Michigan Energy Options to recycle mercury thermostats removed during energy
  efficiency improvements and community demolition efforts. The state, with nearly 220 collection sites, has an
  opportunity to offer free collections throughout Michigan. The number of thermostats recycled has increased from
  about 3,000 per year in 2009 to 17,941 in 2012-2013, which equates to approximately 120 pounds of mercury
  recovered. This represents an increase of 16 percent over last year's totals.
- A grant was awarded to the Michigan Department of Agriculture and Rural Development's Clean Sweep Program.
   During FY13, nearly 1,500 pounds of mercury containing devices were collected, representing the capture of several hundred pounds of pure mercury from local residents, schools, and businesses.
- Through a Great Lakes Restoration Initiative (GLRI) Grant, Michigan expanded efforts to remove mercury and reduce its impact from the state fisheries and water supply. This funding source offered an opportunity to provide a \$300 incentive to dentists installing amalgam separators to reduce mercury discharges. From its beginning in January 2011 through the grant end date of September 2013, a total of 1,262 amalgam separators were installed under the program. This resulted in the recycling of 2,524 pounds of waste amalgam or 1,262 pounds of mercury being recovered each year.

- A total of 8,970 mercury auto switches, equating to approximately 20 pounds of mercury, were recycled in FY13.
   There are currently over 300 collection sites located throughout Michigan for mercury auto switches.
- Through a contract funded by the GLRI Grant, The Environmental Quality Company conducted a bucket collection program from April 2013 through September 2013. This collection program was responsible for recycling a total of nearly 1,200 mercury containing devices, which contained over 214 pounds of mercury.
- The Michigan Department of Community Health (DCH) collaborated with Michigan State University to develop Public Service Announcements (PSAs) on mercury that can be viewed on YouTube or aired on cable and TV channels. A PSA on cleaning up broken CFLs, two longer length informational videos, and three presentation videos were finalized and went live on September 19, 2013:
  - Cleaning Up Broken CFL Bulbs www.youtube.com/watch?v=EkUHuW0B\_es&feature=youtu.be
  - Mercury: Dangerous Material www.youtube.com/watch?v=MuvVQj5bh3o&feature=youtu.be
  - Mercury: The Hazard You Don't See www.youtube.com/watch?v=svmst0OFDGo&feature=youtu.be
  - Poison Control Center presentation www.youtube.com/watch?v=aBsAb6zCUFl&feature=youtu.be
  - Local Health Department presentation
     www.youtube.com/watch?v=gvs2niEvi-o&feature=youtu.be
  - U.S. EPA presentation www.youtube.com/watch?v=6BvRICwefbk&feature=youtu.be



Compact Fluorescent Light Bulb - PSA

These PSAs, along with five others developed last year, have been airing at Michigan Secretary of State offices across the state and are available for viewing on the DCH's YouTube Web site, www.youtube.com/michigandch.

## Michigan Business P2 Partnership

The Michigan Business Pollution Prevention Partnership (MBP3) is a voluntary program open to all Michigan organizations interested in initiating or expanding P2 practices and receiving recognition for these efforts.

- The estimated combined cost savings gained via the P2 results reported by MBP3 partners during calendar year 2012 was \$105,702,248.90 (Cost factor source: U.S. EPA P2 Cost Calculator and guidelines).
- MBP3 added 14 new facilities to its membership in FY13 who committed to develop P2 goals and report results annually.
- P2 news and opportunities were disseminated to partners and presentations were given at workshops to inform and engage potential new partners.

"GM Flint Assembly is able to utilize resources within the MBP3 program to improve pollution prevention at the site and within our community. We continue to expand our knowledge on pollution prevention and share this knowledge with our partners." — Irene Bashore, General Motors Flint Assembly

P2 Results Reported by Partners in Terms of Green House Gas Reductions: Metric Tons of CO, Equivalents (MTCO, Eq) Reduced (FY13)

		2,	
Reduction	MTCO, Eq Reduced	Equivalency	
Energy Use 138,376,689 Kilowatt hours	97,632	The annual green house gas emissions from 20,340 passenger vehicles.	
<b>Water Use</b> 74,467,330 Gallons	208	The CO <sub>2</sub> emissions from 23,318 gallons of gasoline consumed.	
Solid Waste Diverted from the Landfill 1,843,417,500 Pounds	2,460,962	The CO <sub>2</sub> emissions from burning 122,925 railcars worth of coal.	

(Source: U.S. EPA GHG Equivalencies Conversion Tool)

## Michigan Green Communities Challenge

In 2010 the DEQ partnered with the Michigan Municipal League (MML), the Michigan Energy Office (MEO), Michigan Townships Association (MTA), and Michigan Association of Counties (MAC) to expand the Michigan Green Communities Challenge, which measures local government progress toward energy efficiency and sustainability benchmarks.

In the ensuing years, the program has seen a number of significant changes, including a move to a Web-based checklist format, the addition of new partner organizations, and an expansion of topics covered beyond energy efficiency. After a series of successful statewide conferences and other educational events, which included participation from more than 130 local governments, the supporting organizations started to view the Challenge as one component of a broader program, the Michigan Green Communities network, designed to connect leaders from around the state and help them learn from one another.

Until now, this network has been largely an informal and unofficial entity, held together by verbal agreements and a common vision. Today, Michigan Green Communities is supported by six statewide organizations that have signed a formal memorandum of understanding: MML, MEO, MTA, MAC, the DEQ, and the MML Foundation. These organizations have agreed to commit staff time and other resources to the program, which will be led by a steering committee of local government leaders. The MML Foundation has agreed to serve as the fiduciary for Michigan Green Communities.

The Michigan Green Communities network continues to grow. Visit http://mml.org/green to get your community or organization involved and keep up on the latest program updates.

## Neighborhood Environmental Partners Awards Program

The Neighborhood Environmental Partners (NEP) Awards Program was developed by the DEQ to recognize facilities and their community partners who have worked together on environmental projects to improve the local environment in their communities.

In FY13 DEQ Director Dan Wyant awarded 13 facilities in Michigan the NEP Program Award for their outstanding commitment to environmental community outreach. The 13 facilities were:

- ADAC Automotive
- AWTEC
- · Consumers Energy J.R. Whiting Plant
- DTE Energy Company
- Ford Motor Company
- General Motors LLC
- Hemlock Semiconductor Corporation
- Herman Miller Incorporated
- · Holland Board of Public Works
- · Lansing Board of Water and Light
- Light Corporation
- Pilgrim Manor Incorporated
- United States Army Garrison-Detroit Arsenal-Environmental Division



Director Dan Wyant presenting NEP Awards

#### Examples of FY13 projects include:

- Water quality sampling projects with local schools and watershed groups
- Shoreline Cleanup and Adopt-a-Highway projects
- Earth Day Activities (including plant tours and environmental presentations at local schools)
- Habitat creation and restoration projects (examples: planting native plant species, creation of butterfly gardens, building bird boxes, maintaining nature trails, camp and park restoration projects)
- · Electronic and household waste collections

Special longevity recognition was given to Consumers Energy J.R. Whiting Plant, DTE Energy Company, General Motors LLC, Herman Miller Incorporated, and United States Army Garrison-Detroit Arsenal-Environmental Division for five or more years of participation with the NEP Awards program.

## Retired Engineer Technical Assistance Program

The Retired Engineer Technical Assistance Program (RETAP) provides on-site P2 assessments to small businesses and institutions in Michigan. Assessments are performed by teams of retired engineers and are free, voluntary, confidential, nonregulatory, and objective.



In FY13 the RETAP was cited as an example program providing "great customer service and environmental benefits" by Governor Rick Snyder in his Special Message

on Energy and the Environment. The RETAP was a North America Gold winner of the International Green Apple Award for Environmental Best Practices by The Green Organization for being an exceptional public sector program providing valuable P2 technical assistance to small businesses. To date, the RETAP has assisted over 1,250 businesses by providing specific recommendations to eliminate waste, conserve resources, increase process and energy efficiencies, and improve profits. The RETAP will continue to enhance program services through a \$106,000 P2 grant received from the U.S. EPA last year.

In FY13 the RETAP completed 71 assessments encompassing 109 buildings and identifying over \$3.5 million in potential cost savings or an average of \$49,200 saved per RETAP assessment (see table below). The RETAP engineers provided 227 hours of additional P2 assistance for small businesses and government facilities, which identified over \$40,000 in potential savings.

**RETAP Completed 80 P2 Assessments in FY13** 

Reductions	Amount	
Operating Costs	3.2 million Dollars	
Waste Disposal	2.5 million Pounds	
Water Usage	13.6 million Gallons	
Electricity Usage	17.4 million kWh	
Natural Gas Usage	0.9 million CCF	
CO <sub>2</sub> Emissions (equivalents)	33.9 million Pounds	

If you are looking at how to be more green, how to be more energy efficient, we have resources and tools to help. - Governor Rick Snyder, November 2012 Special Message on Energy and the Environment.

## **Small Business P2 Loan Program**

All across Michigan, small businesses are taking advantage of the DEQ's Small Business Pollution Prevention Loan (P2 Loan) Program to assist them in deploying preferred environmental technologies and practices. Established under the 1998 Clean Michigan Initiative Bond approved by voters, the P2 Loan Program has invested over \$6.5 million in 64 loans to small businesses. Any business that employs 500 or fewer people, is independently owned or operated, and not dominant in its field is eligible to apply for a low interest loan.

In FY13 over \$97,500 was awarded in loans to the following P2 Loan Program participants:

- 3 M Leasing, L.L.C., and their local lender, Comerica Bank
- · Animal Hospital and Pet Complex of Lowell, P.C., and their local lender, Chemical Bank
- Shelby Foot and Ankle, P.L.L.C., and their local lender, FirstMerit

The OEA's Compliance Assistance Program offers multi-media environmental assistance to businesses, industry, governmental officials, and the general public on all major DEQ programs.

## **Customer Service Program/Survey**

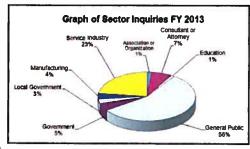
To gain a better understanding of how the department is meeting customer needs, the DEQ developed a Customer Service Program. As part of this program, the DEQ distributed a customer satisfaction survey and developed two publications to assist the regulated community with inspections – "What to Expect from an Environmental Compliance Inspection" and "Environmental Inspections: Rights and Responsibilities." As mandated by the Michigan Legislature, the DEQ is reporting on the program results and outcomes.

- Ninety-nine percent of 98 inspected businesses that completed the survey reported their DEQ inspector was professional, courteous, and adequately answered their questions during the inspection.
- Ninety-seven percent of survey responders reported that their DEQ inspector adequately explained their initial finding to them at the close of the inspection.

The complete survey results can be viewed at **www.michigan.gov/deqsurveys**. Through this program, the DEQ can assess the services it provides, make improvements where needed, and ultimately increase customer satisfaction.

#### **Environmental Assistance Center**

One of the many services offered by the DEQ is the Environmental Assistance Center (EAC). The EAC is a call center that provides businesses, individuals, and communities a single point of access to all DEQ programs. Callers may contact the EAC toll free at 800-662-9278 during business hours to receive fast, direct, one-on-one assistance from the OEA assistance staff. Approximately half of the incoming inquiries are resolved by OEA staff, while the other half are routed to the DEQ regulatory staff or agencies like the Department of Natural Resources or United States Environmental Protection Agency (U.S. EPA).



In FY13 the EAC handled 15,986 inquiries, 99 percent of which were resolved within one business day. The distribution is as follows: 56 percent were from the general public, 23 percent were from service industries, 5 percent from government, 7 percent from consultants or attorneys, 4 percent from manufacturing industries, 3 percent from local government, 1 percent from associations or organizations, and 1 percent from education. The customers assisted by the EAC routinely return satisfaction surveys with complimentary comments.

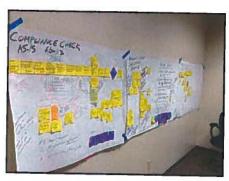
## **Environmental Audit Privilege and Immunity**

The Environmental Audit Privilege and Immunity Law was created in 1997 to reduce the fear of disclosure of information regarding violations by businesses and municipalities to the DEQ that may lead to enforcement and penalties. It provides incentives for businesses to perform environmental audits and promptly report and correct violations, leading to increased compliance. Obtaining privilege involves filing a Notice of Intent to Perform an Environmental Audit prior to performing the audit. Immunity provisions can be sought later by promptly filing a Voluntary Disclosure and correcting the observed violations. In FY13, 50 Notices of Intent to perform an audit and 22 Voluntary Disclosures were filed in efforts to voluntarily comply with environmental regulations.

## **Lean Process Improvement (LPI) Projects**

**Compliance Verification Program** 

The Compliance Verification Program is responsible for gathering compliance status within the DEQ related to specific facilities. Verifications are needed to assure that incentives are not given to facilities that have continuous violations. This process provides a level playing field for other companies that are consistently expending resources to assure a healthy environment related to their operations. The original process utilized nearly two hours of staff time per facility. After conducting the LPI, the time was reduced to 15 minutes. Additionally, the coordination between the regulatory divisions and the Compliance Assistance team was reduced from three weeks to just over a week.



**Pollution Alerting Emergency System** 

The Compliance Assistance Unit began gearing up in FY13 to accept Pollution Alerting Emergency System (PEAS) calls in the Environmental Assistance Center (EAC). Historically, the PEAS calls have been answered by an answering service that does not specialize in environmental concerns. Effective December 2013, the PEAS calls are answered by the EAC during regular business hours. This change has great potential to improve the quality of service provided to anyone reporting a spill or release and is likely to improve the speed of response.

#### **Permit Coordination**

The DEQ administers more than 65 permits, licenses, and professional certifications. Determining which of these is required for a project or activity can be challenging, especially for a new or expanding business. The OEA makes the process simpler, by guiding businesses through the "Michigan Business One Stop" (One Stop) web portal. Through One Stop (www.michigan.gov/business), a user can determine the permits, licenses, and certifications needed in order to conduct business within the state of Michigan. During FY13, the OEA helped numerous businesses navigate One Stop to determine the environmental regulations that applied to their prospective business operations. The OEA continues to serve on several workgroups to provide ongoing improvements to the One Stop tool, in order to increase efficiencies and convenience for new, existing, and expanding businesses in Michigan. The OEA also makes the process easier to understand, by creating DEQ specific permit information checklists available at www.michigan.gov/deqpermits.

## Superfund Amendments and Reauthorization Act (SARA) Title III

The Michigan SARA Title III Program implements the reporting requirements of the federal Emergency Planning and Community Right-to-Know Act. At the end of FY13, there were 7,394 facilities in Michigan's online database for which 6,407 annual hazardous chemical inventory reports and 235 revisions were submitted. In addition, 440 emergency planning notifications were submitted. The SARA Program staff processed 31 written follow-up hazardous chemical release reports. In addition to responding to numerous SARA Program inquiries, the SARA Program staff provided training at five conferences during the year, published an updated SARA guidebook, and maintained current information on the Web pages specific to SARA Title III, Release Reporting, and Emergency Planning.

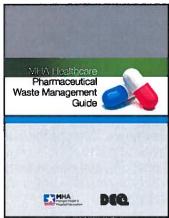


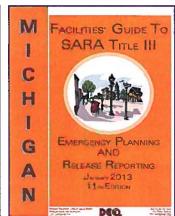
#### **Publications**

The OEA publishes regulatory guidance materials, both online and hard copy, in coordination with expert program staff. These products provide independent, immediate access to compliance assistance resources. The OEA publications range from Frequently Asked Questions and brochures to more extensive fact sheets, subject area guidance documents, and comprehensive guidebooks like the Michigan Guide to Environmental, Health, and Safety Regulations. In FY13 OEA staff published 19 new or updated compliance assistance publications on a variety of topics, some of which included:

- Michigan Air Emissions Reporting System (MAERS) User Guide and Workbook
- Michigan Facilities' Guide to SARA Title III, Emergency Planning and Release Reporting - 11th Edition
- MHA Healthcare Pharmaceutical Waste Management Guide
- Public Involvement Handbook

The OEA staff also published a biweekly DEQ Environmental Calendar and quarterly Environmental Assistance Bulletin highlighting decisions and actions before the DEQ as well as training events and outreach materials. Each edition of the Environmental Assistance Bulletin included a Compliance Assistance Corner article providing regulatory guidance on a current topic of interest to the regulated community.





#### Workshops, Webinars, and Online Training

The OEA oversees scheduling, logistics, registration, and speaker coordination to deliver training events that educate businesses, municipalities, institutions, and the general public on environmental requirements, P2 practices, and other topics related to the DEQ's mission. These training events include live workshops, conferences, and webinars, as well as recorded videos and tutorials that can be accessed by users at any time.

In FY13 the OEA collaborated with programs throughout the DEQ to coordinate 41 workshop and conference events held throughout the state. Over 2,400 businesses, municipalities, institutions, and environmental professionals participated at these events. The largest event was the Stormwater, Asset Management and Wastewater (SAW) Grant Seminar Series held at 4 locations throughout the state with 536 attendees. The DEQ also hosted a variety of other events that included topics such as air emissions and SARA Title III reporting, green chemistry, asset management, air permitting, and green healthcare.



#### FY13 Workshops, Conferences, and Seminars

DATE	EVENT	DATE	EVENT
10/26/2012	Green Chemistry Conference, Detroit		Noncommunity Drinking Water Supply Workshop, Bay City
11/7/2012	Air Permit to Install Application Workshop, Lansing		Small System Water Operator Training Series, 5 locations
12/6/2012	Drinking Water Asset Management Seminar, Harbor Springs	May 2013	Type II Level 5 Noncommunity Training, 3 locations
12/10/2012	MS4 Permit Workshop, Pontiac	6/5/2013	Air Permit to Install Application Workshop, Lansing
January and February 2013	Introduction to the MAERS Workshops, 5 locations	6/21/2013	Michigan Environmental Education Curriculum Support - Climate Change Workshop, Lansing

DATE	EVENT	DATE	EVENT
February 2013		7/29/2013	No Child Left Inside Summit, East Lansing
27172010	Air Permit to Install Application Workshop, Lansing	7/31/2013	MI Green Labs Initiative Workshop, Ann Arbor
1110110112010	Water and Wastewater Asset Management Seminar Series, 4 locations	9/4/2013	Air Permit to Install Application Workshop, Lansing
3/9/13	Michigan Environmental Education Curriculum Support Unit Training	9/11-12/2013	MI Green Healthcare Conference, Detroit
4/8/2013	Air Permit to Install Application Workshop, Lansing	September 2013	Stormwater, Asset Management and Wastewater (SAW) Grant Seminar Series, 4 locations







The OEA coordinated and hosted 18 webinars in FY13. The webinars ranged in scope from explaining how to comply with new concentrated animal feeding operations (CAFO) annual report requirements to providing an overview of the Environmental Audit Privilege and Immunity Law. The 18 live webinar broadcasts educated 1,180 people throughout Michigan and the United States. Recordings of these webinars are posted at www.michigan.gov/deqworkshops.



#### **FY13 Webinars**

DATE	WEBINAR TITLE	DATE	WEBINAR TITLE
10/5/2012	Local Health Department Train the Trainer	5/2/2013	Environmental Audit Privilege and Immunity Law
11/20/2012	2013 Clean Diesel Grant Program RFP Q&A	5/8/2013	Calculating the Cost Benefit of P2 & GHG Emission Reduction
11/27/2012	MI Natural Shoreline Partnership - Shoreline Permitting	6/11/2013	Radon in New Construction
1/10/2013	MAERS Review	6/12/2013	Radon in Real Estate
1/14/2013	Lead Consumer Notification for Noncommunity Schools and Daycares	7/16/2013	P2 - WARM and ReCon
2/6/2013	PCB Total Maximum Daily Load (TMDL) Public Meeting Webinar Broadcast	8/8/2013	Nonpoint Source Grant
2/19/2013	Complying with New CAFO Annual Report Requirements	8/28/2013	Asbestos and Fire Suppression Training
3/26/2013	Spill Prevention, Control, and Countermeasures (SPCC) Plans for Farms	9/5/2013	Michigan Electronics Takeback Program
4/24/2013	Mercury Total Maximum Daily Load (TMDL) Online Public Meeting	9/18/2013	Nonpoint Source Grant

## **ENVIRONMENTAL EDUCATION**

Environmental Education helps Michigan citizens understand the connection of people and living things to the air, land, and water and how these systems relate to the global environment. These connections lead to informed decisions on environmental protection and natural resource conservation. The DEQ Environmental Education strategy is as follows:

- 1. Integrate environmental education curriculum support into Michigan schools at the middle school level to ensure students have early training and exposure to environmental concepts.
- 2. Build and maintain a strong network of partnerships to leverage and support environmental education at all levels of
- 3. Coordinate a vibrant internship program to provide college-level exposures to environmental work.

#### Environmental Education FY13 highlights include:

- The Michigan Environmental Education Curriculum Support (MEECS), a science-based curriculum impacting
  grades 3-9, includes units on ecosystems and biodiversity, land use, water quality, air quality, energy resources,
  climate change, and outdoor education supplement. The MEECS was originally published in 2006. During FY13, the
  second edition, including the new units, was published. Nearly 1,000 educators attended a second edition MEECS
  workshop. Workshops have been conducted for nearly 4,500 educators since the MEECS was first published.
- Working with a myriad of colleges and programs, the DEQ facilitated 91 internships during FY13, a 7.1 percent increase over FY12.
- As part of our environmental education of youth, the DEQ celebrated Earth Day with nearly 2,000 children and more than 200 teachers and assistants.



Winning Kindergarten Poster



Winning First Grade Poster



Winning Second Grade Poster



Winning Third Grade Poster



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Winning Fifth Grade Poster

