



# AWaRe Division Annual Report

# FY2015

**Air, Waste, Remediation & Redevelopment Division**

Wisconsin  
Department of  
Natural Resources

- FY2015 Highlights
- Customer Service Excellence
- New Laws and Regulations
- Emerging/Ongoing Issues
- Performance Measures

# Division Goals

Protect Human Health and the Environment

Provide Excellent Customer Service

Promote Economic Vitality

Support Conservation of Resources

*Division Purpose: To protect the environment and public health through efficient, effective and consistent processes that yield measurable environmental results, promote superior performance and build customer driven solutions.*

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# From the Administrator

On behalf of the dedicated staff of the Air, Waste and Remediation & Redevelopment (AWaRe) Division, I am proud to provide you with this Annual Report for FY2015 (July 1, 2014 – June 30, 2015). As you will see, our Report continues to focus on four key areas: customer service excellence; new laws and regulations; emerging/ongoing issues; and performance measures.

2015 was another productive year for the Division. The Remediation & Redevelopment program celebrated its 20<sup>th</sup> birthday by returning another 1300 acres of previously contaminated lands back to productive use. The Waste & Materials Management program continued to enhance recycling efforts around the state, providing a recycling toolkit for special events. In addition, air quality overall continues to improve, as shown in the Air Quality Trends Report, which is produced by the Air Management program. Moreover, the Division's commitment to service excellence was demonstrated by the fact that **97%** of our customers who completed our survey indicated they were very satisfied or satisfied with the service they received from staff! I hope you will take a few minutes to review some of the many other accomplishments reflected in this Report.

Moving forward, there will be some changes in the Division. What has been the AWaRe Division has merged with a number of water programs to form a new Environmental Management Division. Furthermore, we will be examining the work we do to ensure that we are putting your resources towards the highest priority work. In addition to examining *what* work we do, we will also be looking at *how* we do our work, to ensure we are operating as efficiently as possible. This analysis will also help us determine if any additional adjustments need to be made to the Division structure. Ultimately, these structural changes and work analysis will allow us to better serve our customers.

I look forward to working with you and receiving your input as we move ahead with this effort!

A handwritten signature in black ink, appearing to read "Pat Stevens", with a long horizontal flourish extending to the right.

Pat Stevens, Administrator

# AWaRe Facts

- Wisconsin has the **best times in the nation for issuing major source air construction permits** according to a Greenwire review of state and federal permitting data.
- In FY2015, DNR issued the **highest number of major air operation permit renewals** since formal tracking began in 2000.
- The **number of ozone nonattainment areas in Wisconsin is the lowest** since the current regulatory framework was established 25 years ago.
- We helped make **more than 1,300 acres of property available for productive reuse** in FY2015.
- Since the creation of the Remediation & Redevelopment program in 1995, DNR has **helped clean up more than 15,600 brownfield properties**; more than 20,000 acres have been returned to productive use since 2004.
- Federal funds awarded to DNR for **brownfields cleanups since 2004 have totaled \$12.24M**. DNR has awarded 33 grants for almost \$6M and six loans for a total of \$4M. Since 2009, federal funds awarded to DNR for **brownfield assessments total \$2.1M**. DNR has made 43 funding awards, with half going to communities with populations less than 10,000.
- More than **180 million pounds of electronics have been recycled through E-Cycle Wisconsin** between January 2010 and June 2015.
- Recycling processing facilities **recycled some 830,000 tons of material in 2014 from residential and commercial sources**.

# FY2015 Highlights

## Remediation & Redevelopment – 20 years of progress

The Wisconsin Remediation & Redevelopment (RR) program is two decades old this year. Created in 1995 after the passage of the Wisconsin Land Recycling Act in 1994, the program was aimed at dealing with something new, called “brownfields.” Essentially, the law created exemptions for local governments, voluntary parties, lenders, and owners of property neighboring the problem sites to help promote the cleanup and reuse of contaminated properties.

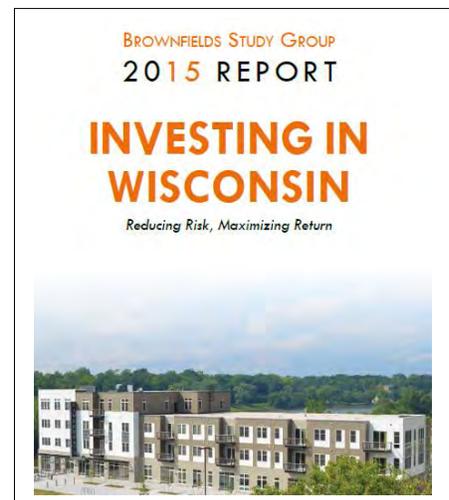
Since that time, the RR program has worked with citizens all across the state, in all 72 counties and in more than 95% of Wisconsin’s 1,848 cities, villages and towns. DNR has helped clean up more than 15,600 brownfield properties, and more than 20,000 acres have been returned to productive use since 2004, when tracking began.

The RR Program is routinely identified as one of the most successful and innovative cleanup programs in the country. We credit our success in large part to our strong partnerships with local governments, environmental professionals and non-profit organizations.

## Brownfields Study Group finalizes report

A large part of the cleanup and redevelopment success in Wisconsin is due to the partnership between the Wisconsin Department of Natural Resources and the Brownfields Study Group. This independent and external advisory group – with members representing state and local governments, environmental consulting firms, industry associations, law firms, non-profits and academia – has worked to strengthen brownfield redevelopment legislation and administrative procedures.

During much of 2014, the Group and interested stakeholders spent countless hours developing new proposals to meet today’s needs and to enhance an already vibrant brownfields program. These proposals can be found in the Group’s [2015 Report – Investing in Wisconsin](#).



## Cleanup and redevelopment projects

### Fox River

Following seven years of cleanup work on the Fox River in the heart of Appleton, a former industrial site is seeing new life as the RiverHeath neighborhood. Luxury condominiums, a brew pub, and retail space have already been developed. Future plans include an outdoor music venue, apartments and a riverfront recreation trail. So instrumental to the redevelopment effort was DNR Project Manager



*The Borski Boardwalk at the RiverHeath in Appleton, named in honor of Remediation & Redevelopment employee Jennifer Borski (DNR photo).*

Jennifer Borski, that the RiverHeath development team named a local boardwalk in her honor and recognized her work with a plaque. All told, this \$14 million effort is slated for completion in 2016.

### The Galaxie

In the fall of 2014, developers broke ground on The Galaxie, a \$65 million mixed-use housing and retail venture in the shadow of the state capital on Madison's busy East Washington Avenue corridor. This four-acre site has seen industrial and commercial use since the early 1900s. With the help of a \$400,000 grant from DNR, the city removed 16 underground fuel tanks and tons of contaminated soil from the site. The Galaxie will soon be home to the city's first Festival Foods grocery store, a 10-story apartment building, and 65,000 square feet of retail space.

### Badger Army Ammunition Plant

What was once a decades-old ordinance factory near the Baraboo Hills is becoming one of the state's newest recreational areas with the help of the Remediation & Redevelopment program's experts in contamination cleanup. The former Badger Army Ammunition Plant (BAAP) produced propellants for the military during three wars beginning in the 1940s. Now, the grassland and oak savanna offers a wide variety of recreational opportunities as part of the Sauk Prairie Recreation Area.



*The Gruber's Grove Bay "lay down area" at the former BAAP, where contaminated sediment and water are pumped into the long tubes. Water flows through the membrane, leaving the mercury contaminated sediment behind. The water is collected, purified and sprayed back onto the land; the tubes are buried in place, creating an approved landfill (DNR photo).*

Even before the factory was decommissioned in 1998, staff with the RR program began working on the remediation of groundwater, sediment, and soil contamination cleanup efforts on the property beginning in the mid-1980s, helping to clear the massive amounts of volatile organic compounds, PCBs, and other long forgotten contaminants.

## Recycling Excellence Awards

In October, 2014, the Waste & Materials Management program's Recycling Excellence Awards recognized local governments and organizations for their superior recycling efforts and innovations. The award program publicly acknowledges communities with outstanding recycling performance while highlighting the many ways communities and organizations, both small and large, are able to increase the effectiveness of local recycling programs. The program will enter its third year in 2015. Any local government or organization that recognizes excellence in its local recycling strategy is encouraged to self-nominate or submit a nomination on another program's behalf. Visit: <http://dnr.wi.gov/topic/Recycling/RU.html>.

### *2014 Recycling Excellence Award Winners:*

*City of Janesville  
 Village of Lake Delton  
 Eau Claire County  
 Outagamie County  
 Dunn County  
 Village of Bayside  
 Midwest Renewable Energy Association  
 Chippewa County  
 Town of Brooklyn  
 Village of Suamico  
 City of Prairie du Chien  
 Forest County Potawatomi  
 Village of Stockbridge  
 Town of West Kewaunee  
 Village of Sturtevant  
 Town of Mackford  
 City of Two Rivers  
 Town of Sumpter*

## Green Tier is helping Waupaca Foundry achieve zero waste

The Waupaca Foundry in the Fox Valley is finding ways to reuse foundry byproducts, aiming to become the first iron foundry worldwide with zero landfill waste. As part of this initiative, the foundry has been recognized by DNR's Green Tier program, a cooperative effort that aids and celebrates businesses that seek to reduce waste and reuse products for the public good and market. Waupaca



*Waupaca Foundry byproduct material being used as sub-base for a new milking parlor and calf barn (DNR photo).*

Foundry's success shows that with an innovative strategy, industrial byproducts can safely be put to uses that benefit everyone and don't need to be considered "wastes" solely destined for the landfill. This partnership also demonstrates how DNR can be a catalyst for new or existing industries to find safe, effective beneficial uses for their byproduct material, saving both money and resources without endangering the environment. Businesses seeking uses for their own industrial byproducts are able to consult with the DNR's Sustainability and Business Support program.

## Gundersen Health System and DNR collaborate to train inspectors

Inspecting a hospital for compliance with hazardous waste regulations can be challenging. DNR's hazardous waste program and Gundersen Health System collaborated in April 2015 to train DNR inspectors on how to properly inspect a healthcare facility. The onsite training raised DNR staff competency in inspecting healthcare facilities and provided detailed feedback to Gundersen about how it manages its waste. Both Gundersen and DNR believe the collaborative training will enable DNR staff to inspect Wisconsin healthcare facilities more efficiently with the least possible impact on facility operations and patient care. In the coming years, this effort will save Gundersen and DNR money on training and encourage safer waste management practices in hospitals and other health care facilities.



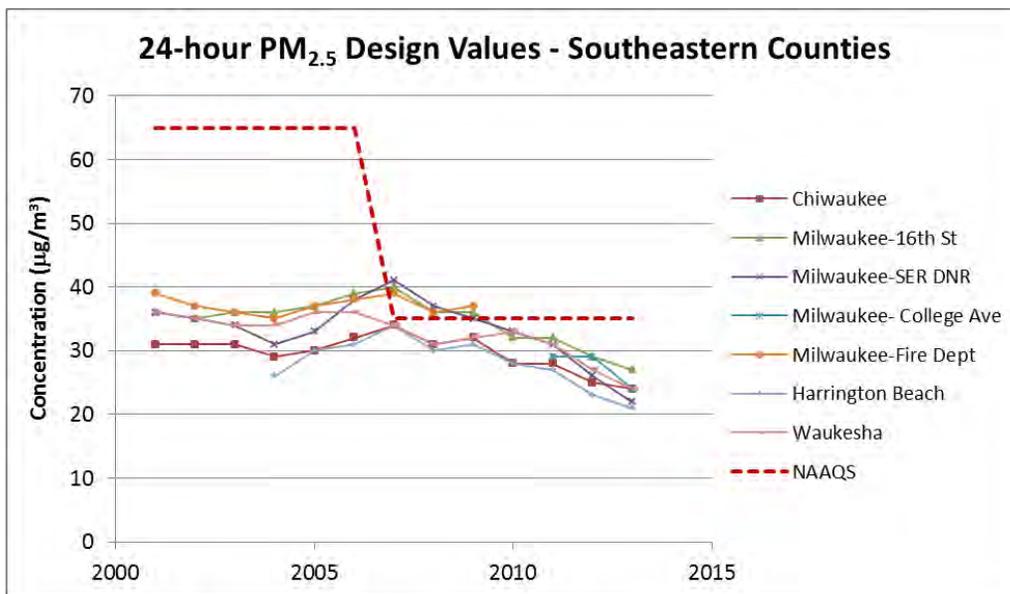
*DNR and Gundersen Health System employees collaborate on training (DNR photo).*

## Air quality monitoring trends

This spring, for the third year, the Department issued an [Air Quality Trends Report](#) demonstrating that the overall air quality in Wisconsin continues to improve. This year, the report was updated to include not just ozone and fine particle trends, but all federally-regulated criteria pollutants.

The Department operates a statewide network of air quality monitors for a variety of pollutants, including the criteria pollutants fine particles (PM<sub>2.5</sub>), ozone, sulfur dioxide, oxides of nitrogen, and carbon monoxide. Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards for pollutants. Data from Wisconsin's monitoring network is quality assured, certified, and reported to EPA to demonstrate how well air pollution controls and programs are working to improve air quality and meet federal standards. Additionally, monitors that provide hourly information are utilized to inform the public when air pollution reaches unhealthy levels.

Overall air quality  
in Wisconsin  
**continues to  
improve**



The data summarized in the current report is through 2013. The certified 2014 data is being assembled now and will be available in the next version of the Trends Report. For more information on the Air Quality Trends Report, please visit the Air Quality Trends web page: <http://dnr.wi.gov/topic/AirQuality/Trends.asp>

## Stage II vapor recovery grant program replaces requirement and redundancy

The Department of Natural Resources was allocated \$1,000,000 in the 2013-2015 State Biennial Budget to set up a grant program to support the voluntary removal, or decommissioning, of Stage II vapor recovery systems at gasoline stations in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties.

Stage II vapor recovery equipment captures vapors resulting from vehicle fueling operations at gasoline stations; however the newer Onboard Refueling Vapor Recovery (ORVR) technology in vehicles essentially serves the same purpose. In fact, when both stage II vapor recovery equipment and ORVR technology are present, there may be a slight increase in vapor emissions due to compatibility issues between the two emission control systems.

The grant program was successful, distributing over \$850,700 with individual station awards averaging \$1,456. Five hundred eighty-four stations, or about 85% of active stations in the nine county area, were properly decommissioned, addressing potential future emissions from incompatible control systems as well as eliminating possible soil or groundwater contamination pathways. In addition to the public health benefit, removal of stage II equipment eliminates the time and cost associated with compliance certification, reporting, testing, and maintenance of the vapor recovery system both for station owners and the department.

### WHAT OUR CUSTOMERS ARE SAYING:

*"The grant process was very easy to do for our three sites. I'm glad the State of Wisconsin did this and that it was administered very easily and efficiently. Great job to you and your department!"*

Kurt T. Paradise,  
Controller for  
Stop-N-Go

## Tribal Class I implementation

As a result of a multi-year review and discussion, the DNR reached a major agreement with Forest County Potawatomi Community on air quality related values (AQRVs).

Under the Federal Clean Air Act, Indian tribes can request EPA to re-designate their reservation lands to Class I status. Class I status allows for greater protection from the impacts of air pollution through the implementation of more stringent air standards for tribal lands. The Forest County Potawatomi reservation lands were previously re-designated to Class I status. This may affect new large industrial air emission sources that are issued air permits by Wisconsin DNR, such as paper mills and power plants located outside tribal boundaries.

The Potawatomi adopted regulations intended to protect aquatic systems, water quality, visibility, and vegetation for their Forest County reservation lands.

The tribe also adopted

thresholds for sulfur dioxide, nitrogen, sulfur, ozone, mercury, and haze, to protect their AQRVs. On May 1, 2015, DNR completed its review and formally recognized the Potawatomi Tribe's AQRVs and associated thresholds. New large air emission sources in the state will now have to ensure that their emissions do not have an adverse impact on the Potawatomi Class I area in Forest County.

In addition to the Forest County Potawatomi, two other regional tribes are seeking Class I status from the EPA for their tribal lands: the Bad River Band located on Lake Superior near Ashland, and the Fond du Lac Band located in Minnesota, approximately 20 miles west of Superior.



## **AWaRe employees of the year**

Congratulations to the AWaRe Division's employees of the year! Recipients were:

- **Kristin Hart** – Air Management Employee of the Year
- **Terry Evanson** – Remediation & Redevelopment Employee of the Year
- **Amalia Baldwin** – Waste & Materials Management Employee of the Year
- **Larry Lynch** – AWaRe Division Employee of the Year
- **Brad Wolbert** – AWaRe Division Supervisor of the Year
- **E-cycle Wisconsin Team: Amalia Baldwin, Waneta Kratz, Marcy McGrath, and Sarah Murray** – AWaRe Division Team of the Year

The awards recognize our employees for their service excellence, decision making, effective communication, interpersonal relationships and leadership.

## **Department employees of the year**

Congratulations to the AWaRe Division's recipients of department awards!

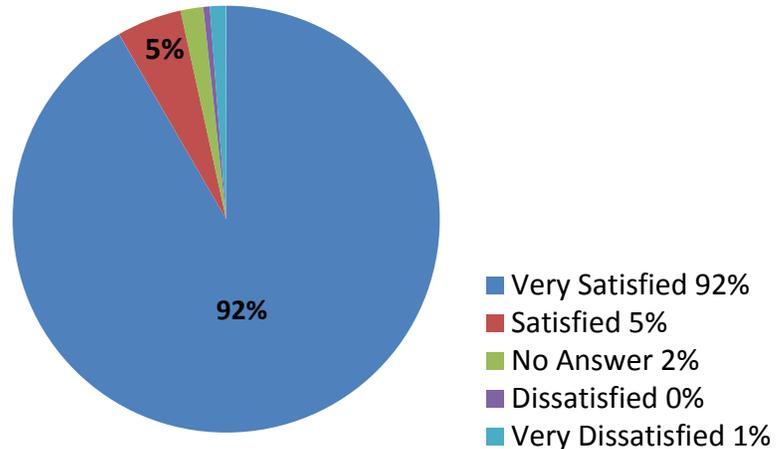
- **Secretary's Directors Award – Ashland NSP Lakefront Superfund Site Team:** Jamie Dunn, Bill Fitzpatrick, Steve Galarneau, Scott Inman, Donalea Dinsmore, Neal Baudhuin, Jeremiah Vue, Bruce Moore, Chris Saari, Kathleen Shafel, Lacey Cochart, Judy Fassbender, Steve LaValley, Joe Graham, Steve Ashenbrucker, Alyssa Core, Dan Peerenboom, Kathy Bartilson, Sheri Snowbank, Eric DeVenecia, Nancy Larson, Gary Edelstein, John Robinson, Darsi Foss, Kris Hess, Robert Liska, and Paul Luebke.
- **Secretary's Award for Effective Communication** – Loren Brumberg

# Customer Service Excellence

## AWaRe Division's excellent customer service

Customer service is a priority in the Air, Waste, Remediation & Redevelopment Division. One measure of our success in this area is the feedback we receive from customers. In FY2015, 97% of customers completing our customer satisfaction survey were either satisfied or very satisfied overall with the customer service received from AWaRe Division staff.

### Overall customer satisfaction in AWaRe Division



### WHAT OUR CUSTOMERS ARE SAYING:

*"Got an ID set up the same day and within less than an hour from when I submitted it. I was incredibly impressed."*

Customer service survey respondent

## Waste & Materials Management reporting systems now online and more user-friendly

The Waste & Materials Management Program (WMM) has nearly completed a long-term IT project that converts its older databases into a single system. As part of this conversion, all reporting systems will use the same online and customer-friendly format. By converting all required reporting forms to a similar online format, WMM has made it easier and more convenient for customers to submit required documents. Customers will no longer have to print and submit paper reports. Additionally, the new online forms, like the updated [Infectious Waste Annual Report](#), will share a similar format and layout, making it easier for customers to learn and use the reporting systems.

## Event recycling toolkit debuts

In early 2015, the Waste & Materials Management Program developed a toolkit to assist groups with recycling and waste reduction at special events. The [event recycling toolkit](#) is an online resource for event planners and organizers. The toolkit contains how-to guides, signs and other materials for print or download



that help make recycling away from home easy for event organizers, vendors and attendees.

The toolkit was inspired by recent event recycling successes in 2014. Wisconsin county fairs, July Fourth celebrations and dozens of other summer festivals last year reduced waste costs and boosted the recovery of recyclable items, proving that a little planning goes a long way. DNR staff worked especially closely with organizers of the

During the 2014 Sheboygan County Fair weekend, crews collected **5,100 pounds** of plastic, aluminum, glass, cardboard and paper.

2014 Sheboygan County Fair, who started planning in January. By the time the fair opened in July, they had placed 40 low-cost recycling bins throughout the fair park. During the fair weekend alone, crews collected 5,100 pounds of plastic, aluminum, glass, cardboard and paper.



Recycling at an event in Dane County (DNR photo).

## Compliance calendars help businesses and the environment

Many small businesses do not have the resources to hire staff or outside consultants specializing in environmental requirements to ensure their businesses remain in compliance with state and federal environmental regulations. The Department's [Small Business Environmental Assistance Program](#) (SBEAP) helps small businesses understand and comply with the environmental regulations affecting their industry, and offers resources and individualized assistance.

The SBEAP works with both industry experts and topic experts at multiple state agencies that enforce

environmental quality rules to help small businesses across the state. Through development of compliance calendars for both Gasoline Dispensing Facilities (gas stations) and Dry Cleaners, the SBEAP helps nearly 3,500 Wisconsin small businesses comply with environmental regulations. The dry cleaner calendar has been available since 2004 and the gas station calendar was first distributed in 2009.



**Instructions for Using the Record Keeping Pages in this Calendar**

Each month, check if you have any deadlines approaching for permit renewal, tank insurance, compliance testing and employee training. Remind yourself to meet all important dates and deadlines by marking your calendar!

• Attach monthly inventory worksheets or printout(s) here •

If you prefer to keep your monthly inventory worksheets or ATG strips with this calendar, attach them to the record keeping page for each month.

Reminders—Permits, Insurance, Testing and Training	
Are tank permits up to date?	Yes No
Is tank insurance due this month?	Yes No
Is equipment testing due this month? Are most recent test results on site?	Yes No
Is all training up to date for current employees?	Yes No

Use this table to keep a record of your required monthly inspections. Read the complete "Monthly Inspection Checklist" on page 34, and record your inspection results for each month on this table. Each person who conducts the inspection should initial their entries.

Monthly Inspection, Condensed Record (perform by end of each month or 30 days apart; see page 34 for expanded checklist)				
Inspection area	Inspected?	Repaired?	Logged on maintenance record?	Inspected by? (Initials)
<b>Underground storage tanks and gasoline dispensing equipment (includes Stage I vapor control system for facilities in Stage I areas)</b>				
Release detection system (tank monitor)	Y N	Y N	Y N	
Spill buckets	Y N	Y N	Y N	
Overfill alarm	Y N	Y N	Y N	
Impressed current system (if applicable)	Y N	Y N	Y N	
Fill and monitoring probe ports	Y N	Y N	Y N	
Spill and overfill response supplies	Y N	Y N	Y N	
Dispenser hoses, nozzles and breakaways	Y N	Y N	Y N	
Dispensers and dispenser sumps	Y N	Y N	Y N	
Piping sumps (submersible)	Y N	Y N	Y N	
<b>Gasoline dispensing equipment at facilities that choose to retain Stage II vapor recovery systems (inspecting the equipment below is optional but recommended - see page 43)</b>				
Vapor return line	Y N	Y N	Y N	
Nozzle belows	Y N	Y N	Y N	
Nozzle faceplates/facemasks	Y N	Y N	Y N	
Nozzles	Y N	Y N	Y N	
Vapor processing unit working properly	Y N	Y N	Y N	

2015 Compliance Calendar for WI Gasoline Facilities, page 6

These calendars include regulations enforced by DNR, Department of Revenue (dry cleaners), Department of Agriculture, Trade and Consumer Protection (gas stations), and the U.S. Environmental Protection Agency. Each calendar contains weekly and/or monthly reminders for inspections, checklists to follow during inspections, a location to record required information, and summaries of the requirements that apply from each of the agencies mentioned.

Compliance calendars are just one example of the many resources provided by the SBEAP to help small businesses comply with environmental requirements. Find the Small Business Environmental Assistance Program on the web at [dnr.wi.gov](http://dnr.wi.gov). Search "small business."

## Air quality monitoring – a technological leader

The Wisconsin DNR air quality monitoring group works hard to be a technological leader in order to provide access to high quality air monitoring data in an efficient and transparent manner. Over the past year, the group made major strides in technological advancement by using federal grants and state funding.

### Data acquisition system

The air quality monitoring group began pursuing an upgrade to their antiquated data acquisition system (DAS) in 2013. The DAS computer server communicates with each monitoring site, receives data from the sites, and compiles all the data for upload to the public air quality mapping internet page, as well as a variety of other sources. The DAS project is near completion. The group will work on implementation during fiscal year 2016. Improvements that will soon be visible to the public will make air quality data more easily accessible to the public via a new, user-friendly air quality mapping page and a mobile phone application.

### WHAT OUR CUSTOMERS ARE SAYING:

*“Extremely prompt, very courteous and professional.”*

Customer service survey respondent

### Data logger network

This year, the air quality monitoring group completed a major hardware and software upgrade to the systems that send the data from the monitoring sites to the DAS. Many of the advancements will allow for better data security, as well as quicker execution times, bringing data to the public even faster.

### Remote operations

Remote operation of monitoring equipment allows an operator to perform basic functions and quality checks from their laptop computer and even their smartphone. When equipment is not operating properly, field personnel may be able to fix problems without actually visiting the site.

Two years ago, the monitoring group began tracking trips saved through remote operations as part of an AWaRe Division sustainability measure. As of June 30, 2015, the monitoring group has saved over 38,000 miles traveled, which translates to approximately 1,900 gallons of gas saved.

## Remediation and Redevelopment Program's commitment to educating stakeholders

### WHAT OUR CUSTOMERS ARE SAYING:

*"...[The employee] was sincerely interested in moving the project forward in a cooperative manner."*

Customer service survey respondent

The Remediation and Redevelopment (RR) Program's commitment to educating its stakeholders is evident in the planning and execution of two major outreach initiatives during the last year: Consultants' Day 2015 and a recurring schedule of monthly webinars and conference calls.

#### **Consultants' Day**

Nearly 300 environmental consultants participated in two Consultants' Day conferences held during April, more than doubling the attendance seen in the previous offering. And of the nearly 100 post-conference evaluations received, high praise for both events was nearly unanimous.

In 2016, the RR Program will hold a similar conference for local government officials and other non-technical stakeholders.



*Nearly 300 environmental consultants participated in two Consultants' Day conferences held during April. The conferences addressed numerous regulatory issues encountered during cleanups under the NR 700 rules series (DNR photo).*

### **Webinars**

Since October, 2014, the Remediation & Redevelopment program has presented seven online webinars and conference calls for both internals and externals. This *Issues & Trends* series takes place on the first Wednesday of the month during the typical noon lunch break, and lasts about an hour. Both technical and non-technical topics are covered, with 50-100 participants attending each event. A full schedule of topics is planned through the end of 2015 and into early 2016, with planning for the rest of 2016 underway.

### **Green Team meetings**

In a small group, in-person setting, the RR program's "Green Team" meetings bring important parties in the cleanup and redevelopment process together to discuss issues, answer key questions and give everyone a better understanding of proposed projects. In the last year, program staff participated in nearly 100 Green Team meetings across the state, usually with small communities where there is less experience working with brownfields redevelopment.

### **WHAT OUR CUSTOMERS ARE SAYING:**

*"She took care of it and exceeded our expectations. She was professional, a good listener, caring, and got right back to us to help answer questions."*

Customer service survey respondent

# New Laws & Regulations

DNR's Beneficial Use program has been successfully managing coal ash for over 15 years, **diverting millions of tons of ash from landfills** and into productive uses.

## Federal rules on coal ash allow state to continue beneficial use efforts

In late 2014, EPA established new rules for the management of coal ash, the first ever national rules for managing waste generated by burning coal. The new rules affect ash from all coal burning facilities producing electricity through coal combustion, and regulate coal ash in the same disposal category as household waste and non-hazardous industrial solid waste. DNR and Wisconsin utilities will continue to work collaboratively to ensure coal ash in Wisconsin is managed and reused efficiently. DNR's [beneficial use program](#) has been successfully managing coal ash for over 15 years, diverting millions of tons of ash from landfills and into productive uses. The new federal rules allow DNR to continue the beneficial use program, while also promoting more frequent inspections of sites where coal ash is collected, tracing when and how coal ash is being used and reused in Wisconsin.

## Pharmaceutical waste disposal laws updated

Pharmaceutical waste can affect both the environment and human health, but with two new changes to the law in 2014, collecting and destroying unused medications is becoming easier for Wisconsin communities. In early 2014, Wisconsin adopted a drug disposal law to clear up some of the legal barriers to pharmaceutical waste collections. The law required collection locations to be approved by either the federal Drug Enforcement Administration (DEA) or the state Department of Justice and to be registered with DNR. Also, in late 2014, the federal DEA [amended the Controlled Substances Act](#) to make it easier for law enforcement agencies and other qualified sources to collect drugs from the public. Wisconsin DNR worked actively with these agencies to promote these changes and, with them, pharmaceutical waste disposal will be more cost efficient and effective.

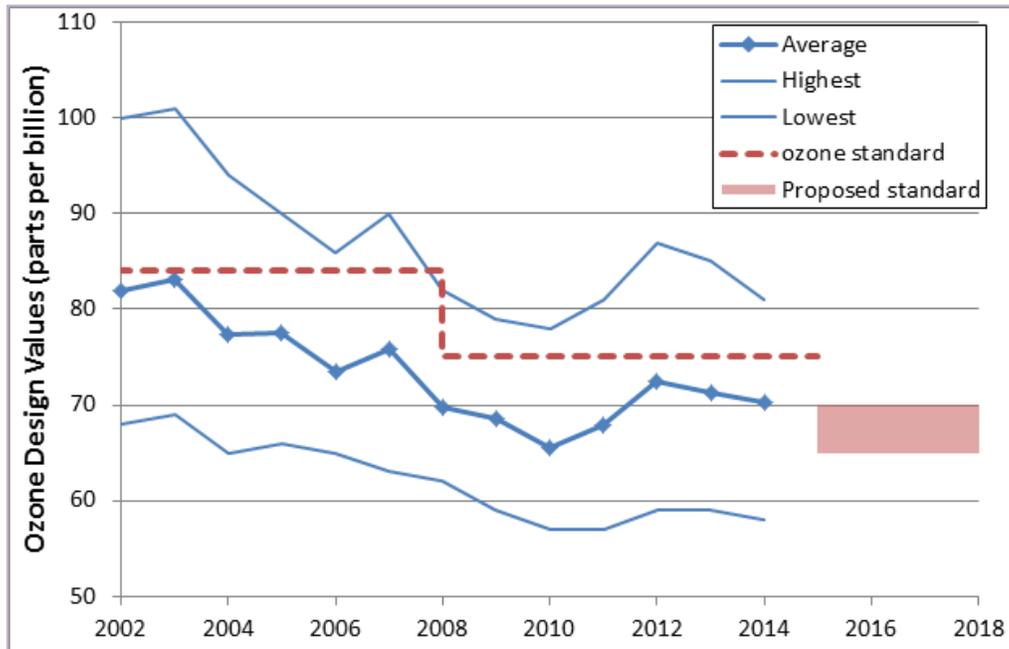
A list of pharmaceutical waste collection locations is available online at:

[dnr.wi.gov](http://dnr.wi.gov)

Search for "pharmaceutical waste."

## New ozone standards

Wisconsin ozone concentrations (“design values”) and standards over time



Between 2002 and 2011,  $NO_x$  emissions in the state decreased by 34 percent and VOC emissions by 40 percent.

Meeting the ozone standard statewide is a central objective under the Air Management program’s broad performance metric of reducing human health risk caused by air pollution.

On October 1, 2015, EPA released its final 2015 ozone National Ambient Air Quality Standard, lowering the standard from 75 parts per billion (ppb) to 70 ppb. For counties in Wisconsin that may exceed the new standard, the Air Management program will need to develop a plan, as required by federal law, to bring these areas into attainment of the standard.

While the standard has become more stringent over time, the number of ozone nonattainment areas in Wisconsin is the lowest since the current regulatory framework was established 25 years ago. Currently, only two areas in Wisconsin are not attaining the current (2008) ozone standard: Sheboygan County and the eastern portion of Kenosha County.

Ozone concentrations in Wisconsin have fallen as a direct result of state efforts, in partnership with its stakeholders, to control emissions of the pollutant's precursors including nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs). Between 2002 and 2011, NO<sub>x</sub> emissions in the state decreased by 34% and VOC emissions by 40%. The Air program has also worked with nearby states to reduce emissions that cross into Wisconsin, contributing to ozone nonattainment. The decrease in ozone concentrations is part of a larger trend of significant air quality improvements in Wisconsin over the last few decades.

# Emerging/Ongoing Issues

## E-Cycle Wisconsin continues to reduce electronic waste

During the fifth year of the program (ending June 30, 2014), E-Cycle Wisconsin collected 37.2 million pounds of electronics for recycling. DNR staff compiled data to produce its 2014 annual report to the Legislature and Governor, including recommendations for possible legislative changes. In the coming year, E-Cycle Wisconsin and DNR will discuss challenges facing the program and potential solutions to electronic waste issues in the state.

During the fiscal year ending June 30, 2014, E-Cycle Wisconsin collected **37.2 million pounds of electronics** for recycling.

## Wisconsin WRAP combines public and private interests

The Wrap Recycling Action Program (WRAP) is a public-private partnership aimed at reducing plastic wrap, bag and film waste by encouraging local units of government and small business to collaborate in plastic film recycling efforts. Wisconsin is the pilot site for plastic film recycling nationwide and since the pilot launched in 2014,

Wisconsin WRAP has seen substantial growth. Local governments and small businesses in the state can join the WRAP initiative as plastic film collectors. Since its inception, WRAP efforts have helped create jobs, build community, strengthen recycling and protect the environment. WRAP also encourages local governments, retailers, schools, consumers and others to use less plastic film such as bags and wrap, and to recycle these materials when they are no longer usable. From consumers to stores to industrial centers, there truly is a role for everyone in recycling these materials.



## **Innovations in glass and tire recycling**

Wisconsin's recycling law encourages residents and businesses to keep certain items out of their landfill waste, and instead recycle them at the end of their useful lives. These items include glass and tires, materials whose market value has declined over the past few years. DNR's Waste & Materials Management program is working to identify new options for recycling glass and tires to the maximum extent possible by bringing together recycling facility operators, potential buyers, and users of recovered glass and tires to discuss barriers to recycling, target means of overcoming those barriers and consider more nontraditional recycling uses.



## **Waste stakeholder workgroup taking shape**

The Waste & Materials Management program (WMM) has a long track record of working with local governments, private companies and advocacy groups to improve waste regulations and practices in Wisconsin. Following the lead of other programs in the AWaRe Division, WMM is now formalizing external stakeholder workgroups (often referred to as "study groups") to facilitate the free and transparent flow of information between DNR and its stakeholders on subjects of mutual interest and concern. The WMM Program is preparing to launch the WMM Study Group in early 2016 by meeting with a cross-section of active stakeholders.

## **External groups help DNR solve difficult cleanup issues**

Two new stakeholder groups are helping DNR work out issues related to contaminated sediment and contaminated material management.

The contaminated sediment and contaminated material management groups will provide input to DNR's Environmental Management Division, identifying issues, concerns, and opportunities associated with the management of sediment and other contaminated materials from dredging projects, environmental cleanups, redevelopments, and other construction projects.

Group members represent local governments, attorneys, consultants, utilities, environmental groups and other parties with an interest in sediment and solid waste management issues. These groups will report out to the Brownfields Study Group and provide feedback directly to the agency.



*Soil pile at a cleanup site in Dane County (DNR photo).*

## **EPA finalizes rules regulating carbon dioxide emissions from power plants**

In August 2015, EPA released several final rules regulating the emission of carbon dioxide (CO<sub>2</sub>) from fossil-fueled power plants, including existing, new, and modified and reconstructed facilities.

EPA calls its finalized regulation affecting existing power plants the “Clean Power Plan” (CPP). Under the final rule, Wisconsin will be required to reduce the state’s CO<sub>2</sub> emission rate by 41% from 2012 to 2030.

The DNR’s Air Management program, working cooperatively with the Public Service Commission of Wisconsin, submitted numerous comments on EPA’s proposals and is currently analyzing the final rules. The state is also evaluating EPA’s proposal for a federal plan that would apply if a state does not submit an approvable state plan under the CPP.

Wisconsin has already significantly reduced its power sector CO<sub>2</sub> emissions through a variety of measures. The CO<sub>2</sub> emissions rate from fossil fuel-fired power plants in Wisconsin decreased by 10% from 2005 to 2012 due to a combination of efficiency

upgrades at power stations, retirements of older, inefficient electric generating units, and construction of new, more efficient units. In addition, renewable energy now accounts for over 10% of the state's total generation, and the state has a well-established energy efficiency program, Focus on Energy. It is estimated that the use of renewable energy (excluding hydropower) avoided the emission of roughly 5 million tons of CO<sub>2</sub> in 2013 and that energy efficiency measures avoided emission of roughly 3.8 million tons of CO<sub>2</sub> in 2013.









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