Letter Report

# **Environmental Cooperation Pilot Program**

**Department of Natural Resources** 

July 2008



Legislative Audit Bureau

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# STATE OF WISCONSIN Legislative Audit Bureau

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> Janice Mueller State Auditor

July 17, 2008

Senator Jim Sullivan and Representative Suzanne Jeskewitz, Co-chairpersons Joint Legislative Audit Committee State Capitol Madison, Wisconsin 53702

Dear Senator Sullivan and Representative Jeskewitz:

We have completed a review of the Environmental Cooperation Pilot Program (ECPP). The program is administered by the Department of Natural Resources (DNR) and was established by 1997 Wisconsin Act 27 to test innovative environmental regulatory methods. Since the program's inception, DNR has entered into seven agreements with power generation and manufacturing companies to reduce pollution. Statutes require the Legislative Audit Bureau to monitor ECPP and report to the Legislature on our findings.

During 2006 and 2007, DNR renewed six of the seven agreements with ECPP companies for a final five-year term. One of two separate ECPP agreements with We Energies was not renewed because environmental goals had been attained and neither DNR nor the company anticipated any further benefits from the program.

Since our last review, DNR has reported environmental performance measures. However, these measures could be improved to identify performance by individual companies. In order to meet statutory requirements and better assess ECPP's effectiveness, we also suggest that DNR expand its efforts to measure the companies' and its own administrative savings, consider additional strategies for sharing environmental or technical innovations, and employ additional efforts to ensure adequate public involvement.

We appreciate the courtesy and cooperation extended to us by DNR and the ECPP companies we contacted in conducting this review.

Sincerely,

Janice Mueller State Auditor

Janice Mueller

JM/KW/ss

**Enclosure** 

#### ENVIRONMENTAL COOPERATION PILOT PROGRAM

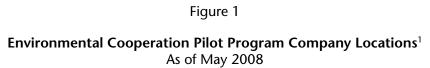
1997 Wisconsin Act 27, the 1997-1999 Biennial Budget Act, established the Environmental Cooperation Pilot Program (ECPP) to evaluate innovative environmental regulatory methods and directed the Department of Natural Resources (DNR), which administers the program, to enter into no more than ten agreements with companies by October 2002. Section 299.80, Wis. Stats., identifies steps to be taken by DNR, participating companies, and the public in the development of innovative regulatory methods, including working together to reduce pollution below statutorily allowed levels.

Under s. 13.53(2)(d), Wis. Stats., the Legislative Audit Bureau is required to monitor and report annually on ECPP. This is our sixth review. In conducting it, we reviewed selected elements of the ECPP agreements, interviewed DNR staff, examined reports prepared by DNR and participating companies, and spoke with representatives of all participating companies.

# Agreements

DNR entered into seven cooperative environmental agreements with six companies in 2001 and 2002. The agreements outline innovative efforts that will be taken to achieve measurable or noticeable improvements in environmental performance, such as pollution and waste production and use of water and land, as well as flexibility offered by DNR on specific administrative requirements, such as which permit provisions are waived. During 2006 and 2007, all but one of the agreements were renewed for an additional and final five-year term, as allowed by statutes.

As shown in Figure 1 and Table 1, ECPP currently includes a mix of power generation and manufacturing companies statewide.





<sup>&</sup>lt;sup>1</sup> Northern Engraving Corporation's ECPP agreement covers plants at three locations: Holmen, West Salem, and Sparta.

Table 1

Environmental Cooperation Pilot Program Participation
As of May 2008

		ECPP Agreement	
Company	Type of Business	Expiration Date	Examples of ECPP Innovative Efforts
We Energies	Electric power generation plant	February 3, 2011	Recovering coal ash from its landfills, blending it with coal, and re-burning it to reduce demand for additional coal and decrease material sent to landfills
Cook Composites and Polymers Company	Manufacturer of resins and coatings for building materials and automotive and boat finishes, among many other uses	September 29, 2011	Removing certain toxic constituents from waste and no longer burning hazardous waste in its incinerator, thereby eliminating the need for a waste incineration permit, and introducing new product lines to reduce emissions
Northern Engraving Corporation	Manufacturer of plastic and aluminum nameplates, automotive trim, and other industrial decoratives	June 7, 2012	Closing some incinerators and changing to lower emission production materials to reduce air pollutants, water usage, and solid waste
Packaging Corporation of America	Pulp and paper mill that manufactures components of corrugated cardboard	September 10, 2012	Using alternative hazardous air pollutant treatment technology to reduce emissions below those prescribed by the United States Environmental Protection Agency
Madison Gas and Electric Company	Electric power generation plant	September 26, 2012	Burning paper-derived fuel in its generators, which offsets use of coal, reduces air pollutants, and reduces materials sent to landfills
3M	Manufacturer of several product lines, including automotive weather stripping, brightnessenhancing film for laptop computer screens, and reflective sheeting for traffic signs	October 1, 2012	Recovering and recycling a number of materials used during production processes and using alternative production materials to reduce emissions and prevent waste

Statutes require a public comment period for all agreement amendments or revocations, and an informational meeting may be held if public interest is high. Three of the six current agreements included amendments at the time of renewal, and DNR complied with the public participation requirement. In addition, statutes state that DNR may notify the Joint Committee on Finance of its intention to renew an agreement. In our February 2006 review of ECPP, we recommended that DNR notify the Joint Committee on Finance of all proposed agreement extensions to ensure the Legislature is adequately advised. DNR implemented our recommendation and, through July 2007, notified the Committee of its intent to renew six of the seven agreements, which the Committee approved without objection.

The one agreement that was not renewed was with We Energies and covered eight power generation stations in Milwaukee, Ozaukee, and Kenosha counties. The agreement lapsed in September 2007 because both We Energies and DNR indicated that there was no additional benefit to extend it another five years. Through the use of emission control strategies, We Energies had exceeded and agreed to continue monitoring three specific system-wide emission limits beyond their five-year goals.

At the end of the current five-year ECPP agreements, companies may let the agreements lapse or apply to DNR's Green Tier program. That program is similar to ECPP and attempts to achieve wider and longer-term participation from companies subject to DNR regulation, as well as other entities committed to superior environmental performance. ECPP is considered the pilot program of Green Tier, and five of the six companies we spoke with indicated they planned to participate or are studying the details involved with participating in the Green Tier program. One company—We Energies—had no conversion plans at this time. DNR said it anticipates the introduction of legislation to facilitate ECPP companies entering Green Tier before their ECPP agreements expire. DNR further anticipates the introduction of this legislation before July 1, 2009, the statutory deadline for applications to participate in Green Tier.

### **DNR Staffing**

We noted in our previous review of ECPP that dedicating more staff time to the program could enable DNR to develop tools for measuring performance and for encouraging public involvement, which could also be used in assessing Green Tier's performance in the future. The greatest number of hours recorded for the program was in 2001, when DNR staff devoted 7,311 hours, or the equivalent of 4.0 full-time equivalent (FTE) staff positions, to program implementation. By fiscal year (FY) 2005-06, reported hours had fallen to 1,260, but they rose 18.7 percent in FY 2006-07 to 1,496 hours, or approximately 0.8 FTE position. DNR attributes the increase in FY 2006-07 to staff time required to complete agreement renewals and expects a decline in FY 2007-08 as staff resources are directed to Green Tier and other programs. Unpaid interns assist DNR with ECPP and contributed about 330 hours to the program in FY 2006-07.

#### **Performance Measures**

Statutes require DNR to evaluate the innovative regulatory methods initiated under ECPP. In addition, companies must achieve measurable or noticeable improvements in environmental performance. Goals must be specified in measurable and verifiable terms in the agreements and are to be based on a company's baseline performance evaluation due within 180 days of the start of the agreement. Statutes also direct DNR and participating companies to assess their success in reducing the time and money they spend on paperwork and other administrative activities. We noted weaknesses in performance measurement in our previous reviews of ECPP and recommended that DNR develop performance measures to quantify the program's environmental effects and administrative savings.

#### **Environmental Performance**

DNR reported five environmental performance measures in its 2006 and 2007 ECPP annual progress reports, using emissions data already collected under state and federal requirements. Companies that produce certain volumes of pollutants or that have permits for emissions must report their pollutant emissions to DNR. All six ECPP companies are subject to these requirements and report emissions of air pollutants, such as sulfur dioxide and nitrogen oxides, and hazardous waste. The ECPP environmental performance measures compared aggregated air pollutant emissions and hazardous waste outputs of ECPP companies to those of all other nonparticipating companies in Wisconsin. The measures were chosen for their significance to public health and the environment, availability of data, and general familiarity to the public.

In order to show meaningful trends over time for aggregated ECPP companies and all other reporting companies in Wisconsin, DNR compared changes in pollutant emissions over time using 2000 as a baseline level. DNR chose 2000 as the baseline year because it preceded all ECPP agreements. However, 1997 baseline levels were chosen for hazardous waste generation because hazardous waste reporting requirements are more comprehensive in odd-numbered years, and adequate data were available for that year. DNR reported declines in five pollutant emission levels in its 2007 ECPP progress report. As shown in Table 2, we found all five reported pollutant emission levels for ECPP companies have decreased since the program began, and the declines have exceeded those for all other companies reporting data on comparable types of emissions.

Table 2

Percentage Change in Pollutant Emissions
From 2000 through 2006<sup>1</sup>

Pollutant	ECPP Companies	All Other Reporting Companies in Wisconsin
Nitrogen Oxides	(63.2)%	(39.1)%
Sulfur Dioxide	(38.1)	5.8
Volatile Organic Compounds	(45.9)	(23.8)
Hazardous Air Pollutants	(29.1)	(7.4)
Hazardous Waste <sup>2</sup>	(44.3)	(38.8)

<sup>&</sup>lt;sup>1</sup> Represents the most recent year for which data were available.

DNR indicated that it continues to seek ways to expand and improve environmental performance measures to account for program results as company processes change. For example, although hazardous waste generation among ECPP companies is less than the 1997 baseline levels, it increased from 2001 through 2005 because of a change in the way

<sup>&</sup>lt;sup>2</sup> Hazardous waste generation data are compared for 1997 and 2005, rather than 2000 and 2006.

Cook Composites and Polymers processes its waste byproducts. Previously, some byproducts were treated on-site and therefore were not required to be reported as hazardous waste. The company now sends the waste byproducts off-site, classifying them as hazardous waste, which increases the amount of hazardous waste the company generates. However, DNR noted that sending waste byproducts off-site to be recycled also results in an environmentally preferable outcome.

In addition to providing environmental results at the aggregate level, we suggest DNR consider reporting individual company results based on the goals specified in each agreement, which could be compared to each company's baseline performance evaluation. This additional analysis of individual performance would give DNR the opportunity to highlight and recognize each company's environmental progress. It also would prevent a single company's increase in pollutant levels from affecting overall results.

Environmental performance measurements may also be more meaningful if DNR is able to report each company's performance based on its unit of production. The measures are currently not adjusted to take into account variations in company production. For example, Madison Gas and Electric Company reports pollutant emission rates per megawatt-hours, which is the standard measure of electric power generation; although the company experienced a large decrease in total emissions from 2005 to 2006 because of a decrease in energy generation, the amount of sulfur dioxide emissions per megawatt-hour actually increased slightly. However, while emissions per unit of production would provide a more accurate assessment of individual performance, participating companies' varied outputs, including megawatt-hours, resins, and paper products, would not allow DNR to aggregate total program performance based on units of production.

DNR also considered reporting each company's performance by industry sector but found that comparing ECPP companies with all other companies in their respective industry is difficult, because ECPP companies are not governed by the same regulations. DNR noted, for example, that the performance of Packaging Corporation of America, a pulp and paper mill, could not be compared to other paper mills because manufacturing processes and products differ among the companies. In addition, Packaging Corporation of America has more flexible regulations because of ECPP participation and therefore uses different emission controls than other companies in the paper industry. However, continuing to refine the methods to measure and report the environmental performance of ECPP companies will also benefit DNR's management of other programs requiring performance measurement.

#### ☑ Recommendation

We recommend the Department of Natural Resources continue its development of environmental performance measures for the Environmental Cooperation Pilot Program, including measures to assess both aggregate program performance and individual company performance.

## **Administrative Savings**

Statutes direct DNR to seek to reduce its own administrative costs and those of participating companies. As an incentive to improve environmental performance, ECPP companies are

offered flexibility in specific administrative requirements, such as reduced monitoring and reporting obligations. However, the 2007 ECPP progress report indicates that only two participating companies actually reduced their administrative costs. Two other ECPP companies have not attempted to measure administrative savings, either because they believe they did not incur any savings or because to do so would reduce any time that was saved as a result of ECPP flexibility.

All six current ECPP agreements contain language requiring annual assessments of either staff time or expenditures related to ECPP administration. Only Northern Engraving Corporation and 3M have reported savings to DNR, but we also found savings at a third company:

- Northern Engraving Corporation reported saving over 3,000 staff hours and 4,000 pages of paper annually because the number of construction permit applications was reduced;
- 3M reported approximately 315 hours saved from 2005 through October 2007 because of reduced permitting processes for new projects; and
- Packaging Corporation of America indicated to us that 430 hours per year had been saved as a result of reduced monitoring frequency, but company representatives have not measured any other efficiencies because of the time it takes to quantify the savings.

DNR indicated that little has been done to systematically measure its own potential administrative savings. However, staff in DNR's West Central Region, who work with Northern Engraving Corporation and 3M, estimated a reduction of approximately 2,500 staff hours associated with reduced permitting processes and paperwork. DNR said additional assessments have not been done because other agreements focus less on permitting and more on flexible company processes, making it hard to determine if any administrative savings have occurred.

#### **Information Transfer**

Statutes direct DNR to encourage the transfer of information about methods for improving environmental performance and the adoption of these methods by other companies. As a pilot program, ECPP's technological innovations, environmental improvements, and methods for improving business relationships can advise existing and future DNR programs. However, DNR is cognizant of protecting company information and by statute must keep certain records confidential that would, if made public, divulge a method or process that is entitled to protection as a trade secret. DNR indicated that ECPP is a voluntary program that likely would not have attracted companies if there were stringent requirements regarding information transfer.

Although DNR does not have a specific strategy to encourage information transfer, we identified a number of ways the transfer occurs. For example, DNR publishes copies of all agreements and company contact information on its Web site and produces annual ECPP progress reports. DNR also hosted a meeting in January 2007 for about 70 ECPP and Green Tier participants to discuss issues and share program experiences. In February 2008, two ECPP

companies gave presentations at the Green Tier Advantage conference. DNR is also using the expired agreement with We Energies as a model for multi-pollutant approaches to air quality improvements.

DNR has included explicit strategies for sharing environmental and technological innovations within some ECPP agreements. For example, Cook Composites and Polymers' renewed ECPP agreement includes the following goals:

- apply the lessons learned in implementing the Saukville facility agreement to company facilities in other states and have DNR share experiences with environmental agencies in those states;
- with DNR's facilitation, explore the options for partnerships and projects with the United States Forest Products Laboratory and others involved with Wisconsin's forest products industry and research; and
- work with DNR to support and foster a sustainability initiative in southeastern Wisconsin among companies and organizations willing to share information about their waste streams and byproducts, and explore opportunities for use of these materials to achieve mutual environmental and economic benefits.

ECPP company officials with whom we spoke said they share information with other companies on their environmental efforts and innovations; give facility tours; or make presentations to local governments, organizations, and industry conferences. Some of the companies also provide ECPP and environmental innovation information on their own Web sites. For example:

- Cook Composites and Polymers reported that since 2004 its staff have given presentations at conferences for the Environmental Protection Agency, the National Symposium of Environmental Managers, and the University of Wisconsin (UW)-Madison Robert M. La Follette School of Public Affairs, among others, on topics such as reducing administrative burdens on environmental programs, use of management systems to improve loss performance, conflict risk management, and working well with neighbors.
- We Energies reported working with organizations and government agencies to disseminate information on coal ash recovery and re-burn processes and has promoted its ash recovery and reuse technology by presenting at industry conferences.
- 3M spoke at the 2008 Green Tier Advantage conference regarding methods to move the company toward sustainable practices, including product modifications and beneficial use of waste materials.
- Packaging Corporation of America received an achievement award from the American Forest and Paper Association, and site visit requests from international and university groups, for its wastewater treatment plant biogas project.

As another strategy to encourage information transfer, we believe DNR could facilitate connections with research centers, applied technology centers, and laboratories within UW System and the Wisconsin Technical College System. One ECPP company representative said the company renewed its agreement because ECPP fosters new ideas and partnerships, including opportunities for networking and market research. Those opportunities can be found through several UW System and Wisconsin Technical College System programs that focus on information transfer and product development, including the following, which were part of our review of State Economic Development Programs (report 06-9):

- the Northwest Wisconsin Manufacturing Outreach Center, which is part of the UW-Stout Technology Transfer Institute and offers technical assistance, on-site operations assessments, and other services to businesses in 33 counties;
- the Paper Industry Resource Center at UW-Green Bay, which offers technical assistance and information to the paper industry, including identifying and applying new technologies to business operations;
- the Office of Corporate Relations at UW-Madison, which serves as the initial point of contact to assist businesses in identifying university resources; and
- Advanced Manufacturing Solutions, a statewide Wisconsin Technical College System initiative that assists manufacturers in increasing productivity and competitiveness through networking, improving technology skills, and process assessments.

#### **Public Involvement**

Statutes require DNR to seek to increase trust among government, facility owners and operators, and the public through open communication and resolution of conflicts over environmental issues. Companies and DNR staff we spoke with all emphasized that ECPP has created beneficial, collaborative relationships and has allowed the companies to promote themselves as environmentally aware businesses. We Energies said it has benefitted from being seen as a leader in the industry and among customers who view the company with a high regard.

Statutes also require DNR to involve the public in the development and monitoring of ECPP agreements. For example, DNR must:

- seek to improve the provision of useful information to the public about the environmental and human health impacts of companies;
- provide public access to information about environmental performance evaluations conducted by participating companies; and
- encourage facility owners and operators and communities to work together to reduce pollution to levels below those required in statutes.

Each ECPP company must establish an interested persons group made up of people who may be affected by the activities at the company's facilities. Companies must meet with these groups at least once every six months to discuss the implementation of agreements and to receive comments on the progress of their environmental projects. In our previous review of ECPP, we noted concerns about inadequate public involvement, specifically regarding meeting with interested persons every six months.

During 2006 and 2007, five of the six companies intended to meet with their respective interested persons groups twice yearly, but not always within six months of the previous meeting. 3M held just one meeting for its interested persons group in 2006, but the group met twice in 2007. Although We Energies said it planned two meetings each year, staff could not provide documentation of meeting dates.

Attendance and participation at interested persons meetings varied significantly among ECPP companies. Cook Composites and Polymers and Madison Gas and Electric exceeded requirements for interested persons groups, with all meetings having high attendance. In 2006, Cook Composites and Polymers held three interested persons group meetings and also conducted its biennial survey of the Saukville community, which measures public perception of the company's environmental performance and identifies community concerns.

Other companies have been less successful in meeting the requirements for interested persons' involvement. We Energies' Pleasant Prairie Power Plant is located in an open area with no nearby housing. The location makes it difficult to attract community attention to ECPP efforts because people are relatively unaffected by such things as noise or odor coming from the plant. We Energies indicated that no one attended one of the 2006 interested persons meetings, and attendance at all other meetings has been very low, even though meetings have been scheduled at different times of the day and week.

Some other companies also reported difficulty in obtaining community involvement but have tried methods to improve attendance and disseminate information. For example, as a result of consistently low attendance at interested persons meetings, Northern Engraving Corporation holds only one on-site meeting each year. As a substitute for a second meeting, the company sends out periodic e-mail updates on its environmental projects to members of the interested persons group. These communications allow for comments and ask if members would like a formal meeting to be held. Northern Engraving Corporation stated that typically no comments are received and there is not enough interest to hold an on-site meeting. DNR considers the e-mail notifications to be a valid substitute for an on-site meeting with interested persons.

Only one person attended a 2007 meeting at Packaging Corporation of America. Because the company employs a large number of people in the Tomahawk community, it believes many residents know about its environmental projects and do not find it necessary to attend meetings. As a way to meet requirements for interested persons involvement, Packaging Corporation of America gave presentations to its employees in January 2006 and 2007 regarding ECPP efforts and why they are important to the company. Therefore, even though attendance has been low at the interested persons meetings, the company and DNR believe the community remains well-informed about Packaging Corporation of America's ECPP commitments.

In order to improve the provision of useful information to the public and encourage companies and communities to work together, we suggest DNR seek to employ additional techniques to ensure statutory requirements are met, such as considering changes to the composition of groups to include other stakeholders, including environmental groups, and facilitating meetings among participating companies and local organizations or municipal boards.

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