

2006 MVP2 Award Recipients



The 2006 recipients of the National Pollution Prevention Roundtable's (NPPR) Most Valuable Pollution Prevention (MVP²) awards reduced pollution by 8 million pounds, conserved more than 500 million kWh of electricity, reduced water use by over 200 million gallons while cutting costs by over \$6 million.

The winners represent federal, state, and local government agencies, as well as non-profits, industries, and individuals that have demonstrated significant accomplishments in pollution prevention (P²). These prestigious awards were presented at a ceremony in Washington DC on September 19, 2006. Congressional representatives from the states and districts of the winners were invited to meet with the recipients following the ceremony.

Volunteer of the Year

Robert Kerr, Pure Strategies

Bob works with numerous state programs on integrating pollution prevention into regulatory and non-regulatory agency programs. He has also worked on the development of EPA regulatory-incentive programs, ranging from the Agency's original emissions trading policy to the current Performance Track Program. He is the Co-Chair of the Policy and Integration Workgroup.

P2 Champions

Robert Pojasek, SAI Global

Bob is an internationally recognized process improvement specialist. He was a pioneer in the area of pollution prevention and is the lead author on the US Environmental Publication, "An Organizational Guide to Pollution Prevention." He worked for the Government of Mexico to provide an independent evaluation of their Voluntary Environmental Audit Program. Bob has served on the Science Advisory Boards of the US Environmental Protection Agency and the US Air Force. For seven years, he served as a judge for the national environmental awards program for the American Forest and Paper Association.

Projects/Programs

EnviroStars Cooperative, *EnviroStars Business Incentive Program*

The EnviroStars business incentive program, which began in King County (Seattle-area), Washington in 1995, certifies companies' efforts to prevent pollution and reduce hazardous waste, and helps the public to identify environmentally responsible businesses in their communities. The program has since been adopted by five Local Hazardous Waste Management Programs across Washington State: Jefferson, King, Kitsap, Pierce, and Whatcom counties. This group of county programs has formed an implementation organization called the EnviroStars Cooperative. County-based program representatives work with businesses to evaluate and improve hazardous waste management practices, as well as to provide recommendations and resources for addressing a comprehensive list of sustainable practices, in order to minimize environmental impact and which lead to a range of economic and other business benefits.

By the end of 2005:

- 573 businesses had enrolled
 - Automotive repair shops have reduced an estimated 448 tons, or 66,934 lbs of hazardous wastes and have saved over \$210,000 annually
 - Dry Cleaners reduced an estimated 200 tons, or 42,828 lbs of hazardous wastes
- Mercury levels measured by the wastewater treatment plants were reduced by 50 percent because of new dentists' practices.

Maryland Department of Environment-Maryland Technology Extension Service (MTES), *Environmental Management System (EMS) Implementation Assistance Program*

The EMS Implementation Assistance Program was created in 2001 and has worked with 28 companies to date. The program works with groups of three to five businesses at a time. To participate, each business must provide a letter of commitment signed by the highest level of management at their facility, assign an EMS team, send at least two representatives to the four group workshops, and commit to completing implementation of an EMS within the six-month project period.

- One program- 7,501,225 pounds of waste reduction in the first year of implementation at a cost savings of \$109,440
- ATK Elkton: Saved approximately \$3,857 and 158,688 kilowatt hours and \$5,961 and 2,573 gallons of gasoline.
- Coca Cola Bottling (Silver Spring, MD): Reduced electric power usage by 7.5%, reduced water consumption by 7.5%, reduced solid waste going to landfill by 10%
- LaFarge: 17,371,697 gallons per year in water use and water discharge at a cost savings of \$10,000-12,000/year

Michigan Departments of Environmental Quality and Agriculture et al., *Michigan Turfgrass Environmental Stewardship Program*

Michigan turfgrass is a 1.86 billion dollar industry, employing 30,000 people and encompassing 1.9 million acres of land. The Michigan Turfgrass Environmental Stewardship Program (MTESP) is a voluntary proactive initiative designed to prevent pollution and increase compliance with environmental laws on golf properties. The program represents a unique partnership between:

- Michigan Department of Environmental Quality
- Michigan Department of Agriculture
- Michigan Turfgrass Foundation
- MichiganStateUniversity
- Michigan Golf Course Owners Association
- Golf Association of Michigan
- Michigan Golf Course Superintendents Associations

The MTEEP currently has 234 golf courses voluntarily participating in the program and has certified 63

PENNTAP-ETAC Partnership

The PENNTAP-ETAC partnership provides outreach and technical assistance to companies in western Pennsylvania regarding pollution prevention and energy efficient opportunities and practices. PENNTAP helps Pennsylvania businesses improve their competitiveness by providing free technical assistance and information to help resolve specific technical questions or needs. ETAC is a not-for-profit applied research and technical assistance center specializing in applying infrared, ultraviolet, microwave, radio frequency and other types of energy to improve heating, drying, coating and curing processes used in manufacturing facilities. An important component of these technologies is their ability to improve product quality, increase productivity, improve energy efficiency, reduce costs, and reduce the environmental impact of many industrial processes.

This partnership has helped Pennsylvania businesses:

- Reduce 6,000,000 kWh/yr in electric energy
- Reduce 100,000 mcf/yr in natural gas
- Reduce 20,000,000 lbs/yr in air emissions
- Reduce 1,800,000 lbs/yr in solid wastes
- Reduce 73,000,000 gal/yr in water use and wastewater
- Save \$2,600,000 per year

Rochester Institute of Technology, *Wiper Blade Edge analyzer project*

The NationalCenter for Remanufacturing and Resource Recovery (NC3R) at Rochester Institute of Technology (RIT) has been providing technical assistance and applied research and development to companies, industries, and government agencies interested in remanufacturing and resource recovery since 1992. NC3R has recently created and implemented a unique and innovative process for recovering a component used in copiers and printers around the world, thereby conserving natural resources and reducing solid waste transferred to landfills. The result of the Wiper Blade Edge Analyzer project is a new technology and process for reclaiming used wiper blades from toner cartridges during the remanufacturing process. Three hundred tons of metal and urethane have been diverted from landfills

Steelcase Inc., *2006 Environmental Report*

"Nearly 100 Hundred years ago we made a promise – that we would act as stewards of the environment. Since then, we've been dedicated to serving our customers in a way that never becomes a disservice to our planet. We believe that, big or small, every action that safeguards and restores the environment is significant. By inspiring lasting, meaningful action, we can all benefit from lasting, meaningful results." – James P. Hackett, President and CEO.

- Protected 360,000 acres across Michigan
- Reduced VOC emissions by 41%, or roughly 155,000 metric tons since 2001
- Reduced GHG emissions by 95%- roughly 1,045 tons
- Reduced water consumption by 54%
- Decreased energy consumed by 45%- roughly 560,000,000 kilowatt-hours

Tinker Air Force Base, *Environmental Management Division*

Over the past two years, CEV has remained focused on its mission - to serve as the TAFB focal point for all environmental issues by developing and implementing policies, programs, and procedures that ensure base-wide compliance with environmental requirements while fully supporting base missions. CEV has demonstrated continued commitment to its mission by implementation of its strategic vision: Reach out to neighbors; Seek new ways to fulfill TAFB's environmental mission; Apply cutting-edge technologies to processes; Provide state-of-the-art training.

- Reduced chrome by 28,000 gallons and saved \$120,000 annually
- Reduced VOCs by 16 tons
- Reduced hazardous waste volume by 3,450 tons
- Reduction energy consumption by 25,000 MBtu/yr
- Reduced coolant disposal by 200 tons
- Diverted 42 tons of metal sludge and 30 tons of compost

US EPA ORD Cincinnati / UnStain North America LLC, *Thermo-Diffusion of a Zinc Coating*

The process of thermo-diffusion of a zinc coating is a newer process that forms a zinc alloy with the substrate. The process is designed to coat fasteners as well as small and medium-sized items, including threaded items, made of steel and cast iron. The technology claims (1) that the coating will adhere to lightly rusted (oxidized) parts and/or with light oils without pretreatment, (2) that the corrosion protection is two to four times higher as compared to competitive processes such as hot dip galvanizing and electro-galvanizing and (3) that the process is environmentally friendly being a near zero discharge process. The US EPAevaluated the pollution discharge from the manufacturing process by inspecting and obtaining parts from a plant in Johannesburg, South Africa, as well as from UnStain North America, LLC, and other parts that are zinc coated with other methods. EPA concluded that the original part does not have to be replaced or reworked as frequently which has pollution and cost savings. Ninety percent of the parts can skip the pre-treatment step and the associated pollution. There are no air stack emissions or water discharges and all sludge is recycled back into virgin product. The corrosion resistance was evaluated by EPA and was superior to traditional zinc coatings.

US EPA Region 8 / Yellowstone National Park, *Greening of Yellowstone*

In 1997, when Yellowstone National Park celebrated its 125th anniversary as the world's first national park, park staff began thinking about the next 125 years and the sustainable efforts that would ensure the preservation and protection of Yellowstone. As a result, the concept of the "Greening of Yellowstone" was created. The main goal of this effort is to implement changes in how the park does business that result in reducing and/or eliminating pollution while providing an example to our visitors and to other land management agencies.

In 2005 the project:

- Achieved 65 percent diversion rate of solid waste from going to the landfill
- Replaced 500 feet of boardwalk with recycled plastic materials
- Produced more than 1,400 tons from the park's solid waste stream
- Reduced carbon dioxide emissions into the atmosphere by 522 metric tons by using alternative fuels
- Installed a solar electric array at the Lamar Buffalo Ranch, located within the park, that provides more than 90 percent of the complex's energy needs, annually.

Publications

Dan Ahern and John Calcagni

US EPA Region 4/Waste Reduction Resource Center

John and Dan won the award for their publication, "Implementing the Pollution Prevention Act of 1990 - Leading Every Firm to Stewardship". This work presents a methodical, integrated, comprehensive approach to applying many of the techniques and tools that have been shown to be effective in promoting pollution prevention. It recognizes that members of the business community have different motivations and presents a methodical approach to identify which measures are most likely to be effective with each type of firms and when to best implement the measure to maximize impact. John and Dan crafted a well written document which presents the P2 dilemma in a different way.

Paul Orum

The Center for American Progress

Paul received the 2006 Writing Award for his publication, "Preventing Toxic Terrorism". The Center for American Progress, with assistance from the National Association of State PirIGs and National Environmental Trust, conducted a survey to identify such facilities and spotlight successful practices that have removed unnecessary chemical dangers from our communities. This survey (which covered facilities that no longer report using extremely hazardous substances under the federal Risk Management Planning program) found that facilities across the country, representing a range of industries, have switched to safer alternatives from a variety of hazardous chemicals, producing dramatic security and safety benefits at a reasonable cost. This fascinating report makes the connection between pollution prevention and homeland security. The report shows how simple substitutions can decrease the risks to local populations. The document suggests transferability to a number of industries and showcases a variety of examples showing feasibility for others to do the same.

NPPR would like to extend a special thank you to the judges of this year's MVP² awards:

- Dana Rasmussen, *Gerson Lehrman Group*
- Peter Johnsen, *Nevada SBDC*
- Marcia Horan, *Michigan Department of the Environment*
- Jim Kotsmith, *3M*
- Gary Miller, *Illinois Waste Management and Research*
- Michele Russo, *McGraw-Hill Construction*
- Steve Brachman, *University of Wisconsin Extension Service*
- Thomas Vinson, *Southwest Center for Zero Waste*