



# Office of Pollution Prevention 2008 Annual Report

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## From the Director

Pollution Prevention is a key element in the Virginia Department of Environmental Quality’s (DEQ) strategy to protect Virginia’s environment and ensure the Commonwealth’s natural resources are adequately preserved for future generations. DEQ hosts a number of Pollution Prevention programs in the Office of Pollution Prevention (OPP). These serve as a conduit for non-regulatory assistance to businesses, institutions, and communities, and also motivate Virginians to minimize their environmental footprint—actions that often enhance their bottom line. A few of the highlights for 2008 were:

- Receiving the “Shining Example Award for Sustainable Tourism” with our partners the Virginia Tourism Corporation and the Virginia Hospitality and Tourism Association for the Virginia Green tourism initiative from the Southeast Tourism Society;
- Expansion of the Governor’s Environmental Excellence Awards Program to include categories for the public sector, partnerships and individuals in addition to industry, presented to 33 winners at the 19th Annual Environment Virginia Symposium in April;
- Reaching the milestone of 450 participating facilities in the Virginia Environmental Excellence Program; and,
- Receiving \$100,000 in grant funding from the U.S. Environmental Protection Agency to conduct three solid waste reduction pilot projects to: (1) develop an inventory of all construction and demolition debris disposal facilities; (2) study the feasibility of commercial food waste composting; and, (3) evaluate the practicality of building “greener” highways through the use/reuse of industrial material products and byproducts.

I am confident that all Office of Pollution Prevention initiatives will continue to produce positive results for both the environment and the partnerships they foster. I am convinced that future environmental improvements will depend on partnerships and innovations, and I am pleased and proud that DEQ continues to be a leader in both areas.

David K. Paylor



*“Virginia Green is an exceptional program that has been widely embraced by the tourism industry in Virginia, allowing them to participate in an initiative that not only saves the environment but also provides more profitability to small tourism businesses across the Commonwealth. Virginia Green is a great public-private partnership.”*  
**Alisa Baily**  
 President (CEO), Virginia Tourism Corporation

**Virginia Green participants by sector:**

- 200 Lodging
- 53 Restaurants
- 22 Partner Organizations
- 21 Conference Centers
- 20 Welcome Centers & Rest Areas
- 17 Attractions
- 15 Certified Green Events
- 11 Travel Organizations
- 3 Visitor Centers
- 3 Convention Centers

# Virginia Green

Virginia Green is the Commonwealth’s voluntary initiative to promote pollution prevention practices in all sectors of the tourism industry. The program is operated as a partnership with the Virginia Tourism Corporation (VTC) and the Virginia Hospitality & Travel Association (VHTA). Through a system of self-certification, facilities are required to meet minimum criteria or core activities established for each sector of tourism – hotels, restaurants, attractions, conference centers, etc. OPP oversees development of all programmatic guidance and reviews each of the submitted applications, while the VTC and VHTA coordinate marketing and promotion. Based on industry-supported research, implementation of pollution prevention practices can result in expected reductions in water and energy usage of 30% and solid waste reductions of 50%.

This past year was an overwhelmingly successful one for Virginia Green, as participation grew from just over 100 to more than 350 facilities and organizations. OPP introduced new guidance and core activities for several additional sectors: Welcome Centers & Rest Areas, Visitor Centers, EcoOperators, Marinas, and Green Events. In addition, guidance has been drafted for Golf Courses and Wineries. Significant partnerships have been forged with various state programs and industry groups in the development of the sector guidance.

On August 15th, Governor Tim Kaine participated in a ceremony to designate Virginia Beach as a “Green Destination” as a result of its successful efforts to certify numerous attractions and restaurants in Virginia Green. Pictured with the Governor are Tom Griffin, DEQ Virginia Green Coordinator, and Laura Habr, a Virginia Beach restaurateur and leader in the City’s greening efforts.



## Program Outreach

OPP staff made more than 20 Virginia Green presentations in 2008 to a wide range of audiences, ranging from national and state tourism officials to local and regional tourism boards. An important milestone in the program’s development occurred in 2008 when the VTC assumed primary marketing responsibilities and launched the Virginia Green Travel website as the Commonwealth’s internet gateway to all things green in Virginia tourism ([www.viriniagreentravel.org](http://www.viriniagreentravel.org)). The site supports green trip planning and links consumers directly to facility-specific profiles which identify their pollution prevention activities. Another significant achievement of 2008 was the automation of the application process for Virginia Green.



## Program Awards & Recognition

The Virginia Green program itself has been recognized for its success. DEQ has received inquiries from a number of states about the program's structure and function, including Delaware, Colorado and West Virginia. On September 3rd, Virginia Green received the "Shining Example Award for Internet Excellence" from the Southeast Tourism Society at a ceremony in Little Rock, Arkansas. The Society represents the states of Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.



## Governor's Environmental Excellence Awards

The Governor's Environmental Excellence Awards program was expanded in 2008 to allow public sector entities and individuals to participate. Secretary of Natural Resources, L. Preston Bryant, Jr., announced the 33 winners on April 2 at the 19th Annual Environment Virginia Symposium in Lexington. The awards are intended to recognize the significant contributions of environmental and conservation leaders in three categories: environmental projects, environmental programs and land conservation. In the first year of the expanded awards program, businesses and industrial facilities, government agencies and individuals were all recognized.

Three entries were recognized at the highest award level, the Governor's Flag:



- Micron Technology in Manassas for its successful implementation of an environmental management system, which ensures best management practices and innovative technologies are deployed throughout the facility. Pictured at left are: Secretary Bryant, Christopher Dott (Micron) and DEQ Director David Paylor.
- City of Charlottesville for its environmental sustainability initiative to protect and maintain environmental resources and to minimize waste.
- Volvo Trucks North America's New River Valley Plant in Dublin for its recycling project that reuses 70 percent of the facility's wastewater.

Also receiving awards were: BAE Systems, Norfolk Ship Repair; Town of Blacksburg/Virginia Tech/Sustainable Blacksburg; Town of Blacksburg/YMCA; Boehringer Ingelheim Chemical; Canon Virginia; Cargill Meat Solutions; Caroline Stalnaker; Charlotte Hanes; Chesapeake Energy Center; Columbia Gas of Virginia; Coors Brewing Company; Hinge House; Hopewell Cogeneration Facility; Lockheed Martin; MeadWestvaco Corporation; Old Dominion University; Philip Morris - Park 500; Prince William County Freedom High School; Smithfield Packing; Eastern Shore Southern Tip Partnership; University of Virginia; US Army Garrison Fort AP Hill; US Army Garrison Fort Eustis; Virginia Beach City Schools; Virginia Department of Corrections; Virginia Regional Environmental Management System; Volvo Trucks North America; William A. Owen, III; and, York County School Division.

Award winners were chosen based on criteria related to environmental scope, impact, management and protection; community outreach, involvement and access; and a record of compliance with environmental regulations. This year's awards were sponsored by DEQ in partnership



with the Virginia Department of Conservation and Recreation, the Virginia Manufacturers Association and Virginia Tech’s Center for Organizational and Technological Advancement.

## Virginia Environmental Excellence Program

*The Virginia Environmental Excellence Program (VEEP) is intended to recognize facilities and persons that have demonstrated a commitment to enhanced environmental performance and to encourage innovations in environmental protection.*

Facilities accepted into the program must demonstrate their commitment to environmental performance through the development of an environmental management system (EMS), implementation of pollution prevention programs and compliance with environmental regulations. There are three types of participation options for interested facilities:

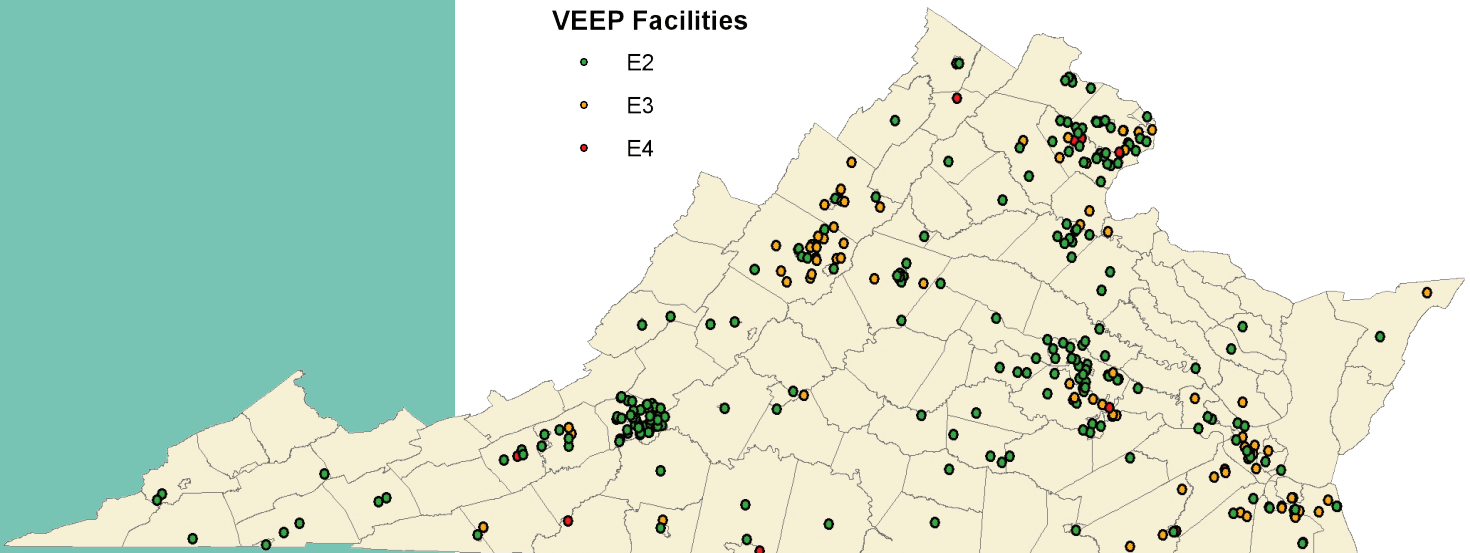
*VEEP facilities are leaders in their communities. As an example, in 2008, the NASA Wallops Flight Facility, an E3 member, provided mentoring assistance to a nearby marine science non-profit organization. NASA employees helped the non-profit organization’s staff ensure that hazardous waste regulations were followed during a renovation project, which was beneficial to both the organization and the environment.*

- E2 (Environmental Enterprise) for facilities that have made significant progress toward the development of an EMS, have made a commitment to pollution prevention and have a record of sustained compliance with environmental regulations.
- E3 (Exemplary Environmental Enterprise) for facilities that have exceeded the E2 requirements and have a fully-implemented EMS.
- E4 (Extraordinary Environmental Enterprise) for facilities that have exceeded the E3 requirements, have completed at least one full cycle of an EMS as verified by a third-party auditor and have demonstrated a commitment to continuous and sustainable environmental progress and community involvement. Any facility that applies to and is accepted into the Environmental Protection Agency’s Performance Track program is also considered to be an E4 facility.

DEQ’s pollution prevention program administers VEEP, reviewing applications and renewals, performing site visits for E3 and E4 applications, conducting compliance reviews and coordinating recognition events.

**VEEP Facilities**

- E2
- E3
- E4



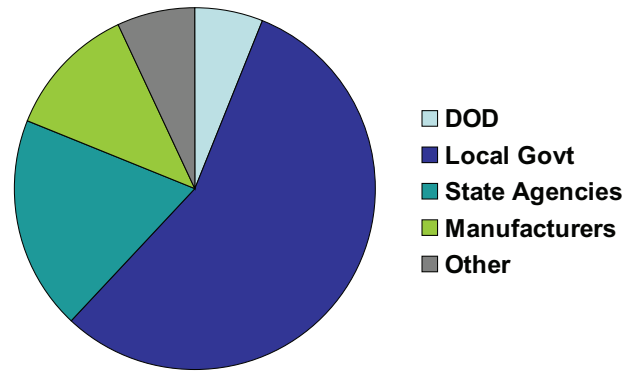
*By the end of 2008, there were approximately 450 facilities in VEEP.*

## **Growth of the Program**

By the end of 2008, there were almost 450 facilities in VEEP, which represents a growth rate of almost 17% from last year. Almost 60% of the facilities are at the E2 level, a third are at the E3 level, and the remaining 5% are at the E4 level.

VEEP facilities are located in all geographic areas of the Commonwealth, with larger numbers in the urban areas. VEEP participation by sector is as follows: 56% local governments; 19% Virginia State agencies; 12% manufacturing; 7% other facilities; and, 6% U.S. Department of Defense.

*2008 VEEP Participation by Sector Type*



## **VEEP Incentives**

Members of the Virginia Environmental Excellence Program enjoy two types of incentives: recognition and regulatory flexibility.

**Recognition Ceremonies.** Upon request, DEQ recognizes new and renewing VEEP facilities at ceremonies throughout the Commonwealth. In 2008, DEQ participated in 16 events, recognizing a total of 24 facilities. These events focus attention on the members' efforts to improve the environment by minimizing their footprint. The ceremonies also emphasize the positive partnership shared by DEQ and its VEEP members and highlight the individuals who commit to reduce their facility's impact, as well as the administrators and managers who support them. Typically the ceremonies include representatives from both DEQ's Central Office and the appropriate DEQ Regional Office, local elected officials, and facility managers and staff.



*On May 7th, a ceremony was held to recognize the achievement of E2 at all 9 of the W. Baxter Perkinson, Jr., Ltd., dental practice locations in metropolitan Richmond, the first dental offices to become part of VEEP. Pictured left to right are DEQ Director David Paylor; Dr. W. Baxter Perkinson, Jr.; Gilbert Roberts, Jr., and Dr. Terry Dickinson.*



*On August 12th, the City of Newport News' Public Works Wastewater Division was recognized for their recent E3 acceptance with a ceremony at the City Council meeting. Pictured at right are Marcus Leeper, Andy Belvin, Chris Alston, Frank Daniel (DEQ Tidewater Regional Office Director), and Patty Hoggard.*

**Regulatory Flexibility.** In 2005, the General Assembly acknowledged that regulatory and administrative flexibility are powerful incentives for driving improved environmental performance when it passed legislation allowing VEEP members to request the use of alternative, innovative approaches to meet or go beyond current levels of compliance. In addition, the General Assembly authorized DEQ to offer VEEP members a discount on certain permit fees.



*The Virginia Department of Corrections (DOC) has set a goal of having all of their facilities in VEEP within the next few years. At the end of 2008, seven DOC facilities had been accepted and seven were under review. Pictured above are representatives of the Augusta Correctional Center with Amy Owens, Director of DEQ's Valley Regional office (center).*

- **Annual Permit Fee Discounts for VEEP Facilities:** Several years ago, the General Assembly passed legislation establishing annual fees for facilities with certain types of waste and water permits. Simultaneously, the legislature acknowledged that VEEP members “go beyond” compliance and determined that improved environmental performance merited permit fee discounts:

- \* Hazardous waste: potentially 5% for E2 facilities and 10-20% for E3 and E4 facilities
- \* Solid waste: potentially 10% for E2 facilities and 20% for E3 and E4 facilities
- \* Water: potentially 2% for E2 and 5-20% for E3 and E4 facilities

In 2008, more than 100 permits were discounted, saving VEEP members in excess of \$43,000.

- **Alternate Compliance Methods:** VEEP members at the E3 and E4 levels are eligible to request the use of “alternate compliance methods” – an innovative incentive for any performance-based program. Virginia law authorizes DEQ’s three regulatory boards to grant appropriate facility requests. VEEP members use this mechanism to request reduced monitoring and reporting frequency, streamlined permit application and renewal processes, and to make operational changes without prior approval from the Department. As outlined in the law, only alternate compliance methods that meet the purpose of the applicable regulatory standard, achieve the purpose through increased reliability, efficiency or cost effectiveness, and provide equal or greater environmental protection will be approved; proposals that alter existing standards, increase pollutants released to the environment, increase impacts to Virginia’s waters, or result in a loss of wetland acreage will not be approved. Depending on the method requested, the changes may require a permit amendment.

## Results

To remain in good standing with the program, all VEEP facilities must submit a report each year. Several years ago, DEQ instituted an on-line reporting system that emphasized the reporting of measurable results rather than descriptive updates. When applying for and renewing participation, facilities select from a list of more than thirty-five environmental indicators that they then use as the basis of their results tracking and VEEP annual reporting. Facilities report results in both actual and normalized quantities (i.e., results based on production, number of employees, etc.). Normalized results allow facilities to better track year-to-year performance.

Reports submitted in 2008 show improvements in many of the measures over a baseline amount. The overall program results as presented above should only be considered as a general indication of VEEP facility performance because: the program is voluntary and data is reviewed as submitted by the facilities; many facilities still have limited experience tracking environmental data; in some cases, the numbers shown represent

### Dollars & Cents:

- In 2008, VEEP facilities reported cost savings of more than \$3.9 million.
- DEQ provided annual permit fee discounts totalling more than \$43,000 and benefitting over 60 VEEP facilities in 2008.

## *2007 Reported VEEP Results (difference from baseline)*

### Material Use:

Hazardous Materials Use down 628 tons

Recycled Materials Use up 125,367 tons

### Water Use:

Reclaimed/Recycled Water use up 23 million gallons

*Total Water Use up 585 million gallons*

Total Energy Used down 499,610 MMBtus

Land and Habitat Conservation up 6 acres

### Air Emissions:

Air Toxics down 19 tons

Nitrous Oxides down 403 tons

Sulphur Oxides down 3,640 lbs

Volatile Organic Compounds down 220 tons

Particulate Matter down 2,400 lbs

### Waste:

Hazardous Waste disposed down 1,733 tons

Non-Hazardous Waste recycled up 62,924 tons

***Over \$10 Million in Cost Savings***

a single facility; and, the reports are a snapshot from one year and may not reflect overall reduction trends.



## Mercury Reduction

### *Auto Salvage Industry Mercury Reduction*

OPP's partnership with the Virginia Automotive Recycling Association (VARA) yielded a pilot project to remove mercury tilt switches in automobiles as part of the dismantling and salvage process. Mercury-containing switches in automobile scrap have been identified as a primary source of mercury air emissions from the steel industry. Several years ago, OPP sponsored the distribution of a pre-paid collection kit with instructions for removing the switches and precautions for safe handling and shipping. VARA promoted the pilot to its membership, and more than 30 facilities participated in the program. VARA also coordinated the pilot program with EPA's National Partnership for Environmental Priorities, pledging to remove 1,500 switches (the equivalent of nearly five pounds of mercury).

The success of this pilot program resulted in legislation adopted by the 2006 Virginia General Assembly, which requires removal of mercury convenience switches from end-of-life motor vehicles prior to demolition. The statute authorizes DEQ, through the Virginia Waste Management Board, to adopt guidelines setting standards for the removal and management of switches from end-of-life automobiles. DEQ has been working with VARA, the Department of Motor Vehicles, Virginia's scrap industry, steel manufacturers, and the automotive industry to implement the program. End of Life Vehicle Solutions (ELVS), an organization created by automotive manufacturers, has distributed collection buckets for mercury switches throughout the state. Efforts are already underway to remove switches from automobiles prior to their demolition.

## Virginia Fluorescent Lamp Recycling Challenge

While fluorescent lamps are beneficial to the environment because of their energy efficiency, they do contain small quantities of mercury. To ensure that mercury is not released to the environment, the best option is to recycle fluorescent lamps.

Several years ago, DEQ challenged facility managers, particularly those at commercial buildings, to recycle their lamps. The "Virginia Fluorescent Lamp Recycling Challenge" now includes almost 40 organizations:

- 99th Regional Readiness Command, US Army Reserve
- Albemarle County Schools
- BAE Systems, Manassas
- Blacksburg Country Club
- Capital One West Creek Campus, Richmond
- Champs Sports Bar and Café, Blacksburg
- CMG Leasing Inc., Blacksburg
- Colley Architects, P.C., Blacksburg
- Covanta Energy Alexandria
- Covanta Energy Fairfax
- Defense Logistics Agency, Richmond
- Downtown Merchants of Blacksburg
- Fort A.P. Hill
- Fringe Benefit, Blacksburg
- Fun n' Games, Game & Hobby Shoppe, Blacksburg
- Gillie's Restaurant, Blacksburg
- Gwaltney of Smithfield, Ltd.
- Homebody, Blacksburg
- Hopewell Cogeneration Facility
- Hyosung America Inc. Scottsville Plant
- International Paper – Franklin Mill
- Kent Square, Blacksburg
- Kyanite Mining Corporation, Dillwyn
- Leesburg Water Pollution Control Facility
- Lunenburg Correctional Center
- Mish Mish, Inc., Blacksburg
- National Bank of Blacksburg
- New Tech Fitness, Blacksburg
- Sharky's Wing and Rib Joint, Blacksburg
- Smithfield Foods – Portsmouth Division
- Smithfield Packing Company (South)
- Town Center, Virginia Beach
- Town of Blacksburg
- U.S. Army Transportation Center – Fort Eustis
- VPT, Inc., Blacksburg
- Washington and Lee University, Lexington
- YMCA - Virginia Tech Blacksburg



**Lamp Recycling Challenge participants committed to recycle almost 53,000 bulbs per year.**



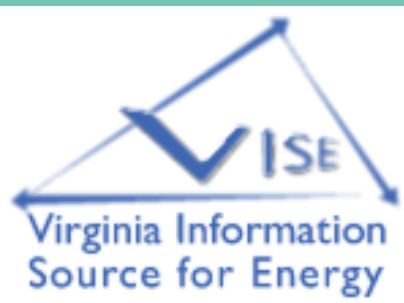
These facilities, which represent over 22,400,000 square feet, have pledged to recycle almost 53,000 fluorescent bulbs per year.



## Virginia Hospitals for a Healthy Environment

The Virginia Hospitals for a Healthy Environment (VH2E) is OPP's voluntary program for the Virginia healthcare industry. Based on the EPA's Hospitals for a Healthy Environment (H2E) program, VH2E has successfully promoted pollution prevention opportunities and the resources available through the national H2E effort to the Virginia healthcare industry for several years. VH2E has now grown to include more than 80 participants, 50 of which are hospitals, representing more than half of the industry.

During 2008, the national H2E program transitioned into a privately run partnership called "Practice Greenhealth." This new program is not directly supported by EPA and is fee-based. As a result of the changes at the national level, Virginia's program is similarly in a transition mode. OPP will continue to assist the Commonwealth's healthcare facilities on pollution prevention issues. Compliance with hazardous waste regulations remains one of the most critical concerns to healthcare facilities. Therefore, OPP actively supports the DEQ regional hazardous waste compliance staff with its compliance assistance goals and outreach to healthcare facilities. During 2008, OPP assisted in three healthcare compliance assistance visits; DEQ hazardous waste compliance staff completed an additional eight such visits.



## Energy Efficiency & Renewable Energy

Virginia and other states continue to face air quality challenges related to ozone non-attainment, regional haze, fine particulates and toxic air pollutants. Air deposition contributes to acid precipitation as well as nutrient and toxic impacts in the Chesapeake Bay. Increasing energy efficiency and implementing clean energy technologies are two ways to mitigate negative impacts.

In many cases, clean, renewable energy approaches provide an environmentally and economically preferable alternative to conventional end-of-pipe pollution control, representing a classic pollution prevention approach. One significant barrier to implementation of these approaches can be a lack of access to current and comprehensive information. OPP actively participates in energy efficiency and renewable energy related outreach and education and seeks partnerships with other organizations that have similar goals.

### *Technical Assistance*

OPP offers free energy assessments to interested facilities. OPP also maintains the Virginia Information Source for Energy website, or VISE, at [www.deq.virginia.gov/p2/vise/homepage.html](http://www.deq.virginia.gov/p2/vise/homepage.html). VISE is a repository for information on alternative energy options in Virginia, energy efficiency tips and financial incentives. The content and format of the VISE site were updated in 2008 to include information from the Virginia Energy Plan and the environmental impacts of energy use.



## Partnerships

OPP collaborates with various organizations to expand energy education and promote the benefits of energy efficiency and renewable energy. In 2008, DEQ participated in environmental and energy conferences and events throughout the Commonwealth, including four "Earth Day" Events, the 2008 Commonwealth



*Below is OPP staff member Rachel Bullene at the Defense Supply Center Richmond's Earth Day Event with Joe Krouse of DSCR.*



of Virginia Energy and Sustainability Conference, and the Association of Energy Conservation Professionals (AECP) Annual Expo. Pictured above are Holly Williams and Jeffrey Hurst of DEQ's Blue Ridge Regional Office in front of the VISE exhibit at the AECP Expo. DEQ also joined the Richmond area's GRTC Transit System's Ride Finders and a number of other local partners at "Try Transit Day" to promote the use of alternative modes of transportation in an effort to reduce outdoor air pollution. OPP collaborates with several other organizations working on energy issues, such as the Virginia Department of Mines, Minerals and Energy, Hampton Roads Clean Cities, and the Virginia Regional Environmental Management System.

## Outreach to Reduce Priority Toxic Chemicals

EPA's National Partnership for Environmental Priorities (NPEP) focuses on the voluntary reduction of 31 Priority Chemicals found in the nation's products and wastes. These are 28 organic chemicals and three metals identified by EPA to be persistent, bioaccumulative, and toxic (PBT). The complete list with accompanying fact sheets can be found at [www.epa.gov/epaoswer/hazwaste/minimize/chemlist.htm](http://www.epa.gov/epaoswer/hazwaste/minimize/chemlist.htm). OPP coordinates with EPA Region 3 to implement NPEP in the Commonwealth and encourages facilities to participate in the program by voluntarily committing to eliminate or substantially reduce or recycle the targeted chemicals. In 2008, Virginia NPEP facilities pledged to reduce 6,420 pounds of priority chemicals: 200 pounds of mercury, 5,020 pounds of polychlorinated biphenyls (PCBs) and 1,200 pounds of lead.

On October 29th, at EPA's Waste Wise and NPEP Annual Conference, seven Virginia facilities that signed on to NPEP in 2008 were recognized. The new Virginia NPEP participants are:

- Thompson Tire (two sites), M & M Tire, South Main Auto Services, all of the Town of Blacksburg, and Costco, located in Sterling, which are all reducing lead by using an alternative material for tire balancing.
- Rivanna Solid Waste Authority, Charlottesville, is expanding their outreach efforts and their capacity to handle fluorescent lamps in order to improve the recycling rate for these lamps.
- Appalachian Power Company in Southwestern Virginia is addressing PCBs by replacing transformers and rectifiers.

The Virginia Department of Corrections is also expected to have several facilities join in the near future as the department upgrades firing ranges, which will improve lead recovery and recycling.



## Businesses for the Bay



Started in 1996, the regional pollution prevention partnership effort Businesses for the Bay (B4Bay) has been a great success story. Pollution prevention outreach programs from Virginia, Maryland, Pennsylvania, and the District of Columbia have worked with nearly 1,000 participating facilities to assist in the restoration of the Chesapeake Bay. All total, B4Bay participants from the entire watershed have reduced more than 2 billion pounds of pollutants through pollution prevention practices. In addition, these same participants reported cost savings of more than \$30 million. More than 400 of the participants were from Virginia and accounted for more than 750 million pounds of reduced pollutants and savings of more than \$12 million. B4Bay's Excellence Awards program has also served as a significant recognition opportunity for its membership. More than 150 awards have been made for outstanding efforts; Virginia participants have won more than 75 of those awards.

In 2008, however, the EPA's Chesapeake Bay Program ended its financial support for the program. A non-profit organization has assumed the program's administrative duties, and, at present, all activities, including the awards program, have been postponed indefinitely. OPP remains committed to support B4Bay and its Virginia participants should it be reactivated.

## Recycling & Litter Prevention

DEQ supports recycling and litter prevention programs throughout the state with its information clearinghouse and outreach activities as well as through the administration of an annual grants program. Recycling data for Virginia shows a continuing growth in the Commonwealth's annual recycling rate; for calendar year 2007, DEQ has calculated the rate at 38.5%. Locality-based litter prevention and recycling programs received grant awards for FY 2008 totaling almost \$2 million. DEQ also awarded just over \$100,000 for six special projects, including a tire and appliance amnesty day in Powhatan County and an on-street recycling pilot in Arlington County. As in previous years, DEQ staff provided guidance and program information through participation in workshops, meetings, and conferences.

## Solid Waste Reduction Pilot Projects

In 2008, DEQ received \$100,000 from EPA Region 3 to support three waste reduction pilot projects aimed at increasing access to waste reduction models and infrastructure information. The projects, which will be completed in 2009, are: (1) development of a construction and demolition materials management database to increase awareness of the non-disposal opportunities for this material; (2) food waste characterization surveys of two or more "green" facilities to develop management strategies for the diversion and composting of this material; and, (3) planning and coordination of a Mid-Atlantic Industrial Materials Roundtable Workshop to facilitate understanding of what would constitute a Green Highways project, the regulatory and construction specifications for the industrial materials proposed for such projects, and to incorporate this information into an overview of two Virginia Department of Transportation roadway construction projects already planned.



*OPP staff member Steve Coe talks with Daniel Dreyer of Sims Metal Management about recycling markets and options for scrap metals.*

## DEQ's pollution prevention 2008 results at a glance ...

- 349 participants in the Virginia Green tourism program
- 28 Virginia Green tourism presentations
- 33 Governor's Environmental Excellence Awards presented
- 17 recognition ceremonies celebrating 24 new VEEP members
- Approximately 450 facilities participating in VEEP
- \$43,000 in annual permit fee discounts for VEEP facilities
- 6,000 pounds of priority chemicals such as mercury, lead and polychlorinated biphenyls pledged to be voluntarily reduced
- Over \$10 million savings reported by VEEP facilities as a result of their environmental initiatives
- Performed 37 site visits at VEEP facilities and 13 hazardous waste minimization site visits
- 3 compliance assistance visits to hospitals
- \$100,000 grant from EPA to investigate solid waste reduction options

## Office of Pollution Prevention Websites

General Information

[www.deq.virginia.gov/p2](http://www.deq.virginia.gov/p2)

Virginia Green Tourism Program

[www.deq.virginia.gov/p2/viriniagreen](http://www.deq.virginia.gov/p2/viriniagreen)

[www.VirginiaGreenTravel.org](http://www.VirginiaGreenTravel.org)

Governor's Environmental Excellence Awards Program

[www.deq.virginia.gov/info/geea/2009/homepage.html](http://www.deq.virginia.gov/info/geea/2009/homepage.html)

Virginia Environmental Excellence Program

[www.deq.virginia.gov/veep](http://www.deq.virginia.gov/veep)

Virginia Information Source for Energy

[www.deq.virginia.gov/p2/vise](http://www.deq.virginia.gov/p2/vise)

National Partnership for Environmental Priorities

[www.deq.virginia.gov/p2/wastemin.html](http://www.deq.virginia.gov/p2/wastemin.html)

VA Hospitals for a Healthy Environment

[www.deq.virginia.gov/p2/vh2e](http://www.deq.virginia.gov/p2/vh2e)

Virginia Naturally

[www.vanaturally.com](http://www.vanaturally.com)

Mercury Switch Pilot Project & Fluorescent Lamp Recycling Project

[www.deq.virginia.gov/p2/mercury](http://www.deq.virginia.gov/p2/mercury)

Recycling & Litter Prevention

[www.deq.virginia.gov/recycle/homepage.html](http://www.deq.virginia.gov/recycle/homepage.html)