



COMMONWEALTH of VIRGINIA

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To: The Honorable Timothy M. Kaine

The Honorable M. Kirkland Cox, Chair
House Committee on Agriculture, Chesapeake and Natural Resources

The Honorable Charles R. Hawkins, Chair
Senate Committee on Agriculture, Conservation and Natural Resources

From: David K. Paylor 

Date: December 1, 2007

Subject: Office of Pollution Prevention, 2007 Annual Report

I am pleased to provide you with a copy of the Department of Environmental Quality's (DEQ's) Office of Pollution Prevention's "2007 Annual Report." This report has been prepared pursuant to Virginia Code § 10.1-1425.17 and sets forth DEQ's pollution prevention activities.

DEQ hosts a number of pollution prevention programs which provide non-regulatory assistance to businesses, institutions, and communities and motivate Virginians to minimize their environmental footprint. This report describes the progress of these programs during 2007.

This report is being made available at www.deq.virginia.gov/regulations/reports/html. If you have any questions concerning this report or if you would like a hard copy of this report, please contact Angela Jenkins, Assistant Director of Legislative and Legal Affairs at (804) 698-4268.



Office of Pollution Prevention 2007 Annual Report

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From the Director

We must protect Virginia’s environment today to ensure our Commonwealth’s natural resources are adequately preserved for future generations. Pollution Prevention is a key element in those preservation efforts; that is why the Department of Environmental Quality (DEQ) hosts a number of Pollution Prevention (P2) programs. 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. Led by the Office of Pollution Prevention, in 2007 DEQ expanded its P2 partnership programs including the Virginia Environmental Excellence Program, nationally-recognized for providing recognition and incentives to facilities that voluntarily commit to reaching “beyond compliance” environmental results.

I appreciate all of our pollution prevention efforts in 2007, but I am particularly proud that we:

- Co-sponsored the Second Annual Virginia Environmental Management System Conference in October in Roanoke, which was attended by more than 140 participants;
- Received our third consecutive “Champion of Change” award from the national Hospitals for a Healthy Environment program; and
- Led the drive to involve US EPA and our neighbor states in working more actively towards improving the Chesapeake Bay watershed.

Also worth touting is the improved relationship DEQ is establishing with our regulated community. A survey of the Virginia Environmental Excellence members revealed that they find their new, collaborative relationship with us valuable---as well as the improved environmental performance and reduced operating costs they are realizing from being Virginia Environmental Excellence Program members.

I am confident that these and all the Office of Pollution Prevention initiatives will continue to elicit positive results--not only in the form of improved environmental quality but also in the partnerships they create. Clearly, improving Virginia’s environment and preserving its natural resources will depend on partnerships and innovations. I am pleased and proud that DEQ continues to be a leader in both of these areas.

David K. Paylor



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:

- 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.

Who is in VEEP?

- Quarry Operations
- Utilities
- Food Manufacturing
- Beverage and Tobacco Product Mfg
- Paper Manufacturing
- Printing and Related Support Activities
- Chemical Manufacturing
- Computer & Electronic Product Mfg
- Transportation Equipment Mfg
- Furniture and Related Product Mfg
- Retail Stores
- Transportation
- Warehousing and Storage
- Information
- Finance and Insurance
- Professional, Scientific & Technical Services
- Management of Companies & Enterprises
- Waste Management & Remediation Services
- Educational Services
- Health Care and Social Assistance
- Parks and Recreation
- Lodging and Food Services
- Public Order & Safety Activities
- Space Research and Technology
- Other Government



The Office of Pollution Prevention (OPP) administers VEEP, reviewing applications and renewals, performing site visits for E3 and E4 applications, conducting compliance reviews and coordinating recognition events. At the end of 2007, there were over 364 facilities in the program, with three quarters at the E2 level. In addition, there were more than 20 applications under review.

Growth of the Program

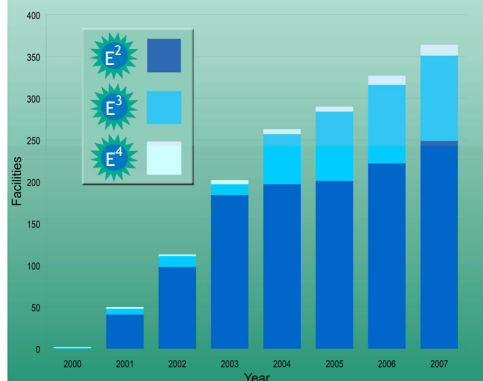
By the close of 2007, more than 364 facilities will be accepted into the Virginia Environmental Excellence Program. This represents an increase of two members in the E4 level of VEEP, eight additional E3 members, and 27 new E2 memberships over 2006 levels.

Members represent all areas of the Commonwealth. As of late fall 2007, the largest presence was centered in the West Central Region (113, or 31%, of members). The Tidewater Region is home to 70 members (19%) and the Northern Virginia and Piedmont Regions each serve as the home location for more than 50 members (approximately 15% of VEEP members in each Region).

As the outreach efforts continue, and as VEEP's members share their enthusiasm for the Program and acknowledge the business value of their environmental improvements, the growth of the Program is expected to continue on its upward trend.

By the end of 2007, there were more than 350 facilities in VEEP.

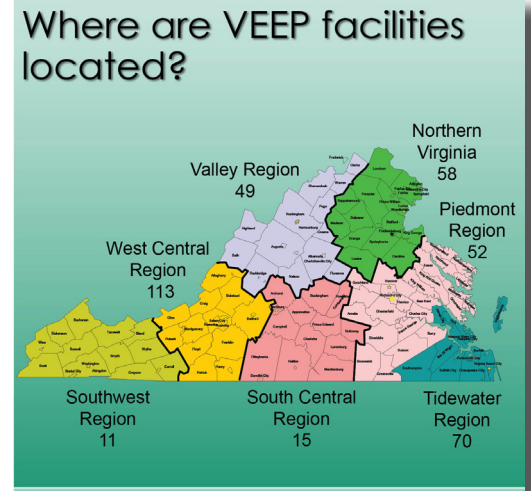
Growth of the Program



VEEP Incentives

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

Recognition Ceremonies. OPP recognizes new member facilities at ceremonies throughout the Commonwealth. During the past year, DEQ honored more than 27 entities at 16 events. Each event focuses attention on a member's efforts to improve the environment by minimizing the facility's footprint. The jointly-coordinated ceremony also emphasizes the positive partnership shared by DEQ and its VEEP members. DEQ is proud to highlight the individuals who commit to reduce their facility's impact and the administrators who support them as they work to meet their environmental goals. Ceremony participants typically include DEQ representatives from both the Central Office and the appropriate DEQ Regional Office, local elected officials, and facility managers and staff. The photograph at left captures the E4 recognition ceremony held at Micron Technology in Manassas; Virginia's Secretary of Natural Resources, L. Preston Bryant, Jr. (center left) and DEQ Director David K. Paylor (third from left) both participated in the ceremony.



Regulatory Flexibility. DEQ supports the concept that VEEP members are environmentally-responsible entities that deserve to be recognized--and treated differently--for their actions. Virginia's General Assembly acknowledges that regulatory and administrative flexibility are powerful incentives for driving improved environmental performance. Thus, 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. DEQ remains a leader among states in fostering improved environmental performance through traditional as well as breakthrough incentives and tools.

- Annual Permit Fee Discounts for VEEP Facilities: Once again, Virginia rises to the top as the only state in the nation offering a financial incentive in the form of permit fee reductions for participants in its performance-based program. Several years ago, Virginia's 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 their improved environmental performance merited permit fee discounts:
 - * Hazardous waste: potentially 5% for E2 facilities and 10-20% for E3 & E4 facilities
 - * Solid waste: potentially 10% for E2 facilities and 20% for E3 & E4 facilities
 - * Water: potentially 2% for E2 and 5-20% for E3 & E4 facilities

DEQ provided annual permit fee discounts totalling more than \$57,500 benefitting almost 100 VEEP facilities in 2007.

In 2007, almost 100 facilities benefited from the reduced permit fee incentive, saving VEEP members in excess of \$57,500.

In 2007, VEEP facilities reported cost savings of more than \$1.5 million.

OUR SURVEY TOLD US...

- VEEP offers business value
- Membership results in reduced operating costs
- Membership improves environmental performance and public perception
- DEQ interactions are a positive experience
- VEEP provides positive recognition and collaboration opportunities
- VEEP provides regulatory incentives
- VEEP provides shared best practices
- VEEP provides local networking

- Alternate Compliance Methods. VEEP members at the E3 and E4 levels are uniquely positioned to request the use of “alternate compliance methods” – an innovative incentive for any performance-based program. A Virginia statute authorizes DEQ’s three regulatory boards to grant appropriate facility requests. In general, DEQ expects VEEP members will 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.
- VEEP Membership is an Incentive. A 2007 survey of members revealed that there are numerous intangible incentives to join VEEP. The program serves to motivate improvement in environmental performance and membership can improve the public’s perception of a facility. Positive interactions with DEQ—including recognition of a facility’s effort and results and collaboration opportunities—are valued benefits. Sharing best practices and networking with like-minded colleagues rank high among reasons for continued participation in the program. Clearly, DEQ’s responsiveness to the needs of its members is directly linked to VEEP’s continually growing membership.

VEEP Results

Reduction of 48.9 tons in the use of hazardous materials
9.4 million tons of non-hazardous materials recycled
Decrease in the disposal of hazardous waste by 150 tons
Reduction of almost 927 million gallons in total water use
Over 65 tons of hazardous waste recycled
Decrease in disposal of non-hazardous waste by 3,068 tons
Over 3,900 tons of recycled materials used
Reduction of NOx emissions of 724 tons
Reduction of greenhouse gases of more almost 8,700 tons
Cost reductions of more than \$1.5 million



VEEP Integration Project

OPP is undertaking an effort to more completely integrate VEEP into the policies, programs, and procedures of DEQ. The project, formally launched in the fall of 2007, will focus on building capacity among the core regulatory programs within the DEQ to better integrate VEEP in terms of policies, procedures, and the delivery of incentives. OPP believes that the ultimate result of this integration will be an overall improvement in environmental quality within the Commonwealth and a significant step towards its long-term goal of sustainability. The project includes elements such as training, education, and stakeholder engagement—each with measurable results.

Outreach to Wastewater Treatment Plants

In 2007, OPP and DEQ’s Division of Water Quality joined with Virginia Tech’s Center for Organizational and Technological Advancement (COTA) and EPA’s Office of Water to encourage wastewater treatment plants to

“I think the VEEP program demonstrates leadership for innovative ways to foster increased environmental stewardship in Virginia. Lockheed Martin appreciates the support DEQ has provided to this valuable program and to our facility for encouraging us to make even further progress beyond compliance.”

David Gunnarson

Lockheed Martin, Manassas

State Agencies in VEEP:

- Army National Guard (51 facilities)
- Blue Ridge Community College Student Coffee Shop
- Christopher Newport University Grounds Dept
- Conservation and Recreation
- Corrections (4 facilities)
- DEQ
- Fire Programs
- Historic Resources
- Jamestown-Yorktown Foundation (3 facilities)
- Mental Health, Mental Retardation and Substance Abuse Services (8 facilities)
- Southwest Virginia Higher Education Center
- Treasury
- University of Virginia (4 departments)

develop EMSs. In support of the Chesapeake Bay watershed restoration effort, partial scholarships to a COTA EMS development program were offered to plants within the Bay watershed subject to Virginia’s new limits on nutrient discharges. Facilities accepting the funding have committed to establish EMS teams, attend multiple training sessions over the course of 18 months, develop an EMS and apply for participation in VEEP. Localities included in this initiative are the Cities of Alexandria, Buena Vista, Waynesboro, Fredericksburg, Richmond and Chesterfield County.

Virginia State Agencies & VEEP

Virginia state government measures the performance of its agencies in two ways: Agency Performance Measures (program measures) and the Management Scorecard (administrative measures). In order to document their compliance with the pollution prevention-oriented aspects of the Natural and Historic Resources component of the Management Scorecard, many Virginia state agencies seek acceptance in VEEP at the E2 level. By the end of 2007, 13 state entities (representing almost 80 individual facilities) will be participating in VEEP.

Virginia EMS Association

In 2006, representatives of several VEEP facilities formed the Virginia EMS Association (VEMSA), a collaboration of nearly 60 EMS practitioners whose goal is to promote and support the implementation of EMSs to achieve environmental improvement and encourage new and continued participation in the program. In October 2007, VEMSA presented the Second Annual Virginia EMS Conference in Roanoke with the theme “Promote, Support, and Celebrate Environmental Management Systems.” DEQ, EPA and Virginia Tech were co-sponsors of the event, which drew over 140 people and included presentations on VEEP Basics, Advancing in VEEP, EMS 101, EMS Auditing and Sector Trends. Future plans include forming a support and education system to: promote and support EMS across the Commonwealth and across all sectors; provide a network of professionals to share information, ideas and strategies to help members advance or maintain their EMS programs; and provide a state-based liaison organization to communicate with DEQ and the EPA on EMS-based issues.

Regional EMS Initiatives in Virginia

DEQ encourages VEEP facilities to look beyond their fencelines when developing their EMS priorities and to investigate issues of regional concern such as air quality, Chesapeake Bay water quality, and land conservation. The Virginia Regional Environmental Management System (VREMS) is a unique, nationally recognized partnership that includes over 60 federal, state, and local public and private organizations that collaborate to address community and environmental issues. VREMS was originally sponsored by the Department of Defense and the White House Council on Environmental Quality in 2003 as a pilot program to develop an EMS-based regional approach to environmental and community challenges. The VREMS partnership’s success and growth has led to continuing support by the Defense Supply Center Richmond (DSCR), a VEEP E4/Performance Track facility. The DSCR finds value in VREMS because through improved working relationships, it enhances the facility’s mission readiness, promotes long term sustainability and provides significant benefits to its local community. The

"VREMS considers DEQ to be the essential partner. Their willingness to freely collaborate on initiatives is the prime reason we have obtained the success that we have."

*Jimmy Parrish
Defense Supply Center Richmond*

partnership's mission is to: collaborate to address local and regional environmental priorities; improve communication and trust between partners and the community; leverage environmental experiences, best practices, lessons learned, and materials; and help each partner cost-effectively manage their environmental impacts. Recent projects have focused on retrofitting diesel school buses in the Cities of Richmond and Hopewell to reduce air emissions, bringing fueling stations for the alternative fuel E-85 to eastern and northern Virginia, promoting energy efficiency at participants' locations, testing the use of a catalyst to reduce concentrations of nitrous oxides, and committing to reduce point and non-point sources of stormwater pollution.

The Rivanna Environmental Management System Alliance (REMSA) is a regional EMS partnership formed in the summer of 2005 in the Charlottesville-Albemarle County area by several VEEP facilities. REMSA partners include the City of Charlottesville, the County of Albemarle, University of Virginia, Rivanna Water and Sewer/Solid Waste Authority, and Albemarle County Public Schools. The original purpose was to network on issues related to EMS development and implementation; however, the group has evolved into a mutually beneficial partnership that works collaboratively to pursue environmental initiatives and realize environmental improvements on a regional level. REMSA partners have benefited from sharing information, ideas and best practices, pooling resources and learning from each other's successes and mistakes. The environmental initiatives that REMSA has worked on include electronics, rechargeable battery, and fluorescent lamp recycling; school chemicals removal, B20 biodiesel use, hybrid-electric vehicles, green building, and green purchasing.

The Chesapeake Bay-focused EMS initiative is a project of the regional Chesapeake Bay Program. The Bay Program has recently developed a document called "Introduction to a Chesapeake Bay-Focused Environmental Management System." The guide includes general information about EMS development as well as possible approaches to customize the elements of an EMS to focus on Chesapeake Bay restoration and sustainment goals.



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. OPP sponsored 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 thirty facilities participated in the program. VARA also coordinated the pilot with EPA's National Partnership for Environmental Priorities, pledging to remove 1,500 switches (the equivalent of nearly five pounds of mercury).

The acclaimed success of this pilot resulted in legislation adopted by the 2006 Virginia General Assembly requiring removal of mercury convenience switches from end-of-life motor vehicles prior to their demolition. The statute authorizes DEQ, through the Virginia Waste Management Board, to adopt guidelines setting standards for 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



Lamp Recycling Challenge participants committed to recycle 32,125 lamps in 2007.

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.

OPP has issued a challenge to commercial property managers to recycle their lamps. However, this challenge is open to all Virginia facilities. Information about the "Virginia Fluorescent Lamp Recycling Challenge" can be found on DEQ's Mercury Reduction website (www.deq.virginia.gov/p2/mercury). A list of partners that have answered the challenge can also be found on the site. In 2007, the following facilities committed to fluorescent lamp recycling:

- Washington and Lee University, Lexington
- Smithfield Packing Company, Smithfield
- Virginia Department of Corrections Lunenburg Correctional Center
- BAE Systems, Manassas
- International Paper, Franklin
- Covanta Energy, Alexandria
- Albemarle County Schools
- Hopewell Cogeneration Facility
- U.S. Army Transportation Center – Fort Eustis
- Kyanite Mining Corporation, Dillwyn
- Town of Leesburg Water Pollution Control Facility
- Smithfield Portsmouth Division
- Gwaltney of Smithfield
- Defense Supply Center Richmond
- Colley Architects, P.C., Blacksburg
- Covanta Energy Fairfax, Lorton
- Downtown Merchants of Blacksburg, Blacksburg
- Sharky's Wings and Rib Joint, Blacksburg
- Hyosung America Inc., Scottsville
- 99th Regional Readiness Command, U.S. Army Reserve, VA
- Champs Sportsbar & Cafe, Blacksburg
- Kent Square, Blacksburg
- CMG Leasing, Inc., Blacksburg
- National Bank of Blacksburg



Virginia Hospitals for a Healthy Environment

Virginia Hospitals for a Healthy Environment, or VH2E, is DEQ's voluntary pollution prevention initiative for healthcare facilities in the Commonwealth. VH2E was developed in support of the national Hospitals for a Healthy Environment (H2E) program, and its aim is to encourage Virginia healthcare facilities to embrace H2E's goals for mercury elimination and waste and toxics reduction. Currently, 50 hospitals in Virginia, or slightly less than half, participate in the program.



In 2007, DEQ was honored by the national H2E program and received the Champions for Change Award. Pictured with the award above is P2 Director Sharon Baxter. The award is given to state programs and other organizations that have successfully promoted the program's goals and recruited hospitals to join H2E. DEQ also encouraged VH2E participants to work towards and apply for individual awards. Altogether, ten VH2E participants received awards:

2007 Partners for Change Award: Culpeper Regional Hospital, Culpeper; HCA Lewis-Gale Medical Center, Salem; and, Martha Jefferson Hospital, Charlottesville.

2007 Making Medicine Mercury Free Award: Bon Secours St. Mary's, Richmond; Inova Alexandria Hospital, Alexandria; Inova Loudoun Hospital, Leesburg; Inova Mount Vernon, Alexandria; Martha Jefferson Hospital, Charlottesville; and HCA Retreat Hospital, Richmond.

2007 Partner Recognition: Bon Secours Richmond Community Hospital

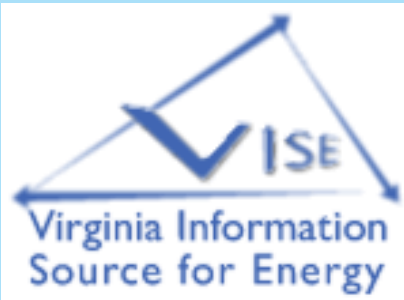


Martha Jefferson Hospital's Bill Weigold (3rd from left) receives H2E's "Partner for Change" Award from Anna Gilmore-Hall, Chair of H2E Board, Laura Brannen, H2E's Executive Director, and Mac Robinson, H2E Board Member.

Other VH2E highlights from 2007:

- Hazardous Waste Compliance Assistance: Staff from the Office of P2 and the Waste Division continued their outreach to hospitals on the issue of their compliance with hazardous waste regulations. DEQ's hazardous waste program extended its 2006 initiative to provide compliance assistance visits (CAVs) to hospitals; eight such visits were conducted in 2007. As a result, hospitals in Virginia have made significant progress in revising their waste management procedures to ensure the effective handling of hazardous waste, particularly pharmaceuticals, which continues to be a challenge for the sector.
- VH2E Outreach: The series of roundtable meetings for participating hospitals initiated in 2006 was continued in 2007; two such workshops were held this year. The first, held in February, focused on hazardous waste compliance and pharmaceuticals, and the second, presented in May, was titled "Winning an H2E Award." In addition, VH2E co-sponsored a workshop with Rubbermaid, Inc. that featured microfiber cleaning technologies in July. DEQ also presented a workshop for all seven hospitals in the Sentara Health System on pharmaceutical wastes in September.
- Mercury and Waste Reductions: VH2E participants reported reductions of over 500 pounds of mercury and 185 tons of solid waste, with cost savings of more than \$335,000.

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- **Communication & Marketing:** VH2E facilities receive regular emails from P2 staff regarding its offerings and they are included on the national H2E's list-serve, a valuable information tool. However, facility responsibilities and contacts change constantly in the healthcare industry, making database updates and program communication very difficult. In 2007, OPP staff embarked upon a project to dramatically increase its effectiveness by completely overhauling its VH2E database. OPP worked with its project contractor, the national H2E program, and the Virginia Hospital & Healthcare Association to re-establish communication with participating facilities whose contacts had changed and to create contacts for the more than 50 Virginia hospitals that are not in the program. A recruitment mailer was sent to each of these prospects in September and P2 staff expects that this will result in many new participants next year.

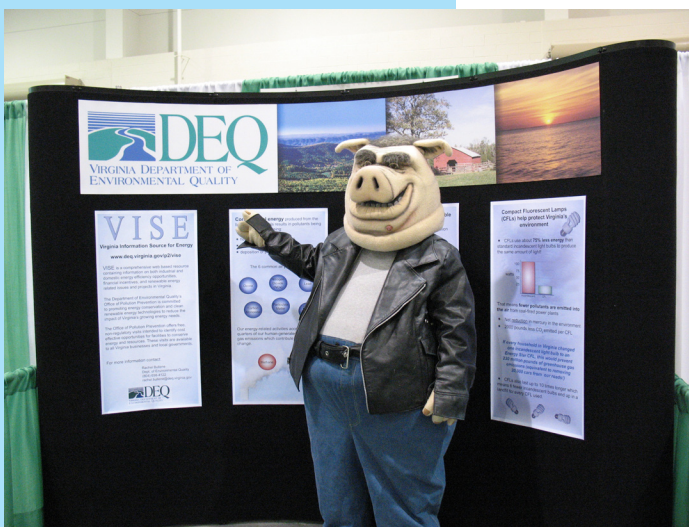
Energy Efficiency & Renewable Energy

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 related outreach and education; primary activities related to energy efficiency and renewable energy are technical assistance and partnering with other organizations.

Technical Assistance

OPP offers free energy assessments to interested facilities. OPP also maintains the Virginia Information Source for Energy website, or VISE. VISE is a repository for information on alternative energy options in Virginia, energy efficiency tips and financial incentives.



Partnerships

OPP collaborates with various organizations to promote energy education and the value of energy efficiency and renewable energy. In 2007, the Department participated in environmental and energy conferences and events throughout the Commonwealth, including UVA's Energy Day, the Association of Energy Conservation Professionals Annual Expo (the "Energy Hog" is pictured at left with the VISE exhibit at the Expo), the Commonwealth of Virginia Energy and Sustainability Conference, and "Green Day," a promotional event for the hospitality industry held in Virginia Beach. DEQ also joined the Richmond area's GRTC Transit System's Ride Finders and a number of other local partners at "Try



“Initially, we were somewhat discouraged to have to pay for recycling. However, we quickly realized that the volume of our dumpster trash had decreased so much that we were able to reduce the number of times that it was picked up, which results in a net cost savings!”

*Laura Wood Habr
Owner of Croc's 19th Street
Bistro in Virginia Beach*



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 Wind Energy Collaborative, Hampton Roads Clean Cities, and the Virginia Hydrogen Economy Roundtable.

Outreach to the Hospitality Industry

In 2006, the OPP staff established a partnership with Virginia’s tourism industry to promote P2 practices. The partnership is between DEQ, the Virginia Tourism Corporation, and the Virginia Hospitality & Travel Association. The program is called “Virginia Green,” the “Commonwealth’s campaign to promote environmentally-friendly practices in all aspects of Virginia’s tourism industry.”

Virginia Green was announced in the Fall of 2006, and Virginia Green Lodging was piloted as the first component of the larger Virginia Green effort. Through the efforts of OPP, more than 75 hotels, motels, bed and breakfasts, and other lodging facilities are now participating in the program. The Virginia Green partnership has established minimum criteria or “core activities,” and participants must self-certify that they are meeting these criteria. Those core activities for the Lodging sector are:

- Optional Laundry Service
- Visitor Recycling
- Energy Conservation
- Water Conservation & Efficiency
- “Green” Event & Conference Planning



Certifying participants receive plaques and Virginia Green profiles are developed documenting all of their “environmentally-friendly” practices. Above, Tom Kupa of Virginia Crossings Resort receives a plaque from Virginia Green Coordinator Tom Griffin. Participants also receive window decals and full use of the program logo. The facilities and their profiles are included on the Virginia Green Lodging website (www.deq.virginia.gov/p2/lodging), and in the Virginia Green search function on the *Virginia is for Lovers* website (www.virginia.org).

Additional Virginia Green Programs:

OPP staff has promoted Virginia Green to the Lodging sector and developed guidance for additional sectors of Virginia’s tourism industry. As with the lodging sector, OPP staff gained input from the industry in developing “core activities” pertinent to each sector. In August 2007, DEQ launched its prototype for the larger Virginia Green website (www.deq.virginia.gov/p2/virginiagreen), and it announced the criteria for several new sectors of Virginia tourism:

- Convention Centers
- Restaurants
- Attractions

“Virginia’s natural resources are its #1 tourism attraction. Virginia Green is helping to protect those resources and, at the same time, is appealing to environmentally-savvy tourists. And, best of all, Virginia Green facilities are actually saving money by implementing these measures!”

*Alisa Bailey
CEO of the Virginia Tourism Corporation*

- Travel Organizations
- Conference Centers
- Partners

The new sectors and the website have not yet been officially announced or marketed. However, news and interest has spread quickly, and new participants are joining daily. Travel organizations such as Convention & Visitors Bureaus, Bed & Breakfast Associations, and Restaurant Associations are embracing Virginia Green enthusiastically in hopes of marketing their regions as “green destinations.” Guidance is being developed to address several more sectors of Virginia’s tourism industry: golf courses, wineries, welcome centers, campgrounds, parks, and even “eco-tourism” services.

The Virginia Tourism Corporation has plans for a mass marketing campaign for Virginia Green in 2008. It hopes to successfully “brand” the Virginia Green logo as the recognizable symbol for all things green in Virginia tourism.



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. OPP coordinates with EPA Region III to implement NPEP in the Commonwealth and encourages facilities to participate in the program. Facilities voluntarily commit to eliminate or substantially reduce the chemicals in production or recover or recycle the chemicals where they cannot easily be eliminated or reduced at the source. Virginia NPEP facilities have currently pledged to reduce 592,682 pounds of priority chemicals: 145 pounds of mercury, 225 pounds of methyl ethyl ketone, and 592,312 pounds of lead.

On November 2nd, Philip Morris USA hosted a recognition ceremony for the five Virginia facilities that signed on to NPEP in 2007 (pictured at left). The new Virginia NPEP participants are:

- Aetna Wire, Virginia Beach, which is developing a lead reduction plan for its wire and cable production.
- Fort A.P. Hill, which has committed to recycle lead from small arms fire.



- Brenco Incorporated, Petersburg, which is reducing mercury-containing equipment on site.
- Defense Supply Center Richmond, which is recycling mercury from fluorescent lamps.
- Philip Morris USA Headquarters in Richmond, which is recycling mercury from fluorescent lamps.

Also, current member Federal-Mogul Corporation – Power Train Systems of Blacksburg has been reducing the lead content of an aluminum alloy used in production. Their efforts have been so successful that they expect a complete phase-out of lead-containing aluminum alloys (used in engine bearings). As a result, the company submitted a new goal in 2007 and has committed to further reduce lead by 10,000 pounds by the end of 2008. In recognition of their success, Federal Mogul received a national NPEP award from EPA in November 2007.



Businesses for the Bay

Businesses for the Bay (B4B) is a voluntary pollution prevention program targeting facilities in the Chesapeake Bay watershed. It is run collaboratively by the Chesapeake Bay Program, the District of Columbia, and the states of Maryland, Pennsylvania and Virginia. OPP actively promotes the program through a variety of approaches, including presentations, directed mailings, a website, and site visits to both potential members and member facilities.

There are currently 960 participants in the program; 398 of them are within Virginia. In 2007, Virginia participants reported approximately 102

million pounds of waste reduction and recycling and over \$2.6 million in cost savings due to pollution prevention efforts. In support of the efforts of B4B, Virginia has pursued partnerships and reciprocal agreements with other pollution prevention initiatives such as VEEP, the Elizabeth River Project (a pollution prevention initiative focused on the Elizabeth River in Norfolk) and the Virginia Clean Marinas Program.

On November 8th, DEQ hosted the Businesses for the Bay Annual Meeting & Awards at Westmoreland State Park in Virginia's Northern Neck. Virginia participants were honored with a total of eight B4B Excellence Awards, more than half of all the awards presented. The Virginians recognized at the ceremony were:



- City of Charlottesville: Outstanding Achievement for Pollution Prevention - Local Government Facility
- University of Virginia, Charlottesville: Outstanding Achievement for Pollution Prevention - State Government Facility
- York County School Division, Yorktown: Outstanding Achievement for Pollution Prevention - Local Government Facility
- Anheuser-Busch, Williamsburg: Outstanding Achievement for Pollution Prevention - Large Facility
- Norfolk Naval Shipyard - Outstanding Achievement for Pollution Prevention - Federal Government Facility

In 2007, OPP counted...

- 8 compliance assistance visits to hospitals
- 9 VH2E participants recognized with awards
- 16 ceremonies celebrating new VEEP members
- 75 lodging facilities participating in Virginia Green
- 100 VEEP facilities took advantage of the permit fee reduction benefit
- 350 VEEP members
- 398 Virginia members of Businesses for the Bay
- 1,500 mercury tilt switches to be removed through OPP pilot project pledges
- 57,500 dollars discounted in fee permits for VEEP members
- 335,000 dollars saved from VH2E reductions in mercury and solid waste
- 592,682 pounds of priority chemicals being reduced by VA NPEP facility pledges
- 1,500,000 dollars in cost savings realized by VEEP members

- Isle of Wight Family & Cosmetic Dentistry, Smithfield: Outstanding Achievement for Pollution Prevention - Small Facility
- Virginia Regional Environmental Management System, Richmond: Partner Organization of the Year
- Kristel Riddervold, City of Charlottesville: Mentor of the Year

Office of Pollution Prevention Websites

General Information

www.deq.virginia.gov/p2

Virginia Environmental Excellence Program

www.deq.virginia.gov/veep

Virginia Information Source for Energy

www.deq.virginia.gov/p2/vise

VA Hospitals for a Healthy Environment

www.deq.virginia.gov/p2/vh2e

DEQ's Small Business Assistance Office

www.deq.virginia.gov/osba/

Virginia Naturally

www.vanaturally.com

Businesses for the Bay

www.deq.virginia.gov/p2/b4b/

National Partnership for Environmental Priorities


www.deq.virginia.gov/p2/wastemin.html

Virginia Green Lodging Program

www.deq.virginia.gov/p2/virginiagreen

Mercury Switch Pilot Project & Fluorescent Lamp Recycling Project

www.deq.virginia.gov/p2/mercury



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