



COMMONWEALTH of VIRGINIA

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Douglas W. Domenech
Secretary of Natural Resources

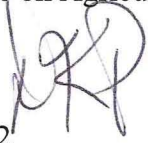
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To: The Honorable Robert F. McDonnell

The Honorable Beverly J. Sherwood, Chair
House Committee on Agriculture, Chesapeake and Natural Resources

The Honorable Emmett W. Hanger, Jr., Chair
Senate Committee on Agriculture, Conservation and Natural Resources

From: David K. Paylor 

Date: December 1, 2012

Subject: Office of Pollution Prevention, 2012 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 2012 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 2012.

This report is being made available at <http://www.deq.virginia.gov/LawsRegulations/ReportstotheGeneralAssembly.aspx>. If you have any questions concerning this report or if you would like a hard copy of this report, please contact Angie Jenkins, Policy Director at (804) 698-4268.

Pollution Prevention 2012



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Inside:

From the Director	1
Governor's Corporate Sustainability Roundtable	2
Virginia E3 Initiatives	3
Outreach to Reduce Priority Chemicals	3
Governor's Environmental Excellence Awards	4
Virginia Green Tourism	7
Virginia Environmental Excellence Program	8
Energy Efficiency & Renewables	2
Resources	10

From the Director

For more than twenty-five years, pollution prevention has played a key role in the Department of Environmental Quality's (DEQ) mission to protect and enhance Virginia's environment. DEQ's Office of Pollution Prevention (OPP) hosts a number of programs and initiatives that serve as a conduit for non-regulatory assistance to businesses, institutions, and communities. These efforts are aimed at motivating Virginians to minimize their environmental footprint through actions that exceed what is required while enhancing their bottom line. A few of the highlights from 2012 are:

- The Sustainability Partners track of the Virginia Environmental Excellence Program was launched in the Spring. The new track is intended to encourage organizations across the Commonwealth to make sustainability part of their culture through leadership, innovation and continual improvement;
- Governor Robert F. McDonnell and Secretary of Natural Resources Douglas W. Domenech invited leaders of some of Virginia's largest corporations to for the first-ever Corporate Sustainability Roundtable in Richmond on April 23rd; and,
- On April 11th, thirteen Governor's Environmental Excellence Awards were presented. Winners included universities, manufacturers and governmental agencies.

DEQ continues to enjoy a national reputation as a leader in promoting collaborative partnerships and engaging audiences through non-regulatory environmental programs. I am confident that DEQ's successful pollution prevention and sustainability initiatives, in combination with support from Governor McDonnell and Secretary Domenech and our engaged and committed stakeholders, will continue to flourish.

David K. Paylor

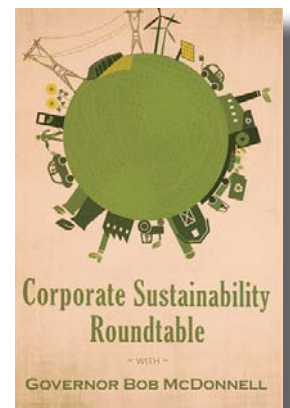


Pictured (from left to right) at the Corporate Sustainability Roundtable are Deputy Secretary of Natural Resources Anthony Moore, DEQ Director David Paylor, James River Association Executive Director Bill Street, CRT/tanaka Vice President of Government Affairs Missy Neff Gould, President of James Madison University Linwood Rose (retired), and Luck Companies Vice President of Environmental Design and Development Doug Palmore. (Photo: Michaele White, Office of the Governor)

Corporate Sustainability Roundtable

On April 23rd, Governor Robert F. McDonnell and Secretary of Natural Resources Douglas W. Domenech hosted the Virginia Corporate Sustainability Roundtable in Richmond. Leaders from some of Virginia's largest corporations and non-profit organizations, including Smithfield Foods, Dominion, Altria, MeadWestvaco, AOL, the Luck Stone Companies, the James River Association, VIRGINIAforever and the Chesapeake Bay Foundation attended.

Prior to the event, Governor McDonnell issued a proclamation establishing April 23-29, 2012, as "Environmental Sustainability Week." Formal presentations on sustainability, including the role that non-profits, academia and government agencies can play in forwarding the concept, were followed by a roundtable discussion with the Governor. Following the discussion, the Governor signed legislation related to high performance buildings.



Governor McDonnell and Dennis Treacy, Smithfield Foods (Photo: Michaele White, Office of the Governor)



(Photo: Michaele White, Office of the Governor)

Energy Efficiency and Renewable Energy

Virginia and other states continue to face air quality challenges related to ozone, regional haze, fine particulates, and toxic air pollutants. 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. One significant barrier to implementation of these approaches can be a lack of access to current and comprehensive information. OPP actively participates in and promotes energy efficiency and renewable energy related outreach and seeks out partnerships with other organizations.

Energy efficiency, conservation and renewables are all key components of OPP's primary programs, the Virginia Environmental Excellence Program and Virginia Green. OPP also maintains the Virginia Information Source for Energy website, or VISE. The website is a repository for information on alternative energy options in Virginia, energy efficiency tips, and financial incentives.



Solar panels at DuCard Vineyards, a Virginia Green member

E3: Economy, Energy and Environment Initiative

The Manufacturing Technology Center (MTC), located at the Wytheville Community College, is a long-time OPP partner in promoting pollution prevention throughout the Commonwealth. Last year, MTC, which is part of the GENEDGE Alliance, a National Institute of Standards and Technology Manufacturing Extension Partnership affiliate, spearheaded the launch of an E3 (Economy, Energy and the Environment) initiative. Called E3: Southwestern Virginia, the effort supports sustainable manufacturing in seventeen counties of Southwest Virginia. Joining forces with the local community, the MTC provides manufacturers with hands-on assessments of production processes to reduce energy consumption, minimize their carbon footprint, comply with environmental regulations, prevent pollution, increase productivity, and drive innovation. Over twenty-seven different public and private-sector organizations are participating in the E3: Southwestern Virginia project, including OPP (which co-sponsored an energy efficiency and conservation workshop with MTC in September), the Virginia Community College System, EPA Region 3, the US Department of Energy, the US Department of Labor, and the US Department of Commerce.

First year results of the initiative:

- Presentation of six workshops and three conferences attended by over 250 clients
- \$234,000 in energy savings
- Conservation of 12.7 million gallons of water
- Reduction of 12 million gallons of waste water discharges
- Reduction of 10,000 pounds of solid waste
- Reduction of 10,000 pounds of hazardous waste

In 2012, a separate but complementary E3 project was initiated in the Danville/Pittsylvania area, spearheaded by GENEDGE.

Outreach to Reduce Priority Chemicals

Mercury Reduction Website

In recent years OPP has worked to promote and coordinate statewide pollution prevention efforts to reduce or eliminate the use of mercury and mercury-containing products and to collect unused elemental mercury for proper management and recycling. Virginia's Mercury Reduction activities draw heavily upon the strengths of successful mercury-related programs in other states and cities. DEQ has utilized existing partnerships with industry mentors, state and local governments, and the dental industry and created new partnerships with federal government agencies, the hospital and pharmaceutical industry, and local school systems. One of these efforts is the "Virginia Fluorescent Lamp Recycling Challenge," which was initiated in 2007 to encourage facility managers, particularly those at commercial buildings, to recycle their fluorescent lamps, which contain small amounts of mercury.

Auto Salvage Industry Mercury Reduction

OPP's partnership with the Virginia Automotive Recyclers Association (VARA) yielded a pilot project to remove mercury tilt switches in automobiles as part of the dismantling and salvage process because the 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 pre-paid collection kits 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. Subsequent to the pilot project, the 2006 Virginia General Assembly adopted legislation requiring the removal of mercury convenience switches from end-of-life motor vehicles prior to demolition.

DEQ has worked with VARA, the Virginia Department of Motor Vehicles, the 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 Commonwealth. To date, nearly 67,000 switches have been collected in Virginia, equating to more than 150 pounds of mercury.

Governor's Environmental Excellence Awards



On April 11th, the winners of the 2012 Governor's Environmental Excellence Awards were announced at the 23rd Environment Virginia Symposium in Lexington. The awards program was co-sponsored by DEQ, the Virginia Department of Conservation and Recreation (DCR), Dominion, and Trane. Thirteen entries were recognized with awards in the categories of Environmental Program, Environmental Project and Land Conservation. An additional thirteen entries were presented Honorable Mention certificates. Winners are highlighted below.

Gold Medal Winners

Clarke County Conservation Easement Authority

The Clarke County Conservation Easement Authority was created in 2002 with the general purpose of protecting and preserving land with significant agricultural, natural, scenic, and historic resources. To date more than 3,600 acres on fifty farms have been protected, retiring more than one hundred potential building rights. Parcels proposed for conservation easements are evaluated based on specific criteria, which rate the land on its agricultural, natural, scenic, and historic resource value. The County's Easement Authority has filled an important niche by enabling smaller landowners who might not meet the criteria of other programs to place land in easement, thus protecting valuable natural and historic resources important to Clarke County for future generations. Pictured at right are DEQ Director David Paylor, DCR Director David Johnson and Alison Teetor.



NASA Goddard Wallops: Flight Facility Energy Savings Performance Project

Situated on the Eastern Shore in close proximity to three wildlife refuges and a national seashore, NASA Goddard Space Flight Center's Wallops Flight Facility (WFF), a Virginia Environmental Excellence Program (VEEP) E4 facility, has a fully capable launch range and a research airport. The WFF Energy Savings Performance Project (ESPP) was a multi-year effort to reduce the facility's carbon footprint. WFF took a broad-perspective look at alternative measures and selected the ESPP alternative because it would exceed the goals of a federal executive order with no initial capital investment. The project has reduced pollutant emissions, including greenhouse gases, reduced energy consumption by 30%, saved one million gallons of water per year, and eliminated twenty fuel oil tank systems and their associated environmental liability. Pictured at left: Secretary Douglas W. Domenech, DEQ Director David Paylor and Phillip Smith.



NASA Langley Research Center, Hampton: Sustainability through Planning and Innovation

NASA Langley Research Center (LaRC), a VEEP E3 facility, chose to approach its aging and inefficient facilities, decreasing workspace and land needs, changing technology requirements, ever-tightening environmental regulations, and rising facility operational/maintenance costs with a "revitalization through sustainability" approach. By building high performance green buildings, reducing its fleet, upgrading infrastructure, and making the core campus a walkable community, LaRC has seen water reductions of 10 million gallons, energy reductions of more than 8.7 million kWh, and fuel use reduction of 52%. Pictured at right: Secretary Domenech, DEQ Director David Paylor and George Finelli.



Naval Station Norfolk: Environmental Management System



In 2008, the Naval Station Norfolk (NSN) implemented an environmental management system focused on reducing polluted stormwater runoff, reducing waste generation, recycling and diverting solid waste, reducing spills, reducing toxic chemical usage and emissions, conserving energy and emphasizing alternative energy sources, constructing sustainable buildings, and purchasing green products and services. Results include reducing hazardous waste sent off-site for treatment by 60%; recycling, reuse and burning of more than 7 million gallons of oily bilge water and used oil from ship and shore activities; reducing air emissions by 79% and fuel usage by 65%; collecting almost 97,000 pounds of debris and litter; reducing the use of toxic and hazardous materials by 15%; and, achieving a 28% diversion rate through recycling. NSN has also adopted a sustainable development policy, conducted energy audits, purchased green vehicles, and installed 55 low impact development features. Pictured

at left are: Secretary Domenech, DEQ Director David Paylor, Sharon Baumann and DCR Director David Johnson.

Virginia Department of Corrections: Southampton Deconstruction and Recycling Project

With the Southampton Correctional Center Deconstruction and Recycling Project, the Virginia Department of Corrections (VADOC) employed an innovative approach to removing an outdated facility and converting the land to farmland. The facility consisted of twelve structures totaling approximately 145,000 square feet and approximately 19 acres in size. VADOC removed as many of the recyclable and reusable components as possible, recovering \$381,000 in reusable items, \$316,000 in recycled metals, and, \$1,125,000 of crushed concrete. The project resulted in a total recovery of 1.85 million pounds of metal, approximately 150,000 tons of bricks and concrete, 24 pallets of roof slate, and 12 pallets of antique brick. Additionally, thousands of items were salvaged for use at other VADOC institutions. Only 80 cubic yards of debris was landfilled. In total, VADOC expended approximately \$263,000 and saved \$5.38 million. Pictured at



Silver Medal Winners

Cargill Dayton/Harrisonburg Complex: Shenandoah Valley Watershed Restoration Program. The Cargill Shenandoah Valley Watershed Restoration Program is focused primarily on restoration, erosion prevention, and pollution reduction from water runoff into bodies of water. Partners include Cargill, the Shenandoah Valley Pure Water Forum, and multiple local high schools. Cargill, a VEEP E4 facility, has been involved in restoration projects at four major impaired water bodies. Activities have included sampling of the water for dissolved oxygen and macroinvertebrates, planting native trees and grasses along the stream banks, installation of riparian buffer zones, construction of fences, installation of automatic water troughs for cattle, and installation of culverts.

Covanta Fairfax, Inc.: Water Conservation. Since 2007 Covanta Fairfax, Inc., a VEEP E4 facility, has embarked on a multi-faceted project addressing water management, conservation, and sustainability within the facility, focusing on stormwater runoff, wastewater, and water reuse. Examples of projects include installing debris and sediment filters, purchasing a street sweeper, and, installing a new oil/water separator at the truck weight scales. Covanta has also embarked on a joint project with Fairfax County to reuse treated wastewater from the nearby wastewater treatment plant.

Northern Neck Land Conservancy: Cat Point Creek Special Project. Cat Point Creek is a 19.32 mile long waterway that flows through the Northern Neck to the Rappahannock River. Its watershed consists of 46,800 acres of hilly terrain that includes many farms, streams, millponds, and wetland estuaries. There are large expanses of unspoiled wetland habitat ideal for many varieties of salt and freshwater plants. The Conservancy is working to facilitate the placement of conservation easements. To date, more than 1,000 acres of open space, farm land, timberland, and watershed property have been protected.

University of Virginia Department of Parking and Transportation: Transportation Demand Management. The Department of Parking and Transportation, a VEEP E3 facility, works with faculty, students and staff to encourage transportation alternatives to reduce single occupancy vehicle trips to and around the school. Initiatives include: free bus rides for all community members, use of biodiesel, discounted parking rates for carpooling faculty and staff, access to fuel efficient vehicles by the hour or by the day, an online ridematching system, a bicycle repair station, a commuter calculator, and bike racks on all buses.

Bronze Medal Winners

Defense Supply Center Richmond: Installation of Stormwater Low Impact Development Bioretention Units. In the spring of 2011, the facility, which is a VEEP E4 member, implemented a series of low-cost, innovative stormwater management solutions based on Low Impact Development (LID) concepts and techniques, including the construction of several bio-retention units. Totalling nearly 30,000 square feet in size, the units are soil and plant-based filtration mechanisms that naturally remove pollutants, nutrients, and sediment and detain stormwater, allowing it to soak into the ground.

Hopewell Cogeneration Facility: Improvements Through the Use of an Environmental Management System. The facility, a VEEP E4 member, is a cogeneration power plant that produces electric power. It has achieved significant results through its environmental management system: reducing NOx emissions of 80 tons/year; increasing recycling by 40%; reducing expenditures for electricity by 38%, or more than \$225,000 per year; and, water savings of several million gallons per year.

Radford University (RU): Magnetic Bearing Chiller in Preston/Martin Hall. Energy consumption on residential campuses accounts for a significant amount of the total electricity and water use. RU investigated the various means to conserve resources while reducing costs, and last year, when it came time to replace a chiller, the school chose a magnetic bearing chiller. Radford saw savings of \$20,000 in just the first 2.5 months of operation, as well as a reduction of more than 100,000 kWh, the equivalent of approximately 145,000 pounds of CO2 emissions.

Volvo Trucks North America, The NRV Plant, Dublin: A Decade of Energy Improvement with Dramatic Engagement & Results. Since 2001, the Volvo Trucks North America plant, a VEEP E4 facility, has diligently pursued the reduction of energy use and the improvement of energy efficiency, resulting in energy savings of 547 MWh and approximately \$33,000 in cost savings per month. Projects included relighting and delamping, as well as the installation of radiant heat, skylights, a solar wall, and motion detectors.

Honorable Mention Winners

- Army National Guard Maneuver Training Center: Fort Pickett Army Compatible Use Buffer Program
- Chesterfield County Parks and Recreation Department and Capital Region Land Conservancy: Atkins Acres Community Park
- Hopewell Cogeneration Facility: Heat Rate Improvement through CO2 Blasting
- James Madison University: Food-Related Waste Reduction Program
- Joint Base Langley-Eustis (Fort Eustis): Mattress Recycling
- Lockheed Martin: Employee Engagement – Going Beyond the Facility Boundary
- Radford University: Campus Conservation Nationals 2010
- Smithfield Packing Company, Inc. (Portsmouth): Removal of Hazardous Waste Stream
- Smithfield Packing Company, Inc. (North Facility): Sludge Composting Project
- Smithfield Packing Company, Inc. (North Facility): Community Outreach Program
- Spotsylvania County Utilities, Public Works Department: Journey Through the Chesapeake Bay Camp
- Virginia Department of Conservation and Recreation: LEED Certification of State Park Visitor Centers
- Waste Management – Maplewood Recycling and Waste Disposal Facility: Wildlife at Work and Corporate Lands for Learning Initiatives

Virginia Green Tourism

Virginia Green (VG) is the Commonwealth's voluntary initiative to promote pollution prevention practices across all sectors of the tourism industry. Participating tourism businesses and organizations voluntarily commit to program requirements, including recycling and waste reduction, water and energy conservation, and holding green conferences and events.



The program, which was launched as a pilot project in 2006, is structured to encompass the entire travel and tourism sector, and includes lodging, restaurants, attractions, conference facilities, convention centers, campgrounds, events, visitor centers, wineries, golf courses, transportation facilities and supporting organizations. OPP oversees development of all programmatic guidance and reviews each of the submitted applications, while DEQ's partners, the Virginia Tourism Corporation (VTC) and the Virginia Hospitality and Travel Association (VHTA), coordinate the marketing and promotion of the program.

2012 Virginia Green Highlights:

- **Achieving 1,200 Participants.** Spurred by various regional efforts and several added categories of participation, the number of VG participants has continued to grow. Work to transition additional category applications to the automated application system has continued. The development of category specific VG applications has continued, with a transportation facilities category added this year and a breweries category under way. An effort was made in 2012 to encourage long time members to ensure that their online VG profile is kept up to date.

- **Application Update.** This year work began to update all sector applications to include additional pollution prevention and energy saving tips that reduce cost. The inclusion of measurable results will be a major modification to the application that will encourage participants to monitor their progress and provide more opportunities to share significant results with members.

- **Virginia Green Suppliers Network.** The Virginia Green Suppliers Network (VGSN) was established in 2010 and has grown to over 100 members. It was created to assist VG participants in connecting with companies that provide green products and services, such as recycling vendors, grease filtering companies, and solar panel installers. VGSN is managed by the VHTA and requires a small joining fee. Through VGSN, special offers are available to program members. In late 2012, DEQ received a small grant to research the best practices of green suppliers in other states with a goal of enhancing the VGSN.



A Virginia Military Institute cadet assisting with food waste composting at the 23rd Environment Virginia Symposium in Lexington a VG green event.

- **Promotion.** DEQ works with the VTC to promote the program. New marketing efforts include an overhaul of the website, posters featuring a Quick Response (QR) code, window placards, flags, and other promotional signs. VG is now able to offer members personalized placards and banners with the program and member logos. Educational placards are also available for restaurant wait stations to provide servers with green tips. To increase brand recognition among consumers, VG offers events the use of large banners for free and worked with the Virginia Tourism Corporation to get a quarter page advertisement in the April edition of *Backpacker Magazine*.

- **Keep Virginia Beautiful Partnership.** Through VG's partnership with Keep Virginia Beautiful, the State Parks were awarded a Keep Virginia Beautiful grant to purchase 275 recycling bins to increase visitors' access to recycling receptacles. In the fall of 2012, ceremonies took place at three Virginia State Parks to showcase the recycling bins.



Many members now proudly display the program flag.

Virginia Environmental Excellence Program

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

Since 2000, DEQ has promoted the non-regulatory Virginia Environmental Excellence Program (VEEP) as a mechanism to encourage “beyond-compliance” environmental results. VEEP provides recognition and incentives to those facilities meeting the program requirements. There are four types of participation options for interested facilities:



- E2 (Environmental Enterprise) for facilities that have made significant progress toward the development of an environmental management system (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.
- SP (Sustainability Partners), the newest VEEP track, which is designed to encourage organizations to make environmental sustainability part of their culture through leadership, innovation, and continual improvement.

OPP administers VEEP, reviewing applications and renewals, performing site visits, conducting compliance reviews, and coordinating recognition events.

Highlights from 2012

Launch of VEEP Sustainability Partners Track. Following eighteen months of a stakeholder involvement process, DEQ launched the Sustainability Partners (SP) track as a pilot project in the Spring of 2012. VEEP SP is a separate but complementary track to the existing program levels. Key differences include VEEP SP not requiring an environmental management system (EMS) and being organization- rather than facility-based. Also, the VEEP EMS tracks (E2, E3 and E4) provide recognition at the facility level, whereas VEEP SP recognizes multi-facility organizations. In addition, VEEP SP members are expected to be able to document a culture of sustainability. There are no regulatory incentives or annual permit fee discounts associated with VEEP SP. As a result of the pilot project, three Charter VEEP SP members were accepted in September: the University of Virginia, the Virginia Department of Corrections, and the Charles Luck Stone Centers. In the fall of 2012, DEQ invited other organizations to apply to become VEEP SP members for calendar year 2013.

Grant Funding. OPP competed for, and won, a grant from US EPA Region 3 to enhance the VEEP program by integrating the program's database into DEQ's primary database. This project will result in making VEEP facility and environmental results information available in real-time to the rest of the agency. The integrated database resulting from the project will provide inspectors, monitoring staff, and permit writers with a more complete profile of facilities that are part of VEEP, including EMS and pollution prevention projects. DEQ's experience has been that opening up a dialogue between the agency's regulatory and OPP staff typically results in identifying additional pollution prevention opportunities, either at that facility or at another, similar facility.

Recognition Ceremonies. Upon request, DEQ recognizes new and renewing VEEP facilities at ceremonies throughout the Commonwealth. In 2012, DEQ participated in 10 events for 17 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

Annual Permit Fee Discounts for VEEP Facilities. When legislation establishing annual permit fees for facilities was put in place, the General Assembly acknowledged that VEEP members “go beyond” compliance and determined that their 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 10-20% for E3 and E4 facilities); and water

(potentially 2% for E2 and 2-20% for E3 and E4 facilities). In 2012, the discounts totaled in excess of \$138,000.

Environmental Results. To remain in good standing, all VEEP facilities must submit a progress report. Several years ago, DEQ instituted an on-line reporting system that emphasizes the reporting of measurable results rather than descriptive updates. When applying for and renewing participation, facilities select from a list of more than 35 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 product, number of employees, etc.). Normalized results allow facilities to better track year-to-year performance.

2012 Aggregate VEEP Results*	
•	Total reported cost savings of \$32 million
•	99% less hazardous waste disposed than in 2010 (1,440 tons versus 192,600 tons)
•	An increase of 19% in the amount of hazardous waste recycled over 2010
•	A reduction in total water use of 5% over 2010 (2.645 billion gallons versus 2.795 in 2010)
•	The use of 357 billion gallons of reclaimed or recycled water, an increase of 19% (301 billion in 2010)
•	The use of 30% less hazardous materials (309 tons versus 440 in 2010)
•	Restoration of 38 acres of land

**Results reported in 2012 are based on calendar year 2011 accomplishments. The overall program results as presented above should only be considered a general indication of VEEP facility performance because: (1) the program is voluntary and data is reviewed as submitted by the facilities; (2) many facilities still have limited experience tracking environmental results data; and, (3) the aggregate results are a snapshot from one year and may not reflect overall reduction trends.*

Resources

General Information

www.deq.virginia.gov/Programs/PollutionPrevention.aspx

Virginia Green Tourism Program

www.deq.virginia.gov/Programs/PollutionPrevention/VirginiaGreen.aspx

www.virginia.org/green/

Governor's Environmental Excellence Awards Program

www.deq.virginia.gov/Programs/PollutionPrevention/GovernorsEnvironmentalExcellenceAwards.aspx

Virginia Environmental Excellence Program

www.deq.virginia.gov/Programs/PollutionPrevention/VirginiaEnvironmentalExcellenceProgram.aspx

Virginia Information Source for Energy

www.deq.virginia.gov/Programs/PollutionPrevention/VirginiaInformationSourceforEnergy.aspx