Pollution Prevention 2015

Office of Pollution Prevention
629 East Main Street
Richmond, Virginia 23219

Inside:

From the Director	1
Virginia Green Travel	2
E3: Economy, Energy and Environment Initiative	4
Governor's Environmental Excellence Awards	5
Virginia Environmental Excellence Program	8
DEQ Environmental Management System	10
Resources	12

From the Director

This year celebrates the 25th anniversary of the Federal Pollution Prevention Act, which focused efforts on reducing the amount of environmental waste produced. DEQ's Office of Pollution Prevention (OPP) hosts a number of programs and initiatives that support the Pollution Prevention Act. The programs 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 minimum regulatory requirements while enhancing their bottom line. A few of the highlights from 2015 are:

- Leading by example, DEQ continued to improve our own environmental management system (EMS) including conducting an internal audit, coordinating many Earth Day events, and applying to the Virginia Environmental Excellence Program (VEEP) as an Exemplary Environmental Enterprise (E3);
- Presenting eight Governor's Environmental Excellence Awards at the Environment Virginia Symposium in March; and,
- Assisting the City of Richmond to make the 2015 UCI Road World Cycling Championships a sustainable event and supporting the event's efforts through Virginia Green.

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 Terry McAuliffe, Secretary Molly Joseph Ward, and our engaged and committed stakeholders, will continue to flourish.

David K. Paylor

Director Paylor recognizing Joint Base Langley-Eustis (JBLE) for Fort Eustis' VEEP E4 membership. JBLE joined VEEP as an E2 member in 2007 and has progressed to the E4 level through a good compliance history, development of a fully implemented, comprehensive environmental management system verified by an independent third party auditor, and a documented commitment to continuous and sustainable environmental progress and community involvement.

Virginia Green Travel

Virginia Green is the Commonwealth's voluntary initiative to promote pollution prevention (P2) practices across all sectors of the tourism industry. Participating tourism businesses, organizations, events, and festivals voluntarily commit to engage in P2 practices in the core areas of waste reduction, water conservation, energy conservation, and in the support of green meetings. Virginia Green partners join through a checklist process that also serves as a learning tool for additional green practices and resources. The program is unique in that an online Virginia Green profile is created for each partner documenting all of their green practices so that consumers can review the list and be part of the process that encourages continuous improvements in environmental performance.

VirginiaGreenTravel.org

The program, which was first 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, festivals, visitor centers, wineries, golf courses, transportation facilities, food trucks, catering 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 and the Virginia Hospitality and Travel Association, coordinate marketing and promotion.

A Virginia Green event banner is on display at Earth Day Richmond, a registered Virginia Green Event. Virginia Green banners are available for loan to all registered events to promote the event's green efforts and the program.

2015 Virginia Green Highlights:

1,650 Virginia Green Participants.
Virginia Green continues to be a leader among state green tourism programs and has grown to include over 1,650 participants. Industry awareness, regional partnerships, and an emphasis on greening festivals and events has contributed to Virginia Green's continued growth. New members for 2015 include the Hyatt Regency Tysons Corner Center, the Ladies Professional Golf Association Kingsmill Championship, and Lockn' Music Festival at Oak Ridge Farm in Arrington. This year, Virginia Green began the revision of its application to streamline the process and improve the application's function as a technical resource for all members.

In March over 450 pounds of oyster shells were collected for the Oyster Shell Recycling Program at the Oyster Roast & Festival hosted at Historic Tredegar in Richmond.

Virginia Green Travel Alliance.
The Virginia Green Travel Alliance (VGTA), a fully-accredited 501(c)(3) non-profit organization was created in 2014 to help promote Virginia Green and its partners. The VGTA focuses on regional partnerships, education, program marketing, and innovative green tourism projects. The VGTA has worked to establish the RVA Green Team Volunteer Network through a partnership with HandsOn Greater Richmond; it will serve as a resource for events and festivals in the Richmond region by providing a network of trained volunteers available to ensure recycling and other green practices are implemented correctly. To date, over 15 tons of waste has been diverted from landfills with the help of the volunteer network. The Inaugural Support Virginia Green Tourism Oyster Roast & Festival in Richmond was hosted by the VGTA to raise awareness of the program. The event involved over 50 Virginia Green partners, sent 450 pounds of oyster shells back to the Bay via the Virginia Oyster Shell Recycling Program, and had a landfill diversion rate of 99%. Planning for next year's event is already underway.

Measureable Results.
Virginia Green does not require annual reporting of environmental results; however, environmental progress data is garnered through technical assistance, the awards program, and voluntary reporting. These data allow for the program to annually determine conservative measures of overall progress that are based on established industry averages. Estimates for 2015 will be available in early 2016.

Virginia Green Suppliers Network (VGSN).
The VGSN is a fee-based internet directory of green service providers in support of Virginia Green. The VGTA collects the fees generated to enhance program outreach and marketing. In 2015, the VGSN was redesigned and relaunched to provide a more user-friendly experience, making it easier to connect consumers with the environmentally friendly products they are looking for. The VGSN currently includes over 75 suppliers ranging from composting to computer support.

2015 Road World Cycling Championships.
OPP, in partnership with the VGTA and the City of Richmond's Sustainability program, worked to promote the Richmond region and the event itself as a showcase of green tourism practices. The event was the first Road World Championship to receive the official UCI recycling eco-label. The VGTA partnered with the City of Richmond and was on-site for the entire event and responsible for:

- Recruiting and leading approximately 600 Green Team volunteers;

- Implementing the Waste Management Plan for the event including recycling, compost collection, and litter prevention in all hospitality zones;

- Providing the City with effective signage and labeling for event containers and guidance for event vendors; and

- Overseeing the recovery of unused food from catering functions.

2015 Road World Cycling Championship
Waste Diversion Facts

- 25,000 pounds of material recycled
- 9,500 pounds of compostables collected
- 2,100 pounds of grease collected to be turned into bio-diesel
- 4,000 pounds of pallets recycled
- 2,800 pounds of cardboard recycled
- 1,000 pounds of food recovered and donated to CARITAS
- 21,300 pounds of signage donated for reuse or recycled

Total: 65,000 pounds of material recycled or composted!

Left: First Lady of Virginia, Dorothy McAuliffe (second from left) discussing sustainability with Tom Griffin of the VGTA, Mary-Stuart Torbeck with the Virginia Green Program, and Sharon Baxter of DEQ at the 2015 Road World Cycling Championships.

Right: Peggy Hawkins, DEQ Director of Human Resources, and Val Thomson, DEQ Director of Administration, volunteered as Green Team members at the 2015 Road World Cycling Championships.

E3: ECONOMY - ENERGY - ENVIRONMENT
A SUSTAINABLE GROWTH STRATEGY

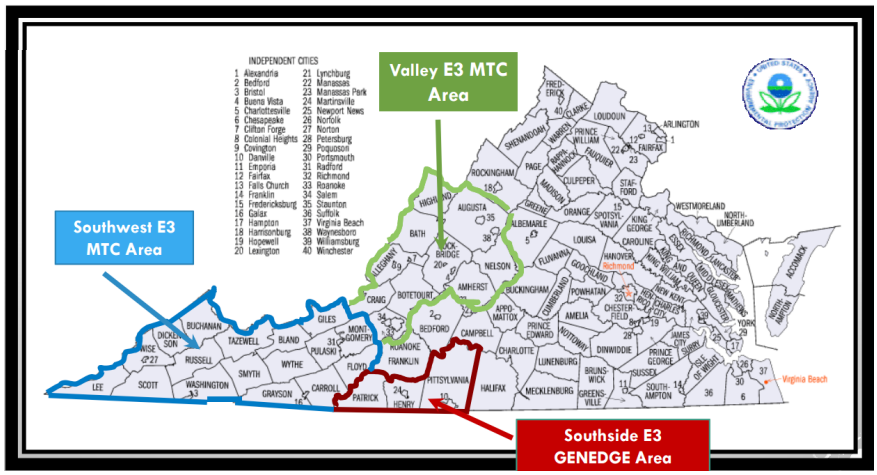
E3: Economy, Energy and Environment Initiative

The Manufacturing Technology Center (MTC), located at Wytheville Community College, is a long-time OPP partner in promoting pollution prevention throughout the Commonwealth. In August of 2011, the MTC, a partner with GENEDGE ALLIANCE, a National Institute of Standards and Technology Manufacturing Extension Partnership (NIST MEP) affiliate, spearheaded the launch of the first Virginia E3 (Economy, Energy and the Environment) initiative. This initiative was made possible through funding provided by EPA Region 3 Pollution Prevention grants.

Called E3 Southwest Virginia, the effort supports sustainable manufacturing in seventeen counties in that region. 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 Southwest Virginia project, including OPP (which co-sponsored an energy efficiency and conservation workshop with the MTC), the Virginia Community College System, EPA Region 3, the US Department of Energy, the US Department of Labor, and the US Department of Commerce. The MTC partners with the Department of Energy's Industrial Assessment Center at North Carolina State University; twenty-one energy assessments have been completed or scheduled in Virginia's E3 service area.

In 2012, a separate E3 project, E3 Southside Virginia, was initiated in the Southside Virginia metropolitan area consisting of Danville and Pittsylvania County by GENEDGE ALLIANCE. This project provides the same services as the Southwest Virginia project. E3 Southside Virginia was expanded in 2013 to include Martinsville, Patrick County, and Henry County. The expansion has continued, and E3 services are now available to ten counties and eleven cities in the Shenandoah Valley, Roanoke Valley, and Lynchburg. Five assessments have been completed in the Valley E3 with an additional four assessments planned. Funding for this expansion was made available by an EPA Source Reduction Grant. Over fifty two-day E3 Technical Assessments have been completed in Virginia as of August 2015.

OPP supports E3 efforts by encouraging facilities to participate in assessments and raising awareness of the E3 programs. OPP partnered with the MTC at the Virginia Occupational Safety and Health Conference in Roanoke on a joint exhibit to showcase a wide array of P2 programs. For more information on Virginia's E3 project, contact Keith Litz at the Manufacturing Technology center at klitz@wcc.vccs.edu or 276-223-4858.



Governor's Environmental Excellence Awards

On March 31, the winners of the 2015 Governor's Environmental Excellence Awards were announced at the 26th Environment Virginia Symposium in Lexington. The awards program was co-sponsored by DEQ and the Virginia Department of Conservation and Recreation. Eight entries were recognized with awards in the categories of Sustainability, Environmental Project, and Land Conservation. An additional two applicants were presented Honorable Mention certificates.

Gold Medal Winners

Chesapeake Bay Foundation
Brock Environmental Center

The Chesapeake Bay Foundation (CBF) recently opened the Brock Environmental Center at Pleasure House Point in Virginia Beach, one of the most energy efficient, environmentally smart buildings in the world. Elevated 14 feet above sea level, it is also a prototype for coping with climate change in a region increasingly prone to flooding. The Center is the first public, commercial-scale building in the United States to capture and safely treat rainwater to federal clean water standards for both hand washing and drinking. The Brock Center will use 90% less water and 80% less energy than typical buildings. In addition, no waste will be sent to a wastewater treatment plant. Renewable energy installations were designed to generate more energy on-site than is used over the course of a year. During construction of the offices, no new materials were purchased. All building materials came from previous construction sites or were reclaimed. CBF believes the office can be used as an innovative teaching tool for all on how to live in concert with nature.

Virginia Conservation Legacy Fund, Inc.
Natural Bridge Perservation

The Virginia Conservation Legacy Fund (VCLF) was formed after the private owner of the Natural Bridge property announced that the property would be subdivided into 35 parcels to be sold at auction. The VCLF successfully worked to permanently protect the Natural Bridge, a total of 1,669 acres. The property will be conserved for future generations through donation to the State Parks system where it will be used to develop a regional education center focusing on the environment, history, ecology, and geology and to expand the outdoor recreation opportunities at Natural Bridge. In addition to permanently preserving the area, the VCLF is working to overhaul energy systems to focus on renewable energy sources, protect water quality through the use of bioretention and other best management practices, restore fields to native vegetation, and support wildlife habitats. Natural Bridge will become a new state park once all debt is retired and the property can be transferred to the Commonwealth of Virginia.

Virginia Living Museum
Living Green in the Bay Watershed

The Virginia Living Museum (VLM) is a private non-profit museum and education center in Newport News where the elements of a native wildlife park, science museum, aquarium, botanical preserve, and planetarium are combined. The VLM is a certified Virginia Green Attraction, committed to minimizing its environmental impacts by preventing pollution wherever feasible in its operations. The museum's mission is to promote stewardship of the earth and conservation practices. The VLM has a Green Team, which is a cross departmental volunteer committee of staff members that has led "green" practices and programs for over 20 years. These include the 46.2 kW

roof mounted solar photovoltaic panel installation, the change from asphalt walkways to permeable paver pathways, green roof installations, stream buffer plantings of native species, and recirculating stream systems in outdoor exhibits. The sustainability efforts go beyond the exhibits to include the reuse of cafe frying oil to power staff vehicles, reuse of newspapers for animal cage bedding replacing the need to purchase commercial bedding, and a switch to non-toxic materials for cleaners, inks, and deicers. The VLM is also one of the largest environmental education centers in the Commonwealth and has put enormous planning and investment into creating permanent, engaging exhibits to promote sustainable practices by Virginia residents. For instance, the Goodson House demonstrates green building products and practices by displaying the house "unfinished" with cut-away windows into the walls to expose green building systems to visitors.

Silver Medal Winners

Evonik Corporation
Sustainability and Cost Savings Program

Evonik Corporation's facility in Hopewell produces various chemical products. Evonik's Sustainability and Cost Savings Program was developed to systematically track all cost savings and waste/material reduction initiatives made on site. The guiding principle of the group is that sustainability goes hand in hand with profitability. Evonik believes that wasteful practices are harmful to the environment and the company. Within the first year of development, several major process improvements have already been identified and implemented. Phase I of a multi-phase project to reduce material loss has resulted in more than 50,000 kg of material being removed from wastewater. A project analyzing raw material usage has reduced the amount lost by more than 60,000 kg while reducing the total nitrogen level in wastewater. A process change in catalyst type has reduced solid waste generation by over 9,000 kg and steam usage by over 3,000 decatherms. A process change to maximize efficiency of chilled water pumps has reduced energy usage by over 165,000 kWh. A process change in hydrosiliation reaction has reduced usage of precious metals by over 1.3 kg. Together, these changes have saved Evonik over $300,000 during the first year. In addition to these completed projects, the Hopewell Evonik site has several other initiatives in various development phases.

SKW Constructors
Elizabeth River Tunnels Project

SKW is a joint venture of three large construction firms, Skanska, Kiewit, and Weeks, to design and build the second midtown tunnel under the Elizabeth River. One of the first things that the Midtown Tunnel Project undertook was the development of an Environmental Management Program and Plan. The program consists of many sustainability goals, including recycling/reusing/reducing wastes, best management practices, and staff and community involvement. Since the beginning of the project, the recycling/reuse rate has been 99%, with only 1% of waste going to landfills. SKW implemented onsite treatment of lead contaminated soil using a process called "Fesi Bond" which has reduced hazardous waste and saved the project over $100,000 in disposal costs. The project also makes oyster boxes to foster spat from what would have been waste concrete. By using a portable concrete washout system called Envirowash, SKW has been able to reduce the amount of concrete wash water from more than 200 gallons to less than 20 gallons per concrete pour. SKW also requires the use of an "Environmental Check List" for all tasks which must be approved by all department heads. SKW developed "Environmental Excellence Reports" to share the environmental processes being used with personnel, parent companies, and regulatory agencies. SKW's goal is to use these reports and their membership in the VEEP as tools to educate the construction world on ways that construction can be done to help benefit the environment while saving a project money.

Bronze Medal Winners

Crop Production Services, Inc. - Petersburg Agri-Terminal
Engineered Living Stormwater Runoff Treatment System

Crop Production Services, Inc.'s, Petersburg Agri-Terminal, used for bulk storage and distribution of agricultural chemicals, designed and installed a sustainable living treatment system to treat and minimize stormwater runoff. The treatment system included using engineered topsoil, native vegetation, and barriers to slow the flow of surface water. Living treatment systems have been shown to address a variety of pollutants including nutrients, pesticides, organic substances, metals, and suspended materials. Once the vegetation is established, it will become a low maintenance treatment system. The

elimination of the point source discharge allowed Crop Production Services, Inc. to terminate its Virginia Pollution Discharge Elimination System (VPDES) permit. The total money saved as a result of this project is approximately $510,000, based on the estimates provided by SiteWise and a cost accrual matrix used for internal accounting obligations.

Hilton Garden Inn - Richmond Downtown
Food Waste Composting

The Hilton Garden Inn Downtown has been an active member of Virginia Green since joining in early 2010, always looking for new environmental projects. In late 2010, the Hilton Garden Inn decided to reduce waste by establishing a food waste composting program and has been composting all raw food waste since then. The Hilton Garden Inn was the first hotel in Richmond to implement a composting program. The waste is diverted from the hotel's compactor and picked up by the Natural Organic Process Enterprise of Virginia. In a typical month, 2,000 lbs of raw food waste is converted into usable compost. Over the course of the program, over 100,000 lbs of food waste has been composted. Some of the compost has been donated to non-profit organizations. The cost of the composting program is offset by reduced solid waste pickups.

Virginia Tech
Advancing Sustainability through Student Engagement

Virginia Tech takes a hands-on approach to education, preparing scholars to be leaders. In May 2013, Virginia Tech President Charles Steger approved the revised Virginia Tech Climate Action Commitment, which lays out the sustainability goals of the institution, including the creation of a sustainability office. A number of programs have been initiated to help the University meet its sustainability goals. A Green RFP Program was created to direct university funds to student-generated sustainability projects. To date, 27 student proposals have been approved totaling more than $210,000. Virginia Tech's Dining Services has implemented a "Reusable To-Go" program that involves reusable water bottles and to-go containers. In May 2014, over 300 graduating students signed the Graduation Pledge Alliance, pledging to consider social and environmental consequences of potential jobs.

Honorable Mention Winners

- Delaware North at Shenandoah National Park – GreenPath® Environmental Management System
- NASA Langley Research Center, Hampton – Revitalization through Sustainability

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 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.

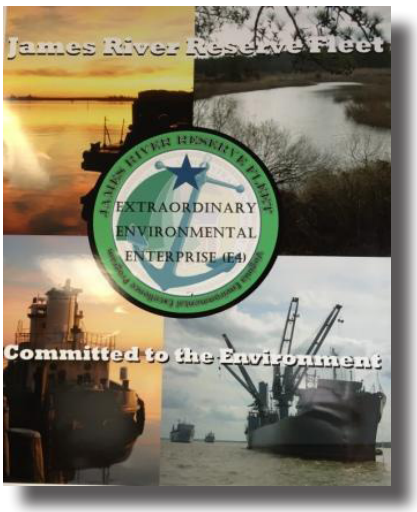
• E4 (Extraordinary Environmental Enterprise) for facilities that have exceeded the E3 requirements, have completed at least one full cycle of an EMS as verified by a third-party auditor, and have demonstrated a commitment to continuous environmental progress and community involvement.

• SP (Sustainability Partners) is for organizations that have made environmental sustainability part of their culture through leadership, innovation, and continual improvement.

OPP administers VEEP, which includes reviewing applications and renewals, performing site visits, conducting compliance reviews, and coordinating recognition events. The program has approximately 425 participating facilities. This year, OPP reviewed approximately 90 applications for VEEP new and renewing members.

Highlights from 2015

Outreach. As in previous years, DEQ continued to employ multiple types of outreach intended to keep current program participants up-to-date as well as to reach potential new members, such as workshops, e-newsletters, webinars, and updates via social media. Site visits were conducted at six facilities as part of the E3 and E4 application process during which members showcase environmentally friendly processes.



The James River Reserve Fleet designed the poster above to celebrate their VEEP E4 membership.

- **Presentations and Conferences**: VEEP staff participated in a number of events throughout 2015 to reach multiple audiences. This year OPP staff was invited to the University of Virginia to address staff and a delegation from China. The presentation, "Sustainability and VEEP," covered many components of environmental sustainability with an emphasis on the value of voluntary programs like VEEP. OPP was also invited to present greening strategies to staff of the Department for Aging and Rehabilitative Services. VEEP staff attended the Virginia Occupational Safety and Health Conference in Roanoke, General Electric's Health and Safety Fair in Charlottesville, the Virginia Manufacturers Association's Virginia Environmental Health and Safety Conference in Richmond, and the Energy and Sustainability Conference hosted by the Virginia Chamber of Commerce in Richmond to reach new and existing members.
- **Engaging Members:** VEEP members are encouraged to assist one another. This year VEEP staff was able to connect a VEEP member with a volunteer auditor capable of completing the unrelated Third Party EMS Audit required for E4 membership. In addition, guidance was developed to assist volunteer auditors.
- **Stormwater Pollution Prevention Outreach**: For the past two years, OPP has been working proactively with VEEP members to raise awareness about stormwater. In this time OPP has provided outreach on stormwater management and solicited input from VEEP members for information on successful stormwater best management practices, which

were added to a stormwater outreach website dedicated to VEEP members.

- **Success Stories**: OPP initiated a new project to develop and maintain a database of Virginia P2 case studies. The purpose of the database is to encourage companies across Virginia to adopt P2 practices by showing real world examples. The success stories identify technologies and techniques that were successful; showcase the effectiveness of P2 projects by quantifying pollution reduction, cost savings, and other benefits; and promote environmental performance beyond the industry standard. OPP has developed ten detailed case studies which are on the agency's website (see Resources on page 14 for more information). The organizations and companies highlighted vary from manufacturing to tourism to local government.

Fareva, a VEEP E4 member since 2010, uses the VEEP bulletin board above to communicate progress on EMS goals.

- **Member Recognition**: Upon request, DEQ recognizes new and renewing VEEP facilities at ceremonies throughout the Commonwealth. In 2015, DEQ conducted seven of these ceremonies, three of which were for E4 members. 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.

VEEP Data Management Improvements. Integrating the VEEP database into DEQ's primary database, the Comprehensive Environmental Data System (CEDS), has been an ongoing project that will improve VEEP data management capabilities as well as make VEEP facility and environmental results information available in real-time to the rest of the agency. The integrated database will provide inspectors, monitoring staff, and permit writers with a more complete profile of facilities that are part of VEEP, including EMS and P2 projects. In addition, the integrated database will automate the process of applying VEEP billing discounts, which will reduce errors and staff time. During 2015, OPP staff continued to work with the DEQ information management staff to finalize the programming requirements. Once complete this integration should streamline VEEP operations and promote internal support for the program.

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% for E3 and E4 facilities); solid waste (potentially 10% for E2 facilities and 20% for E3 and E4 facilities); and water (potentially 2% for E2 and 5% for E3 and E4 facilities). In 2015, the discounts totaled in excess of $198,000.

Environmental Results. To remain in good standing, all VEEP facilities must submit an annual progress report. Several years ago, DEQ instituted an online 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. In conjunction with environmental benefits, members reported saving over $41,000,000.

2015 Aggregate VEEP Results*

- **44,910 tons of non-hazardous waste recycled**
- **Reduced non-hazardous waste disposed by 1,461,506 tons**
- **Reduced hazardous waste disposed by 187,216 tons**
- **Reduced hazardous material use by 294 tons**
- **Reduced total water use by 566,083,852 gallons**
- **Increased recycled water use by 97,741,468 gallons**
- **Reduced greenhouse gases emissions by 49,558 tons**
- **Reduced total energy usage by 1,291,647 MMBtus**
- **Total cost savings of $41 million**

*Results reported in 2015 are based on calendar year 2014 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 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.

DEQ Environmental Management System

Implementation of DEQ's reinvigorated Environmental Management System (EMS) continued this year led by OPP. The EMS Manual was developed by a cross-functional team from DEQ's Central and Regional Offices and with the support of DEQ's leadership. The goal of this initiative is to not only reduce DEQ's environmental footprint, but also engage employees in the day-to-day decision making that is a cornerstone of environmental management. DEQ is setting an example for other state agencies.

The EMS has been added to DEQ's strategic plan, committing the agency to enhancing environmentally sound practices, increasing environmental awareness, increasing communication of mutually beneficial knowledge, and encouraging innovative environmental solutions. These efforts go hand in hand with the agency's mission of protecting and enhancing Virginia's environment and promoting the health and well-being of the citizens of the Commonwealth.

On July 1st, 2014, Director David Paylor signed the updated commitment to the EMS, DEQ Agency Policy Statement No. 5-2014. This policy sets the foundation for DEQ to build and maintain a strong EMS and it is the basis for which DEQ will set internal objectives and targets to improve its own environmental performance. The policy commits DEQ to ensuring compliance with applicable laws and requirements, identifying environmentally sound practices, communicating the policy and programs to employees and the public, and collaborating with stakeholders on opportunities for environmental stewardship.

Objectives & Targets

The EMS Team has been implementing numerous objectives and targets to address risks identified by a review of the agency's environmental aspects. Of the nine objectives and targets that have been implemented to date, seven have been completed.

Completed Objectives & Targets:

- Developed a tracking sheet and guidance to ensure the effective use of DEQ's fleet vehicles
- Developed mandatory EMS Awareness training for all DEQ staff
- Expanded DEQ's recycling efforts
- Distributed an aerosol can disposal fact sheet
- Updated DEQ's Pollution Prevention Plan
- Established an EMS Newsletter which is sent out quarterly
- Added environmentally friendly printer/copier requirements to the request for quote

Management Review

In early August, the DEQ Leadership Team (LT) participated in the new EMS's first Management Review. LT sponsors presented the status of the EMS including a summary of completed objectives and targets, actions currently being implemented to address open objectives and targets, and what the EMS Team plans to address next. The management review process is crucial for the success of the program. It allows the LT to provide guidance to the EMS Team and ensures that the goals being developed by the Team are in line with LT expectations.

Internal Audit

The first internal audit of the EMS was completed by a subgroup of the Agency EMS Team. The audit identified strengths and opportunities for improvement in the program. Based on audit findings, the EMS Team developed action plans to strengthen the EMS.

VEEP Membership

DEQ has been an E2 (Environmental Enterprise) member in the VEEP since 2002. This year, DEQ submitted an application to advance to the E3 (Exemplary Environmental Enterprise) level. DEQ will be the first state agency to participate in VEEP at the E3 level.

DEQ Celebrates Earth Day Every Day

EMS Teams throughout DEQ worked to highlight the many ways that DEQ makes every day Earth Day. Summaries of the regional efforts are below.

Central Office Staff participate in a clean up of Brown's Island.

- **Central Office:** The DEQ Central Office hosted an Earth Week Celebration consisting of four days of events with nine speakers from inside and outside the agency covering topics that ranged from Chesapeake Bay efforts and watershed education to marine debris and balloon litter. During one session a representative from Chesterfield County helped employees make two rain barrels that were donated to Chesterfield County schools for their learning gardens. The office also participated in a two hour clean up of Brown's Island during which six bags of trash were collected. Over 100 Central Office employees made the pledge to make Earth Day every day, indicating the different ways they planned on reducing their environmental footprint.

- **Blue Ridge Regional Office-Lynchburg:** The Lynchburg office hosted a Lunch & Learn with Susan Timmons, a local Master Gardener, who spoke to the Lynchburg staff about Sustainable Landscapes and Native Plants.

- **Blue Ridge Regional Office-Roanoke:** The office participated in the Roanoke Earth Day celebration by distributing brochures and displaying live macroinvertebrates, which are indicators of water quality. DEQ's Roanoke Office also hosted an Earth Day shredding event, promoting the shredding event to the other businesses in their office complex. A total of 6,000 lbs was collected for recycling.

- **Northern Regional Office:** Northern Regional Director Tom Faha gave the keynote address at Prince William County's ribbon cutting ceremony for their new household hazardous waste and electronics collection facility, which will be open several times a week rather than twice per year as in most localities. Staff attended Earth Day events in Tysons Corner and at Fort A.P. Hill as well.

Lynchburg Staff enjoying the Lunch & Learn.

Display organized by Southwest Region Office staff for the Earth Day Celebration.

DEQ's Robin Schuhmann dressed as Sir Recyclot at Mount Trashmore Park.

Paper collected at the Blue Ridge Regional Office - Roanoke shredding event.

- **Piedmont Regional Office:** The office participated in its annual Adopt-A-Highway trash pickup along a 1.4 mile section of Broad Street, filling four bags with trash and also helped with the Innsbrook Lake Cleanup.

- **Southwest Regional Office:** Staff organized and hosted a display at the annual Town of Abingdon Earth Day Celebration. The event included e-waste recycling, document shredding, rain barrel making, and a conservation "Jeopardy" game.

- **Tidewater Regional Office:** Volunteers from DEQ's Tidewater Office participated in the City of Virginia Beach's annual Earth Day event at Mount Trashmore Park and provided information on different programs within DEQ; more than 7,000 people attended the event. New this year was "Sir Recyclot," whose armor consisted of 95% recycled material, made out of over 7,000 can tabs, 50+ soda cans, and other materials reused from a thrift store.

- **Valley Regional Office:** Office staff participated in their annual Adopt-A-Highway trash pickup.

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

Pollution Prevention Case Studies
www.deq.virginia.gov/Programs/PollutionPrevention/PollutionPreventionCaseStudies.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