

Office of Pollution Prevention

Promoting P2 in the Commonwealth

Meghann Quinn

Manager, Office of Pollution Prevention

Virginia Department of Environmental Quality



DEQ: Who We Are and What We Do

We are 800+ professionals who apply science and law to enhance Virginia's environment

- Air Quality & Renewable Energy
- Water Planning & Permitting
- Land Protection & Revitalization
- Regulatory Affairs & Outreach





What We Stand For

A healthy environment and a healthy economy are integrally related; balanced economic development and the protection of our environment go hand in hand to contribute to Virginians' quality of life.













Our Mission

DEQ's Mission is to protect and enhance the environment of Virginia in order to promote the health and well-being of the Commonwealth's citizens, residents, and visitors in accordance with applicable laws and regulations.

What We Do

- Permits
- Compliance
- Enforcement
- Monitoring
- Pollution response
- Pollution prevention
- Waste reduction
- Outreach





§ 10.1-1183. Creation of Department of Environmental Quality; statement of policy.

It is the policy of the Department of Environmental Quality to **protect and enhance the environment** of Virginia in order to promote the health and well-being of the Commonwealth's citizens, residents, and visitors in accordance with applicable laws and regulations.

The purposes of the Department are:



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- 1. To assist in the effective implementation of the Constitution of Virginia by carrying out state policies aimed at conserving the Commonwealth's natural resources and protecting its atmosphere, land, and waters from pollution.
- 2. To address climate change by developing and implementing policy and regulatory approaches to reducing climate pollution and promoting climate resilience in the Commonwealth and by ensuring that climate impacts and climate resilience are taken into account across all programs and permitting processes.
- 3. To coordinate permit review and issuance procedures to protect all aspects of Virginia's environment.
- 4. To further environmental justice and enhance public participation in the regulatory and permitting processes.
- 5. To establish and effectively implement a pollution prevention program to reduce the impact of pollutants on Virginia's natural resources.
- 6. To establish procedures for, and undertake, long-range environmental program planning and policy analysis, including assessments of emerging environmental challenges.
- 7. To conduct comprehensive evaluations of the Commonwealth's environmental protection programs.
- 8. To develop uniform administrative systems to ensure coherent environmental policies.
- 9. To coordinate state reviews with federal agencies on environmental issues, such as environmental impact statements,
- 10. To promote environmental quality through public hearings and expeditious and comprehensive permitting, inspection, monitoring, and enforcement programs, and provide effective service delivery to the regulated community.
- 11. To advise the Governor and General Assembly, and, on request, assist other officers, employees, and public bodies of the Commonwealth, on matters relating to environmental quality and the effectiveness of actions and programs designed to enhance that quality.
- 12. To ensure that there is consistency in the enforcement of the laws, regulations, and policies as they apply to holders of permits or certificates issued by the Department, whether the owners or operators of such regulated facilities are public sector or private sector entities, including the development of electronic recordkeeping and document transmittal systems that encourage the use of electronic methods in performing the Department's business as a means of furthering both resource conservation and transaction efficiency.
- 13. To ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of environmental laws, regulations, and policies.



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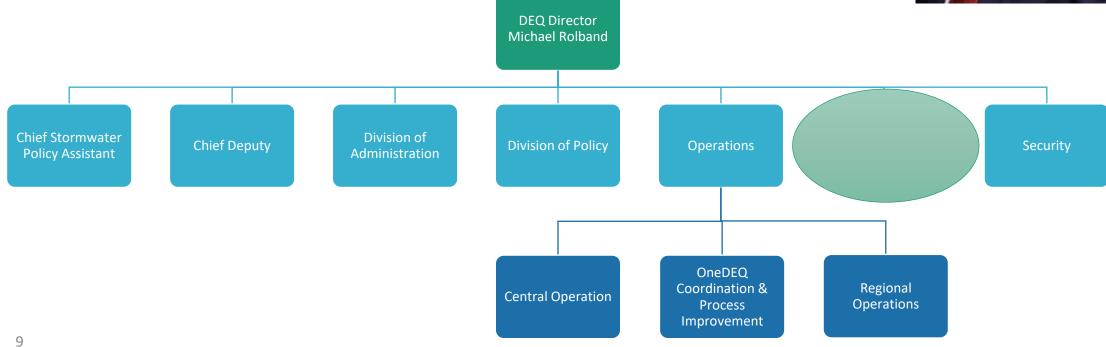


Virginia DEQ Structure

Boards & Citizen Advisory Groups



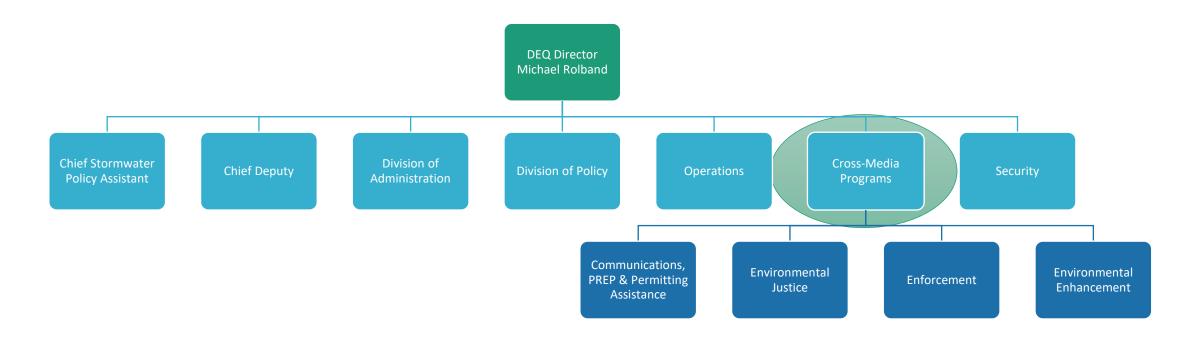






Virginia DEQ Structure

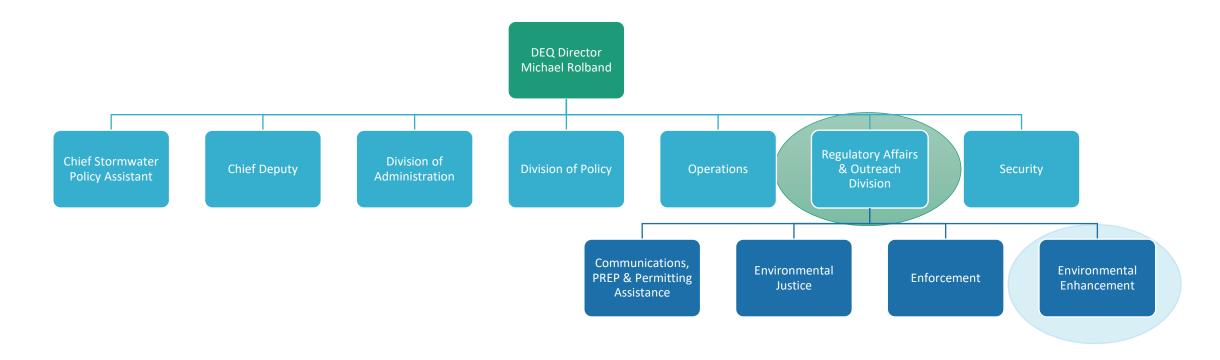






Virginia DEQ Structure







Division of Environmental Enhancement

- Coastal Zone Management Program
- Office of Environmental Impact Review & Long Range Planning
- Office of Pollution Prevention











Office of Pollution Prevention

 Motivate Virginians to minimize their environmental footprint through actions that exceed what is required while enhancing their bottom line.

- Non-regulatory programs
 - Public recognition
- Technical assistance
 - Web-based information resources
 - Training & workshops



What is P2?

• Pollution Prevention means eliminating or reducing the use, generation or release at the source of environmental waste.























GOVERNOR'S

ENVIRONMENTAL EXCELLENCE



Governor's Environmental Excellence Awards

- Award categories
 - Environmental & Sustainability Program
 - Environmental & Sustainability Project
 - Land Conservation Program
 - Virginia Outdoors Plan
 - Commonwealth Green Government
- Winners selected by a panel of independent judges
- Applications received from non-profits, manufacturers, small businesses and government









Virginia Information Source for Energy



• Energy conservation and renewable energy technologies are important to Virginia's environmental and economic health as well as to the health of Virginians.

- Financial Incentives
- Renewable Energy
- Energy and the Environment



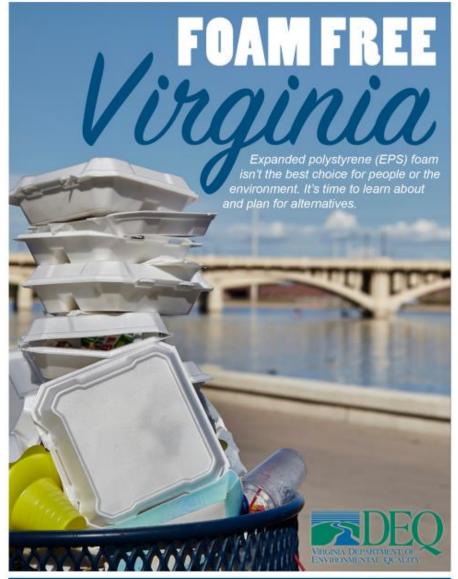
Virginia Green Travel



- Green certification for the tourism industry
- All sectors of tourism
- Environmental benefits and cost savings
- Ask Virginia Green
- Find members at Virginia.org/green
- Partnership







GET READY In 2021, the Virginia General Assembly passed legislation that bans the use of EPS containers by food vendors. Currently, this ban will take effect in two phases. In the first phase, food establishments with 20 or more locations must stop using EPS containers by July 1, 2025. By July 1, 2026, remaining food establishments must comply with the ban. This applies to any food vendors that serve prepared food, including restaurants, cafeterias, food trucks, catering companies, and grocery store salad bars.

Expanded Polystyrene (EPS) Ban

- Two phases:
 - July 1, 2025, food establishments with 20 or more locations must stop using EPS containers
 - July 1, 2026, remaining food establishments must comply
- Applies to any food vendors that serve prepared food, including restaurants, cafeterias, food trucks, catering companies, and grocery store salad bars.

VEEP is...



- DEQ's voluntary recognition and incentive program
- Facilities in the program have committed to:
 - Complying with environmental regulations
 - Striving for continuous environmental improvement









Partnerships

• VEEP in and of itself is an example of a successful partnership.





Greening of Government

- Waste Reduction
- Environmentally Preferable Purchasing
- Energy Conservation
- Executive Order 17- Recognizing the Value of Recycling and Waste Reduction
 - State Agency Recycling
 - Stopping Food Waste

THE VALUE OF RECYCLING

Recycling ...



Conserves resources and protects the environment



Can reduce carbon emissions compared to extracting virgin materials



Reduces the amount of waste sent to landfills and incinerators



Creates jobs and generates local and state tax revenues



Is most beneficial when people "recycle right," so first make sure you check what can and cannot go in the bin



HOW YOU CAN HELP



In stores:

- Shop for products made with recycled materials
- Buy items with less packaging
- Bring your own bags
- Buy only what you need



At home:

- Ask to be removed from paper mailing lists
- Don't throw away anything that can be reused or repaired
- Donate unwanted electronics
- Print on both sides of paper and use recycled paper
- Compost food scraps and yard waste

EO 17: Recognizing the Value of Recycling and Waste Reduction

- Stopping Food Waste
 - DEQ worked with the Department of Agriculture and **Consumer Services**
 - Identify strategies for reducing food waste from large-scale suppliers



Executive Order

NUMBER SEVENTEEN (2022)

RECOGNIZING THE VALUE OF RECYCLING AND WASTE REDUCTION

By virtue of the authority vested in me as Governor, I hereby issue this Executive Order to recognize the value of recycling, to help create new clean technology jobs, and to help stop

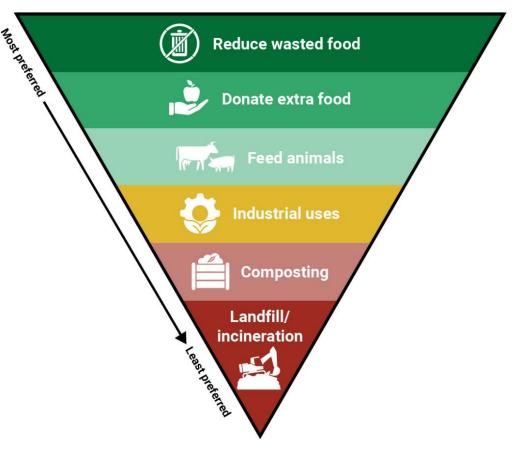
Americans today recycle less than they did a generation ago, yet there are more opportunities for post-consumer recycled products than ever before. Recycling and reuse opportunities for post-consumer recycled products man ever before. Accycling and tease activities account for over 750,000 jobs nationwide. Food waste comprises the single largest activines account for over /30,000 Jous nationwide, rood waste comprises the single largest category of waste by volume disposed of in landfills. We need to conserve our natural resources, category of waste by volume disposed of in minums. The facts to conserve our minum reduce the amount of recyclable materials and waste that goes into landfills, and promote new reduce the amount of recyclapse materials and waste that goes may manufins, and promotine new clean energy jobs here in Virginia. Recognizing and promoting the importance of recycling has the potential to positively impact the Commonwealth's environment, providing cleaner air and

Accordingly, pursuant to the authority vested in me as the Chief Executive Officer of the Commonwealth, and pursuant to Article V of the Constitution of Virginia and the laws of the Commonwealth, I hereby order my administration to take the following actions to address our



EO 17: Stopping Food Waste







Climate Pollution Reduction Grants



- Part of the Inflation Reduction Act
- Implemented by EPA
- States received \$3M planning grants
 - Priority Climate Action Plan (PCAP) submitted March 1
 - Comprehensive Climate Action Plan (CCAP)
 due in 2025
- States with PCAPS were eligible to compete for \$4.3B
 - Twenty-five applications were selected



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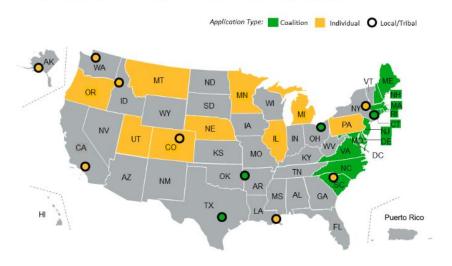
CPRG Competitive Grants

- Selected applications were from states (13), local governments (11), Tribes (1) and coalitions (8)
- Two from Virginia:
 - Atlantic Conservation Coalition (VA, NC, SC & MD) - \$421M
 - Priority Methane Reduction Projects in Virginia - \$99.9M



Selected Applications

The 25 selected applications are from 13 state applicants, 11 municipal applicants, and 1 Tribal applicant and will fund projects in 30 states. Eight of the selected applications were submitted by coalitions of multiple entities that will collaborate to implement the proposed projects.





Priority Methane Reduction Projects in Virginia

- Fugitive Coal Mine Methane Capture & Utilization (\$80.8M)
- Landfill Methane Capture & Utilization (\$9.6M)
- Food Rescue and Composting (\$9.6M)



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Food Rescue and Composting Grant Program

- Reduce landfilled food waste through edible food rescue and increased food waste composting
- Competitive award process open to Virginia agencies, colleges and universities
- Each grant will have two distinct funded program requirements:
 - Edible Food Project (rescue and donation of edible food within a community to reduce food waste and increase access to food)
 - Food Waste Composting Project (develop or expand an existing collection system for organics recycling)





VEEP Reporting Overview

KEITH BOISVERT

Virginia Department of Environmental Quality 8/15/2024

Overview

- Reporting Requirements
- Information of Interest
- Observations and Metrics





EMS Track Reporting Requirements

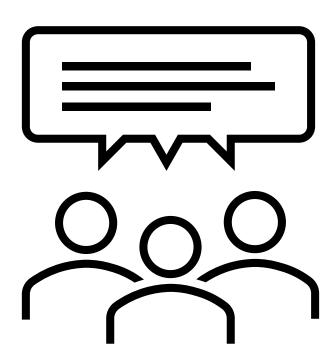
- Must report annually.
- Report through the myDEQ portal.
- Three-year reporting cycle.
- Reporting Commitments:
 - ○E2 = 1 Commitment
 - ○E3 = 2 Commitments
 - ○E4 = 3 Commitments





Information Gathered

- What are your environmental priorities?
- Are you improving? How?
- How much are you improving?
- Not improving? Why?





Observations and Normalizing

- Recessions and pandemics are bad
- Actual Quantity
- Normalized Quantity

Normalizing Factor	1.00	1.02	1.00	1.10
Normalizing Quantity	7,040,963.00	7,189,014.00	7,005,947.00	7,716,628.00
Actual Quantity	232,291.33	230,000.31	232,342.02	235,744.00
	2020	2021	2022	2023



Aggregate Reporting – Cost Savings

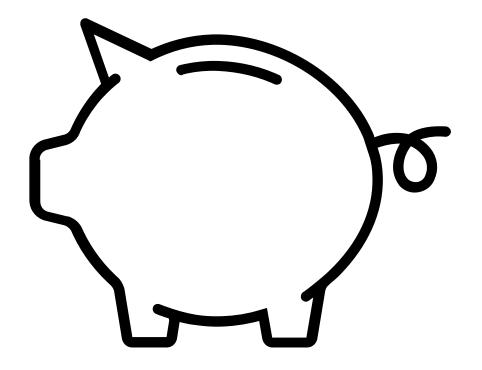
Only some reports include cost savings.

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02005 = $2,500,000.00
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02012 = \$107,000,000.00

○2022 = \$62,200,000.00

02023 = 42,500,000.00

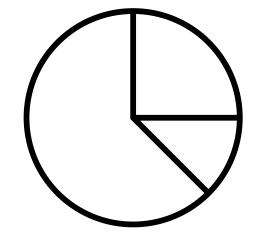




Aggregate Reporting Numbers

- Almost 300 individual reporting commitments.
- Normalized Aggregate Numbers 2023:

Category	Results	Amount	Unit
Energy Use	Decreased	398,653	MMBtu
Water Use	Decreased	258,398,509	Gallons
Waste Recycled	Increased	27,522	Tons
Waste Disposed	Decreased	6,042	Tons
Recycled Material Use	Increased	18,676	Tons





Reporting Number Equivalents

- Energy use decrease equal to the energy use of 1,430 U.S. citizens per year.
- Water use decrease equal to water use for 1,000 Americans for 8.6 years.
- Waste disposed decrease equals the weight of 2,064 Lincoln Navigators.
- Recycled material use increase is the same as 108.5 single family homes (wood frame, 1600 square feet).
- Waste recycled increase is a about 122 times the weight of the Statue of Liberty (225 tons).



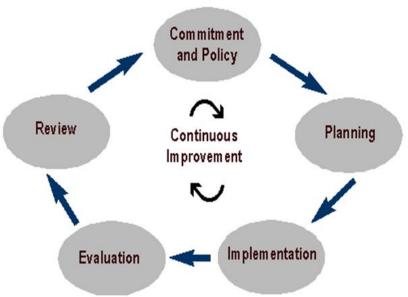


VEEP 101 EMS – Back to Basics

Morgan Goodman
Pollution Prevention Specialist
Virginia Department of Environmental Quality
August 15, 2024

What is an EMS?

- An EMS is a management approach for addressing environmental aspects of internal operations and activities.
- EMS implementation is based on the "Plan, Do, Check, Act" model using standard processes to:
 - oldentify activities and risks
 - Establish goals
 - Implement plans to meet goals
 - Evaluate progress
 - Continuous improvement





What an EMS isn't.

 An EMS is not a binder on a shelf. It is a management system that should be integrated into day-to-day activities at your facility.

• It's not a "set it and forget it" system, it's based on continuous improvement.





The Benefits of an EMS

- Mitigate Risks Early
- Enhance Efficiency
- Improve Business Competitiveness
- Public Relations
 - Lead by example
 - Going above and beyond
 - Community impact

Cement plant makes concrete improvements to the environment

Roanoke Cement has cultivated cleaner air and water in neighboring farmland.





What is VEEP?

- Voluntary program recognizing Virginia facilities that go above and beyond environmental compliance.
- Two types of participation:
 - Facility-Based Track
 - Sustainability Partners (SP) Track
- VEEP members are committed to continuous improvement and pollution prevention





VEEP EMS Track Structure

- **E2** Facilities interested in beginning an EMS or in the early stages of implementing an EMS and pollution prevention program.
- E3 Facilities with a fully-implemented EMS and pollution prevention program with documented results.
- **E4** Facilities with a fully-implemented EMS, that has been verified by an independent 3rd party, and that have committed to measures for sustainable environmental progress and community involvement.
- All facilities must have a record of sustained compliance.

Taking the First Step – E2 Basics

- Environmental Policy Statement Includes a commitment to compliance, pollution prevention, training, communication, and continuous improvement.
- Evaluation of Aspects and Impacts A comprehensive list of aspects and impacts, a method for determining significance, and a process outlined for aspect review and reevaluation.
- Objectives and Targets Goals addressing significant aspects with tasks planned for implementation and tracking results.
- Pollution Prevention Plan A listing of projects and accomplishments including reduction number and cost savings.



Taking it to the Next Level

Additional E3 Requirements

- Legal & Other Requirements
- EMS Roles & Responsibilities
- EMS Reporting & Recordkeeping
- EMS Training
- Voluntary EMS Self-Assessments
- Emergency Management & Response Plans
- EMS Communication Internal and External

Additional E4 Requirements

o 3rd Party Verification & Commitment to Community Involvement



What It Takes to Be A Success Story

Underlying factors for a successful environmental program:

- Management support
- Dedicated Green Team
- Training
- Integration into daily activities
- Continuous improvement





The Benefits of VEEP

- Recognition
- Networking
- Guidance on best practices
- Mentoring opportunities
- Permit fee discounts
- Improved relationship with regulators

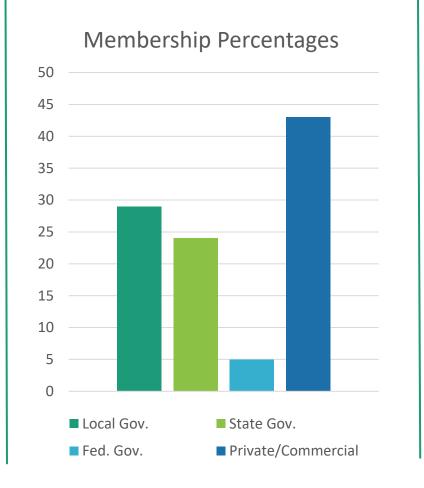




VEEP by the Numbers

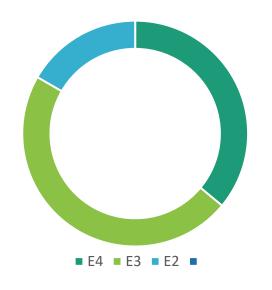


250,000+ employees under the umbrella of VEEP



350+ Participants

Only ~20% of members are E4





Questions?

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