

## COMMONWEALTH of VIRGINIA

#### DEPARTMENT OF ENVIRONMENTAL QUALITY

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March 15, 2017

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The Honorable Richard H. Stuart Senate of Virginia, 28<sup>th</sup> District P.O. Box 1146 Montross, Virginia 22520

Dear Senator Stuart,

Molly Joseph Ward

Secretary of Natural Resources

In response to the March 9, 2017, letter from the Clerk of the Senate requesting a Rule 20(o) study of Senate Bill 1518 and as a follow-up to your letter dated February 2, 2017, the Department of Environmental Quality (DEQ) offers the following:

DEQ promotes recycling and oversees implementation of the Litter Grant Fund through applications from localities. In Virginia, the primary efforts for recycling and litter prevention, however, occur at the local level. Attached for your reference is Virginia's Annual Summary Recycling Rate Report (CY 2015) which is available on DEQ's website and reports a calculated recycling rate of approximately 44 percent (for solid waste planning units with a population above 100,000).

As introduced, Senate Bill 1518 would have amended Article 3 of the Virginia Waste Management Act (VWMA) regarding Litter Control and Recycling as it relates to beneficial reuse of materials including commonly recycled materials such as glass, plastic, metal, and fiber. As introduced, the bill would have added a definition of "beneficial use." The bill also would have required DEQ to conduct an evaluation of Virginia's solid waste recycling rates and develop recommendations to increase those rates over the next 10 years in order to provide for industrial beneficial uses and public litter reduction with a particular focus on incentive-based strategies for material recycling facilities. The bill would have required that the evaluation include an examination of the impact of mixed waste recycling facilities (facilities that sort all solid waste received or generated in a certain area and then sort out recyclable material) on overall recycling.

As introduced, the bill also would have changed the frequency of recycling rate reporting by localities with less than 100,000 citizens from once every four years to once every two years. As you may recall, all localities were required to report annually regardless of population until legislation passed in 2014 reduced the reporting frequency for those localities below the threshold to once every four years.

Currently, the Litter Prevention and Recycling Grants are distributed by the DEQ in consultation with Litter Grant Fund Advisory Board based upon established criteria. Most localities spend a portion of these funds on salaries and local programs. As introduced, Senate Bill 1518 would have directed that a proposal for a Litter Prevention and Recycling Grant that includes provisions to increase plastic, glass, fiber, or metal recycling for beneficial use and litter prevention through a public-private cooperative program would be deemed to meet the eligibility requirements for such grants.

As introduced, the bill also would have amended a provision relating to the production of litter bags by allowing for the inclusion of recycling symbols on these bags. DEQ does not currently design or produce these bags because no funding has been allocated for their creation or production.

Amendments were offered for Senate Bill 1518 when the bill came before the Senate Agriculture, Conservation and Natural Resources Committee, but the amendments were not adopted by the committee. The amendments would have ensured that the proposed definition for "beneficial use" was consistent with current regulatory definitions of the term and would have directed DEQ, in the evaluation described above, to make recommendations to "improve the reliability of the supply of recycled materials" rather than "for the increase of [the recycling] rates."

As noted in your letter dated February 2, 2017, during the discussion of Senate Bill 1518, the Senate Agriculture, Conservation and Natural Resources committee decided to pass the bill by indefinitely with a letter from the Chairman to DEQ requesting that if the proponents of Senate Bill 1518 were to call a stakeholders meeting to discuss the subject matter of the bill, that the committee would appreciate DEQ, if asked, to participate and provide its input and expertise. As I hope you know, DEQ is always happy to engage with the public and the regulated community and, if asked, we would be happy to participate in any such meetings of the subject matter of Senate Bill 1518.

Thank you for your continuing support of DEQ and its mission, and please do not hesitate to call me if you have any questions or I can be of further assistance.

David K. Paylor

Attachment

cc: The Honorable Lynwood W. Lewis, Jr.

# VIRGINIA ANNUAL RECYCLING SUMMARY REPORT

Calendar Year 2015



September 2016

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#### Virginia's State Recycling Summary Report for Calendar Year 2015

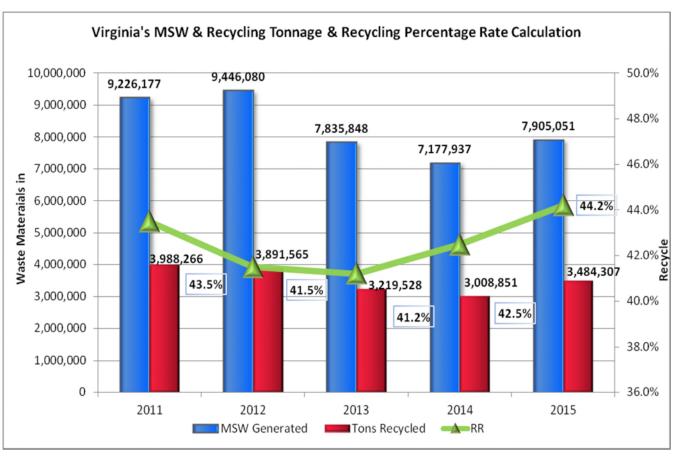
#### **Executive Summary**

The calendar year 2015 Annual Recycling Rate reporting by Virginia Solid Waste Planning Units (SWPUs) with populations above 100,000<sup>1</sup> established a calculated recycling rate for Virginia of 44.2 %. This calculation included credits for solid waste reused, non-MSW recycled, and recycling residues. This rate was based on the data submitted by the 17 SWPUs required to report for 2015.

#### Introduction

The Virginia Department of Environmental Quality (DEQ) has completed its review of the recycling rate data reported for calendar year 2015. DEQ has reviewed 41 submitted reports. The data represent recycling information from 113 Virginia cities, counties and towns.<sup>1</sup> Recycling rate reports were also submitted by 26 SWPUs that were not required to report for 2015.

Virginia's annual recycling rate for 2015 as seen on the graph below is based only on data from the required reports submitted by the 17 SWPUs with populations above 100,000.



1

<sup>&</sup>lt;sup>1</sup> Virginia Code §10.1-1411 was amended by legislation introduced during the 2012 Session of the Virginia General Assembly and requires annual recycling rate reporting by each SWPU or locality with a population of greater than 100,000 according to the most recent U.S. Census. Each SWPU or locality with a population of 100,000 or less according to the most recent U.S. Census must submit a recycling survey report once every four years. Planning units in this latter category will next report in 2017 for calendar year 2016.

#### **Areas Reporting Highest Rates**

Historically, higher recycling rates have been reported in the more densely populated areas of the state. These areas are represented primarily by the 17 SWPUs with populations over 100,000.<sup>1</sup> These areas include:

Calculated Regional Recycling Rate by Ye	ar		
<u>Area</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Fredericksburg Area	46.2%	43.6%	46.3%
Hampton Roads/Tidewater Area	33.7%	31.3%	33.5%
Lynchburg Area	40.1%	41.5%	38.9%
Northern Shenandoah Valley	49.7%	41.4%	40.4%
Northern Virginia	47.4%	45.4%	46.0%
Richmond Area	62.7%	57.5%	57.4%
Roanoke Area	39.0%	27.8%	35.4%

#### **Mandated Recycling Rates**

Pursuant to Virginia Code § 10.1-1411.D, each SWPU is required to achieve and maintain a minimum 25 percent annual recycling rate *unless*:

- Its population density is less than 100 persons per square mile, or
- Its civilian unemployment rate is 50 percent or more above the state unemployment average.

SWPUs meeting these criteria are required to achieve and maintain a minimum 15 percent recycling rate.

#### **Solid Waste Management Planning and Recycling Action Plans**

DEQ continues to review the required solid waste management plans and any updates submitted by the SWPUs for completeness, including locality or regional recycling program information. All SWPUs are required to maintain or exceed the mandated recycling rate for their jurisdiction(s). If at any time the SWPU reports less than the required 15 percent or 25 percent recycling rate, DEQ will require that a Recycling Action Plan be developed and submitted as an amendment to the SWPU's solid waste management plan. Visit

http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms/MandatoryRecyclingRates.aspx for additional information.

#### **Recycling Success Stories and Related Report Information**

Information provided by localities, from web-based resources, or other data sources.

<u>City of Richmond</u>: In July 2015, the City of Richmond enhanced its recycling program by going to 95 gallon recycling carts citywide. This led to a 50 percent increase in waste diversion, collection efficiencies, and an overall reduction in its carbon footprint.

<u>City of Alexandria</u>: The City of Alexandria has been testing the feasibility of asking residents to separate food waste for special collection and composting. The city offered free food waste collection services for some of its curbside collection customers and the program proved popular. However, residents of selected apartment buildings who were given this opportunity were much less willing to give it a try. City staff is evaluating the costs and environmental benefits of these two pilot efforts. According to the U.S. Environmental Protection Agency, 30 percent of the material in a residential trash can is food waste after traditional recyclables and yard waste have been removed. For more information visit <a href="https://www.alexandriava.gov/FoodWaste">https://www.alexandriava.gov/FoodWaste</a>

<u>Central Virginia Waste Management Authority (CVWMA)</u>: CVWMA made significant changes in its curbside and drop-off recycling programs. Items added to the program now include plastics #1 - #7 – bottles and containers, caps and lids (all free of food and residue). Also added are waxy coated cartons: milk, juice, juice boxes, soup, wine, cream, egg substitutes, and cat food boxes. Henrico County and CVWMA held a seminar in June 2016 on debris management and monitoring in the event of a FEMA-declared storm. Contracts in place will assist member jurisdictions with storm debris management. Information from *CVWMA Regional Waste Line* - <a href="http://cvwma.com/wp-content/uploads/2013/08/RWL">http://cvwma.com/wp-content/uploads/2013/08/RWL</a> Aug 2016-1.pdf

<u>Montgomery Regional Solid Waste Authority (MRSWA):</u> During the last year, MRSWA updated its website: <u>www.mrswa.com</u> and on the homepage there is a video of the Recycling and Disposal Solutions of Virginia (RDS) facility in Roanoke. RDS has state of the art equipment to handle single stream recycling needs for numerous jurisdictions. MRSWA offers universal waste recycling to the public at no charge and household hazardous waste collection day, on the third Saturday each month.

<u>Electronics Recycling</u>: Though not included in the recycling rate, computer manufacturers are required to report to DEQ the amount of electronics recovered through their recycling networks. For calendar year 2015 they reported 2,218,416 pounds (1,109 tons) of electronics recovered. For more information about this program, visit

 $\frac{http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms}{ElectronicsRecycling/VirginiasComputerRecoveryandRecyclingAct.aspx}.$ 

<u>Private Sector Reporting</u>: Wal-Mart and Target provided recycling data for their Virginia stores to DEQ. This information was made available to all SWPUs on DEQ's recycling webpage for inclusion in their recycling reporting. Visit their links on the following webpage under Featured Topics:

 $\frac{http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RecyclingandLitterPreventionPrograms.}{aspx}$ 

### **Calculated Recycling Rates for 2015**

**Solid Waste Planning Unit Recycling Rates and Data** 

Solid W	Solid Waste Planning Unit Recycling Rates and Data				
REPORTING ENTITY (17 Solid Waste Planning Units required to report annually)	2015 Recycling Rate (%)	2015 Total Recycled Tons (PRMs + Credits)	2015 Total MSW Generation  Tons (PRMs + Credits +  MSW disposed)		
State Totals	44.2	3,484,307	7,905,051		
	44.2	tons	tons		
Alexandria (City) SWPU	48.6	96,739	186,943		
Arlington County SWPU	44.5	145,792	265,120		
Augusta –Staunton-Waynesboro SWPU	45.6	71,825	164,205		
Central Virginia Waste Management Authority SWPU (counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George; cities of Richmond, Hopewell, Colonial Heights and Petersburg)	58.8	722,877	1,153,152		
Fairfax County SWPU	49.6	585,849	1,230,415		
Loudoun County SWPU	44.5	168,054	373,611		
Montgomery Regional Solid Waste Authority SWPU (Montgomery County, Blacksburg and Christiansburg)	27.5	23,371	84,568		
Mount Rogers PDC SWPU (counties of Bland, Smyth, Washington and Wythe)	20.5	15,137	132,391		
Newport News (City) SWPU	40.7	88,182	194,703		
Northern Shenandoah Valley Regional Commission SWPU (counties of Clarke, Frederick, Shenandoah, Warren and Page; City of Winchester)	49.7	138,682	278,805		
Prince William County SWPU	33.7	230,563	561,108		
Rappahannock Regional Solid Waste Management Board SWPU (Stafford County and city of Fredericksburg)	58.4	94,640	167,785		
Region 2000 (counties of Nelson, Appomattox and Campbell; city of Lynchburg and town of Bedford)	39.1	131,965	329,060		
Southeastern Public Service Authority SWPU (counties of Isle of Wight and Southampton; cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk and Virginia Beach)	31.7	593,372	1,863,291		
Spotsylvania County SWPU	34.6	68,961	186,156		
Thomas Jefferson PDC SWPU (counties of Albemarle, Fluvanna and Greene; city of Charlottesville)	40.3	158,442	318,208		
Virginia Peninsulas Public Service Authority SWPU (counties of Essex, James City, King and Queen, Mathews, Middlesex and York; cities of Hampton, Poquoson and Williamsburg)	36.5	152,556	418,230		
The calculated recycling rate is based only on data from the 17 SWPUs above required to report for CY 2015.	2015 Recycling Rate (44.2 %)	2015 Total Recycled Tons (PRMs + Credits)	2015 Total MSW Generation Tons (PRMs + Credits + MSW disposed)		

REPORTING ENTITY (26 SWPUs with populations 100,000 or less not required to report, but Voluntarily Reporting)	2015 Recycling Rate (%)	2015 Total Recycled Tons (PRMs + Credits)	2015 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Accomack County SWPU	41.6	16,617	39,942
Amherst County SWPU	27.4	8,782	32,106
Bedford County SWPU	44.9	33,695	78,505
Botetourt County SWPU	19.2	4,012	20,895
Brunswick County SWPU	18.6	2,485	13,354
Carroll-Grayson-Galax SWPU	21.9	7,601	34,682
Craig County SWPU	18.8	494	2,622
Cumberland Plateau Regional Waste Management Authority SWPU (Buchanan, Dickenson and Russell counties)	30.2	18,832	62,293
Danville (City) SWPU	41.2	9,788	23,778
Fairfax (City) SWPU	59.3	33,038	55,730
Falls Church (City) SWPU	68.3	9,845	14,845
Fauquier County SWPU	40.3	30,903	76,643
Floyd County SWPU	22.6	3,190	14,110
Franklin County SWPU	33.2	16,742	50,380
Greater Rockingham SWPU	27.7	20,822	75,280
Harrisonburg City SWPU	39.0	17,799	48,073
Herndon (Town) SWPU	44.4	11,289	25,425
Lunenburg County SWPU	15.5	1,300	7,905
Manassas (City) SWPU	44.8	24,866	55,497
Martinsville (City) SWPU	18.7	12,330	65,971
New River Resource Authority SWPU (counties of Pulaski and Giles; city of Radford)	30.9	34,349	118,841
Patrick County SWPU	39.6	3,596	9,081
Rappahannock County SWMP	22.8	1,450	6,365
Roanoke City SWPU	62.6	64,590	103,179
Salem (City) SWPU	38.2	11,511	30,115
Vinton (Town) SWPU	58.7	5,077	8,644

All data based on adjustments by DEQ for consistency with 9VAC-20-130-125, with a 5 percent maximum percentage allowed for credits to the base recycling rate calculated by a solid waste planning unit. A 2 percent source reduction credit has been added to the calculated recycling rates for those planning units with a documented source reduction program.

PRMs (principal recyclable materials): paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other.

Credits: recycling residues, solid waste reused non-MSW recycled (includes construction and demolition material, ash and debris), and source reduction initiatives. Source reduction initiatives must be documented as SWPU policy and promoted across the SWPU.

Municipal Solid Waste (MSW) disposed: Municipal solid waste delivered to sanitary landfills or incinerators for disposal.

#### **Solid Waste Planning Units Not Reporting**

28 SWPUs with populations of 100,000 or less and not required to report for CY 2015.

Alleghany Highlands SWPU

Amelia County SWPU

**Bath County SWPU** 

Bristol (City) SWPU

**Buckingham County SWPU** 

Caroline County SWPU

Craig County SWMP

**Culpeper County SWPU** 

**Gloucester County SWPU** 

**Highland County SWPU** 

King George County SWPU

Lee County SWPU

Louisa County SWPU

**Lunenburg County SWMP** 

**Madison County SWMP** 

Manassas Park SWMP

Northampton County SWPU

Northern Neck PDC SWPU (counties of Lancaster, Northumberland, Richmond and Westmoreland)

**Orange County SWMP** 

Pittsylvania County SWPU

Prince Edward-Cumberland County SWPU

Roanoke County SWPU

Rockbridge - Lexington - Buena Vista SWPU

Scott County SWPU

Southern Crater Region SWPU (counties of Dinwiddie, Greensville, Surry, and Sussex; city of Emporia)

Southside Regional PSA SWPU (counties of Charlotte, Halifax and Mecklenburg)

Vienna (Town) SWMP

Wise County SWPU

#### **Recycling Rate Calculation – 2015**

Seventeen recycling rate reports, representing 113 Virginia localities, were received pursuant to the requirements of § 10.1-1411 of the Code of Virginia. The chart represents data only from the 17 SWPUs required to report for CY 2015. This represents a return rate of 100 percent of the required reports. Totals for these reports are presented below:

#### **Principal Recyclable Materials (PRM) Tons**

PRM Material	Tons Recycled
Paper	758,223
Metal	405,521
Plastic	21,477
Glass	12,247
Commingled	530,711
Yard Waste	455,890
Waste Wood	258,970
Textiles	21,978
Waste Tires	33,270
Used Oil	30,063
Used Oil Filters	2,365
Used Antifreeze	2,988
Batteries	11,291
Electronics	7,522
Inoperative Motor Vehicles	309
Other	103,072
Total PRM in Tons	2,655,897

Credits	Tons Recycled
Recycling Residue	18,061
Solid Waste Reused	480,600
Non-MSW Recycled	329,749
TOTAL CREDITS	828,410

MSW Disposed Tons	
Household Waste	3,700,831
Commercial Waste	611,602
Institutional Waste	49,200
Other	59,111
Total MSW Tons	4,420,744

2% Source Reduction	
Credit	0.14% overall

#### **State Rate Calculation**

((PRM + Credits) / (PRM + Credits + MSW Disposed)) x 100 + Source Reduction Credit (3,484,307 / 7,905,051) x 100 + 0.14% = 44.2%