

Commonwealth of Virginia

Department of Environmental Quality

Solid Waste Managed in Virginia  
During Calendar Year 2005



June 2006

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# Solid Waste Managed in Virginia During Calendar Year 2005

## EXECUTIVE SUMMARY

*Section 10.1-1413.1 of the Code of Virginia requires the Department of Environmental Quality (Department) to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year. Facilities that have solid waste management permits are required to provide the Department with information to prepare this report. As of May 25, 2006, one hundred ninety-eight (198) permitted facilities provided information on their activities for calendar year 2005 for this report.*

*Based on the facilities' reports, a total of 24,492,185 tons of solid waste was received at Virginia's permitted solid waste management facilities during calendar year 2005. Of this total, 17,462,242 tons originated in the Commonwealth, and 7,029,943 tons originated from other jurisdictions.*

*Municipal solid waste (MSW) constituted 16,917,050 tons of the total amount of solid waste received during calendar year 2005. Of the total MSW received 11,207,608 tons originated in the Commonwealth, and 5,709,441 tons originated from other jurisdictions.*

*Five jurisdictions accounted for 96.5% of all waste received from out-of-state sources: Maryland (40.3%); New York (26.7%); Washington, D.C. (17.5%); North Carolina (6.7%); and New Jersey (5.3%).*

*During the calendar year 2005, the total solid waste, MSW, and CDD received from out-of-state decreased by 9.8%, 3.1%, and 35.4% respectively, over 2004 amounts. For Virginia sources during the same period, the total solid waste, MSW, and CDD received decreased by 9.4%, 6.5%, and 24.5 % respectively, over 2004 amounts.*

*Of the solid waste managed in Virginia during the year, 79.85% - 16,341,108 tons - was landfilled, 10.5 % - 2,144,370 tons- was incinerated, and the rest was managed by other means (see Figure 1). Of all solid waste received at Virginia facilities during the year, 70.1 % was MSW, 15.5% was CDD waste, and the remainder was other types of waste.*

*Permitted solid waste management facilities reported that 6.1% of the waste that they managed was diverted from disposal by recycling or mulching. Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2004 was 29.8%. See*

*<http://www.deq.virginia.gov/recycle/documents/AnnualReportRRR2004FINAL.pdf>.*

*A report on the statewide recycling rate for calendar year 2005 will be issued later this year.*

*For the fifth year, permitted facilities were required to report on their available capacity and the expected life of the facilities based on current disposal rates. This information shows that at current rates the remaining available landfill capacity is as follows: MSW – 18.0 years; CDD – 12.3 years; non-captive industrial – 40.5 years; and total – 17.9 years. These projections do not account for population increases, changes in waste generation or disposal rates, or the closing of older MSW disposal units pursuant to statute.*

*The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located. Nine facilities provided such information for calendar year 2005.*

# Solid Waste Managed in Virginia During Calendar Year 2005

## I. Introduction

This report has been prepared in accordance with Virginia Code § 10.1-1413.1, which requires the Department to prepare a report by June 30 of each year describing the amount of solid waste disposed of in the Commonwealth during the preceding calendar year (see Attachment 1). All permitted facilities (except for captive waste management facilities) that treat, store, or dispose of solid waste are required to provide the Department with information in their possession as is reasonably necessary for the Department to prepare this report. The statutory reporting requirements have been clarified and supplemented by regulation in 9 Virginia Administrative Code (VAC) 20-80-115 and 20-130-165 (Attachments 2 and 3).

## II. Reporting Procedures

For each category of solid waste, permitted solid waste facilities in Virginia were asked to report the amount of waste that they received, the method by which the waste was managed, the jurisdiction where the waste originated, if known, and the facility's remaining capacity. A copy of the reporting table and instructions for furnishing information to the Department are provided as Attachments 4 and 5, respectively.

The facilities identified amounts of solid waste by each of the following categories:

- municipal solid waste (MSW);
- construction/demolition/debris (CDD);
- industrial waste;
- regulated medical waste (RMW);
- vegetative and yard waste (VW/YW);
- incineration ash;
- sludge other than is land applied in accordance with Virginia Code § 32.1-164.5;
- tires;
- white goods (e.g., refrigerators, washing machines);
- friable asbestos;
- petroleum-contaminated soil (PCS); and
- other waste.

The facilities also reported on each of the following methods of waste management:

- recycled on-site;
- composted on-site;
- landfilled on-site;
- incinerated on-site;
- sent off-site to be recycled

- sent off-site to be treated, stored or disposed (TSD);
- stored on-site at the beginning of the reporting period;
- stored on-site at the end of the reporting period;
- mulched; and
- other.

For the first year facilities were able to submit data online. Facilities may log online at the Virginia Solid Waste Information and Assessment (SWIA) page to submit data at: (<https://www.deq.virginia.gov:8443/SWIAWebApp/login.jsp>). The Solid Waste Information and Assessment application (Attachment 4) requires that certain fields be completed before the data is submitted to DEQ. The instructions for the form (Attachment 5) were modified to assist the facilities with the on-line data submission process.

This report does not wholly represent Virginia's waste management activities, because the statute exempts all captive waste management facilities from the reporting requirements. A captive facility is one that is located on property owned or controlled by the generator of the waste. Most captive waste management facilities in Virginia are industrial landfills. As a result, the reported amounts of industrial waste and sludge represent only the portion that is managed in off-site facilities. Also, this report does not reflect tires managed under the Waste Tire Trust Fund at facilities that do not require a permit.

Permitted solid waste management facilities reported that 6.1% of the waste that they managed was diverted from disposal by recycling or mulching. Most recycling, however, occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2004 was 29.8%. See <http://www.deq.virginia.gov/recycle/documents/AnnualReportRRR2004FINAL.pdf>. A report on the statewide recycling rate for calendar year 2005 will be issued later this year.

### III. Receipt of Assessment Reports

By regulation, facilities must submit their reporting tables by March 31 of each year. Facilities are required to submit a separate reporting table for each jurisdiction from which they received waste. Information from reporting tables received on or before May 25, 2006, has been included in this report. One hundred ninety-eight (198) facilities reported on their activities for calendar year 2005. Last year, two hundred four (204) facilities reported on their activities for calendar year 2004. A list of the facilities reporting this year is provided as Attachment 6. These facilities submitted a total of 340 separate reporting tables, representing waste received from 31 states (including Virginia); Washington, D.C.; and Canada.

### IV. Discussion of Reported Waste Management Activities

Table 1 summarizes the quantities of waste that facilities received and managed during calendar year 2005, by waste type and waste management method. As shown in the table, 24,492,185 tons of solid waste was received at Virginia's permitted solid waste management

facilities during calendar year 2005. Municipal solid waste (MSW) constituted 16,917,050 tons of the total amount of solid waste received.<sup>1</sup>

The column of Table 1 entitled "Landfilled On-Site" indicates the quantity of solid waste disposed of at permitted solid waste landfills in the Commonwealth during calendar year 2005. The amount of solid waste landfilled during the year was 16,341,108 tons. This was a decrease of 10.7% from the 18,299,529 tons that was landfilled in calendar year 2004. The other columns of Table 1 indicate the quantity of waste managed by other methods.

Figure 1 shows the percentage of each method of solid waste management. Waste that was stored at the facilities at the beginning of the year (146,277 tons), and waste that was sent off-site for treatment, storage or disposal (4,725,589 tons) are not included in the basis for calculating percentages for Figure 1.<sup>2</sup> Waste stored on-site at the beginning of the year is similar to waste received and is not considered a management method. Waste that was simply sent off site to another permitted Virginia facility for treatment storage or disposal would also be included in the receiving facility's reporting tables (i.e., if the waste is received at two, separate Virginia-permitted facilities, it may be counted twice as received waste). Based on the management methods included in Figure 1, the majority of solid waste managed in the Commonwealth during the year was landfilled on-site (79.85%) or incinerated (10.5%). Lesser amounts were reported as managed by recycling on-site and off-site (4.2%), other methods (2.2%), mulched (1.9%), composted on-site (0.6%), or stored on-site at the end of the year (0.8%).

Figure 2 shows the composition of the solid waste stream. Of all solid waste received at Virginia facilities in calendar year 2005, 70.07% was MSW, 15.48% was CDD waste, and the remainder was other types of waste. These include industrial waste (3.93%), incineration ash (3.63%), VW/YW (2.38%), "other waste" (1.93%), and regulated medical waste (1.52%).

Table 2 shows the quantities of solid wastes imported from outside Virginia. Five jurisdictions accounted for 96.5% of all waste received from out-of-state sources: Maryland (40.3%); New York (26.7%); Washington, D.C. (17.5%); North Carolina (6.7%); and New Jersey (5.3%). Figure 3 illustrates the total quantity of waste received from individual out-of-state jurisdictions.

Figure 4 compares the amount of waste received at facilities from out-of-state jurisdictions to the amount received from Virginia during calendar year 2005. Of the total amount of solid waste received (24,492,185 tons), 17,462,242 tons originated in the Commonwealth, and 7,029,943 tons originated from other jurisdictions. Thus, of all the waste received at Virginia facilities in 2005, 28.7% originated from other jurisdictions. Of the total MSW received (16,917,050 tons), 11,207,608 tons originated in the Commonwealth, and 5,709,441 tons originated from other jurisdictions. Of the total CDD received (3,738,033 tons), 2,895,506 tons originated in the Commonwealth, and 842,527 tons originated from other jurisdictions.

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<sup>1</sup> When referring to information from Table 1, "waste received" refers to information from the first column, and "waste managed" refers to information from the remaining columns (except as noted). The amount of waste "received" for each type of waste may not match the sum of the reported amounts identified for each method of waste management. This reflects information as submitted by facilities in the reporting tables. In particular, incinerators may properly include the ash that they generate as waste that is "sent off site," and not include it as waste that is "received" at that facility.

<sup>2</sup> Accounting for those two exceptions, the basis for these percentages of waste managed is 20,464,808 tons.

Figure 5 shows a comparison of total solid waste received in 1998 through 2005 for both Virginia and out-of-state sources. Figure 6 shows the same comparison for MSW. The total amount of solid waste received at facilities during 2005 decreased 9.5% (2,584,167 tons) over 2004 amounts. For out-of-state sources during calendar year 2005, the total waste decreased 9.8% (762,286 tons), MSW decreased by 3.1% (183,978 tons), and CDD decreased by 35.4% (462,665 tons) over 2004. For Virginia sources during the same period, the total solid waste, MSW, and CDD decreased by 9.4% (1,821,881 tons), 6.5% (782,316 tons), and 24.5% (939,721 tons) respectively.

This report does not reflect the amount of solid waste exported from Virginia to other states. The Department regulates only the treatment, storage, and disposal of solid waste within the Commonwealth. Virginia facilities and waste generators are not required to submit information on the amount of solid waste exported to other states.

## V. Capacity Information

For the fifth year, landfills that treat, store, or dispose of solid waste were required to report on their available capacity and the expected life of the facilities at the current disposal rates. This information is summarized in Table 3 and detailed in Attachment 7.<sup>3</sup> MSW landfills reported a total available capacity of 257,040,161 tons and a current disposal rate of 14,304,786 tons per year. Thus, at the current disposal rate, there would be 18.0 years of available MSW landfill capacity in the Commonwealth. However, this calculation does not account for population changes, changes in waste generation or disposal rates, or the closing of older MSW disposal units under Va. Code § 10.1-1413.2. Nor does it include facilities for which permits may have been issued, but that have not yet been built and are not accepting waste. Last year, it was reported that there were 16.1 years of remaining MSW disposal capacity.

CDD landfills reported a total available capacity of 20,847,086 tons and a current disposal rate of 1,693,303 tons per year. At the current disposal rate, there would be 12.3 years of available CDD landfill capacity in the Commonwealth. Last year, it was reported that there were 7.0 years of remaining CDD disposal capacity. For non-captive industrial landfills, there are 13,875,893 tons of available capacity and a current disposal rate of 343,020 tons per year (40.5 years). Last year, it was reported that there were 35.0 years remaining capacity for non-captive industrial facilities.

In total, there are 291,763,140 tons of available capacity and a current disposal rate of 16,341,108 tons per year (17.9 years). Last year, it was reported that there were 14.9 years remaining total capacity.

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<sup>3</sup> Facilities reported available capacity in tons and in cubic yards. The available capacity has been estimated using the following conversion factors: 1000 lbs. of MSW = 1 cu. yd.; 1200 lbs. of CDD waste = 1 cu. yd., and 1000 lbs. of industrial waste = 1 cu. yd. The available capacity for individual facilities may vary, depending on factors such as a facility's compaction rate and use of daily cover materials. The last column in Attachment 7 gives the reported remaining life as estimated by individual facilities.

## VI. Reports of Economic Benefits

The statute provides that, at the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located. This may include the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. Nine facilities provided such information for calendar year 2005. See Attachment 8 for details.

Table 1 – Solid Waste Managed in Virginia – 2005 (in Tons)

Waste Type	Waste Received <sup>4</sup>	Recycled On-Site <sup>5</sup>	Composted On-Site	Landfilled On-Site	Incinerated On-Site	Sent Off-Site to be Recycled	Sent Off-Site to be TSD	Stored On-Site Beginning of Year	Stored On-Site End of Year	Mulched	Other <sup>6</sup>
Municipal Solid Waste	16,917,049.91	0.00	0.00	11,258,457.06	2,117,957.23	91,062.70	3,374,133.76	9,721.00	12,830.00	0.00	72.00
Construction/Demolition/Debris	3,738,032.78	145,377.39	0.00	2,790,885.89	4,276.86	54,896.75	647,170.70	11,945.00	15,913.40	57,425.30	39,148.05
Industrial Waste	949,599.84	28,039.19	0.00	871,388.33	4,369.55	6,151.61	36,787.16	0.00	2,864.00	0.00	0.00
Regulated Medical Waste	367,149.75	0.00	0.00	0.00	544.00	0.00	9,252.69	0.00	0.00	0.00	357,353.06
Vegetative/Yard Waste	575,505.15	5,683.19	111,057.57	31,935.18	13,160.59	119,109.65	12,311.22	103,516.00	100,833.25	304,697.91	6,115.19
Incineration Ash	877,247.56	2,731.39	0.00	874,068.17	0.00	0.00	576,913.49	0.00	0.00	0.00	0.00
Sludge	236,599.01	6,052.04	11,223.33	211,058.94	0.00	0.00	4,428.70	0.00	0.00	0.00	3,836.00
Tires	58,638.99	5,237.95	0.00	12,081.43	0.00	21,334.15	17,263.86	419.40	202.00	0.00	2,330.00
White Goods	46,929.65	0.00	0.00	36.00	0.00	46,583.65	363.00	259.00	206.00	0.00	0.00
Friable Asbestos	7,871.05	0.00	0.00	7,739.12	0.00	87.00	44.93	0.00	0.00	0.00	0.00
Petroleum Contaminated Soil	251,779.99	35,925.94	0.00	170,878.21	0.00	15,760.00	1,297.17	13,383.10	16,132.77	0.00	25,125.50
Other Waste <sup>7</sup>	465,781.60	191,720.60	4,337.95	112,580.08	4,062.26	84,745.21	45,621.96	7,033.40	5,922.04	18,111.31	23,094.04
<b>Total</b>	<b>24,492,185.28</b>	<b>420,767.69</b>	<b>126,618.85</b>	<b>16,341,108.41</b>	<b>2,144,370.49</b>	<b>439,730.72</b>	<b>4,725,588.64</b>	<b>146,276.90</b>	<b>154,903.46</b>	<b>380,234.52</b>	<b>457,073.84</b>

<sup>4</sup> The amount of “Waste Received” and “Stored On-Site at the Beginning of the Year” may not precisely match the sum of the reported amounts for the remaining columns (i.e., each method of managing the waste). This difference reflects information submitted in the reporting tables. In particular, incineration ash generated by an energy recovery facility or incinerator may be listed as “sent off site to be treated, stored, or disposed” even though it was not “received” as ash at that facility. VW/YW may be composted to produce a product that is not managed as waste.

<sup>5</sup> The majority of recycling takes place at facilities that do not require a permit from the Department and were not required to submit data for this report. Therefore, the amounts shown in this column represent a substantial underestimate of the true recycling rate in the Commonwealth. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2004 was 29.8%. A report on the statewide recycling rate for calendar year 2005 will be issued later this year. See <http://www.deq.virginia.gov/recycle/documents/AnnualReportRRR2004FINAL.pdf>.

<sup>6</sup> “Other” methods of management may include steam sterilization of medical waste, approved use of shredded tires at permitted facilities, and thermal treatment of PCS, among others.

<sup>7</sup> Additional details were reported this year compared to previous years.

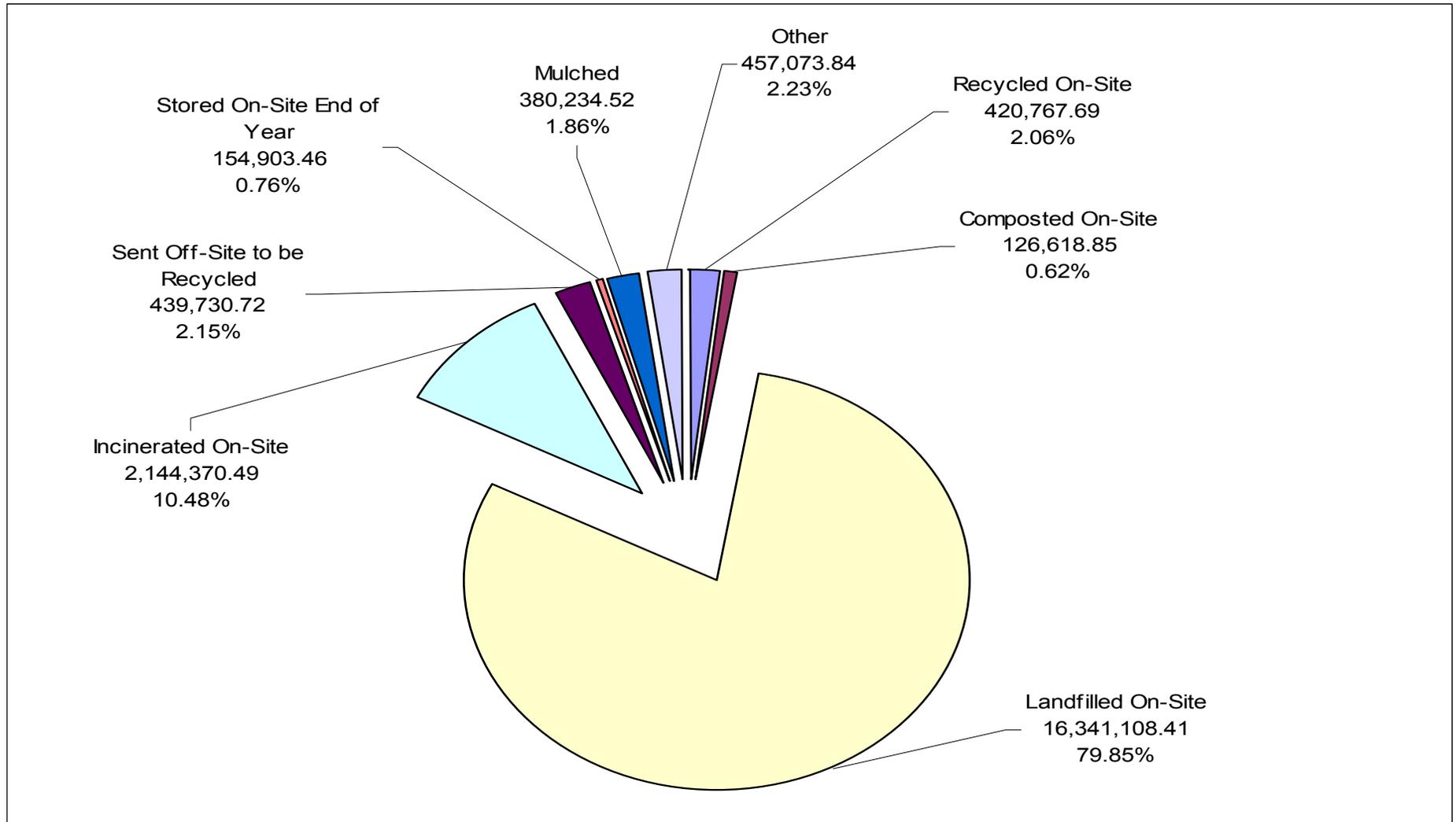
Table 2 – Jurisdiction of Origin of Waste Received – 2005 (in Tons)

State/Possession	MSW	CDD	Industrial	RMW	VW/YW	Incin. Ash	Friable Asbestos	Sludge	Tires	White Goods	PCS	Other	Total Received
Alabama	0	0	0	0	0	0	0	0	0	0	0	6.9	6.9
California	0	0	5.22	0	0	0	0	0	0	0	36.06	1.4	42.68
Canada	60.19	0	0	0	0	0	0	0	0	0	0	0	60.19
Connecticut	0	0	5.81	0	0	0	0	0	0	0	0.04	0	5.85
Delaware	18,536.88	14,304.00	1,987.72	0	0	0	0	239.93	0	0	10.29	0	35,078.82
District of Columbia	1,059,699.66	135,544.05	228.38	0	2,880.00	0	645.11	18,468.09	322.79	55.67	15,712.08	16.7	1,233,572.53
Florida	0	0	4.7	0	0	0	0	0	0	0	7.7	34.25	46.65
Georgia	948.83	0	0.2	0	0	0	0	0	0	0	0	17.7	966.73
Illinois	185.34	0	28.06	0	0	0	0	0	0	0	0	1.07	214.47
Indiana	69.08	0	0	0	0	0	0	0	0	0	0	0.2	69.28
Kentucky	0	0	0.02	0	0	0	0	0	0	0	0.8	5.1	5.92
Maryland	1,992,313.00	507,595.12	40,124.11	705	4,200.00	191,689.65	639.1	34,850.46	4,098.74	94.61	38,807.76	15,983.96	2,831,101.51
Massachusetts	22	541	0.4	30.9	0	0	0	0	0	0	0	0	594.3
Michigan	0	0	39.11	0	0	0	0	0	0	0	0	0	39.11
Minnesota	0	0	2	0	0	0	0	0	0	0	0	0	2
Mississippi	719.89	0	23.06	0	0	0	0	0	0	0	0	0	742.95
Nebraska	0	0	11.54	0	0	0	0	0	0	0	0.41	0.2	12.15
Nevada	0	0	75.28	0	0	0	0	0	0	0	0	0	75.28
New Jersey	334,008.57	35,781.00	2,216.94	0	0	0	0	0	0	0	176.85	126.37	372,309.73
New York	1,803,754.11	32,012.00	29,005.71	93	0	0	0	11,299.49	0	0	38.77	785	1,876,988.08
North Carolina	418,867.63	6,149.25	21,883.76	506.4	6	18.3	21.16	779	11.88	0	13,649.64	5,850.90	467,743.92
Ohio	152.21	0	0	0	0	0	0	0	0	0	0	5	157.21
Pennsylvania	1,483.16	108,471.76	215.3	0	0	0	0	0	0	0	57.27	1,869.60	112,097.09
Rhode Island	0	0	21.1	0	0	0	0	0	0	0	0	0	21.1
South Carolina	499.33	0	1,195.72	0	0	0	0	0	0	0	64.44	26.1	1,785.59
Tennessee	39,804.68	1,788.58	195.15	0	610.99	0	0	0	182.55	0	19.4	672.07	43,273.42
Texas	23.19	0	0	0	0	0	0	0	0	0	0	0	23.19
Washington	0	0	0	0	0	0	0	0	0	0	0	25.1	25.1
West Virginia	38,114.11	340.08	0.07	67.1	0	0	0	0	0	0	0	18.9	38,540.26
Wisconsin	0	0	1.9	0	0	0	0	0	0	0	0	0	1.9
Miscellaneous	179.61	0	0	0	0	0	0	0	0	0	0	14,159.59	14,339.20
Total for Other States	5,709,441.47	842,526.84	97,271.26	1,402.40	7,696.99	191,707.95	1,305.37	65,636.97	4,615.96	150.28	68,581.51	39,606.11	7,029,943.11
Total for Virginia	11,207,608.44	2,895,505.94	852,328.58	365,747.35	567,808.16	685,539.61	6,565.68	170,962.04	54,023.03	46,779.37	183,198.48	426,175.49	17,462,242.17
Total for all States	16,917,049.91	3,738,032.78	949,599.84	367,149.75	575,505.15	877,247.56	7,871.05	236,599.01	58,638.99	46,929.65	251,779.99	465,781.60	24,492,185.28

Table 3 – Summary of Available Capacity in Permitted Disposal Facilities – 2005  
(in Tons)

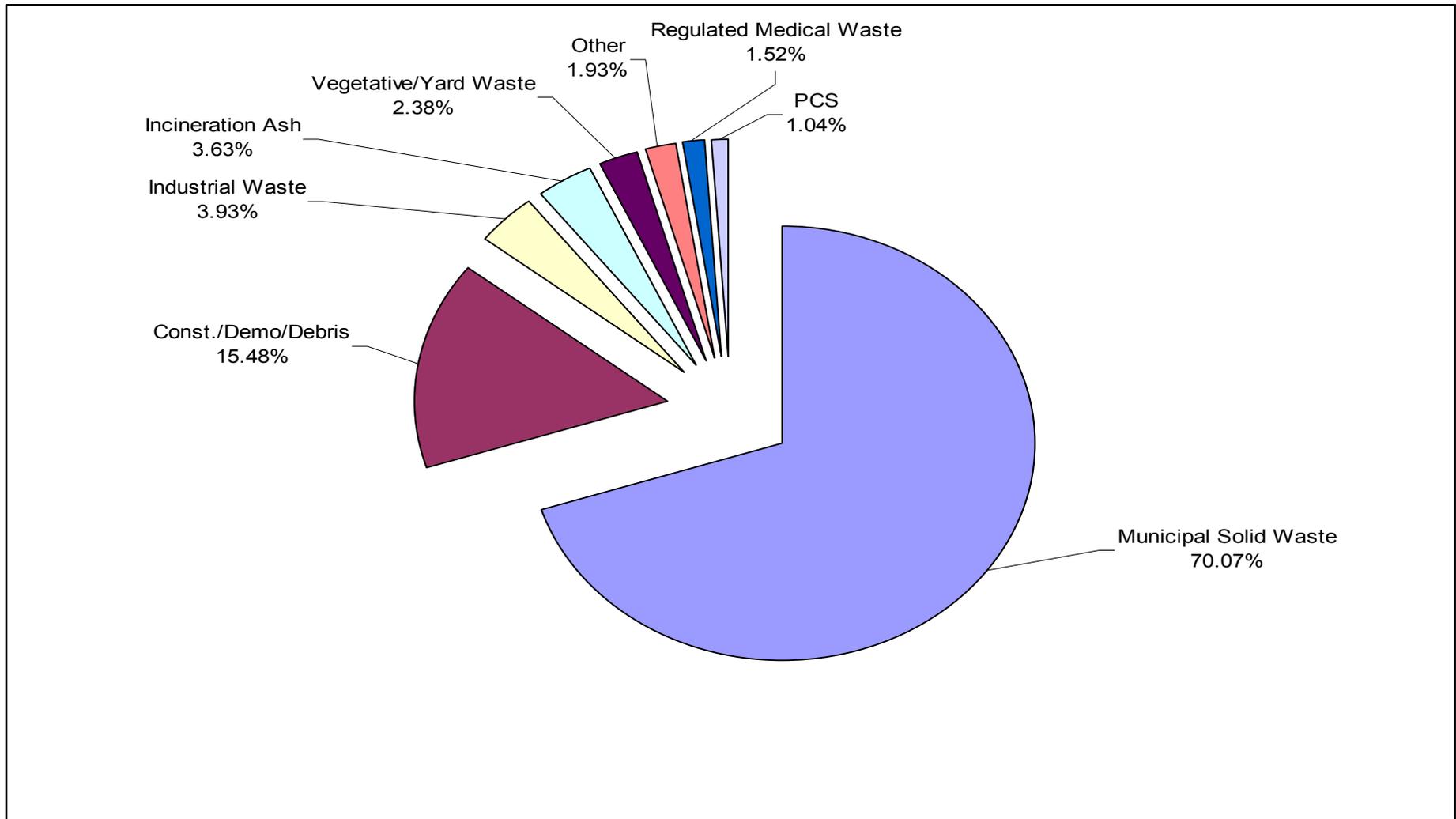
Facility Type	Reported Available Capacity on 12/31/05	Reported Annual Disposal Rate 2005	Remaining Permitted Capacity (Years)
MSW (Sanitary) Landfills	257,040,161.18	14,304,786.14	18.0
CDD Landfills	20,847,085.80	1,693,302.70	12.3
Non-Captive Industrial Landfills	13,875,893.05	343,019.57	40.5
Totals:	291,763,140.03	16,341,108.41	17.9

Figure 1 – Methods of Solid Waste Management – 2005 (in Tons)



The basis for determining these percentages is the sum for all methods of waste management (recycled, composted, landfilled, etc.) in Table 1, with the exception of: (1) waste stored on-site at the beginning or the year (which is similar to waste received); and (2) waste that was sent off-site for treatment, storage or disposal (i.e., waste that was simply transferred to another facility for ultimate management). Accounting for those two exceptions, the basis for these percentages is 20,464,808 tons. Most recycling occurs at facilities other than permitted waste management facilities. As a result, more accurate recycling information is reported by localities. Based on the local government recycling reports, the statewide average recycling rate for calendar year 2004 was 29.8%. See <http://www.deq.virginia.gov/recycle/documents/AnnualReportRRR2004FINAL.pdf>. A report on the statewide recycling rate for calendar year 2005 will be issued later this year.

Figure 2 – Composition of the Solid Waste Stream – 2005 (in Tons)



Note: This figure does not include waste streams comprising less than 1% of the total waste stream. This includes Friable Asbestos (0.03%), Tires (0.24%), White Goods (0.19%), and Sludge (0.97%).

Figure 3 – Waste Received from Out-of-State Jurisdictions – 2005 (in Tons)

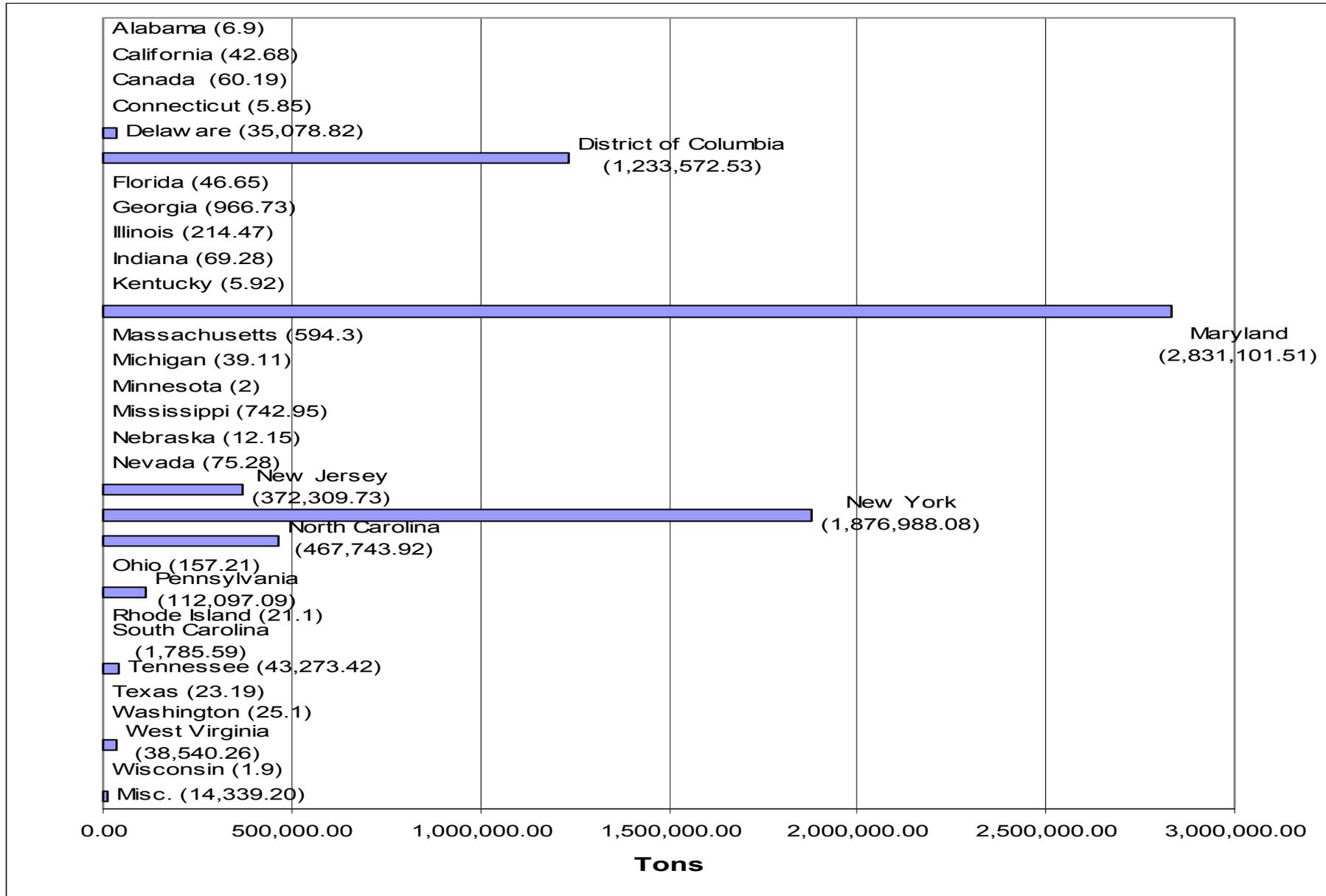


Figure 4 – Solid Waste Received from Virginia and Other Jurisdictions – 2005 (in Tons)

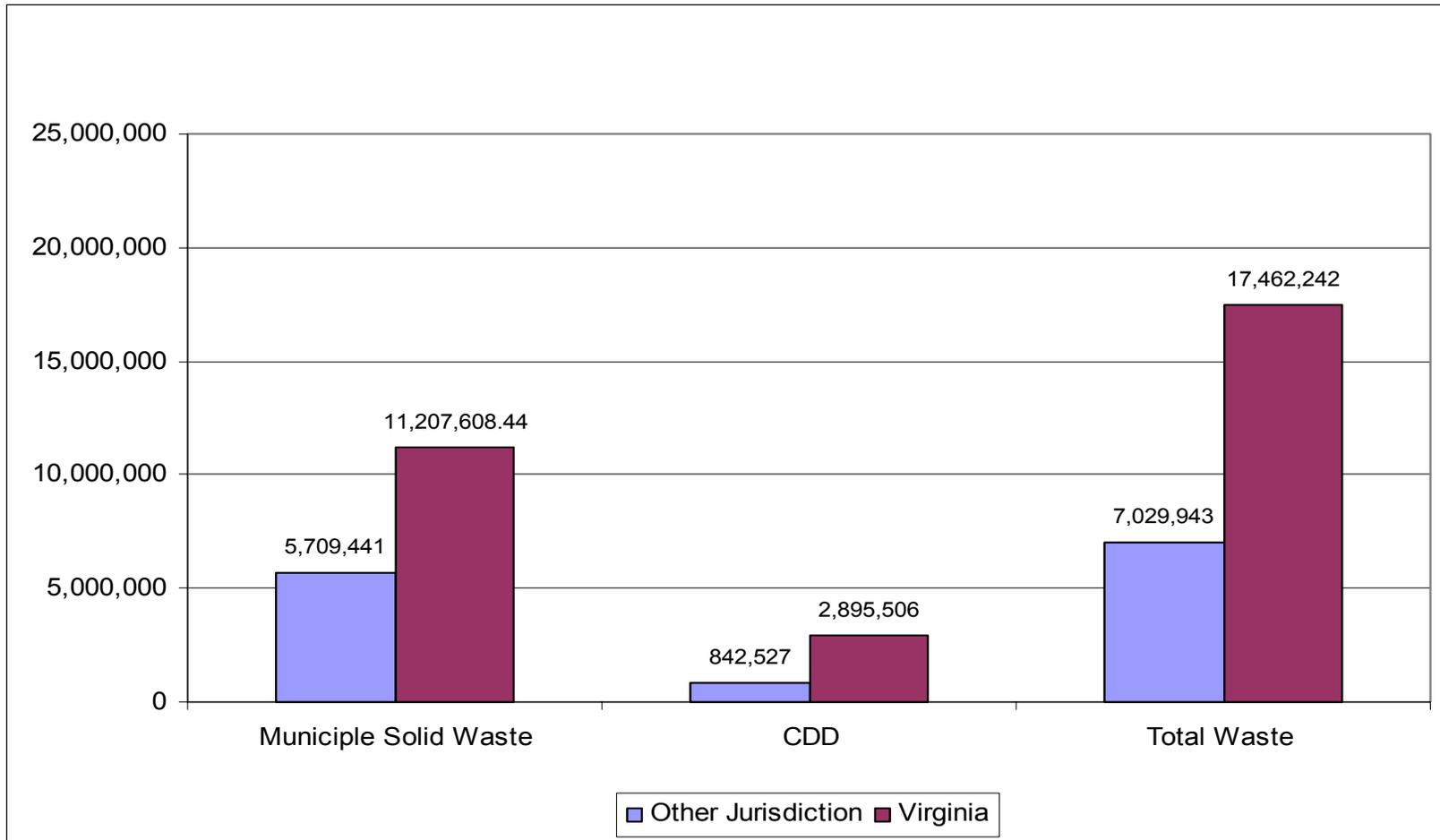


Figure 5 – Total Solid Waste Received from 1998 through 2005

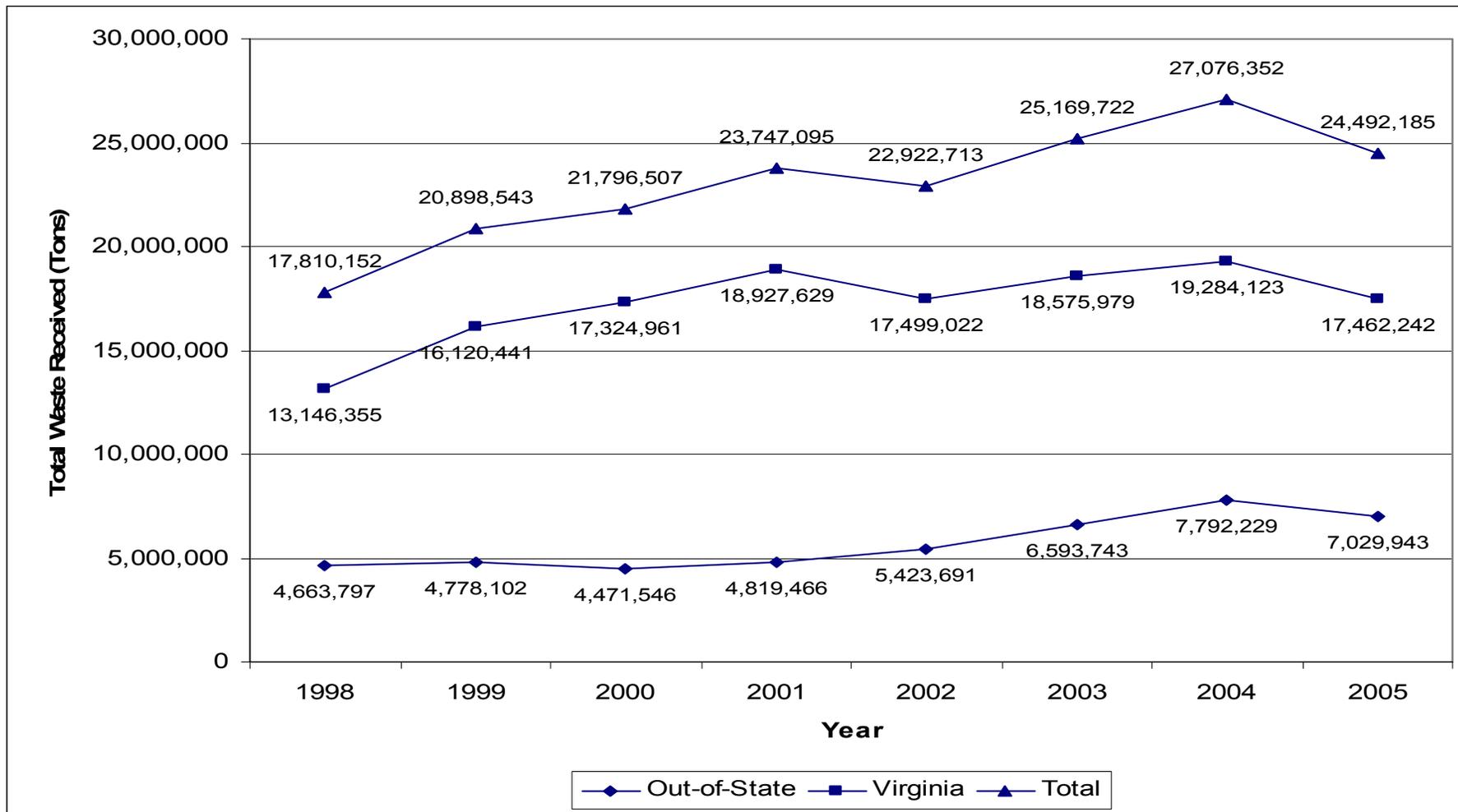
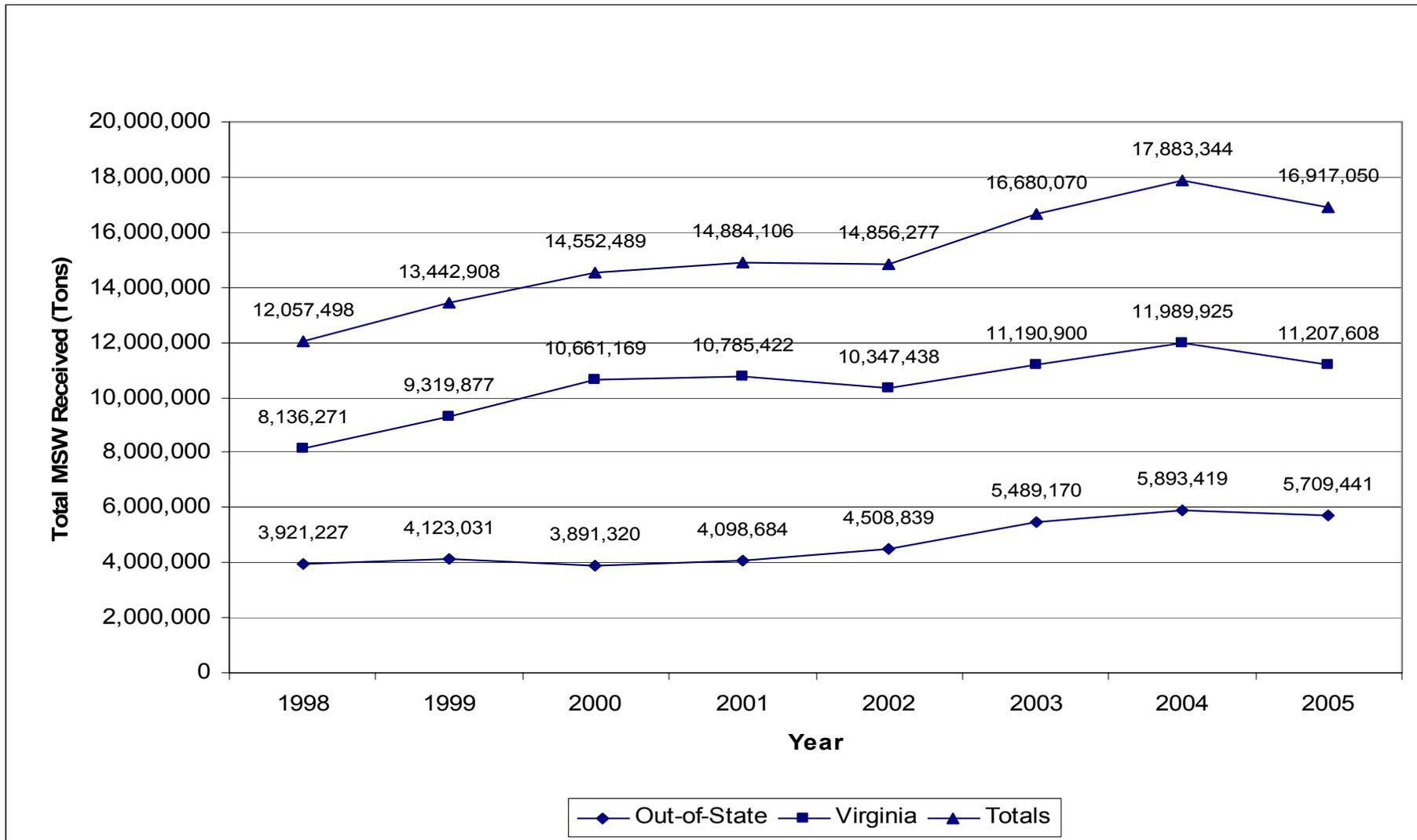


Figure 6 – Municipal Solid Waste Received from 1998 through 2005



## Attachment 1 - Virginia Code § 10.1-1413.1 - Waste information and assessment program

A. The Department shall report by June 30 of each year the amount of solid waste, by weight or volume, disposed of in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) incinerator ash; (iv) sludge other than sludge that is land applied in accordance with § 32.1-164.5; and (v) tires. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated, if known. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; and (iv) incineration.

B. All permitted facilities that treat, store or dispose of solid waste shall provide the Department not more than annually, upon request, with such information in their possession as is reasonably necessary to prepare the report required by this section. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1-336.

C. This section shall not apply to captive waste management facilities.

## Attachment 2 - 9 Virginia Administrative Code 20-80-115 - Solid waste information and assessment program

A. The owners or operators of all permitted solid waste management facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed by the facility during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § 32.1-164.5 of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the state or local jurisdictions where such waste originated. The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (a) recycling; (b) composting; (c) landfilling; (d) incineration (e) sending off-site for further management; and (f) stored on site on December 31 of the reporting year.

Information on the available capacity and expected life of the facilities, at the disposal rates submitted in this subsection, shall be included in the annual report required by this section.

B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.

C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in § 59.1- 336 of the Code of Virginia.

D. The reporting form to be used to fulfill the reporting requirement of this part is Form DEQ 50-25 (Solid Waste Information and Assessment Program - Reporting Table), which is also available in the Regulations for the Development of Solid Waste Management Plans (9 VAC 20-130).

E. This section shall not apply to captive waste management facilities including captive industrial landfills.

## Attachment 3 - 9 Virginia Administrative Code 20-130-165 - Waste information and assessment program

A. The owners or operators of all permitted facilities that treat, store, or dispose of solid waste shall report by March 31 of each year the amount of solid waste, by weight or volume, received and managed in the Commonwealth during the preceding calendar year. The report shall identify solid waste by the following categories: (i) municipal solid waste; (ii) construction and demolition debris; (iii) industrial waste; (iv) regulated medical waste; (v) vegetative and yard waste; (vi) incinerator ash; (vii) sludge other than sludge that is land applied in accordance with § [32.1-164.5](#) of the Code of Virginia; (viii) tires; (ix) white goods; (x) friable asbestos; (xi) petroleum contaminated soil; and (xii) other special waste. For each such category the report shall include an estimate of the amount that was generated outside of the Commonwealth and the jurisdictions where such waste originated.

The report shall also estimate the amount of solid waste managed or disposed of by each of the following methods: (i) recycling; (ii) composting; (iii) landfilling; (iv) incineration (v) sending off site for further management; and (vi) stored on site on December 31 of the reporting year. This section shall not apply to captive waste management facilities. The report is to be sent to the department regional office for the facility's location.

Information on the available capacity and expected life of the facilities at the disposal rates submitted in this subsection shall be included in the annual report required by this section.

B. At the option of the facility owner, the data collected may include an accounting of the facility's economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.

C. No facility shall be required pursuant to this section to provide information that is a trade secret as defined in §59.1-336 of the Code of Virginia.

D. Every city, county and town in the Commonwealth, or solid waste management planning region approved pursuant to 9 VAC 20-130-180, shall submit to the department by April 30 of each year, the data and calculations required in 9 VAC 20-130-120 B and C

# Attachment 4 - Reporting Table - Form DEQ 50-25

1	Facility Name								
2	Permit Number		3	Date Submitted to DEQ		4	Annual Reporting Period		
5	Preparer's Name					6	Preparer's Telephone Number		
7	Preparer's e-mail Address					An e-mail address will only be used to contact you in case of questions about this form submission			
8	Has there been a change to the Annual Fee Billing Contact, Address or Telephone Number? <input type="checkbox"/> Y <input type="checkbox"/> N If so, please notify the DEQ Regional Office								
9	Remaining Permitted Capacity				cubic yards	If a facility's permitted capacity is reported in tons, please note this on the form. DEQ will apply conversion factors based on the type of waste in order to calculate the volume and the number of years of permitted capacity available in the state.			
10	Expected Remaining Permitted Life				years				

11	Originating Jurisdiction (NOTE: Report each jurisdiction on a separate page)	11 a (Optional) - Statement of Economic Benefits Submitted? <input type="checkbox"/>
----	------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Waste Type	Units (check one)		Waste Management – Report Amount by Weight or Volume (Reporting units must be consistent for all fields of a particular waste type.)											
	Tons	Cu Yds	Total Amount of Waste Received (a)	Recycled On-Site (b)	Composted On-Site (c)	Landfilled On-Site (d)	Incinerated On-Site (e)	Sent Off-Site to be: (f)		Stored On-Site: (g)		Other (h)		
								Recycled	Treated, Stored, Disposed	Beginning of Reporting Period	End of Reporting Period	Mulched	Other Than Mulched	
12	Municipal Solid Waste													
13	Construction/ Demolition/Debris													
14	Industrial Waste													
15	Regulated Medical Waste													
16	Vegetative/Yard Waste													
17	Incineration Ash													
18	Sludge													
19	Tires													
20	White Goods													
21	Friable Asbestos													
22	Petroleum Contaminated Soil													
23	Other Wastes (specify)													
24	Total													

See the Instructions for Completing Form DEQ 50-25 for definition of each of the above terms.

Note: A separate form is provided for the optional Statement of Economic Benefits of the facility..

# Attachment 5 - Instructions for Completing Form DEQ 50-25 Solid Waste Information and Assessment Program Reporting Form

## **Solid Waste Information and Assessment (SWIA) Program Reporting Form**

These instructions are designed to assist facilities with completing the required reporting form DEQ Form 50-25. A copy of each form submitted should be maintained in your facility files. The items are numbered to correspond to the numbered fields on Form DEQ 50-25.

### **1. Facility Name**

Enter the name of the facility as it appears on the permit issued by the department.

### **2. Permit Number**

- Enter the permit number assigned to the facility by DEQ.
- Use a separate form(s) for each permit. For multiple permitted facilities, individual forms must be completed for each permitted facility.
- If a facility is being operated under permit-by-rule status, the letters PBR must precede the numbers (Example: PBR999).
- For other solid waste permits, the letters SWP (Example: SWP999) or for emergency permits, the letters EMG (Example: EMG999) should precede the numbers.

### **3. Date submitted to DEQ**

- Enter the date the facility sent the reporting form(s) to DEQ or submitted the on-line SWIA data entry form.
- All forms must be completed and sent by March 31 of each year for the waste managed during the preceding calendar year. This is referred to as the “reporting period”.

### **4. Annual Reporting Period**

Enter the calendar year (reporting period) for which the data is being submitted (Example: 01/01/2005 through 12/31/2005).

### **5. through 7. Preparer’s Name, Telephone Number and E-Mail Address**

This is the name, telephone number, and e-mail of the person responsible for preparing the DEQ Form 50-25. Your e-mail address will only be used if questions arise regarding the information provided on the form.

### **8. Billing Information Change**

If there has been any change to the Annual Fee Billing Contact, Address, or Telephone Number that appeared on the fee bill received from the department the previous year, check the box and inform the Regional Office of the change. Forms will be developed to update billing contact information.

### **9. Remaining Permitted Capacity**

- Only required for landfills, all other facilities enter “N/A”.
- Remaining Permitted Capacity means the space remaining in the landfill that is available for disposal as of December 31 of the reporting period.
- Remaining Permitted Capacity Calculation:

Remaining Permitted Capacity = [Volume specified in Part B Permit] – [Landfill volume already used]

- Report the capacity in cubic yards. If this information is reported in tons, DEQ will use simple conversion factors to obtain the capacity in cubic yards.
- Future proposed expansions not included in the approved Part B permit area may not be included in the capacity calculation. This information can also be obtained from the calculations performed to comply with air requirements found in 40 CFR Subpart WWW (40 CFR 60.750-60.759).

## 10. Expected Remaining Permitted Life

Only required for landfills, all other facilities enter "N/A". Report the number of years of disposal capacity that is available based on the facility's site specific operating criteria.

**Waste Information** - This section reports the origin, types, and amounts of waste managed. Information must be provided concerning the originating jurisdiction of waste received. Amounts of waste can be entered in either tons or cubic yards as determined by the facility. For amounts reported in cubic yards, DEQ will use simple conversion factors to obtain estimated weights.

## 11. Originating Jurisdiction (i.e. state, territory or country)

- Enter the jurisdiction from which the waste originated.
- For waste received from within Virginia, only one form must be completed. Waste from other jurisdictions that passes through a Virginia transfer station and goes to a Virginia landfill for disposal is reported by jurisdiction on the DEQ for 50-25 for the transfer stations and is reported as having originated in Virginia at the final disposal site.
- For waste received from outside Virginia, a separate form must be completed for each jurisdiction from which waste was received. A jurisdiction is either a state, territory, or country. (Example: If you receive waste from the state of New York, and/or New York City, the jurisdiction is "New York." Wastes received from Washington, D.C. and Puerto Rico, are all individual jurisdictions.)
- Stating that the waste originated in the United States does not meet the reporting requirements.

**\*\*Waste Types-** Definitions found below are provided to assist facilities with completing Form DEQ 50- 25. Specific definitions can be found in the Virginia Solid Waste Management Regulations (9 VAC 20-80-10, *et seq.*) and the Regulated Medical Waste Regulations (9 VAC 20-120-10 *et seq.*). Waste types are identified on separate rows of Form DEQ 50-25.

Tire chips, mulch and other items that are used as alternate daily cover are will not be reported on this form. Daily cover will not be considered a waste for the purpose of solid waste information assessment.

**11A. Statement of Economic Benefits** - At the option of the facility owner, §10.1-1413.1 of the Code of Virginia allows the submission of data regarding the economic benefits to the locality where the facility is located. A separate form is provided for this information. Check the box if the facility is submitting this optional information for the preceding calendar year.

**12. Municipal Solid Waste** means that waste which is normally composed of residential, commercial, and institutional solid waste and residues/ash derived from combustion/incineration of these wastes. *NOTE:* Paper and cardboard should be recorded in the row labeled "Municipal Solid Waste". Incinerated MSW must be reported as incinerator ash.

**13. Construction/Demolition/Debris** means construction waste, demolition waste, and debris waste. These wastes must be recorded cumulatively in this row.

- **Construction waste** means solid waste which is produced or generated during construction, remodeling, or repair of pavements, houses, commercial buildings, and other structures. Construction wastes include, but are not limited to lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metal and plastics if the metal or plastics are a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid compressed gases or semi-liquids and garbage are not construction wastes.
- **Demolition waste** means that solid waste which is produced by the destruction of structures and their foundations and includes the same materials as construction wastes.
- **Debris waste** means wastes resulting from land clearing operations. Debris wastes include, but are not limited to stumps, wood, brush, leaves, soil, and road spoils. *NOTE:* Concrete and asphalt should be recorded in the row labeled "Construction/Demolition/Debris".

**14. Industrial Waste** means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas wastes.

**15. Regulated Medical Waste (RMW)** means solid wastes so defined by the Regulated Medical Waste Management Regulations (9 VAC 20-120-10 et seq.) as promulgated by the Virginia Waste Management Board. RMW that is sent off-site for treatment is reported in column (f) Sent off site to be treated, stored, disposed. RMW that is treated on-site is reported in column (h) Other than mulched. RMW medical waste that has been treated is municipal solid waste and should be reported on line 12 under column (f) Sent off site to be treated, stored or disposed. Captive RMW facilities (facilities that do not treat wastes from other businesses) are not required to report their waste management activities. Note: Regulated medical waste may not be disposed in a landfill.

**16. Vegetative/Yard Waste** means vegetative waste and yard waste. These wastes must be recorded cumulatively in this row.

- **Vegetative waste** means decomposable materials generated by yard and lawn care or land clearing activities and includes, but is not limited to, leaves, grass trimmings, woody wastes such as shrub and tree prunings, bark, limbs, roots, and stumps. For more detail see 9 VAC 20-101-10, et seq.
- **Yard waste** means that fraction of municipal solid waste that consists of grass clippings, leaves, brush, and tree prunings arising from general landscape maintenance.
- Vegetative waste/yard waste that has been mulched is reported in column (h) mulched.
- Vegetative waste/yard waste that has been burned is reported in column (h) other than mulched. Do not report this amount in column (e) incinerated on-site.
- Vegetative waste/yard waste that has been composted is reported in column (c).
- Any vegetative waste or yard waste remaining on-site at the end of the reporting year that has not been mulched, composted, or burned is reported in column (g) stored on-site end of reporting period.  
*NOTE:* Brush should be recorded in the row labeled Vegetative/Yard Waste category.

**17. Incineration Ash** means fly ash or bottom ash residual waste material produced from incineration or burning of solid waste. Coal ash is not reported on this row of the reporting table. Coal ash is reported as industrial waste, on line 14. For Incineration ash that is generated at a Virginia-the permitted facility, so the originating jurisdiction for this waste will always be Virginia.

**18. Sludge** means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of treated effluent from a wastewater treatment plant. For the purposes of this form, the waste type "Sludge" excludes sludge land applied in accordance with Va. Code §32.1-164.

**19. Tires** means whole tires that have been discarded because they are no longer suitable for their original intended purpose because of wear, damage, or defect. (See 9 VAC 20-150- et seq. for other definitions dealing with the waste tire program.) Whole tires that have been ground into chips or shred should be reported as other than mulched in column (h). Any allowable use of the tire chips either off site, or as daily cover on-site should not be reported. If tire chips or shred are brought on-site as an alternative daily cover, they will not be reported on this form.

**20. White Goods** means any stoves, washers, hot water heaters, and other large appliances.

**21 Friable Asbestos** means any waste material containing more than 1% asbestos as determined using the polarized light microscopy methods specified in 40 CFR Part 763, Subpart F, Appendix A, Section 1, that, when dry, is capable of being crumbled, pulverized or reduced to powder by hand pressure.

**22. Petroleum Contaminated Soil** means a soil that, as a result of a release or human usage, has absorbed or adsorbed only petroleum or petroleum by-products at concentrations above those consistent with nearby undisturbed soil or natural earth materials. Petroleum and petroleum by-products include, but are limited to diesel fuels, kerosene, gasoline, hydraulic fluids, jet engine fuel, and motor oil.

**23. Other Waste (specify)** means any wastes that do not meet the previously defined waste types. A brief description of the waste must be provided in the field "Other Waste (specify)". Examples: Dirt and Soil, Inert waste, Rubber, Wood chips, Supplemental waste, etc. The on-line form allows for the entry of multiple "other wastes". For the purpose of the standard form, please total all other wastes and provide that number on this line of the form.

**24. Total** means the total of the waste reported in that column of the table (Example: the total waste received, landfilled, incinerated etc.).

**\*\*Waste Management-** Different types of facilities manage waste in different ways. The reporting table contains rows to identify the types of wastes managed (see above). Columns are used to identify how the waste types were managed. In most cases, the amount of waste received should equal the sum of the amounts managed by the listed methods (recycled, composted, landfilled, incinerated, sent off-site, etc.), except for waste stored on-site at the beginning of the reporting period. The following identifies the proper way to report how wastes were managed at your facility.

In general, the total waste received listed in column (a) plus the waste stored on-site at the beginning of the reporting period (g), should equal the total waste managed under each of the methods (b), (c), (d), (e), (f), (g) (end of reporting period) and (h).

$$a + g \text{ (beginning of reporting period)} = b + c + d + e + f + g \text{ (end of reporting period)} + h$$

An exception to this is if waste is generated at the facility. For example an incinerator generates ash since the ash weighs less than the original waste that was brought to the site the equation above will not balance for an incinerator or some RMW treatment activities.

#### **a) Total Amount of Waste Received**

All waste that was received by the facility during the Annual Reporting Period must be reported in this column.

#### **b) Recycled On-Site**

Waste material that was removed from the incoming waste stream and processed into a raw material for a product must be reported on this column. Only consider items that are truly recycled, not reused. Recycled means "the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling shall not include processes that only involve size reduction." NOTE: Only report material that was both separated *AND* processed into a raw material at the facility. If the waste material was not separated *AND* processed, it may not be recorded as "recycled". (Example: Newspaper segregated from the waste stream and sent off-site to a processing facility for recycling should not be counted as recycled, by the reporting facility.) Other amounts may have been sent off-site for recycling or mulched, which are reported in different columns.

#### **c) Composted On-Site**

Waste that was stabilized on-site through a controlled aerobic decomposition process must be reported in this column. Not all waste types can be composted. Regulated medical waste, incineration ash, tires, white goods, asbestos, and petroleum-contaminated soil cannot be managed through composting. For compost facilities, only the volume that could not be composted and was sent off-site for disposal should be recorded as "sent off-site". Composted material is considered a product, not a waste, and does not have to be reported on this form.

#### **d) Landfilled On-Site**

Waste that was landfilled on-site must be reported in this column. Waste received at a facility that was later sent off-site for management through landfilling must not be reported in this column. Instead it must be reported in the "sent off-site to be: treated/stored/disposed" column. Example: Waste received at a transfer station that was later sent off-site to a landfill must be reported as "sent off-site to be: treated/stored/disposed". Regulated medical waste cannot be landfilled.

**e) Incinerated On-Site**

Waste that was incinerated on-site must be reported in this column. Waste received at the facility that was later sent off-site for incineration may not be reported in this column. Instead it must be reported in the “sent off-site to be: treated/stored/disposed” column. Example: Waste received at a transfer station that was sent off-site to an incinerator must be reported as “sent off-site to be: treated, stored, or disposed”, not incinerated. NOTE: “Open Burning” is not the same as “Incineration”. Waste that is open burned would be included in the “Other (other than mulched)” column.

**f) Sent Off-Site to be:**

Waste that was not treated, stored, or disposed of at the receiving facility but was instead sent off-site to another facility for management must be reported in this column. Example: Ash generated from an incinerator process sent off-site to be disposed must be listed in this column. The “sent off-site to be” column is divided into two sub-columns, “recycled” and “treated/stored/disposed”. If waste is sent off-site for recycling (i.e., metals to be reclaimed or tires for shredding and use as fill), it would be reported in the “recycled” sub-column. If waste is sent off-site to be treated/stored/disposed it would be reported in the “treated/stored/disposed” sub-column. If waste is sent off-site for other than recycling, or treatment/storage/disposal, then the “other” sub-column would be used.

**g) Stored On-Site**

This column is also divided into two sub-columns: “beginning of reporting period” and “end of reporting period”. Waste that was stored on-site as of January 1<sup>st</sup> of the reporting period is reported in the first sub-column. If no information is available please refer to the last year’s Solid Waste Information Assessment form for this information. Waste that was remaining on-site at the end of the reporting period must be recorded in the second sub-column. This does not include wastes that will remain on-site permanently, but includes wastes that are stored temporarily at the facility (i.e., white goods awaiting pickup by off-site metal recycler; regulated medical waste in storage awaiting treatment). The total amount of waste landfilled at a facility must not be listed in this column; instead it must be listed in the “landfilled” column.

**h) Other Management**

Wastes managed by methods other than those specified in the previous columns must be recorded in this column. A separate sub-column has been added for woody waste that has been mulched. Otherwise, this column must include a description of how the waste type was managed along with the amount of waste managed.

**Note:** At the option of the facility owner, the Code of Virginia allows for the submission of an accounting of the facility’s economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided at no cost or reduced cost, direct employment associated with the facility, and other economic benefits from the facility during the reporting period.

## Attachment 6 - List of Facilities Reporting – 2005

Facility Name	Permit Number	Regional Office *
623 Landfill	PBR009	PRO
623 Landfill	SWP506	PRO
Accomack County - Bobtown Southern Landfill	PBR090	TRO
Accomack County - Bobtown Southern Landfill	SWP091	TRO
Accomack County - Northern Landfill #2	PBR112	TRO
Accomack County - Northern Landfill #2	SWP461	TRO
Advanced Technologies Incorporated	PBR523	PRO
AERC com Incorporated	PBR177	PRO
Alleghany County - Transfer Station	PBR103	WCRO
American Waste Industries Incorporated	PBR114	TRO
American Waste Industries Incorporated	SWP871	TRO
Amherst County Landfill Permit Number 563	SWP563	SCRO
Appomattox County Landfill 86	PBR163	SCRO
Appomattox County Landfill 86	SWP086	SCRO
Aqua Clean Environmental of Virginia	PBR052	PRO
Arlington County - Department of Human Services	PBR206	NVRO
Ashcake Construction Demolition Debris Landfill	SWP574	PRO
Atlantic Waste Disposal Inc - Sussex County Land	SWP562	PRO
Augusta Regional Landfill	SWP585	VRO
Bath County of - Transfer Station	PBR045	VRO
Battle Creek Landfill	SWP579	VRO
Bay Disposal Incorporated MRF	PBR504	TRO
Bedford City - Hylton Site	SWP569	WCRO
Bedford County - Sanitary Landfill	SWP560	WCRO
Bedford County - Transfer Station	PBR031	WCRO
BFI Fredericksburg Recyclery	PBR107	NVRO
BFI King and Queen Landfill	SWP554	PRO
BFI Old Dominion Landfill	SWP553	PRO
BFI Transfer - Fluvanna Transcyclery	PBR099	VRO
BFI Waste Systems LLC - Roanoke	PBR105	WCRO
Blue Ridge Disposal Incorporated	PBR104	WCRO
Boissevain Transfer Station	PBR004	SWRO
Botetourt County Landfill	SWP582	WCRO
Bristol Solid Waste Management Facility	PBR074	SWRO
Bristol Solid Waste Management Facility	PBR116	SWRO
Bristol Solid Waste Management Facility	PBR121	SWRO
Bristol Solid Waste Management Facility	PBR156	SWRO
Bristol Solid Waste Management Facility	SWP498	SWRO
Bristol Solid Waste Management Facility	SWP588	SWRO
Brunswick Waste Management Facility LLC	SWP583	PRO
Buchanan County - Transfer Station	PBR106	SWRO
Bull Hill Transfer Station	PBR029	SWRO
Campbell County Landfill	SWP285	SCRO
Carroll Grayson Galax Regional Landfill	SWP508	SWRO
Cedar Bluff Transfer Station	PBR002	SWRO
Con Serv Industries	PBR102	NVRO
Country South LLC	SWP581	WCRO
Covanta Alexandria Arlington Incorporated	SWP435	NVRO
Covanta Fairfax Incorporated	SWP510	NVRO

<b>Facility Name</b>	<b>Permit Number</b>	<b>Regional Office *</b>
Danville City of - Transfer Station	PBR015	SCRO
Danville City of - Yard Waste Composting Facility	PBR010	SCRO
Darbytown Road Landfill	SWP525	PRO
Department of Defense - Camp Peary	PBR097	TRO
Dickenson County of - Waste Transfer Station	PBR049	SWRO
Dinwiddie County Transfer Station	PBR137	PRO
DOC Powhatan Correctional Center	PBR175	PRO
Environmental Options Inc	PBR153	WCRO
Fairfax County - Health Department	PBR246	NVRO
Fauquier County Solid Waste Management Facility	SWP149	NVRO
Fauquier County Solid Waste Management Facility	SWP575	NVRO
First Piedmont Corp	PBR196	SCRO
First Piedmont Corp	SWP065	SCRO
First Piedmont Corp - Martinsville TS	PBR520	WCRO
Floyd County - Transfer Station	PBR050	WCRO
Fluvanna County of - Sanitary Landfill	SWP429	VRO
Franklin County - Sanitary Landfill	SWP072	WCRO
Frederick County Landfill	SWP529	VRO
Frederick County Landfill	SWP591	VRO
Garner Tire Company Material Recovery Facility	PBR127	WCRO
Greene County Materials Recovery Facility	SWP568	VRO
Greensville County Landfill	SWP405	PRO
Hampton City - NASA Steam Plant	SWP297	TRO
Hanover County - 301 Solid Waste Facility	PBR189	PRO
Hanover County - 301 Solid Waste Facility	PBR512	PRO
Harold Beasley Inc	PBR198	SCRO
Harrisonburg City of - Sanitary Landfill	SWP059	VRO
Henrico County DPU Springfield Rd Waste Management	SWP545	PRO
Higgerson Buchanan Incorporated	SWP493	TRO
Hilltop Sand and Gravel Company Incorporated	SWP326	NVRO
Industrial Resource Technologies	PBR115	PRO
Interstate 66 - Solid Waste Management Facility	SWP387	NVRO
Interstate 95 Landfill	SWP103	NVRO
Ivy Landfill	PBR132	VRO
Ivy Landfill	SWP125	VRO
John C Holland Enterprises Landfill	SWP280	TRO
King George Landfill Incorporated	SWP586	NVRO
Laurel Valley Center- Culpeper County	PBR140	NVRO
LCM Corp - Transfer Station	PBR136	WCRO
Lee County of - Solid Waste Transfer Station	PBR070	SWRO
Lorton CDD Landfill	SWP331	NVRO
Loudoun Composting	PBR141	NVRO
Loudoun County Sanitary Landfill	SWP001	NVRO
Louisa County Sanitary Landfill	SWP194	NVRO
Lunenburg County of - Sanitary Landfill	SWP544	SCRO
Lynchburg City Sanitary Landfill	SWP558	SCRO
Madison County Landfill and Transfer Station	PBR154	NVRO
Maplewood Recycling and Waste Disposal	SWP540	PRO
Martinsville City - Landfill	SWP049	WCRO
Maryview Hospital	PBR172	TRO
Mecklenburg County Landfill	SWP014	SCRO
Metalpro Incorporated	PBR152	NVRO
Microbiotest Inc.	SWP505	PRO

<b>Facility Name</b>	<b>Permit Number</b>	<b>Regional Office *</b>
Middle Peninsula Landfill	SWP572	PRO
Montgomery Regional Solid Waste Authority	PBR149	WCRO
Montgomery Regional Solid Waste Authority	PBR169	WCRO
MXI Environmental Services LLC	PBR180	SWRO
Nelson County Landfill	PBR051	VRO
New River Resource Authority Solid Waste Facility	SWP548	WCRO
Newport News City - YWCF - Warwick Blvd	PBR096	TRO
Northampton County of - Landfill	SWP507	TRO
Nottoway County of-Sanitary Landfill-Blackstone	SWP304	SCRO
Orange County Sanitary Landfill	SWP090	NVRO
Patrick Co - Solid Waste Transfer Station	PBR032	WCRO
Peters Mountain Landfill	SWP594	WCRO
Petersburg City Landfill	SWP228	PRO
Pittsylvania Co - Sanitary Landfill	SWP571	SCRO
Portsmouth City - Craney Island Landfill	SWP041	TRO
Potomac CDD Landfill	SWP441	NVRO
Potomac Landfill Incorporated CDD MRF	PBR101	NVRO
Prince Edward County Sanitary Landfill	SWP584	SCRO
Prince William County - Balls Ford Yard Waste	PBR030	NVRO
Prince William County Sanitary Landfill	SWP029	NVRO
Purgo Incorporated	PBR046	PRO
Rainwater Landfill	SWP327	NVRO
Rappahannock County Landfill	SWP520	NVRO
Rappahannock Regional Solid Waste Management Board	SWP589	NVRO
Reclamation Incorporated	PBR062	TRO
Richmond City of Hopkins Road Transfer Station	PBR160	PRO
Riverside Regional Medical Center	PBR165	TRO
Roanoke Valley Resource Authority Transfer Station	SWP546	WCRO
Rockbridge County Landfill	PBR071	VRO
Rockbridge County Landfill	SWP075	VRO
Rockingham County of - Sanitary Landfill	SWP062	VRO
Russell County of - Solid Waste Transfer Station	PBR001	SWRO
Salem City - Transfer Station	PBR028	WCRO
Scott County Sanitary Landfill	SWP023	SWRO
Shenandoah County Landfill - Edinburg	SWP469	VRO
Shoosmith Sanitary Landfill	SWP587	PRO
Simons Hauling Company Incorporated	SWP524	PRO
Smith Gap Regional Landfill	SWP555	WCRO
Smyth County of - Transfer Station	PBR041	SWRO
Soilex Corporation - Chesapeake	PBR510	TRO
Soilex Corporation - Suffolk	PBR155	TRO
South Boston Town of - Sanitary Landfill	SWP031	SCRO
Spotsylvania County Livingston Sanitary Landfill	SWP547	NVRO
SPSA - Boykins Transfer	SWP484	TRO
SPSA - Chesapeake Transfer	PBR194	TRO
SPSA - Franklin Transfer Station	PBR192	TRO
SPSA - Incinerator	PBR500	TRO
SPSA - Isle Of Wight Transfer Station	PBR193	TRO
SPSA - Ivor Transfer Station	SWP539	TRO
SPSA - Landstown Transfer	PBR191	TRO
SPSA - Norfolk Transfer Station	PBR195	TRO
SPSA - Oceana Transfer Station	PBR190	TRO
SPSA - Regional Landfill	PBR072	TRO

<b>Facility Name</b>	<b>Permit Number</b>	<b>Regional Office *</b>
SPSA - Regional Landfill	PBR518	TRO
SPSA - Regional Landfill	SWP417	TRO
SPSA - Virginia Beach YWCF	PBR024	TRO
Stericycle Chesterfield RMW Transfer Station	PBR517	PRO
Superior Disposal Inc Materials Recovery Facility	PBR516	PRO
Taylor Road Landfill	SWP270	PRO
Tazewell County Landfill	SWP564	SWRO
Thomas Bros Debris Landfill	SWP445	WCRO
United Disposal Incorporated	PBR522	TRO
US Army - Fort Belvoir	PBR164	NVRO
US Central Intelligence Agency - George Bush Cntr	PBR173	NVRO
US Navy - Little Creek Amphibious Base	PBR199	TRO
US Navy - Norfolk Naval Shipyard	PBR135	TRO
USA Waste of Virginia Landfills - Bethel Landfill	SWP580	TRO
Virginia Beach City - Mt.Trashmore Landfill II	SWP398	TRO
Virginia Health Care Waste Transportation, Incorpo	PBR143	WCRO
Virginia Materials Inc - Norfolk	PBR117	TRO
Virginia Peninsula Public Services Authority - JCC	PBR021	TRO
Virginia Peninsula Public Svc Authty Essex County	PBR016	PRO
Virginia Peninsula Public Svc Authty King William	PBR017	PRO
Virginia Peninsula Public Svc Authty Mathews Co	PBR018	PRO
Virginia Peninsula Public Svc Authty Middlesex Co	PBR019	PRO
Virginia Peninsula Public Svc Authty York County	PBR022	TRO
Virginia Recycling Corporation	PBR039	PRO
VPPSA - YWCF - York County	PBR013	TRO
Waltrip Landfill	SWP322	TRO
Warren County - Transfer Station	PBR033	VRO
Washington County Virginia Solid Waste Transfer	PBR003	SWRO
Waste Industries LLC	PBR077	TRO
Waste Management Charles City Landfill	SWP531	PRO
Waste Management of Virginia - Leesburg	PBR006	NVRO
Waste Management of Virginia - Manassas	PBR091	NVRO
Waste Management of Virginia - Merrifield	PBR111	NVRO
Waste Management of Virginia - Sterling	PBR093	NVRO
Waterway Marine Terminal	PBR506	TRO
Watkins Nurseries Incorporated	PBR181	PRO
Westmoreland County of - Montross Transfer Station	PBR069	PRO
Wise County of - Landfill	SWP513	SWRO
Wolfrap Operations Incorporated - Yorktown	SWP436	TRO
Wythe/Bland Solid Waste Transfer Station	PBR044	SWRO

Total Count = 198

\*Regional Offices

NVRO - Northern Virginia	PRO - Piedmont	TRO - Tidewater
VRO - Valley	SCRO - South Central	SWRO - Southwest
WCRO - West Central		

# Attachment 7 – Capacity/Disposal Rate Detail for Virginia Landfills -2005

Facility Name	Permit Number	Landfill Type	12/05 Cap in Tons	Landfilled in 2005 (Tons)	Reported Remaining Life (yr)
<b>MSW Landfills</b>					
Accomack County - Bobtown Southern Landfill	SWP091	MSW Landfill	159,030.00	28,062.00	7.2
Accomack County - Northern Landfill #2	SWP461	MSW Landfill	254,824.50	23,589.00	16.6
Amherst County Landfill Permit Number 563	SWP563	MSW Landfill	591,665.50	22,563.33	30
Appomattox County Landfill 86	SWP086	MSW Landfill	3,873.00	4,477.00	0.87
Atlantic Waste Disposal Inc - Sussex County Land	SWP562	MSW Landfill	47,809,664.00	2,717,006.17	40.2
Augusta Regional Landfill	SWP585	MSW Landfill	277,550.00	136,594.14	2.03
Battle Creek Landfill	SWP579	MSW Landfill	1,085,000.00	6,245.82	41
Bedford City - Hylton Site	SWP569	MSW Landfill	17,500.00	7,397.00	3
Bedford County - Sanitary Landfill	SWP560	MSW Landfill	129,709.00	42,917.00	3.8
BFI King and Queen Landfill	SWP554	MSW Landfill	25,500,000.00	956,461.00	54
BFI Old Dominion Landfill	SWP553	MSW Landfill	1,078,461.00	1,048,454.00	1.9
Botetourt County Landfill	SWP582	MSW Landfill	79,617.50	26,665.00	2.9
Bristol Solid Waste Management Facility	SWP588	MSW Landfill	3,011,341.50	202,401.70	32
Brunswick Waste Management Facility LLC	SWP583	MSW Landfill	12,835,154.00	1,286,466.00	15
Campbell County Landfill	SWP285	MSW Landfill	1,488,012.00	50,376.00	25
Carroll Grayson Galax Regional Landfill	SWP508	MSW Landfill	169,988.50	47,773.50	3.5
Fauquier County Solid Waste Management Facility	SWP149	MSW Landfill	120,000.00	109,597.00	1
Fauquier County Solid Waste Management Facility	SWP575	MSW Landfill	880,704.00	72,896.00	10
Fluvanna County of - Sanitary Landfill	SWP429	MSW Landfill	32,500.00	13,115.32	1.75
Franklin County - Sanitary Landfill	SWP072	MSW Landfill	255,868.50	57,297.00	5.5
Frederick County Landfill	SWP529	MSW Landfill	527,149.50	146,026.00	43
Greensville County Landfill	SWP405	MSW Landfill	404,431.00	26,446.00	15.6
Henrico County DPU Springfield Rd Waste Management	SWP545	MSW Landfill	516,500.00	93,812.00	5
Interstate 95 Landfill	SWP103	MSW Landfill	22,350,000.00	363,410.28	24
Ivy Landfill	SWP125	Closed Sanitary Landfill	0.00	24,449.81	0
King George Landfill Incorporated	SWP586	MSW Landfill	15,093,728.00	1,253,584.18	23
Loudoun County Sanitary Landfill	SWP001	MSW Landfill	11,524,198.00	94,187.00	60
Louisa County Sanitary Landfill	SWP194	MSW Landfill	190,950.00	23,367.00	7.4
Lunenburg County of - Sanitary Landfill	SWP544	MSW Landfill	370,993.00	12,207.52	7
Lynchburg City Sanitary Landfill	SWP558	MSW Landfill	1,094,608.00	177,027.08	6.2
Maplewood Recycling and Waste Disposal	SWP540	MSW Landfill	19,108,520.00	350,295.94	85.3
Martinsville City - Landfill	SWP049	MSW Landfill	1,000.00	80,928.00	0.25
Mecklenburg County Landfill	SWP014	MSW Landfill	94,000.00	45,846.00	2
Middle Peninsula Landfill	SWP572	MSW Landfill	19,487,338.00	557,385.52	61
New River Resource Authority Solid Waste Facility	SWP548	MSW Landfill	345,027.00	182,795.00	2.6
Northampton County of - Landfill	SWP507	MSW Landfill	5,000.00	12,359.00	1
Nottoway County of-Sanitary Landfill-Blackstone	SWP304	MSW Landfill	454,519.20	23,253.50	20
Orange County Sanitary Landfill	SWP090	MSW Landfill	0.00	27,686.59	7
Peters Mountain Landfill	SWP594	MSW Landfill	477,686.45	10,204.06	46.81
Petersburg City Landfill	SWP228	MSW Landfill	21,713.50	67,970.00	1
Pittsylvania Co - Sanitary Landfill	SWP571	MSW Landfill	1,485,724.00	40,363.84	23
Prince Edward County Sanitary Landfill	SWP584	MSW Landfill	0.00	60,464.00	10.07
Prince William County Sanitary Landfill	SWP029	MSW Landfill	4,640,283.50	311,660.00	19

Rappahannock County Landfill	SWP520	MSW Landfill	5,000.00	6,204.00	1.2
Rappahannock Regional Solid Waste Management Board	SWP589	MSW Landfill	79,028.00	130,225.80	1
Rockbridge County Landfill	SWP075	MSW Landfill	0.00	49,408.83	7
Rockingham County of - Sanitary Landfill	SWP062	MSW Landfill	239,896.00	93,240.35	2.2
Scott County Sanitary Landfill	SWP023	MSW Landfill	4,961.50	16,077.00	0.63
Shenandoah County Landfill - Edinburg	SWP469	MSW Landfill	1,760,000.00	46,382.00	35
Shoosmith Sanitary Landfill	SWP587	MSW Landfill	5,500,000.00	673,487.45	10
Smith Gap Regional Landfill	SWP555	MSW Landfill	4,230,131.00	144,687.00	33.79
South Boston Town of - Sanitary Landfill	SWP031	MSW Landfill	126,394.38	67,639.64	2
Spotsylvania County Livingston Sanitary Landfill	SWP547	MSW Landfill	1,031,500.00	56,992.94	17
SPSA - Regional Landfill	SWP417	MSW Landfill	4,873,650.00	898,395.98	6
Tazewell County Landfill	SWP564	MSW Landfill	1,450,000.00	58,681.00	45
USA Waste of Virginia Landfills - Bethel Landfill	SWP580	MSW Landfill	25,797,500.00	559,252.14	> 50
Virginia Beach City - Mt Trashmore Landfill II	SWP398	MSW Landfill	2,240,052.00	59,338.00	43
Waste Management Charles City Landfill	SWP531	MSW Landfill	15,627,924.00	552,914.70	24.5
Wise County of - Landfill	SWP513	MSW Landfill	100,292.15	45,777.01	2
<b>Number of MSW (Sanitary) Landfills Reporting = 59</b>			<b>257,040,161.18</b>	<b>14,304,786.14</b>	
<b>Remaining MSW Landfill Capacity as of 12/2005 = 17.96</b>					
<b>CDD Landfills</b>					
623 Landfill	SWP506	CDD Landfill	12,193,720.80	614,969.00	15
Ashcake Construction Demolition Debris Landfill	SWP574	CDD Landfill	953,390.40	55,113.60	20
Country South LLC	SWP581	CDD Landfill	1,636,317.00	44,163.00	274
Darbytown Road Landfill	SWP525	CDD Landfill	70,590.00	50,364.00	1.25
Frederick County Landfill	SWP591	CDD Landfill	2,527,530.00	59,730.00	56
Higgerson Buchanan Incorporated	SWP493	CDD Landfill	299,365.20	118,823.40	2
Hilltop Sand and Gravel Company Incorporated	SWP326	CDD Landfill	522,600.00	75,816.00	7
Lorton CDD Landfill	SWP331	CDD Landfill	0.00	245,039.00	0
Portsmouth City - Craney Island Landfill	SWP041	CDD Landfill	1,163,507.40	57,894.00	20
Potomac CDD Landfill	SWP441	CDD Landfill	345,600.00	164,820.00	5.25
Rainwater Landfill	SWP327	CDD Landfill	720,000.00	75,000.00	9.6
Simons Hauling Company Incorporated	SWP524	CDD Landfill	3,000.00	56,440.80	0.25
Taylor Road Landfill	SWP270	CDD Landfill	387,465.00	45,153.00	8
Waltrip Landfill	SWP322	CDD Landfill	0.00	1,662.90	
Wolftrap Operations Incorporated - Yorktown	SWP436	CDD Landfill	24,000.00	28,314.00	1
<b>Number of CDD Landfills Reporting = 15</b>		<b>TOTALS</b>	<b>20,847,085.80</b>	<b>1,693,302.70</b>	
<b>Remaining CDD Landfill Capacity as of 12/2005 = 12.31</b>					
<b>Non-Captive Industrial Landfills</b>					
First Piedmont Corp	SWP065	Industrial Landfill	528,741.05	81,285.57	6.09
John C Holland Enterprises Landfill	SWP280	Industrial Landfill	13,347,152.00	261,734.00	64
<b>Number of Non-Captive Industrial Landfills Reporting = 2</b>			<b>13,875,893.05</b>	<b>343,019.57</b>	
<b>Remaining Non-Captive Industrial Landfill Capacity as of 12/2005 = 40.45</b>					
<b>All Landfills</b>					
<b>Total Number of Landfills Reporting = 77</b>			<b>291,763,140.03</b>	<b>16,341,108.41</b>	
<b>Remaining Landfill Capacity as of 12/2005 = 17.85</b>					

## Attachment 8 – Data Provided by Facilities Regarding Economic Benefits

Virginia Code § 10.1-1413.1.B provides that facility owners may provide “an accounting of the facility’s economic benefits to the locality where the facility is located including the value of disposal and recycling facilities provided to the locality at no cost or reduced cost, direct employment associated with the facility, and other economic benefits resulting from the facility during the preceding calendar year.” The information presented below is for the 2005 calendar year.

Waste Management of Virginia reported economic information for the following solid waste management facilities they operate in the following localities: Sussex (Atlantic Waste Disposal), Charles City (Charles City Landfill), Gloucester (Middle Peninsula), Amelia (Amelia Landfill), King George (King George Landfill), and Hampton (Bethel Landfill). Waste Management of Virginia reported the following economic benefits for the facilities listed above:

- Host fees payments totaling \$19,156,992;
- Free or reduced cost disposal and recycling totaling \$805,224;
- Charitable contributions of \$29,853; and
- Local/State taxes paid totaling \$770,027.

Brunswick Waste Management Facility reported the following benefits to Brunswick County:

- Host fees payments totaling 2,257,869;
- Free Brunswick County waste disposal of \$734,000;
- Goods and services purchased in Brunswick and surrounding areas totaling \$3,032,000; and
- Payment for landfill inspectors of \$130,050; and
- Indirect employment (trucking and services) in Brunswick County of \$1,488,000.

623 Landfill, Inc. reported the following benefits to Goochland County:

- Direct employment associated with the facility of \$666,654;
- Purchases and contracts totaling \$3,818,451; and
- Local/State taxes paid totaling \$205,733.

BFI Waste systems of VA, LLC, reported the following benefits to King and Queen County:

- Host fees payments totaling \$3,037,000;
- Free or reduced cost disposal and recycling totaling \$115,000;
- Direct employment associated with the facility of \$1,600,000;
- Donations of free service to schools and scholarships totaling \$16,000;
- Cash donations made to emergency and fire rescue services totaling \$7,000;
- County Environmental Contingency Fund of \$130,000;
- Goods and services purchased in multi-county region totaling \$1,000,000; and
- Indirect employment of transportation/trucking company located on-site of \$4,000,000.