Maryland Waste Diversion Activities Report

-2005-

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TABLE OF CONTENTS

1
1
2
2
4 6
8
8
9
14
21
22
25
A1
3
3
4
15
5
6
7
11
13 24

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Overview

Introduction

The Maryland Department of the Environment (MDE) promotes and encourages waste diversion across the State. The 2005 Maryland Waste Diversion Activities Report meets the



reporting requirements of Environment Article Section 9-1702 that mandates a report to the Governor and Maryland General Assembly on the status of recycling in the State. The promotion and encouragement of waste diversion is accomplished by partnering with Maryland's jurisdictions and the public and private sectors to develop markets for recyclable materials and by working with other State agencies to increase the volume of materials that are diverted from landfills. These programs contribute toward MDE's achievement of the outcomes stated in

Managing Maryland for Results (MFR), MDE's results-based planning and management approach for achieving its public health and environmental protection goals.

This report provides statistical local jurisdiction recycling and waste diversion data for calendar year 2004, and an overview of the State's waste diversion activities from July 2004 thru June 2005. Data contained in this Report comes from annual reports submitted to MDE by Maryland's 23 Counties, Baltimore City, and the State government agencies participating in the All StAR (All State Agencies Recycle) Program. Counties also provide MDE information on their collection programs, institutional recycling programs, public education efforts, source reduction activities, and disposal facilities.

Maryland's Legislative Mandate

In 1988, the **Maryland Recycling Act (MRA)** authorized MDE to reduce the disposal of solid waste in Maryland through management, education and regulation. The MRA requires:

- Each jurisdiction to develop and implement recycling programs by January 1, 1994. Jurisdictions with populations greater than 150,000 are required to recycle 20% or more of their waste and jurisdictions with populations less than 150,000 are required to recycle 15% or more of their waste. In no case is the recycling rate to be less than 10%.
- Each jurisdiction to select materials to be recycled and the manner in which materials are to be separated and processed. If a jurisdiction fails to meet the specified reductions, State and local authorities can prohibit the issuance of building permits for all new construction.
- State Government to reduce by recycling the amount of the solid waste stream generated for disposal by at least 20% or to an amount that is determined practical and economically feasible, but in no case may the amount to be recycled be less than 10%.
- Newsprint and telephone directories distributed in the State to have a recycled content, by weight, of 35% in 2004, increasing to 40% by 2005.

The MRA excludes from its scope scrap metal, landclearing debris, construction and demolition debris, sewage sludge, and hospital wastes.

Additional legislation impacting recycling in Maryland includes:

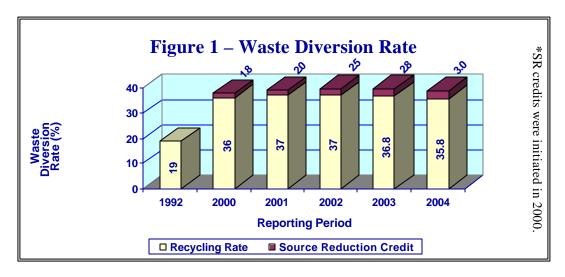
- ▶ Banning separately collected yard waste from disposal at solid waste acceptance facilities (1994).
- Requiring permits for private natural wood waste recycling facilities (1992).
- Consideration by Counties regarding the feasibility of composting solid waste when developing solid waste management plans (1992).
- ▶ Composting in the calculation of the recycling rate (1992).
- ▶ Requiring mercuric oxide battery manufacturers to be responsible for the collection, transportation, and recycling or disposal of these batteries sold or offered for promotional purposes in the State (1994).
- Establishing a program or system for the collection, recycling, or disposal of each cell, rechargeable battery or rechargeable product sold in the state (1994).
- ▶ Establishing a voluntary, Statewide waste diversion goal of 40% by the year 2005, consisting of a 35% MRA recycling rate plus up to 5% credit for source reduction activities (2000).
- ▶ Reducing the impact of mercury in the environment by requiring that MDE provide outreach assistance to schools, businesses, and the general public relating to the proper management and recycling of mercury containing products. The law also prohibits the sale of mercury thermometers beginning in 2002 (2001).
- ▶ Requiring MDE to study the establishment and implementation, by January 2006, of an electronic waste collection system in the State (2004).
- ▶ Requiring manufactures of an average of more than 1000 computers in the previous three years who sell or offer for sale computers in Maryland to register and pay a fee to MDE. Fees may be used to provide grants to counties and municipalities for computer recycling activities. (2005)

Waste Diversion in Maryland for 2004 – A Snapshot

Maryland's 38.8% Waste Diversion Rate

The source reduction (SR) credit plus the recycling rate make up the waste diversion rate. Through the efforts of its citizens, businesses and government agencies, Maryland achieved a statewide waste diversion rate of 38.8% in Calendar year 2004. The 38.8% was composed of a 35.8% MRA recycling rate and a 3.0% source reduction credit. This exceeds the requirements of

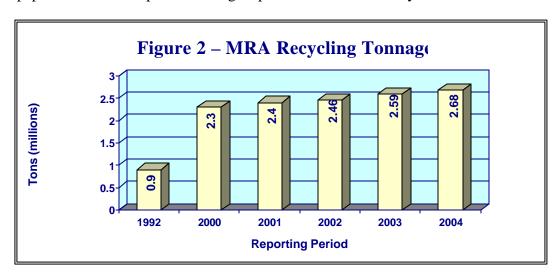
the MRA and is just shy of the 40% waste diversion goal targeted for 2005. Figure 1 provides a historical breakdown of Maryland's waste diversion rate.

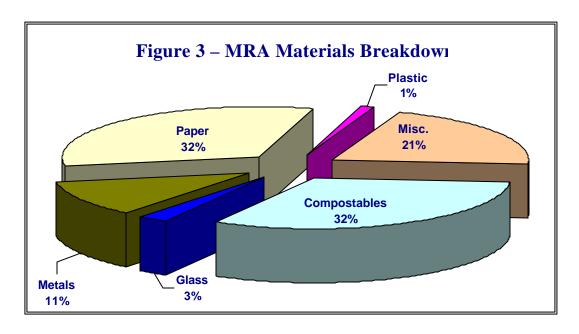


Maryland's 35.8% Recycling Rate

In 2004, Maryland residents and businesses recycled nearly 36% (MRA recycling tonnage ÷ MRA recycling tonnage + MRA waste disposed) of the municipal solid waste they generated. While this rate is good news, it continues the national trend toward the stabilization of recycling rates. To combat this, states across the country are seeking new ways to ensure that recycling continues to increase its slice of the waste management pie. Like Maryland, many states are investigating new commodities to bring into the recycling stream, while continuing to increase their outreach efforts.

Figure 2 tracks the recycling tonnages since 1992 and Figure 3 categorizes the total MRA tons recycled by material in calendar year 2004. Compostable and paper materials composed the largest portion of materials recycled.





Maryland's 3.0% Source Reduction Credit

In 2004, fourteen of Maryland's jurisdictions were able to add from 1% to 5% to their waste diversion rate by emphasizing SR activities as a waste reduction strategy. They accomplished this utilizing Internet resources, demonstration sites (e.g., backyard composting), and publications on reuse practices and yard waste reduction. A complete list of available SR activities and the breakdown of Maryland SR activities in calendar year 2004 is available at www.mde.state.md.us/assets/document/recycling/SRChecklist_results_01.pdf.

Non-profit groups are partnering with government to increase awareness of source reduction and reuse opportunities for materials such as linens, pet supplies, medical equipment, clothing and computers. The partnering provides businesses information on how to improve their bottom line through recycling and SR. As counties learn from their successful colleagues, even more SR programs are expected.

Beyond the Maryland Recycling Act

MDE encourages the recycling of all materials because of the environmental and economic benefits that recycling provides. Table 1 details recycling and waste diversion totals for each of Maryland's jurisdictions. Business and local governments continue to seek recycling opportunities above and beyond those that apply toward the MRA rate. In fact, over 2.7 million tons of other Non-MRA materials were reported as being recycled in 2004. Table 2 offers a breakdown by category of the amount of Non-MRA materials reported as recycled in 2004. For a complete overview of how solid waste is managed in Maryland, refer to the annual "Solid Waste Managed In Maryland" report available each Fall on MDE's web site at www.mde.state.md.us/ResearchCenter/Publications/Land/index.asp.

Table 1 – County Recyclables by Commodity in Tons for Calendar Year 2004

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2004

				Maryla							
		Waste									
	MRA	Diversion								Non-MRA	Total
County	Rate ²	Rate ³	Compostables	Glass	Metals	Paper	Plastic	Misc.	Subtotal	Recyclables ⁴	Recycling*
Allegany	25.99%	28.99%	2,646	107	1,219	6,092	514	10,690	21,268	17,419	38,687
Anne Arundel	36.55%	39.55%	163,184	8,423	23,290	94,588	4,707	24,724	318,916	371,731	690,647
Baltimore City	29.70%	29.70%	30,312	1,017	25,351	55,828	628	201,113	314,249	80,615	394,864
Baltimore County	40.59%	45.59%	95,242	5,407	47,923	167,474	4,184	136,034	456,264	320,287	776,551
Calvert	39.08%	40.08%	21,655	1,799	4,238	9,891	474	363	38,420	76,147	114,567
Carroll	28.90%	31.90%	21,262	1,779	4,911	22,865	574	10,300	61,691	63,613	125,304
Cecil	22.39%	22.39%	16,424	631	1,863	3,509	1,109	20	23,556	18,161	41,717
Charles	30.06%	35.06%	11,106	2,976	7,167	19,205	896	3,285	44,635	353,734	398,369
Dorchester	37.80%	37.80%	23,163	4	470	1,762	22	2,099	27,520	4,553	32,073
Frederick	36.22%	38.22%	39,542	2,922	13,471	36,461	1,354	9,068	102,818	55,388	158,206
Garrett	50.40%	51.40%	18,887	209	2,185	1,180	53	2,375	24,889	20,591	45,480
Harford	60.11%	64.11%	66,003	1,421	9,357	51,310	459	49,742	178,292	56,414	234,706
Howard	37.37%	42.37%	50,315	4,234	6,298	65,635	1,365	6,472	134,319	145,944	280,263
Mid-Shore ¹	47.58%	47.58%	10,086	979	3,468	25,386	611	79,550	120,080	67,085	187,165
Montgomery	33.77%	38.77%	124,156	21,231	80,791	155,465	5,564	2,885	390,092	27,859	417,951
Prince George's	36.30%	39.30%	98,603	15,555	58,800	104,684	5,296	16,354	299,292	603,989	903,281
Somerset	33.82%	33.82%	8,484	26	882	149	15	735	10,291	5	10,296
St. Mary's	22.11%	23.11%	3,134	695	3,199	9,112	228	1,202	17,570	21,982	39,552
Washington	22.26%	23.26%	7,375	736	2,544	17,247	291	1,604	29,797	50,402	80,199
Wicomico	21.18%	21.18%	15,049	494	1,504	8,698	1,829	2,325	29,899	11,406	41,305
Worcester	32.78%	32.78%	26,466	913	3,973	5,386	490	889	38,117	16,314	54,431
State Highways of Ac	dditional A	sphalt and C	oncrete Recycled		•		•	•		343,119	343,119
TOTAL*	35.8%	38.8%	853,094	71,558	302,904	861,927	30,663	561,829	2,681,975	2,726,758	5,408,733

 ^{*} Due to rounding, tonnage totals in this table may differ slightly from the sum of actual values.
 1 Mid-Shore Regional Recycling Program includes Caroline, Kent, Queen Anne's and Talbot Counties.

MRA Recycling Rate = MRA recycling tonnage ÷ (MRA recycling tonnage + MRA waste) x 100.
 Waste Diversion Rate = Recycling Rate + Source Reduction (SR) Credit (based on voluntary reporting of SR activities). Bolded rates include both recycling and SR activities.

⁴ Column includes materials, such as construction and demolition debris, land clearing debris and recycled fluids that fall outside the scope of the standard MRA Recycling Rate, but are reported by the counties as recycled materials.

Table 2 – Recycling of Non-MRA Materials in Tons

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2004

MATERIAL	TONS RECYCLED
Antifreeze	1,672
Asphalt & Concrete	1,226,453
Coal Ash	111,491
Construction/Demolition Debris	504,727
Land Clearing Debris	49,766
Scrap Automobiles	290,678
Scrap Metal	272,852
Sewage Sludge	58,351
Soils	123,149
Waste Oil	22,806
Other Materials	64,814
TOTAL	2,726,759

All StAR (All State Agencies Recycle)

Maryland State government recycling is directed by the 1988 MRA that mandates State government achieve an overall waste reduction goal of at least 20%, or an amount that is determined "practical and economically feasible", but in no case less than 10%. Also, Executive



Order 01.01.2001.02 Sustaining Maryland's Future with Clean Power, Green Buildings and Energy Efficiency (EO) requires each State agency to annually divert or recycle at least 20% of the waste they generate.

The All StAR (All State Agencies Recycle) program is the name of the State government agency recycling program that is designed to help Maryland State government reach its recycling goals. All StAR agencies designate a Recycling Coordinator to manage their various sites

throughout Maryland. They provide technical support to encourage recycling at their agencies' sites and to facilitate reporting on collection activities.

State agencies recycled 12,785 tons of MRA materials for a MRA recycling rate of 19.2% in 2004. This tonnage is included, by County, in Maryland's recycling totals (Table 1) for 2004. Additionally, State government recycled non-MRA materials such as construction and demolition debris, antifreeze, motor oil, scrap metal, landclearing debris, concrete, and asphalt that do not count towards the MRA Recycling Rate. A complete breakdown of the All StAR statistics is available under "State Agency Recycling" on MDE's web page at www.mde.state.md.us/recycling. Table 3 illustrates the performance of each State agency participating in the All StAR program.

Table 3 – Maryland State Agencies' 2004 Recycling Rates

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2004

	.	No. of	N7 0	Total	2004 MRA
Agency Name	No. of Sites	Sites Reporting	No. of People*	MRA 2004(tons)	Recycling Rate (%)^
Department of General Services	18	Keporting 17	10,191	865.79	33.15
Department of General Services Department of Labor, Licensing & Regulation	13	8	1,225	98.72	18.66
Department of Agriculture	3	3	299	68.50	36.93
Maryland Public Broadcasting Commission	1	1	173	15.00	8.20
Comptroller of the Treasury	1	1	850	211.16	50.38
Maryland School for the Deaf	2	2	843	52.00	11.63
Department of Natural Resources	6	6	696	48.80	35.19
Department of Juvenile Services	15	9	3,314	178.90	13.79
Maryland State Archives	13	1	80	3.47	18.20
Department of the Environment	1	1	898	36.88	27.16
Department of Transportation	60	49	26,178	2,344.28	35.78
Department of Health and Mental Hygiene	17	14	9,280	1,163.44	16.00
Maryland General Assembly	1	0	1,223	1,103.44 NR	NR
Department of Public Safety and Correctional Services	28	28	35,763	1,845.24	10.11
Department of Human Resources	13	12	5,239	161.35	24.00
Department of Assessments and Taxation	2	2	209	7.99	29.87
University of Maryland System	15	13	116,625	4,829.51	21.02
St. Mary's College of Maryland	1	1	2,160	140.00	22.10
Morgan State University	1	1	7,343	51.28	16.35
Department of Education	2	1	600	49.07	35.03
Maryland Automobile Insurance Fund	1	1	555	69.50	40.06
Maryland Stadium Authority	1	1	690	163.17	9.91
Baltimore City Community College	1	1	7,962	3.92	0.66
Maryland Environmental Service	1	1	140	20.03	30.86
Maryland Food Center Authority	1	1	26	0.00	0
Judiciary of Maryland	1	1	100	15.26	42.32
Subsequent Injury Fund Board	1	1	16	3.10	53.82
Department of Veterans Affairs	1	1	4	1	69.44
Department of Budget and Management	1	1	200	5.66	18.46
Maryland State Police	27	27	1,739	235.59	28.73
Department of Business and Economic Development	1	1	650	15.21	14.08
Maryland Higher Education Commission	1	1	80	11.30	39.24
Dept. of Housing and Community Development	1	1	490	52.25	21.75
Maryland Insurance Administration	1	1	305	18.00	31.58
TOTALS	241	210	236,146	12,785.39	19.19

^{*} State employees comprise approximately 85,943 of the total number of people at State Agency Locations.

Less than 100% reporting

Increase in MRA tonnage over 2003

Recycling Rate less than previous year

NR – Did Not Report

[^] The 1988 Maryland Recycling Act mandates a State Government recycling rate of at least 20%.

MDE continues to encourage State agencies to expand their recycling programs through technical support and on-site expertise, the *All StAR News* (a newsletter devoted to recycling in State government), and acting as an information clearinghouse by forwarding any relevant recycling information to the appropriate State office. Integrating recycling into State leasing and janitorial contracts, similar to waste collection contracts, could make improvements in the recycling programs for Maryland State government. Currently, contracts allow State offices to set up recycling programs, but they do not equire them as part of the lease. In addition, designating a recycling coordinator in each State office with responsibility to reach the recycling goals and ensuring that State offices have the means to support a recycling program, such as establishing a material staging area, locations for recycling bins, etc., could improve State agency recycling rates.

Increasing Maryland State government's recycling rate to the level required by the MRA and EO could save Maryland State government money. Consider the following money-saving scenarios based upon 2004 data with an average Maryland tipping fee of \$50:

- \$ Maryland State government realized \$639,269 of avoided disposal costs savings by recycling 12,785 tons of MRA material.
- \$ If State government (MRA) achieves a 20% recycling rate by increasing its MRA tonnage, an additional \$26,860 in avoided disposal costs would be realized for a total savings of over \$666,129.
- \$ If State government (MRA) achieves a 20% recycling rate by decreasing the amount of waste generated, an additional amount of over \$134,300 would be saved for a total savings of over \$773,570.
- \$ If each State agency (EO) achieves a 20% recycling rate <u>by increasing its MRA tonnage</u>, nearly \$127,110 in additional avoided disposal costs would be realized for a total savings of over \$766,375.
- s If each State agency (EO) achieves a 20% recycling rate by decreasing the amount of waste generated, an additional amount of over \$635,540 would be saved for a total savings of over \$1,274,810.

How MDE Supports Recycling in Maryland

Promoting Recycled Products

The collection, sorting, and use of recycled materials in the manufacturing of new products are just part of the recycling process. Once manufacturers turn recyclables into products, it becomes everybody's responsibility to "close the loop" and buy products made of recycled material. MDE works to create demand for these products by:

• Promoting a Buy Recycled training manual and program developed by the Maryland Environmental Service (MES) for government purchasing agents. The training manual provides information on increasing purchases of products made with recycled materials.



● Displaying recycled content items on MDE's exhibit panels that travel to school fairs, conferences, outreach events, etc. The promotion of recycled content items and the recycling process are also discussed in presentations given to schoolchildren in grades K-12.

MDE encourages State government to increase the use of products made with recycled materials by supporting procurement initiatives:

❖ State government is required to purchase products with recycled content whenever practicable. A 5% pricing preference over similar items not made from recycled material is allowed.

❖ MDE works cooperatively with the Maryland Department of General Services (DGS) to promote government purchasing of materials with recycled content.

- In FY 2005, DGS purchased \$6,751,716 worth or 3,560 tons of recycled content paper products.
- The DGS maintains a web page at http://dgsweb.dgs.state.md.us/procure/Recycled-Laws.htm that details the State procurement guidelines and lists products available with recycled content such as picnic tables, park benches, and re-refined motor oil. Local jurisdictions in Maryland are able to piggyback on State procurement contracts.
- Boilerplate language stating, "All products used in packing to cushion and protect during the shipment of commodities are to be made of recycled, recyclable, and/or biodegradable materials" is included on all Maryland Invitation to Bid Solicitations and Purchase Orders.

Special Programs

From July 2004, thru June 2005, MDE worked to implement programs designed to expand recycling and protect public health and the environment.

Electronics Recycling (eCycling)

Computers and other consumer electronics are a rapidly growing part of the waste stream. The potential environmental and health threats posed by computers and other consumer electronics that may contain toxic materials such as lead, mercury, cadmium, and chromium, continue to raise concerns about their disposal. In 2005, Governor Robert L. Ehrlich, Jr. signed into law the Statewide Computer



Recycling Pilot Program that requires computer manufacturers to register with and pay a registration fee to MDE in order to sell their products in Maryland. Highlights of the bill include:

- ★ Defines manufacturer as the corporation or other legal entity that is the brand owner or importer of a computer sold in the State;
- ★ Computer means a personal computer or laptop computer or computer monitor:
- ★ First year registration fee is \$5,000. The fee can be reduced to \$500 in subsequent years provided the manufacturer has a MDE approved computer takeback program;
- ★ Money collected as a result of registration is to be used to provide grants to local government to assist in the recycling of computers; and
- ★ Requires local government's to address the methods for the separate collection and recycling of computers in their recycling plan if they want to be eligible for State grants.

Maryland is also conducting special electronics collection events throughout the State. From the first event in October 2001 thru December 2004, 58 collection events were held in 19 jurisdictions in Maryland. Highlights of the program in Maryland include:

- ✓ The collection of over 1,512 tons of electronic equipment from 75 1-day collection events and 4 2-day collection events.
- ✓ Permanent collection programs in Harford, Howard, Montgomery, Prince George's, Wicomico, and Worcester Counties collected nearly 2,812 tons of electronic equipment.
- ✓ Cities of Greenbelt, Salisbury, and Takoma Park have collected nearly 75 tons of electronic equipment from collection programs.
- ✓ The collection of over 59 tons of electronic equipment from 1,170 participants at a one-day event in Baltimore County on April 3, 2004.
- ✓ The placement of eCycling information in telephone books distributed in Maryland, Pennsylvania, Delaware, Virginia, West Virginia and the District of Columbia in 2003. The information lists eCycling web sites and encourages people to donate, reuse, or recycle their electronics.
- ✓ The development of a partnership between MDE and MarketPro Inc., the largest consumer computer show promoter in the United States. The partnership allows MDE to distribute information on eCycling in Maryland MarketPro electronic shows.
- ✓ Over 3,400 tons of electronic equipment has been collected since the program began.

Information on eCycling is available on MDE's web page at www.mde.state.md.us/ecycling. Table 4 gives a breakdown of the electronics equipment collected.

Table 4 – eCycling Collection Programs

County	Population	Туре	Date(s)	No. of participants	Tons collected	Pounds collected	Pounds/ participant
Maryland (State)	5,484,114	_	thru 12-31-03	_	1,118	2,236,011	-
ECycling Special	Events in 20	004					
Allegany	74,106	1-day	6-26-04	215	14.67	29,338	136
Anne Arundel	507,531	1-day	5-8-04	605	37.26	74,520	123
Baltimore City	623,877	2-day	4-24 & 4-25- 04	371	16.76	33,525	90
Baltimore Co.	779,338	1-day 1-day	4-3-04 10-9-04	1,170 840	59.05 29.93	118,093 59,858	101 71
Calvert	85,913	1-day	6-12-04	50	8.06	16,128	323
Carroll	165,379	1-day	6-5-04	325	14.53	29,053	89
Charles	135,069	1-day	6-19-04	120	13.8	27,598	230
Garrett	30,089	1-day	4-24-04	150	11.46	22,922	153
Harford	234,718	1-day	4-17-04	1,000	40.16	80,325	80
		1-day	4-25-04	321	13.73	27,468	86
Midshore	130,389	1-day	11-6-04	216	19.30	38,600	179
Prince George's	840,703	1-day	5-16-04	290	18.14	36,282	125
Wicomico ***	88,569	1-day	10-2-04	_	9.79	19,571	_
Worcester	48,829	1-day	5-1-04	104	7.11	14,222	137
Other eCycling in	า 2004 ****	~~~~	~~~~~	~~~~~		~~~~~	~~~~~
Allegany	74,106	_	2004	_	11.30	22,600	_
Baltimore Co.	779,338	-	2004	_	3.43	6,860	_
Calvert	85,913	-	2004	_	0.48	960	_
Carroll	165,379	_	2004	_	5.42	10,840	_
Frederick	216,535	-	2004	_	24.60	49,200	_
Garrett	30,089	-	2004	_	2.95	5,900	_
Howard	265,728	-	2004	_	163.05	326,100	_
Montgomery ***	919,068	ı	2004	_	618.93	1,237,860	_
Prince George's ***	840,703		2004	_	143.92	287,840	_
St. Mary's	94,482	-	2004		80.40	160,800	_
Washington	139,225	-	2004	_	40.00	80,000	-
Worcester	48,829	-	2004	-	4.49	8,980	-
Permanent **	6 Locations	-	2004	-	872.23	1,744,460	-
	Total			5,777	3,402.96	6,805,914	105

^{*} Midshore Region is composed of Kent, Queen Anne's, Talbot, and Caroline Counties.

^{**} An additional 872.23 tons were collected at 6 permanent locations (*i.e.*, Harford – 0, Howard – 177.62, Montgomery – 523.07, Prince George's – 158.91, Wicomico – 12.63, and Worcester – 0).

^{***} The City of Greenbelt (44,659 lbs.), Salisbury (19,571 lbs.), and Takoma Park (22,290 lbs.) also had eCycling events in 2004. The totals from the cities are included in their respective counties.

^{****} Includes electronics collected from commercial businesses and means that were not part of MDE sponsored events.

Mercury Recycling

MDE continues to work to comply with 2001 mercury legislation entitled "Mercury and Products that Contain Mercury" (Environment Article, Subtitle 9 Sections 6904 through 6907) by establishing collaborative relationships with institutions working on mercury reduction and planning to meet possible future

requirements of the law. The law has been effective in compelling MDE to develop informational materials on the hazards of mercury, design programs to encourage voluntary efforts of Marylanders to reduce mercury, increase awareness of mercury, and provide an information source for Marylanders in the event of mercury spills.

In conjunction with County Health Officers and Environmental Health Directors, MDE worked to develop and disseminate information for adults and children on mercury and mercury-containing products. The resulting fact sheets are available on MDE's web page at www.mde.state.md.us/Programs/LandPrograms/Hazardous_Waste/mercury/index.asp. The fact sheets cover such topics as mercury drop-off locations, general mercury information, alternative products to those containing mercury, mercury spill cleanup and spill kit vendor information, and fish consumption advisories. In addition, in past years MDE participated in public outreach events: Free Friday Flicks, Baltimore Green Week, Belair Edison Spring Fest, and the Maryland Recyclers Coalition Conference. For more information on outreach events see the Education and Outreach section of this report. The MDE Emergency Response Division also continues to provide mercury specific response training to firefighters throughout the State.

MDE has collaborated with many organizations to fulfill the Mercury and Products that Contain Mercury Act mandates. Collaborations have been useful in ensuring that more Marylanders are aware of the hazards of mercury and the requirements of legislation concerning mercury. Some collaborations include:

- Working with Maryland Environmental Service (MES), Maryland State Department of Education (MSDE), the Children's Environmental Health and Protection Advisory Council (CEHPAC) to inventory Maryland schools for mercury. The survey determined that 785 schools reported having mercury, mercury-containing devices, or mercury compounds on their premises. MES used the survey results to design and conduct a collection effort to remove mercury from Maryland schools. Thirty percent of schools (239 schools) that reported having mercury elected to participate in the MES program.
- MDE is continuing its work with the Maryland Hospitals Association and the non-profit group Health Care Without Harm to encourage voluntary participation in the "Hospitals for a Healthy Environment" campaign. This campaign is the result of a Memorandum of Understanding between the U.S. Environmental Protection Agency

- (EPA) and the American Hospital Association (AHA) to eliminate mercury waste by 2005 and reduce total waste by 50 percent by 2010.
- MDE continues to work with the Board of Public Works and DGS to ensure procurement of Mercury-free products.

MDE also partnered with county health departments and other local government agencies to establish permanent mercury fever thermometer collection locations. CVS Pharmacy and EPIC Pharmacy donated a limited supply of digital thermometers to be exchanged for used mercury fever thermometers. Elemental mercury and other mercury containing products are collected at these locations. Table 5 contains a list of established mercury recycling drop-off locations. For further details on any of the mercury information contained in this report, read the "Report on Mercury and Products that Contain Mercury" report available on MDE's web page.

Table 5 – Established Mercury Drop-off Locations

Facility	Location	County	Contacts
Allegany County Health Department	P.O. Box 1745 Willowbrook Road Cumberland, MD 21501	Allegany	301-777-5654
Maryland Department of Environment	1800 Washington Blvd. Suite 610 Baltimore, MD 21230	Baltimore City	410-537-3314
Calvert County Solid Waste Facility	Appeal Landfill 401 Sweet Water Road Lusby, MD 20657	Calvert	Shirley Steffey 410-326-0210
Carroll County Health Department	290 South Center Street PO Box 845 Westminster, MD 21158	Carroll	Charles Zeleski 410-857-5009
Cecil County Health Department	401 Bow Street Elkton, MD 21921	Cecil	Chuck Smyser 410-996-5160
Charles County Department of Public Facilities	1001 Radio Station Road LaPlata, MD 20646	Charles	Lowry Phelps 301-932-3440
Dorchester County Health Department Family Preventative Health Services	503 B Muir Street Cambridge, MD 21613	Dorchester	Theresa Cornish 410-228-3294
Garrett County Health Department	1025 Memorial Drive Oakland, MD 21550	Garrett	301-334-7760
Harford County Department of Public Works	Office of Recycling 3241 Scarboro Road Street, MD 21154	Harford	Bob Ernst 410-638-3417
Howard County Health Department	Howard County Health Dept. 7178 Columbia Gateway Dr. 3 rd Floor Columbia, MD 21046-2147 410-313-6300	Howard	Bureau of Environmental Health 410-313-2640
	Southeastern Health Center 9525 Durness Lane Laural, MD 20723 410-880-5888		

Table 5 – Established Mercury Drop-off Locations

Facility	Location	County	Contacts
Howard County Health Department (cont'd)	Ellicott City Health Center 8492 Baltimore National Pike Ellicott City, MD 21043 410-313-2333 Columbia Health Center	Howard	Bureau of Environmental Health 410-313-2640
	10630 Little Patuxent Pkwy. Suite 400 Columbia, MD 20144-3059 410-313-7500		
Kent County Health Department	125 Lynchburg Street Chestertown, MD 21620	Kent	Ed Birkmire 410-778-1350
Prince George's County Department of Environmental Resources	Brown Station Road Sanitary Landfill 3500 Brown Station Road Upper Marlboro, MD 20774	Prince George's	Waste Reduction Section 301-883-5045
Queen Anne's County Health Dept., Clinical Programs	206 N. Commerce Street Centreville, MD 21617	Queen Anne's	Connie Ralph 410-758-0720
Salisbury Fire Department	Station 16 Headquarters 143 South Division Street Salisbury, MD 21801	Wicomico	410-548-3122
Worcester County Health Department	6040 Public Landing Road Snow Hill, MD 21863	Worcester	Bruce Stevens 410-632-1100

Business Resources

MDE provides assistance to businesses that are interested in participating in Maryland's recycling program by guiding them through the State regulatory framework, consulting on recycling program implementation, and locating markets for recyclable materials. The following provides a more detailed description of these activities.

Market Locator

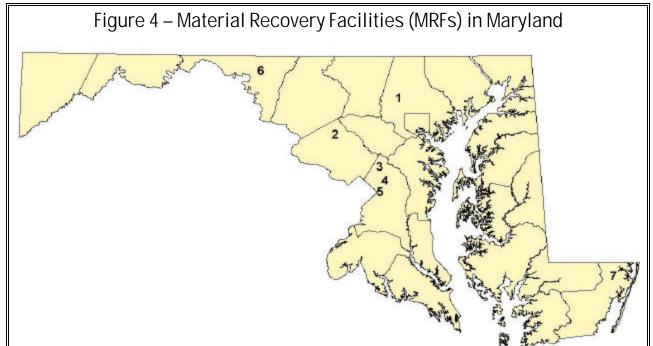
The success of Maryland's recycling programs is linked to finding markets for the materials collected. Figure 4 illustrates the locations of the State's

> material recovery facilities (MRFs). These facilities are strategically located to ensure that materials

reach their market economically.

Businesses can access the Recycling Directory at www.mde.state.md.us/recycling to find a market for recyclable materials. The web site is

designed to promote commercial recycling in Maryland and is searchable by commodity. Businesses can also check the homepage of the Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) at www.libertynet.org/macredo for facilities in the region. The database is searchable by business name, commodity group, facility type, member state, and



Baltimore County

1. Baltimore Resource Recovery Facility 10320 York Road Cockeysville, MD 21030 Ph: 410-628-1130 Fx: 410-628-6516

Montgomery County

2. Montgomery County MRF 16105 Frederick Road Derwood, MD 20855

Ph: 301-417-1433 Fx: 301-417-9415

Prince George's County

3. Paper Stock Dealers, Inc. 4501 46th Street P.O. Box 406 Bladensburg, MD 20710 Ph: 301-762-6990

4. Universal Recycling 1000 Ritchie Road Capitol Heights, MD 20743

> Ph: 301-336-5932 Fx: 301-499-7138

5. Prince George's County MRF 1000 Ritchie Road Capitol Heights, MD 20743 Ph: 301-499-1707 Fx: 301-499-7138

Washington County

6. Browning Ferris Industries, Inc. 11710 Green Castle Pike Hagerstown, MD 21740 Ph: 301-223-7272

Worcester County

7. Ocean City Recycling Center 210 65th Street Ocean City, MD 21842 Ph: 410-524-0318

metropolitan area and/or zip code. Additional links to other companies is available on MDE's recycling web page under "Education and Outreach". For companies without access to the Internet, MDE can mail out or fax a list of markets by material.

Automobile Tires – In FY 2005, the State processed 5.3 million scrap tires. This represents a 4% decrease from the previous year. Emanuel Tire Company processed about 20% fewer tires than in FY 2004. St. Lawrence Cement Company in Washington County resumed operation for usage of scrap tires in FY 2004 and processed over 428,200 scrap tires in FY 2005. This represents a 457% increase over the amount processed during FY 2004. The company is expected to continue to increase its processing rate, which will also increase the State's processing capacity by up to 1.2 million tires per year. Emanuel Tire Company and Maryland Environmental Service (MES) processed approximately 4.0 million or 75.5% of these tires while ESSROC Cement Corporation, St. Lawrence Cement Company, and Harford Waste-to-Energy Facility used approximately 1.3 million or 24.5% of the tires as fuel.

MDE estimates that the FY 2006 processing capacity for scrap tires will be similar to FY 2005. The MES crumb rubber facility, Emanuel Tire, and Harford County's Waste-to-Energy Facility are expected to maintain FY 2005 processing numbers. St. Lawrence Cement Company and ESSROC Cement Corporation are expected to increase slightly the processing of scrap tires.

A detailed report on the handling of scrap tires in Maryland is available in the *Maryland Scrap Tire Program's Annual Report* available on MDE's web page at http://www.mde.state.md.us/Land/land_publications/index.asp.

<u>Batteries</u> – The metals and plastics collected when recycling batteries are used to make other products (including batteries). In addition, the recycling of batteries allows the collection of hazardous metals in a location where they can be more easily managed. Most Counties accept all types of batteries from residents as part of County Household Hazardous Waste (HHW) programs. Specific HHW information is available through the County where you live. County contact information is available at

www.mde.state.md.us/Programs/LandPrograms/Recycling/Education/hhw.asp.

Old automobile batteries can be returned to the retail establishment where a replacement battery was purchased and rechargeable battery collection locations can be obtained by calling 1-800-8BATTERY (822-8837). Additional battery recycling resources for residents and businesses are available by accessing the "Recycling Market Directory" on MDE's recycling web page at www.mde.state.md.us/recycling. Battery recycling companies listed in the "Recycling Market Directory" include:

Company Name	Telephone Number
AERC Recycling	321-952-1516
Air Cycle Corporation	800-909-9709
Arundel Recycling	410-761-6595
Battery Solutions, Inc.	810-494-5010
Cambridge Iron & Metal	410-327-7867
Eco-Battery, Inc.	888-768-2004
Envirolight and Disposal	727-526-8870
Everlights, Inc.	773-734-9873
Exide Corporation	610-378-0540

Company Name	Telephone Number
H.D. Metal Company	410-546-1111
Inmetco	724-758-2800
Maryland Recycle Company	410-780-3060
Ocean City Recycling Center	410-524-5356
Rechargeable Battery Recycling Corporation	877-723-1297
Schultz & Sons Salvage	410-479-2110
Southeast Recycling Technologies Inc.	800-592-3970
USA Lights	301-699-6244
Waldorf Metal Company	301-932-1220

Please contact the company for details.

White Goods – White goods are defined as large lousehold appliances such as refrigerators, stoves, air conditioners, and washing machines. Every County and Baltimore City accepts white goods from residents for recycling. Contact the jurisdiction where you live for details and any questions you may have concerning the proper collection procedures. Contact information is available in the "State, County, and City Recycling Information" section on MDE's web page at www.mde.state.md.us/recycling. Additionally, resources for residents and businesses are available under "Metals" in the "Recycling Market Directory" available on MDE's recycling web page. Once collected white goods have environmentally detrimental materials removed for proper disposal, and the remaining materials (usually metal) are sold for scrap and made into new products.

Permitting Guidance

Two fact sheets are available through MDE to assist recycling and composting businesses in understanding environmental permitting procedures and requirements.

<u>Local Permitting Issues for Recycling and Composting Facilities</u> – Lists various local permits and approvals that may be required of recycling and composting businesses. It also gives information on local economic development points of contact at the county level for any business considering locating or expanding in a specific jurisdiction. This factsheet is available by request or by going to the MDE's recycling web page at www.mde.state.md.us/recycling and clicking on "Education and Outreach".

<u>Solving the Permit Puzzle in Maryland</u> — Outlines common State permit procedures and permits that may be required of recycling and composting businesses. MDE's Customer Service Center (CSC) is the point of contact for information and assistance. The CSC can be reached at 410-537-3772 or 800-633-6101, x3772. This booklet is available by request or by going to MDE's recycling web page at www.mde.state.md.us/recycling and clicking on "Publications".

Waste Diversion Guide

<u>Commercial Waste Diversion Implementation Guide</u> – Assists local government recycling coordinators who are working with businesses to promote recycling and source reduction. Case studies detailing successful commercial waste diversion efforts are provided. The guide is available on the MDE web site www.mde.state.md.us/assets/document/recycling/commercialwasteguide.pdf.

Education and Outreach

As State and County recycling programs mature, it is important for MDE to maintain a high profile and regularly promote the benefits of recycling and waste reduction to a variety of audiences. From July 2004, thru June 2005, MDE continued to emphasize public education through outreach efforts such as television commercials, classroom instruction, and special events.

MDE in the Classroom

MDE promotes "MDE in the Classroom" offering various displays,



presentations and demonstrations that travel to schools and events throughout Maryland. In the 2004-2005 school year, MDE reached 1,000 students and teachers at 20 Maryland schools. Activity lesson plans are also distributed to teachers of all grades as requested.

Grades K-4 receive a Power Point presentation that discusses:

- What is your environment:
- How we use our environment;
- What MDE does;
- Waste facts;
- Recycling; and
- Source reduction and reuse.

A hands-on waste sorting activity helps students understand how to recycle and a group discussion on a story that incorporates all of the discussion points in the Power Point presentation helps the students remember what they learned.

Grades 5-8 receive a Power Point presentation that discusses:

- ▶ What is your environment;
- ▶ How we use our environment;
- ▶ What MDE does:
- ▶ Environmental pollution & litter prevention;
- ▶ Waste facts:



- ▶ Recycling process;
- ▶ Source reduction & reuse;
- ▶ Buy recycled; and
- ▶ Household hazardous waste.

Hands-on demonstrations include a landfill model, a water quality model, and recycled content products.

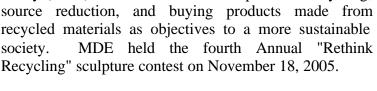
Grades 9-12 receive a Power Point presentation that discusses:

- The organizational structure of MDE;
- The responsibilities and laws associated with waste diversion;
- MDE's recycling initiatives and programs;
- Waste generation;
- Recycling process;
- Source reduction and reuse;
- Buying recycled; and
- Household hazardous waste.

Hands-on demonstrations include a landfill model, a water quality model, and recycled content products.

America Recycles Day (ARD)

America Recycles Day (ARD) is a national event that promotes recycling,



The "Rethink Recycling" sculpture contest was held at the Maryland
Department of the

Environment in Baltimore and featured 51 entries from 14 different high schools across Maryland. With instruction to create a sculpture that promotes "America Recycles Day", students made sculptures of an ornate guitar made from soda cans, wood flooring scraps, cardboard and wire hangers; a beach chair and end table composed of soda can aluminum; a Swan crafted of cut up milk jugs for feathers, tin cans, a light bulb and paper mache; and an abstract sculpture entitled "Stream of Consciousness" made from a drawer of a sewing desk, lace, eyeglasses, paint, fake fruit and old magazines. The Sculpture Contest challenged students to innovatively and artistically use recycled or reused materials as a solution to waste reduction.



MDE Web Site

Information on Maryland's recycling activities can be found on MDE's



recycling web page at www.mde.state.md.us/recycling. The web page includes information on: State and County recycling programs, special projects (e.g., electronics and mercury recycling, composting, and household hazardous waste), tire recycling, setting up recycling programs at work and school, State agency recycling (All StAR), educational resources, outreach activities, and links to other sites. New information is added as it becomes available.

MDE's website also offers Maryland's citizens and businesses the opportunity to e-mail MDE with questions or comments on recycling.

County Recycling & Solid Waste Managers Forums



MDE organizes regular joint County Solid Waste and Recycling Managers meetings in Maryland throughout the year. These meetings offer managers the opportunity to network and share ideas and insight to promote efficient solid waste management. MDE reports on the latest recycling activities, trends, legislative and regulatory changes. Speakers from industry and government are invited to

educate local governments on issues including media and public education, new technologies, and new initiatives such as electronics recycling and reducing mercury in the environment. In an effort to keep these forums focused and relevant, County managers are periodically surveyed regarding the meeting format and their technical support needs.

Whole Foods Market "Be Green" Day

On March 17, 2005, St. Patrick's Day, MDE staffed an exhibit at Whole Foods Market in Baltimore City. "Be Green" Day" encouraged people to recycle and celebrate the environment. The Chesapeake Bay Alliance, Jones Fall Watershed and Baltimore Green Week were also represented. MDE's booth displayed information on recycling, household hazardous waste, mercury, lead and eCycling. Fact sheets and brochures were distributed on the topics of illegal dumping, reducing household hazards by green home cleaning, lead poisoning prevention, buy recycling, and more. Baltimore City recycling calendars, children education activity books, and digital thermometers were offered. Whole Foods Market collected batteries, cell phones, ink cartridges, and plastic six-pack rings for recycling. They also held a cleaning products swap where customers brought in their products in exchange for Mrs. Meyer's brand organic cleaning products.

Fort Meade Earth Day Festival

On April 6, 2005, MDE participated in Fort Meade's 2nd Annual Earth Day Festival held at the Youth Services Building at Fort Meade. Military and civilian parents and students were invited to celebrate by listening to and observing presentations from participants and visiting exhibitors. MDE's exhibit highlighted recycling at home, electronics recycling, household hazardous waste collection, preventing mercury poisoning and preventing lead poisoning. Fact Sheets discussing reducing household hazards, building a zero waste lunch, and mercury kids facts were distributed. Recycling promotional items such as pencils, stickers, bookmarkers and activity books were also distributed to the students.

Mount Hope/Nanjemoy Elementary School 8th Annual Earth Day Celebration

On April 13, 2005, MDE participated in the 8th Annual Earth Day Celebration at the Mount Hope/Nanjemoy Elementary School in Charles County. Information on recycling, source reduction, reuse, and litter prevention was discussed with 60 third grade students. Recycling promotional items such as rulers, tattoos and activity books were distributed to the students.

Partnerships

MDE recognizes the value of being an active partner with local and regional groups who focus on waste management and recycling issues. The following is a description of MDE's partnerships.

<u>Maryland Recyclers Coalition (MRC)</u> – The MRC (<u>www.marylandrecyclers.org/</u>) is a non-profit, volunteer organization committed to promoting waste



reduction, recycling and the conservation of natural resources. MRC is dedicated to promoting partnerships and cooperation between private and public sectors. MDE advocates the mission of the MRC through staff and financial support in the form of membership dues and project support. A MDE representative attends monthly MRC meetings and reports MDE's activities and accomplishments to MRC Board members and attendees.

Maryland Environmental Service (MES) – MES (www.menv.com/) recognizes that recycling is an element of effective waste management. MES offers a full range of recycling services to State and local governments including program planning and implementation, facility management and operation, and marketing of materials. MES administers the Maryland Used Oil Recycling Act on behalf of MDE. Information on MES programs is available at mes@menv.com or 1-800-4RECYCLE (1-800-473-2925).

Northeast Maryland Waste Disposal Authority (NMWDA) – The NMWDA (www.nmwda.org/) provides solid waste and biosolids management to its

members – Anne Arundel County, Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, and Montgomery Counties. The Authority manages three waste-to-energy facilities, and a facility that converts sewage sludge into compost.

Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) – MDE is a member of MACREDO, a consortium that was established through a grant from the United States Environmental Protection Agency Region III to promote regional market development efforts for recycled materials. Other members include representatives from Delaware, Pennsylvania, Virginia, West Virginia and the District of Columbia. MACREDO offers a forum for information exchange between member jurisdictions, local authorities, the private sector, and nonprofit organizations.

Information about ongoing MACREDO projects is available on the MACREDO home page at www.libertynet.org/macredo. These projects involve construction materials recycling and reuse, electronic product recovery, a recycling markets directory, and mixed paper recovery.

County Waste Diversion Programs

County waste diversion programs are the key to the success of waste diversion in Maryland. MDE works cooperatively with each County to ensure that valuable market and program information is shared, analyzed, and discussed. Table 6 illustrates the elements of Maryland's individual recycling programs. Additionally, MDE's recycling web page contains detailed information on the County recycling programs and source reduction activities.

MDE commends County recycling and solid waste managers for their innovative thinking, hard work and dedication in providing education and implementing recycling and source reduction programs for Maryland's citizens and businesses. Highlights of County programs include:

- Six counties achieved waste diversion rates greater than the 40% waste diversion goal;
- ❖ Fourteen counties earned SR credits. Four of these counties, Baltimore, Charles, Howard, and Montgomery, earned the maximum 5% SR credit.
- Citizens have access to recycling by curbside collection or a regional network of drop-offs or both;
- ❖ Six Counties and the city of Greenbelt have permanent electronic drop-off locations;
- ❖ The Cities of Greenbelt and Salisbury have regularly scheduled collection events;
- ❖ Fifteen counties and Baltimore City participated in eCycling collection events;
- Fourteen counties operate textile collection programs;
- ❖ Fourteen counties and Baltimore City maintain 19 permanent mercury dropoff locations and 7 counties and Baltimore City participated in mercury collection events from July 2004 thru June 2005;

- Seven counties collect paint for recycling;
- Three counties recycle boat shrink-wrap; and
- Seventeen counties operate Household Hazardous Waste Programs.

It is important to remember that waste diversion programs are always evolving. Appendix A includes names, addresses, and phone numbers of Maryland's recycling coordinators who can provide the most current information about waste diversion in their jurisdiction. For additional information, log onto MDE's recycling web page at www.mde.state.md.us/was/recycling and click on "State, County and City Recycling Information."

Table 6 -- County Residential Recyclables by Commodity

	Mixed Paper				Established					
	 Containers 	White	Lead-Acid	Oil/	Electronic					
County	- Organics*	Goods	Batteries	Antifreeze	Drop-offs	Paints	Textiles	Hg°	HHW~	Comments [^]
Allegany	√	✓		√ / √	-		✓	√	✓	eCycle, #1 & 2 plastic only, tires; No books
Anne Arundel	✓	✓	✓	√/ ✓		✓			✓	eCycle, wood pallets, C & D, scrap metal
Baltimore City	✓	✓	✓	√/ ✓				✓	✓	eCycle, mercury, household batteries, C & D
Baltimore County	✓	✓	✓	√/ √		✓			✓	eCycle, mercury, gas, usable building material
Calvert	√	√	✓	√ √			✓	>	✓	eCycle, mercury, oil filters, ink-jet cartridges, scrap metal, propane tanks
Caroline	✓	>	✓	√ √			√		✓	eCycle, mercury; No colored paper, books, magazines, x-mas tree; Mid-shore program
Carroll	✓	>	✓	√ √				>		eCycle, asphalt roof shingles, scrap metal, propane tanks
Cecil	✓	✓	✓	√ / √				✓		mercury, wood pallets
Charles	✓	✓	✓	√ √			✓	✓	✓	eCycle, household batteries, oil filters; No books, paperboard
Dorchester	✓	✓		√/ √				✓		crab chum composting; No books
Frederick	✓	✓	✓	√ √			✓		✓	pesticide bottles, wood pallets, propane; No books
Garrett	✓	✓		√/ ✓				✓		eCycle; No cardboard, magazines, books
Harford	✓	✓	✓	√ / √	✓	✓	✓	✓		eCycle, gas, pesticide containers; No books
Howard	✓	✓	✓	√ √	✓	✓	✓	✓	✓	propane tanks, asphalt roof shingles, scrap metal, reusable bldg. materials
Kent	✓	✓	✓	√ √			✓	✓	✓	eCycle, mercury, boat shrink-wrap; Mid-shore program; No hardback books
Montgomery	✓	✓	✓	√ √	✓	✓	✓		✓	computers, bicycles, reusable building materials
Prince George's	✓	✓	✓	√/√	✓	✓		✓	✓	eCycle, mercury, cooking oil
Queen Anne's	✓	√		√ / √			✓	√	✓	eCycle, mercury, boat shrink-wrap; Mid-shore program
St. Mary's	✓	✓	✓	√ √		✓	✓		✓	mercury, #1 & 2 plastic only, mercury, pesticide containers, oil filters, ink jet cartridges
Somerset	✓	✓		√/ ✓						No books
Talbot	✓	✓	✓	√ √			✓		✓	eCycle, mercury, boat shrink-wrap; Mid-shore program
Washington	√	√	✓	√ √			✓			No books
Wicomico	√	√		√ √	√		√	✓	✓	eCycle, wood pallets; No books
Worcester	✓	✓	✓	√/	✓			✓	✓	eCycle, mercury

^{*} Unless otherwise noted in the **Comments Column**, <u>Mixed Paper</u> includes: all paper types, books, cardboard, magazines, newspaper, and telephone books; <u>Containers</u> include: glass, metal, and plastic; <u>Organics</u> include: yard trimmings and x-mas tree recycling.

* Have established Mercury Drop-offs

* Household Hazardous Waste Collection Day

* eCycle = electronics recycling

Appendix

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County Recycling Coordinators

Allegany

Ms. Terry Bennett Recycling Coordinator

Allegany County Dept. of Public Works

701 Kelly Road

Cumberland, Maryland 21502

Phone: 301-777-5933 **Fax:** 301-777-2001

E-mail: tbennett@allconet.org **Web:** http://gov.allconet.org/recycle/

Anne Arundel

Ms. Tracie Reynolds Recycling Manager

Waste Management Services 2662 Riva Road, MS-7406 Annapolis, Maryland 21401

Phone: 410-222-7951 **Fax:** 410-222-4484

E-mail: pwreyn26@mail.aacounty.org **Web:** www.aacounty.org/DPW/WasteManagement/index.cfm

Ms. Carol Taylor, Design Implementation

Specialist

Ms. Jennifer M. Peterson-Helmecki, Education/Outreach Specialist

Baltimore

Mr. Charles Reighart Recycling Coordinator County Office Bldg.

111 W. Chesapeake Avenue Towson, Maryland 21204 **Phone:** 410-887-2000

Phone: 410-887-2000 **Fax:** 410-887-2931

E-mail: creighart@co.ba.md.us

Web: www.co.ba.md.us/Agencies/publicworks/recycling/index.html
Mr. Clyde Trombetti, Public Info. Specialist
Ms. Laura Greaver, Public Info. Specialist
Mr. Joe Pistorio, Public Info. Specialist

Baltimore City

Ms. Dale Thompson Bureau of Solid Waste 200 Holliday Street

Baltimore, Maryland 21202 **Phone:** 410-396-5620 **Fax:** 410-545-6117

E-mail: <u>robert.smith@baltimorecity.gov</u>

Web: www.ci.baltimore.md.us/government/dpw/recycle.html

Calvert

Ms. Shirley Steffey Office of Recycling

P.O. Box 1330, 401 Sweetwater Road

Lusby, Maryland 20657 **Phone:** 410-326-0210 **Fax:** 410-586-9461

E-mail: steffesj@co.cal.md.us

Web: www.co.cal.md.us/services/solidwst.htm

Caroline

Mr. Marshall Monteith Recycling Coordinator Dept. of Public Works 520 Wilmuth Street Denton, Maryland 21629 **Phone:** 410-479-4040 **Fax:** 410-479-0409

E-mail: mmonteith@carolinemd.org

Web: www.carolinemd.org/governmt/pubworks/

Carroll

Ms. Venzena Legge

Manager, Recycling Operations

Dept. of Public Works

225 North Center Street, Room 200 Westminster, Maryland 21157-5194

Phone: 410-386-2633 **Fax:** 410-840-8279

E-mail: vlegge@ccg.carr.org

Web: http://ccgov.carr.org/recycle/index.html

Cecil

Mr. Phil Hoderfield Recycling Crew Leader 758 E. Old Philadelphia Road Elkton, Maryland 21921 **Phone:** 410-996-6275

Fax: 410-287-4608

E-mail: phoderfield@ccgov.org

Web: www.ccgov.org/dpw/landfill/index.htm

Charles

Ms. Lowry Phelps Dept. of Public Facilities 1001 Radio Station Road La Plata, Maryland 20646 **Phone:** 301-932-3599

Fax: 301-932-3449

E-mail: phelpsl@govt.co.charles.md.us

Web: www.govt.co.charles.md.us/pf/sw/recycling/

Dorchester

Mr. Bob Tenanty

Dorchester Co. Dept. of Solid Waste

5435 Handley Road

Cambridge, Maryland 21613

Phone: 410-228-2920 **Fax:** 410-228-9516

E-mail: btenanty@docogonet.com

Frederick

Mr. Phil Harris

Recycling Coordinator Dept. of Solid Waste 9031 Reichs Ford Road Frederick, Maryland 21704 **Phone:** 301-696-2960

Fax: 301-631-3044

E-mail:

Web: www.co.frederick.md.us/Recycling/

Garrett

Ms. Kim Madigan

Garrett County Office of Solid Waste

3118 Oakland-Sang Run Road Oakland, Maryland 21550 **Phone:** 301-387-0322 **Fax:** 301-387-2224

E-mail: kmadigan@garrettcounty.org

Web: www.co.garrett.md.us/swandr/index.html

Harford

Mr. C. Robert Ernst Recycling Coordinator

Division of Environmental Affairs

3135 Scarboro Road Street, Maryland 21154 **Phone:** 410-638-3417 **Fax:** 410-638-4019

E-mail: crernst@co.ha.md.us

Web: www.co.ha.md.us/dpw/envaffairs/

Howard

Mr. Alan Wilcom

Chief, Recycling Division

Bureau of Environmental Services 6751 Columbia Gateway Drive Columbia, Maryland 21046

Phone: 410-313-6444 **Fax:** 410-313-6490

E-mail: awilcom@co.ho.md.us

Web: www.co.ho.md.us/DPW/Environmental Homepage.htm Ms. Kim Reichart, Recycling Coordinator

Kent

Mr. Martin T. Holden

Waste Management Coordinator Kent County Public Works 709 Morgnec Road, Suite 104 Chestertown, Maryland 21620

Phone: 410-778-7448 **Fax:** 410-778-7424

E-mail: mholden@kentgov.org

Web: www.kentcounty.com/gov/pubworks/waste.htm

Midshore Regional Recycling

Program

Mr. James Wood

Midshore Recycling Program

Queen Anne's Co. Dept. of Public Works

P.O. Box 56

Centreville, Maryland 21617

Phone: 410-758-6605

Fax: 410-758-6606

E-mail: jwood@friend.ly.net

(Kent, Queen Anne's, Talbot, Caroline)

Montgomery

Ms. Eileen Kao

Division of Solid Waste Services 101 Monroe Street, 6th Floor Rockville, Maryland 20850 **Phone:** 240-777-6400

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