

# MARYLAND WASTE DIVERSION ACTIVITIES REPORT

-2008 -

(Calendar Year 2007 Data)

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#### **Overview**

#### Introduction

Waste Diversion in Maryland is defined as the amount of waste recycled and the amount of waste diverted from entering the waste stream through source reduction activities. Waste diversion, saves energy, reduces green house gasses and other pollutants generated in the manufacturing process and at landfills, saves natural resources, and reduces the amount of waste disposed at waste disposal facilities (e.g., incinerators, landfills, etc.). The Maryland Department of the Environment (MDE) promotes and encourages waste diversion across Maryland. The 2008 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 information on programs covered by Maryland's waste diversion legislation including statistical local jurisdiction recycling and waste diversion data for calendar year 2007, and an overview of the State's technical assistance activities from July 2007 thru June 2008. Data contained in this report comes from annual reports submitted to MDE by Maryland's 23 Counties, Baltimore City, State government agencies participating in the All StAR (All State Agencies Recycle) Program, and newspaper and telephone directory publishers. Counties also provide MDE information on their collection programs, institutional recycling programs, public education efforts, source reduction activities, and disposal facilities.

Solid waste <u>disposed</u> quantities used in this report to calculate waste diversion rates were gathered from Maryland Recycling Act (MRA) Tonnage Reporting Surveys, filed with the Recycling and Operations Program, that capture solid waste exported directly out-of-State without passing through a Maryland permitted facility, and from Maryland permitted Solid Waste Tonnage Reports filed with MDE's Solid Waste Program. Quantities of solid waste disposed used in this report and reported in the Solid Waste Managed in Maryland Report differ because of dissimilar reporting criteria. The annual Solid Waste Managed in Maryland Report is available at www.mde.state.md.us/ResearchCenter/Publications/Land/index.asp.

## Maryland's Legislative Mandate

In 1988, the **Maryland Recycling Act (MRA)** mandated 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 the materials to be recycled and the manner in which they are 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%.
- Telephone directories distributed in the State to have a recycled content, by weight, of 40% for 2005 and all subsequent years.
- Newsprint distributed in the State to have a 3-year rolling average recycled content, by weight, of 40% in 2005 and all subsequent years.

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:

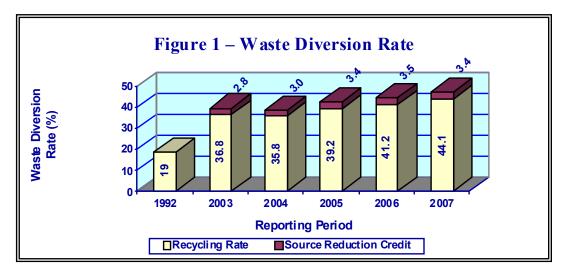
- ▶ Banning scrap tires from disposal in a landfill after January 1, 1994 (1991).
- ▶ Requiring permits for private natural wood waste recycling facilities (1992).
- ▶ Addressing, by Counties, the feasibility of composting mixed solid waste when developing solid waste management plans (1992).
- Composting in the calculation of the recycling rate (1992).
- ▶ Banning separately collected yard waste from disposal at solid waste acceptance facilities (1994).
- ▶ 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).
- ▶ Prohibiting the sale of mercury containing thermostats by October 2007. Requiring MDE report to the Governor and Legislature detailing the statewide collection, reclamation, and recycling of all products containing mercury (2006).
- ▶ Requiring manufacturers of an average of more than 1,000 computers and video display devices in the previous three years who sell or offer for sale

their product in Maryland to register and pay a fee to MDE. Fees may be used to provide grants to counties and municipalities for computer and video display device recycling activities. Replaces the 2005 computer recycling pilot program (2007).

# Waste Diversion in Maryland for 2007 – A Snapshot

## Maryland's 47.5% Waste Diversion Rate

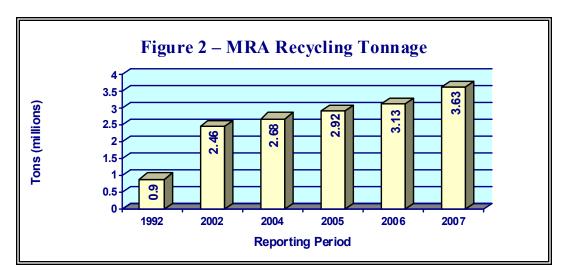
The recycling rate plus the source reduction (SR) credit make up the waste diversion rate. Through the efforts of its citizens, businesses and government agencies, Maryland achieved a statewide waste diversion rate of 47.5% in calendar year (CY) 2007. While this rate is an improvement over CY 2006, the waste diversion rate is in line with the national trend toward the stabilization of waste diversion rates. The 47.5% waste diversion rate was composed of a 44.1% MRA recycling rate and a 3.4% SR credit. This exceeds the requirements of the MRA and the 40% waste diversion goal targeted for 2005. Figure 1 provides a historical breakdown of Maryland's waste diversion rate.

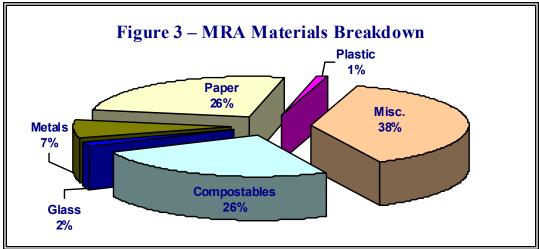


#### Maryland's 44.1% Recycling Rate

In CY 2007, Maryland residents and businesses recycled over 44% (MRA recycling tonnage ÷ (MRA recycling tonnage + MRA waste disposed)) of the municipal solid waste generated. To encourage more recycling, states across the country are seeking new ways (e.g., Single Stream Recycling, Pay-As-You-Throw Programs, etc.) to ensure that recycling continues to gain in popularity as a waste management option. Like Maryland, many states are investigating new commodities to bring into the recycling stream, while continuing to promote the benefits of recycling.

Figure 2 summarizes the recycling tonnages since 1992 and Figure 3 categorizes the total MRA tons recycled by material in CY 2007. Compostables,





and paper materials constituted the largest portion of materials recycled (miscellaneous materials are comprised of multiple materials, the largest being foundry sand at over 60% of the total miscellaneous materials).

#### Maryland's 3.4% Source Reduction Credit

In 2007, thirteen 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 (*i.e.*, backyard food waste and yard waste composting), and publications on reuse practices and yard waste reduction. A complete list of SR activities and a breakdown of Maryland SR activities in calendar year 2007 is available in the "State, County, and City Recycling Rates" section of MDE's web page at <a href="https://www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a>.

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. Business and local governments continue to seek recycling opportunities above and beyond those that apply toward the MRA rate. In fact, nearly 2.8 million tons of other Non-MRA materials were reported as being recycled in 2007. Table 1 offers a breakdown by category of the amount of Non-MRA materials reported as recycled in

Table 1 – Recycling of Non-MRA Materials in Tons

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2007

MATERIAL	TONS RECYCLED
Antifreeze	4,429
Asphalt & Concrete	1,177,024
Coal Ash	87,086
Construction/Demolition Debris	94,457
Landclearing Debris	97,229
Scrap Automobiles	223,124
Scrap Metal	539,645
Sewage Sludge	61,178
Soils	206,525
Waste Oil	49,465
Other Materials	258,943
TOTAL	2,799,105

2007. Table 2 details recycling and waste diversion totals for each of Maryland's jurisdictions. 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 <a href="https://www.mde.state.md.us/ResearchCenter/Publications/Land/index.asp">www.mde.state.md.us/ResearchCenter/Publications/Land/index.asp</a>.

## Maryland's 27.7% All StAR Recycling Rate

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.

# Table 2 – County Recyclables by Commodity in Tons for Calendar Year 2007

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2007

		<i>y</i>	our intent of t			<u></u>			<i>J</i>		
				Maryland Recycling Act (MRA) Materials							
	MRA	Waste									
	Rate <sup>2</sup>	Diversion								Non-MRA	Total
County	(%)	Rate <sup>3</sup> (%)	Compostables	Glass	Metals	Paper	Plastic	Misc.	Subtotal	Recyclables <sup>4</sup>	Recycling*
Allegany	27.56	30.56	6,343	153	1,671	6,931	589	7,934	23,621	130,963	154,584
Anne Arundel	39.16	42.16	178,723	8,370	19,420	91,319	5,993	26,676	330,501	529,359	859,860
Baltimore City	30.16	30.16	26,314	1,783	12,454	30,244	927	145,305	217,027	191,397	408,424
Baltimore County	62.27	66.27	80,150	5,006	26,793	134,429	3,321	963,632	1,213,331	497,614	1,710,945
Calvert	11.97	11.97	806	802	2,577	3,577	355	639	8,756	29,695	38,451
Carroll	28.33	31.33	19,274	1,680	3,864	17,266	810	2,071	44,965	222,156	267,121
Cecil	51.87	54.87	86,950	282	2,837	7,422	1,546	289	99,326	41,650	140,976
Charles	34.96	39.96	22,990	1,411	2,760	17,341	793	3,359	48,654	332,867	381,521
Dorchester	17.58	17.58	1,085	39	727	2,682	159	3,512	8,204	3,569	11,773
Frederick	41.32	44.32	25,644	2,646	5,560	42,379	1,186	50,337	127,752	35,905	163,657
Garrett	57.02	58.02	23,138	199	615	2,480	280	2,740	29,452	8,814	38,266
Harford	56.72	60.72	68,624	1,504	8,218	65,812	486	44,783	189,427	48,411	237,838
Howard	43.07	48.07	87,420	275	7,073	109,054	893	16,945	221,660	5,372	227,032
Mid-Shore <sup>1</sup>	50.31	50.31	20,771	1,034	1,530	30,547	374	74,477	128,733	86,389	215,122
Montgomery	38.52	43.52	155,348	17,628	94,463	167,445	5,980	20,765	461,629	39,647	501,276
Prince George's	38.21	43.21	81,530	7,716	64,236	150,621	4,456	15,655	324,214	347,827	672,041
Somerset	32.78	32.78	6,351	39.3	757	236	25	1,406	8,814	7,117	15,931
St. Mary's	31.08	35.08	4,922	918	4,474	13,934	374	2,113	26,735	40,042	66,777
Washington	35.74	35.74	6,899	1,106	2,563	33,761	7,343	2,477	54,149	42,023	96,172
Wicomico	20.35	20.35	10,073	533	3,431	12,778	2,530	1,117	30,462	8,372	38,834
Worcester	34.07	34.07	25,478	1,060	3,506	5,759	168	952	36,923	51,384	88,307
State Highways of Ad	ditional As <sub>l</sub>	phalt and Con	crete Recycled							98,532	98,532
TOTAL*	44.10	47.50	938,833	54,184	269,529	946,017	38,588	1,387,184	3,634,335	2,799,105	6,433,440

<sup>\*</sup> Due to rounding, tonnage totals in this table may differ slightly from the sum of actual values.

<sup>1</sup> Mid-Shore Regional Recycling Program includes Caroline, Kent, Queen Anne's and Talbot Counties.

<sup>2</sup> MRA Recycling Rate = MRA recycling tonnage ÷ (MRA recycling tonnage + MRA waste) x 100.

<sup>3</sup> Waste Diversion Rate = Recycling Rate + Source Reduction (SR) Credit (based on voluntary reporting of SR activities). Bolded rates include both recycling and SR activities.

<sup>4</sup> 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.

The All StAR 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 recycling activities at their various sites throughout Maryland. They provide technical support to encourage recycling and to facilitate reporting on collection activities.

In 2007, State agencies recycled nearly 25,344 tons of MRA materials for an overall MRA recycling rate of 27.7%. This is a 10.8% (or 2.7 percentage point) increase in the recycling rate over 2006. Table 3 summarizes the performance of each State agency participating in the All StAR program.

Additionally, State government recycled over 161,490 tons of non-MRA materials, including 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 2007 All StAR statistics is available under "State Agency Recycling" on MDE's web page at <a href="www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a>. MRA tonnages reported by State agencies are included in the 2007 recycling totals reported by the Counties (Table 1).

State agencies achieve cost savings by boosting the amount of waste diverted to recycling and by reducing the total amount of waste generated. Greater savings are realized by reducing the amount of waste generated. In 2007, State agencies diverted an additional 22% of their MRA waste for recycling over 2006. Consider the following money-saving scenarios based upon 2007 data with an average Maryland tipping fee of \$52:

- \$ Maryland State government realized \$1,317,888 of avoided disposal costs by recycling 25,344 tons of MRA material.
- s If each State agency (per the EO) achieves a 20% recycling rate <u>by increasing its MRA tonnage</u>, \$131,082 in additional avoided disposal costs would be realized for a potential total savings of \$1,448,970.
- s If each State agency (per the EO) achieves a 20% recycling rate <u>by decreasing the amount of waste generated</u>, additional savings of \$655,932 would be realized for a potential total savings of \$1,973,820.

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 – see Appendix A), and acting as an information clearinghouse by forwarding any relevant recycling information to the appropriate State offices.

# Table 3 – Maryland State Agencies' 2007 Recycling Rates

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2007

Agency Name	No. of Sites	No. of Sites Reporting	No. of People*	Total MRA 2007 (tons)	2007 MRA Recycling Rate (%)^
Department of General Services	20	19	9,959	590.15	31.0
Department of Labor, Licensing & Regulation	13	1	1,218	0.33	7.66
Department of Agriculture	3	3	279	43.09	26.49
Maryland Public Broadcasting Commission	1	1	207	15.98	9.9
Comptroller of the Treasury	1	1	850	199.45	80.99
Maryland School for the Deaf	2	2	795	92.72	26.57
Department of Natural Resources	5	1	723	19.50	8.57
Department of Juvenile Services	14	14	2,765	261.92	13.02
Maryland State Archives	1	1	86	2.04	6.14
Department of the Environment	1	1	898	91.65	34.40
Department of Transportation	70	62	28,195	7,631.17	36.94
Department of Health and Mental Hygiene	17	10	8,987	348.28	15.29
Maryland General Assembly	1	1	1,068	17.61	4.65
Dept. of Public Safety and Correctional Services	30	29	34,695	1,560.37	9.38
Department of Human Resources	11	11	4,484	187.36	22.30
Department of Assessments and Taxation	1	1	16	1.00	17.36
University of Maryland System	17	17	165,067	12,329.58	33.45
St. Mary's College of Maryland	1	1	2,503	816.26	41.33
Morgan State University	1	1	8,458	112.85	6.68
Department of Education	5	5	1,860	51.78	12.37
Maryland Automobile Insurance Fund	1	1	389	46.26	21.75
Maryland Stadium Authority	1	1	1100	428.67	16.62
Baltimore City Community College	1	1	8,251	11.04	3.23
Maryland Environmental Service	1	1	188	14.01	30.99
Maryland Food Center Authority	1	1	21	-	_
Judiciary of Maryland	1	1	133	11.62	24.27
Subsequent Injury Fund Board	1	1	16	2.15	37.33
Department of Veterans Affairs	1	0	657	NR	NR
Department of Budget and Management	1	1	200	13.90	40.06
Maryland State Police	27	27	1,707	225.11	30.77
Dept of Business and Economic Development	1	1	650	26.72	24.74
Maryland Higher Education Commission	1	1	77	11.50	41.49
Dept. of Housing and Community Development	1	1	400	202.34	70.86
Maryland Insurance Administration	1	1	280	21.00	35.00
TOTALS	255	221	288,016	25,343.81	27.71

<sup>\*</sup> State employees comprise approximately 89,870 of the total number of people at State Agency Locations.

Bold Type – Satisfied	the 20% recycling rate	Increase in MRA tonnage over 2006
NR – Did not report	- unable to determine amount recycled	Recycling Rate greater than previous year

<sup>^</sup> The 1988 Maryland Recycling Act mandates a State Government recycling rate of at least 20%.

The ability to get a recycling contractor to offer recycling pick-up service at a reasonable price is the largest obstacle to increasing the All StAR recycling rate. Companies who process and collect recyclables are in the business to make money. This is possible in large offices or offices in metropolitan areas where the quantity of recyclables generated makes it economically feasible to offer recycling pick-up service. In small offices or offices in rural areas, not enough recyclables are generated to make it economically feasible for recycling pick-up service. In these situations, legislation requiring State offices to recycle will not change this fact. Requiring the State to lease office space where recycling is integrated into State leasing and janitorial contracts, similar to waste collection contracts, could overcome this obstacle and make improvements in the recycling programs for Maryland State government. Currently, leasing contracts allow State offices to set up recycling programs, but they do not require them as part of the lease. MDE's preliminary talks with the Department of General Services on this issue, while showing promise, have not progressed past the introductory phase. MDE and the Lease Management and Procurement Division of DGS plan to follow-up on this issue and meet in the first quarter of 2009.

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.

# **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 every citizen'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 may also be discussed in County presentations 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 2008, buying paper products made with recycled content paper was the rule not the exception with nearly 100% of all paper products (e.g., paper, books, paper towels, etc.) purchased made from recycled content paper.
  - Details on State procurement guidelines along with lists of products available with recycled content such as picnic tables, park benches, and rerefined motor oil are available on the DGS web page at <a href="http://dgsweb.dgs.state.md.us/procure/Recycled-Laws.htm">http://dgsweb.dgs.state.md.us/procure/Recycled-Laws.htm</a>. 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 2007 through June 2008, MDE continued implementing special programs designed to expand recycling and protect public health and the environment.

#### Newsprint

Maryland law mandates that, on a statewide basis, newspapers distributed in Maryland shall contain at least 40% recycled content newsprint. To determine compliance with the law, publishers are required to file quarterly and annual reports with MDE. In the year following a reporting period (reporting period is comprised of the current calendar year and the immediately preceding two calendar years) where the recycled content percentage requirement is not met, each newspaper publisher who distributes a newspaper in Maryland shall satisfy the recycled content percentage requirement or pay a fee of \$10 per ton for each ton a publisher falls below the 40% requirement. In the reporting period ending CY 2007, the newsprint recycled content percentage was 45.6%, exceeding the requirements of the MRA.

Table 4 contains 60 publishers that distribute 163 different newspapers in Maryland. MDE is currently working with the Maryland, Delaware, District of Columbia Press Association and exploring other options to gather the information, required under the MRA, from publishers who did not fulfill reporting requirements.

**Table 4 – Maryland Newspaper Publishers** 

Publisher	Content %	Publisher	Content %
A&C Business News	NR	Gay & Lesbian Community Ctr. of Baltimore	51
Afro-American Newspapers	69.3	<b>Greenbelt Cooperative Publishing</b>	NR
American Farm Publications	35	Herald-Mail	47.4
Baltimore Business Journal	74.2	Independent Newspapers, Inc.	48.7
Baltimore Jewish Times	50.2	Kimbel Publications	37.3
Baltimore Newspaper Publishing Co., LLC	25.2	Landmark Community Newspapers	37.4
Baltimore Sun Community Newspapers	100	Latin American Times	NR
Baltimore Sun	48.4	Legal Times	NR
Baltimore Times Publications	32	Maryland Coast Dispatch	NR
Bay Weekly	39.2	Morgan Messenger	30.4
Bayside Gazette	29.6	New York Times Company	30.5
Capital-Gazette Newspapers	30.25	News Journal, Wilmington	26.5
Carroll Publishing Company	39.3	Post Newsweek Media	75
Catholic Review	38.2	Prince George's Post	30.6
Chatsworth Enterprises	36.44	R&B Publishing Company	100
Chesapeake Publishing Corporation	36.6	Randall Family, LLC	68.1
Citizen Communications, Inc.	18.3	Sentinel Newspapers	32.5
City Paper	1.1	Sincell Publishing Company	NR
CMN Communications	32	Southern Maryland Printing	31.4
Connection Publishing	100	Southern Maryland Publishing Co.	45.4
Courier	38.49	St. Mary's Today Newspaper, LLC	51.3
Cumberland Times News	30.44	USA Today	31.1
Daily Record	35.9	Washington Business Journal	NR
Dow Jones & Company	27.5	Washington County Pickett	35.2
El Tiempo Latino	67.3	Washington Newspaper Company	NR
Express Publications Company, LLC	45.42	Washington Newspaper Publishing Co., LLC	26.1
Flag Publications	50	Washington Post	44.6
Freestate Independent Inc.	31.8	Washington Times	30.3
FT Publications Inc.	2.9	Western Montgomery Bulletin	37.8
Gannettt Company, Inc.	32.28	Zip Publishing	29.8
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NR - Did not report

% based upon partial reporting period data

#### **Telephone Directory**

The MRA requires telephone directory publishers, who in the previous calendar year used at least 50 tons of directory stock in telephone directories distributed in the State of Maryland, to use directory stock with a recycled content, by weight, of at least 40%. Publishers of telephone directories must file an annual report with MDE detailing the recycled directory stock content used in their directories.

There are five known publishers of telephone directories distributed in the State of Maryland. In 2007, recycled content for these directories was reported as follows:

- **★** Data National 80.63% recycled content;
- **★** Hispanic Yellow Pages Did Not Report;
- ➤ Patuxent Publishing Company 63.2% recycled content
- **★** Idearc Media 36.5% recycled content; and
- **★** Yellow Book USA 45.5% recycled content

Per the MRA, any publisher of telephone directories distributed in the State who fails to submit the required report shall be deemed to have failed to meet the percentages established. Idearc Media paid \$4,238 for failing to meet the required directory stock content requirement.

#### **Electronics Recycling (eCycling)**

Cyclings

Electronics Recycling

Computers, televisions, 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, Maryland became the third state to enact electronic recycling legislation. The Statewide Computer

Recycling Pilot Program (SCRPP) required computer manufacturers to register with, and pay an annual registration fee to, MDE in order to sell their products in Maryland. In 2007, the Statewide Electronics Recycling Program (SERP) was passed. Effective October 1, 2007, the SERP builds upon the success of the SCRPP. Key changes to the SCRPP include expanding the scope of electronics covered and clarification to the definition of "manufacturer". Highlights of the SERP include:

- ★ Requiring manufacturers who manufacture an average of more than 1,000 covered electronic devices (*i.e.*, a computer or video display device (*e.g.*, televisions, monitors, etc.) with a screen that is greater than 4 inches measured diagonally) per year in the immediately preceding 3-year period to register with and pay a registration fee to MDE if they plan to sell or offer for sale to any person in the State a new covered electronic device.
- ★ Payment of an initial annual registration fee of \$10,000. The subsequent annual renewal registration fee is \$5,000 but the fee can be reduced to \$500 provided the manufacturer has a MDE approved takeback program.
- ★ Prohibiting a retailer from selling or offering for sale to any person in the State a new covered electronic device manufactured by a manufacturer who has not registered and paid the required registration fee to MDE.
- ★ Provision for civil and administrative penalties against manufacturers and retailers who fail to comply with the SERP.
- ★ Issuance of grants to counties and municipalities to assist with covered electronic device recycling activities.

★ Requiring counties to address methods for the separate collection and recycling of covered electronic devices in their recycling plans in order to be eligible for State grants.

Through June 30, 2008, 67 manufacturers registered with MDE and were authorized to sell their products in Maryland in 2008. In Fiscal year (FY) 2008, \$190,000 in registration fees were utilized to provide grants to 17 counties and municipalities for eCycling activities including establishing permanent collection facilities, curbside pickup for seniors, purchasing equipment, expanding electronics recycling, and holding special collection events. Additional grants will be awarded in FY 2009.

Highlights of eCycling in Maryland from October 2001 **to December 2007**, include:

- ✓ 121 special collection events (*i.e.*, 1 or 2-day collection events) were held in 24 jurisdictions.
- ✓ Following 3 years of continuous drops in the number of special collection events, there was a 160% increase in the number of collection events in 2007. This corresponds with the first eCycling grants issued by MDE that were possible due to Maryland's eCycling legislation.
- ✓ Permanent collection programs have been established in Anne Arundel, Baltimore City, Baltimore County, Calvert, Carroll, Cecil, Charles, Frederick, Garrett, Harford, Howard, Montgomery, Prince George's, St. Mary's, Wicomico, and Worcester Counties.
- ✓ Permanent facilities in Allegany, Kent, and Washington counties opened in 2008.
- ✓ Regularly scheduled eCycling collection events are held in the cities of Greenbelt and Salisbury.
- ✓ A one-day event in Baltimore County on April 30, 2005, collected over 89 tons of electronic equipment from 1,600 participants.
- ✓ Over 12,828 tons of electronic equipment has been collected for recycling throughout Maryland since the start of the eCycling program.

Information on Maryland's eCycling program is available on MDE's web page at <a href="www.mde.state.md.us/ecycling">www.mde.state.md.us/ecycling</a>. Table 5 gives a breakdown of the electronics equipment collected. An additional 2,614 tons of electronics were collected in 2007, which Counties reported to MDE as being from commercial businesses that were not part of residential eCycling programs.

**Table 5 – eCycling Collection Programs** 

County	Population	Type	Date(s)	No. of participants	Tons collected				
Subtotal Maryland	5,668,875	-	thru 12-31-06	_	8,281.25	16,562,502			
eCycling Special	eCycling Special Events in 2007								
Allegany (6)	73,980	1 & 2-day	Jan, Mar, Apr, May, Sept, Nov	431	41.09	82,176	191		
City of Annapolis	36,603	1-day	9-29-07	292	31.52	63,035	216		
City of College Park (4)	26,607	1-day	Sept, Oct	143	10.90	21,800	152		
Garrett	30,511	1-day	6-16-07	98	12.46	24,923	254		
City of Greenbelt (4)	22,625	1-day	Jan, Apr, Jul, Oct	374	11.71	23,420	63		
City of Hyattsville	15,598	1-day	10-13-07	89	2.54	5,083	57		
Midshore Region* (3)	135,696	1-day	Apr, Jun, Nov	898	42.59	85,189	95		
Prince George's (3)	859,363	1-day	Jun, Nov	1,422	25.96	51,929	37		
Washington	144,977	1-day	6-2-07	_	11.74	23,470	_		
Worcester (2)	50,628	1-day	Apr, Oct	315	14.3	28,607	91		
Subtotal Events	1,396,588	-	2007	4,062	204.82	409,632	95		
Permanent eCycli	ng in 2007								
Anne Arundel	517,937	_	2007	_	726	1,451,991	_		
Baltimore City	639,866	-	2007	_	310.37	620,740	_		
Baltimore County	799,299	_	2007	_	503.58	1,007,160	_		
Calvert	92,060	1	2007	-	115.82	231,633	_		
Carroll	173,307	ı	2007	-	217.49	434,980	-		
Cecil	102,098	ı	2007	-	107.19	214,380	_		
Charles	144,173	1	2007	_	168.51	337,018	_		
Frederick	230,472	-	2007	_	174.86	349,720	_		
Garrett	30,511	-	2007	_	17.74	35,480	_		
Harford	245,173	_	2007		163.39	326,780	_		
Howard	279,804	-	2007	-	544.98	1,089,960	-		
Montgomery	958,508	1	2007	-	849.19	1,698,380	_		
Prince George's	859,363	1	2007	-	199.88	399,760	_		
St. Mary's	101,246	-	2007	_	103.55	207,096	-		
Wicomico **	91,642	-	2007	_	53.43	106,858	-		
Worcester	50,628	_	2007	-	86.78	173,560	_		
Subtotal Permanent	5,316,087	1	2007	-	4,342.75	8,685,496	_		
Tot	tals (2001 – 2	007)		4,062 (2007)	12,828.82	25,657,630	95 (2007)		

<sup>\*</sup> Midshore Region is composed of Kent, Queen Anne's, Talbot, and Caroline Counties.

#### **Mercury Recycling**

MDE continues to implement the 2001 mercury legislation entitled "Mercury and Products that Contain Mercury" (Environment Article, Subtitle 9

<sup>\*\*</sup> The City of Salisbury (12 tons) had its annual curbside eCycling collection event in 2007. The totals from the event are included in the Wicomico County total.

Sections 6-904 through 6-907) by establishing collaborative relationships with institutions working on mercury reduction and planning to meet possible future mercury recycling activities. MDE has developed informational materials on the hazards of mercury, designed programs to encourage voluntary efforts of Marylanders to reduce mercury, increased awareness of mercury, and provided 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 distribute information for adults and children on mercury and mercury-containing products. Fact sheets are available on MDE's web page at <a href="https://www.mde.state.md.us/Programs/LandPrograms/Hazardous\_Waste/mercury/index.asp">www.mde.state.md.us/Programs/LandPrograms/Hazardous\_Waste/mercury/index.asp</a>.

The fact sheets cover such topics as mercury thermometer drop-off locations, general mercury information, alternative products to those containing mercury, mercury spill cleanup and spill kit vendor information, and fish consumption advisories. The MDE Emergency Response Division also continues to provide mercury specific response training to firefighters throughout the State.

Mercury legislation in 2006, Environment Article Section 6-905.2, prohibits the sale of mercury containing thermostats by October 1, 2007. It also required that MDE report to the Governor and Legislature detailing the statewide collection, reclamation, and recycling of all products containing mercury.

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:

- Support of the National Vehicle Mercury Switch Recovery Program (NVMSRP). NVMSRP is the result of a two-year collaborative effort involving EPA, vehicle manufacturers, the American Iron and Steel Institute, the Steel Manufacturers Association, the Institute of Scrap Recycling Industries, the Automotive Recyclers Association, Environmental Defense, the Ecology Center (Ann Arbor), and representatives of the Environmental Council Of the States. Stakeholders developed a voluntary program to recover mercury switches from scrap automobiles before they are shredded for recycling. In addition to being free to scrap recyclers, the program pays scrap recyclers \$4 per switch that is returned for recycling. In October 2008, MDE inspectors visited scrap recyclers in Maryland urging them to participate in the NVMSRP. As of May 21, 2009, 78 recyclers of a possible 152 had enrolled in the program.
- Continued support of the Hospitals for a Healthy Environment (H2E) program. When hospitals sign on as H2E Partners, they pledge to eliminate mercury at their facility and reduce the quantity and toxicity of health care waste. The Maryland H2E program, now supported with staff funded by a private foundation grant, conducts regular workshops on these topics. To date, 52 Maryland hospitals have signed on as partners.

#### **Household Hazardous Materials (HHW)**

The Annotated Code of Maryland, Environment Article § 9-1801, defines Household Hazardous Waste (HHW) is any waste material, including garbage or trash, derived from a household that would be listed as hazardous waste under the Resource Conservation and Recovery Act but for the fact that the waste is derived from a household. Household hazardous waste may include: agricultural chemicals, cleaning agents and solvents, motor oils, paint, pesticides, and preservatives.

Maryland does not regulate HHW as hazardous waste and Federal law allows for the disposal of HHW in household trash. However, due to the potential of HHW to cause physical injury, contaminate septic tanks or wastewater treatment systems, and present hazards to children and pets, MDE recommends the proper recycling/disposal of HHW materials at local HHW collection programs. Information on HHW programs in Maryland is available at <a href="https://www.mde.state.md.us/Programs/LandPrograms/Recycling/Education/hhw.asp">www.mde.state.md.us/Programs/LandPrograms/Recycling/Education/hhw.asp</a>.

#### **Natural Wood Waste Recycling**

A Natural Wood Waste Recycling Facility (NWWRF) means a facility where recycling services for natural wood waste are provided. Natural wood waste (NWW) means tree and other natural vegetative refuse. NWW includes tree stumps, brush and limbs, root mats, logs, and other natural vegetative material. NWW does not include pallets, crates, lumber, wood chips, firewood, or other products that may be made from NWW, but have subsequently been processed.

MDE views NWW as vegetation, in its natural state, that has been discarded or designated for disposal and requires owners or operators of facilities that receive or process natural wood waste to obtain a permit to operate. Any person or company engaged in natural wood waste recycling activities is regulated under Code of Maryland Regulations 26.04.09. A NWWRF does not include a collection or processing facility operated by a nonprofit or governmental organization located in the State. A NWWRF is also not a single individual or business that processes only NWW generated on its premises or that provides recycling services solely for its employees. Additionally, facilities that only accept processed wood are not required to obtain a NWWRF Permit from MDE. Table 6 lists current permitted NWWRFs in Maryland.

Additional information on Maryland's NWW program is available at <a href="https://www.mde.state.md.us/Programs/LandPrograms/Solid\_Waste/index.asp">www.mde.state.md.us/Programs/LandPrograms/Solid\_Waste/index.asp</a> on MDE's web page, or by contacting MDE's Solid Waste Program at 410-537-3375 or <a href="mailto:khosseinz@mde.state.md.us">khosseinz@mde.state.md.us</a>.

**Table 6 – Permitted Natural Wood Waste Recycling Facilities** 

COUNTY/CITY	FACILITY NAME	PHONE NUMBER		
ANNE ARUNDEL				
Pasadena	A-A Recycling, Inc.	410-437-7718		
Annapolis	Broadneck Hauling	410-757-6152		
Crofton	Wm. Alan Boehm	410-721-1866		
Odenton	L&W Recycling, Inc.	410-551-9142		
BALTIMORE	East recejoning, me.	110 331 3112		
Essex	Albert J. Bierman	410-682-2992		
Baltimore	Baltimore County DPW	410-887-2009		
Baltimore	Edrich Lumber, Inc.	410-922-5959		
Baltimore	Hollins Organic Product	410-828-0210		
Baltimore	Northwest Recycling, LLC	410-833-9369		
White Marsh	Wirtz & Daughters	410-335-0400		
CALVERT	WITE & Daughters	410-333-0400		
Prince Frederick	Thomas L. Hance, Inc.	410-586-0383		
Lusby	Quality Built Homes, Inc.	410-535-6008		
CARROLL	Quanty Dunt Homes, mc.	710-333-0000		
Westminster	Carroll Co. Dept. of Enterprise & Recreation	410-386-2097		
Westminster	C.J. Miller, LLC	410-239-8006		
Woodbine	Recycled Green Industries, LLC	301-674-6689		
CECIL	Recycled Green industries, LLC	301-074-0089		
Elkton	A.L.C. Mulch & Soil, LLC	410-392-0770		
Elkton	Grass Busters Landscaping	301-292-1166		
CHARLES	Grass Busiers Lanuscaping	301-292-1100		
	James E. Hill	201 024 7159		
Ripley Newburg	Maximulch, LLC	301-934-7158 301-259-4906		
FREDERICK	Maximulen, ELC	301-239-4900		
Frederick	Frederick Co. Board of County Commissioners	301-694-1848		
Point of Rocks	William Lee Butler	301-607-4541		
HARFORD	William Lee Butler	301-007-4341		
	Comer Construction Co.	410.870.6004		
Aberdeen		410-879-6094		
Whiteford	Arthur D. Hesron	410-692-2673		
Bel Air	T&M Mulch, Inc.	410-838-2266		
Aberdeen	Crouse Construction Co.	410-879-1822		
HOWARD	I M. C. II.	410 465 4070		
Ellicott City	Jerom M. Carlin	410-465-4078		
MONTGOMERY	ACME Discussion Deal selection Inc.	201 540 2069		
Brookville	ACME Biomass Reduction, Inc.	301-540-2968		
Poolesville	Twin Ponds Farm, LLC	301-942-6700		
PRINCE GEORGE'S	D	201 000 (112		
Upper Marlboro	Dower House Road, LLC	301-809-6113		
Clarksburg	Ritchie Land Reclamation LP	301-428-0800		
TALBOT	D 111 0 10 0 17	410.000.000		
Queen Anne	Dependable Sand & Gravel, Inc.	410-822-6363		
QUEEN ANNE'S		140		
Queenstown	R.H. Baker & Sons, Inc.	410-827-8831		
WASHINGTON	W. 11	240		
Hagerstown	Washington Co. Board of County Commissioners	240-313-2790		
Hancock	L&I Tree Clearing, LLC	301-678-7100		
WICOMICO				
Delmar	Dunn's Tractor Services, Inc.	410-742-7429		
Salisbury	Eastern Shore Forrest Product, Inc.	410-5487136		

#### **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. The State's material recovery facilities (MRFs) are strategically located to ensure materials reach their market economically.

Businesses the Recycling Market access Directory 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 http://macredo.org/ for facilities in the region. The MACREDO database is searchable by business name, commodity group, facility type, member state, and metropolitan area and/or zip code. Additional links to other companies are available on MDE's recycling web pages for the specific commodity in question. For companies without access to the Internet, MDE can mail or fax a list of markets by material.

<u>Automobile Tires</u> – The Scrap Tire Recycling Act established a mechanism for the cleanup of scrap tire stockpiles and for the collection, transportation and recycling or processing of all scrap tires that are generated annually in Maryland. The Act established the State Used Tire Cleanup and Recycling Fund (Fund) as the funding support for the Scrap Tire Program.

The Department uses the Fund for administration of the program, licensing activities, stockpile cleanups, enforcement/compliance, remedial actions, and for the development and distribution of public information concerning scrap tire issues.

Under the Department's authorization, the Maryland Environmental Service (MES) may use portions of the Fund to implement and oversee programs established as part of a Scrap Tire Recycling System and other projects that reduce, recover and/or recycle 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 <a href="http://www.mde.state.md.us/Land/land\_publications/index.asp">http://www.mde.state.md.us/Land/land\_publications/index.asp</a>.

<u>Batteries</u> – The metals and plastics contained in batteries can be recycled and used to make other products (including new batteries). In addition, the recycling of batteries allows the collection of hazardous metals 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 each County. County contact information is available on MDE's household hazardous waste web page 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 is 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 Market Directory" on MDE's recycling web 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
Inmetco	724-758-2800
Maryland Recycle Company	410-780-3060
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 these companies for details.

White Goods – White goods are defined as large household appliances such as refrigerators, stoves, air conditioners, and washing machines. 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. Every County and Baltimore City accepts white goods from residents for recycling. Contact each jurisdiction for details and any questions concerning the proper collection procedures. Contact information is also available in the "State, County, and City Contact Info" section on MDE's web page at <a href="https://www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a>. Additionally, resources for residents and businesses are available under "Metals" in the "Recycling Market Directory" available on MDE's recycling web page.

#### **Permitting Guidance**

Documents are available and regularly updated through MDE to assist recycling and composting businesses in understanding environmental permitting procedures and requirements.

<u>Business Guide to Environmental Permits and Approval</u> – This Business Guide to Permits and Approvals (<u>www.mde.state.md.us/Permits/busGuide.asp</u>) contains important information about the different types of permits, licenses and approvals issued by the Maryland Department of the Environment (MDE). These permits affect businesses and individuals ranging from well drillers, dry cleaners, and gas stations, to power plants and other large industrial facilities. MDE developed this guide as part of its continued commitment to provide excellent service to its permitting customers. The information in this guide can help you determine your permitting needs.

<u>Local Permitting Issues for Recycling and Composting Facilities</u> – This fact sheet 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 <a href="https://www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a> and clicking on "Education and Outreach".

<u>Solving the Permit Puzzle in Maryland</u> – This document 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 going to MDE's recycling web page at <a href="https://www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a> and clicking on "Publications".

#### **Waste Diversion Guide**

<u>Commercial Waste Diversion Implementation Guide</u> – This document assists local 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 at <a href="https://www.mde.state.md.us/assets/document/recycling/commercialwasteguide.pdf">www.mde.state.md.us/assets/document/recycling/commercialwasteguide.pdf</a>.

#### **Public Resources**

As State and County recycling programs mature, it is important for MDE to keep the public informed on waste diversion programs in the State. From July 2007 thru June 2008, MDE provided assistance and public education through efforts such as America Recycles Day/Rethink Recycling Sculpture Contest, web resources, and county solid waste and recycling manager meetings.

#### **America Recycles Day (ARD)**

America Recycles Day (ARD) is a national event that promotes recycling, source reduction, and buying products made from recycled materials as objectives to a more sustainable society. MDE held the sixth Annual "Rethink Recycling" sculpture contest on November 16, 2007 at MDE headquarters.

The "Rethink Recycling" sculpture contest was held at the Maryland Department of the Environment in Baltimore and featured 43 entries from 10 different high schools across Maryland. The Sculpture Contest challenged students to innovatively and artistically use recycled or reused materials as a solution to waste reduction. With instruction to create a sculpture that promotes "America Recycles Day", students made sculptures containing electronic components, cardboard, plastic, scrap wood, dryer lint, old tea bags and other materials. Participants were judged based on creativity, use of materials, and workmanship. In addition, a "People's Choice" award was given to the sculpture that received the most votes from attendees of the contest.

The top sculpture was "Play It Again Sam" made of metal, bottles, cans, a milk jug, cardboard, and a chair.

#### **MDE Web Site**

Information on Maryland's waste diversion activities can be found on MDE's recycling web page at <a href="www.mde.state.md.us/recycling">www.mde.state.md.us/recycling</a>. The web page includes information on: State and County recycling programs, source reduction, special projects (e.g., electronics and mercury recycling, composting, and household hazardous waste), household hazardous waste, setting up recycling programs at work and school, All StAR recycling, educational resources, 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 gain insight to promote efficient solid waste management and recycling programs. MDE reports on the latest recycling activities, trends, and legislative and regulatory changes. Speakers from industry and government are invited to educate local governments on issues including news media and public education, new technologies, and 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.

#### **Partnerships**

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

Maryland Recycling Network (MRN) – The MRN (www.marylandrecyclers.org/) is a non-profit, volunteer organization committed to promoting waste reduction, recycling and the conservation of natural resources. MRN is dedicated to promoting partnerships and cooperation between private and public sectors. MDE supports the mission of the MRN through staff participation, funding, and projects. MDE attends MRN meetings and reports MDE's activities and accomplishments to MRN Board members and attendees.

<u>Maryland Environmental Service (MES)</u> – MES (<u>www.menv.com/</u>) recognizes that recycling is an element of effective waste management. MES assists the MDE-led All StAR program and local governments by offering a full range of recycling services including program planning and implementation, facility management and operation, and marketing of materials. MES administers the Maryland Used Oil Recycling Program on behalf of MDE. Information on MES programs is available at <a href="www.mes@menv.com">www.mes@menv.com</a> 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 <a href="http://macredo.org/">http://macredo.org/</a>. These projects involve construction materials recycling and reuse, electronic product recovery, food waste composting, 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 7 illustrates the elements of Maryland's individual recycling programs. Unless otherwise noted in Table 7, all Counties collect "core" recyclables that include mixed paper (*i.e.*, all paper types, envelopes, books, cardboard, magazines, newspaper, and telephone books), containers (*i.e.*, glass, metal, and plastic), white goods (*i.e.*, appliances), and organics (*i.e.*, yard trimmings and Christmas tree recycling). Additionally, MDE's recycling web page contains detailed information on the County recycling programs and source reduction activities. It is ALWAYS a good idea to contact the County to confirm the information reported in Table 7 and for further details.

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 in 2007 include:

- ❖ Ten counties achieved waste diversion rates greater than the 40% waste diversion goal.
- ❖ Thirteen counties earned SR credits. Four of these counties, Charles, Howard, Montgomery, and Prince George's earned the maximum 5% SR credit.
- Citizens had access to recycling by curbside collection or a regional network of drop-offs or both.
- **!** Eleven Counties accept fluorescent lights for recycling.
- Six Counties accept expired medication for proper disposal.
- Sixteen Counties had permanent electronic drop-off locations.
- ❖ The Cities of Greenbelt and Salisbury had regularly scheduled eCycling collection events.
- Nine counties and four municipalities held eCycling collection events.
- ❖ Fifteen counties operated textile collection programs.
- Fourteen counties maintained 19 mercury thermometer drop-off locations.
- Seven counties collected paint for recycling.
- \* Three counties recycled boat shrink-wrap.
- ❖ Eighteen counties operated Household Hazardous Waste Programs.

It is important to remember that waste diversion programs are constantly evolving. Appendix B includes contact information for Maryland's recycling coordinators who can provide the most current information about waste diversion in their jurisdictions. For additional information, log onto MDE's recycling web page at <a href="https://www.mde.state.md.us/was/recycling">www.mde.state.md.us/was/recycling</a> and click on "State, County, and City Contact Info."

# **Table 7 -- County Residential Recyclables by Commodity**

County	Fluorescent Lights	Medicine	Lead-Acid Batteries		Established Electronic Drop-offs	Paints	Textiles	Hg°	HHW~	Comments/Additional Materials^
Allegany	✓			<b>√</b>   <b>√</b>			✓		✓	eCycle event (household batteries & fluorescen lights), tire events; <b>No</b> books
Anne Arundel*	✓		✓	<b>√</b>   <b>√</b>	✓	✓			✓	wood pallets, C & D, scrap metal, tires
Baltimore City*	✓		✓	<b>√</b>   <b>√</b>	✓				✓	leaves and x-mas tree only
Baltimore County	✓	✓	✓	<b>√</b>  √	✓	✓		✓	✓	gasoline, usable building material, thermostats residential rechargeable batteries
Calvert*	✓		<b>√</b>	<b>√</b>   <b>√</b>	✓		<b>✓</b>	✓	✓	cooking oil filters, ink-jet cartridges, rechargeable batteries, scrap metal, propane tanks, oil filters
Caroline			<b>√</b>	<b>√</b>   <b>√</b>			<b>✓</b>		✓	eCycle event; <b>No</b> hard covers books w/ mixed paper; Mid-shore program
Carroll*			✓	<b>√</b>   <b>√</b>	✓		✓	✓	✓	asphalt roof shingles, scrap metal, propane tanks
Cecil*	✓	✓	<b>✓</b>	<b>√</b>  √	✓		✓	✓	✓	wood pallets, rechargeable batteries, medication
Charles*		✓	✓	<b>√</b>   <b>√</b>	✓		✓		✓	household batteries, oil filters; <b>No</b> books paperboard
Dorchester				<b>√</b>   <b>√</b>				✓		No books
Frederick*	✓	✓	✓	<b>√</b>   <b>√</b>	✓		✓		✓	pesticide bottles, wood pallets, propane; No books
Garrett				<b>√</b>   <b>√</b>	✓					#1 & 2 plastic only, inkjet & toner cartridges, <b>No</b> books
Harford	✓		✓	<b>√</b>  √	✓	✓	✓	✓		gasoline, pesticide containers, oil filters, propane tanks, injet cartridges, gasoline
Howard*			✓	<b>√</b>   <b>√</b>	✓	<b>√</b>	✓	✓	~	propane tanks, asphalt roof shingles, scrapmetal, reusable building materials, carpet vegetable oil
Kent			<b>√</b>	<b>√</b>   <b>√</b>			<b>✓</b>	✓	✓	eCycle event, pesticides, boat shrink-wrap; Mid shore program; <b>No</b> hardback books
Montgomery	✓		✓	<b>√</b>   <b>√</b>	✓	✓	✓		✓	bicycles, cooking oil, propane tanks, tires reusable building materials
Prince George's*	✓	✓	✓	<b>√I</b> √	✓	✓		✓	✓	cooking oil, mattress foam
Queen Anne's				<b>√</b>   <b>√</b>			✓	✓	✓	eCycle event, boat shrink-wrap, passenger tires Mid-shore program
St. Mary's*	✓	✓	✓	<b>√</b>   <b>√</b>	✓	✓	✓		✓	#1 & 2 plastic only, pesticide containers, oi filters, ink jet cartridges, cooking oil, rechargeable batteries, propane cylinders, scrap tires, metal
Somerset				<b>√</b>   <b>√</b>				✓		No books
Talbot			<b>✓</b>	<b>√</b>   <b>√</b>			<b>✓</b>		✓	eCycle event, pesticides, boat shrink-wrap; Mid shore program
Washington			<b>✓</b>	<b>√</b>   <b>√</b>				✓		eCycle event
Wicomico				<b>√</b>   <b>√</b>	✓		✓	1		pesticides, wood pallets
Worcester			✓	<b>√</b> 1	✓			✓	✓	drywall

# **Appendix**

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# Appendix A

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# Start a Rechargeable Battery and Cell Phone Recycling Program at Your Agency

- KARA SCHWENKE MDE STAFF

Recycling rechargeable batteries and cell phones has never been easier. Thanks to the Rechargeable Battery Recycling Corporation's (RBRC) Call2Recycle™ program, your agency can be supplied with a collection box and a pre-paid, pre-addressed shipping label that will be used to send batteries and cell phones to a processing and recovery facility.

RBRC is a non-profit public service organization dedicated to recycling used rechargeable batteries and old cell phones. RBRC collects the Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), Lithium Ion (Liion), and Small Sealed Lead \*(Pb)



rechargeable batteries that power a variety of portable electronic products such as cellular and cordless phones, power tools, laptop computers, camcorders, two-way radios, and digital cameras. Since 1994. RBRC has recycled more than 22 million pounds of rechargeable batteries.

RBRC offers recycling plans for retailers, communities, public agencies, and businesses. RBRC provides collection materials and pays recycling costs.

If your agency participates in the *Call2Recycle*<sup>™</sup> program, all of the collected batteries and cell phones can be applied to your Maryland Recycling Act (MRA) rate. For more information on how to obtain a collection kit and participate in the *Call2Recycle*<sup>™</sup> program, log onto <a href="https://www.call2recycle.org">www.call2recycle.org</a> or contact customer service at 877-723-1297.

#### Did you know?

According to the EPA, more than 350 million rechargeable batteries are purchased in the U.S. annually.



# 16 Maryland State Agencies Reach 20% Goal

 KARA SCHWENKE MDE STAFF

The 1988 Maryland Recycling Act (MRA) requires the development of a recycling plan that



reduces the amount of solid waste disposed by State government by at least 20 percent or to an amount that is practical and economically

[See All StAR, page 2]

# MDE Staff is Here to Help!

- KARA SCHWENKE MDE STAFF

Looking to boost your agency's recycling rate but need some help doing it? Remember – MDE's Recycling and Operations Program is here to help in any way it can!

Christy Bujnovszky has been with MDE's Waste Management Administration for 10 vears (formerly working for the Scrap Program) joining Recycling Program in January 2006. Christy is the lead contact person for state and county recycling, and works to provide technical support to encourage recycling and facilitate reporting on collection activities for State agencies.

Christy Bujnovszky can be reached at (410) 537-3314 or by email at <a href="mailto:cbujnovszky@mde.state.md.us">cbujnovszky@mde.state.md.us</a>.
Feel free to contact her for help

Feel free to contact her for help with your All StAR program!



The next All StAR News is scheduled for the Winter of 2007!

[ALL StAR, from page 1]



feasible. In no case may the amount to be recycled be less than 10 percent. In 2006, Maryland State Government exceeded the minimum rate and recycled 25.8 percent of the waste generated. This is a 5 percentage point increase over the 2005 recycling rate!

Thirteen State agencies increased their MRA tonnage over 2005 and recycled at least 20 percent of their waste. These are as follows; Comptroller of the Treasury, Department of General Services, Maryland School for the Deaf, Maryland Department of the Environment, Maryland Department of Transportation, Department of Health and Mental Hygiene, University of Maryland System, Maryland Automobile Insurance Fund, Subsequent Injury Fund Board, Maryland State Police, Department of Business and Economic Development, Maryland Higher Education Commission and Maryland Administration. Insurance Additionally, even though their MRA tonnages did not increase

in 2006, an additional 4 state agencies (Department of Veterans Affairs, Judiciary of Maryland, Maryland Environmental Service, Department of Human Resources) met the 20 percent goal. Kudos to the Subsequent Injury Fund Board for increasing their recycling rate from 2005 by a whopping 26 percentage points to 69%! Morgan State University also gets a thumbs up for doubling both their MRA tonnages and recycling rate from 2005. Keep up the good work - 20% is just around the corner for you!

Keep in mind that even if you don't recycle at all the sites within your agency, MDE still needs you to complete the All StAR report.

A more detailed breakdown of the 2006 All StAR recycling results is presented on the following page. Additional information on Maryland's 25.8% All StAR Recycling Rate will soon be available on MDE's recycling web page at <a href="https://www.mde.state.md.us/Programs/LandPrograms/Recycling/StateAgencies/index.asp">www.mde.state.md.us/Programs/LandPrograms/Recycling/StateAgencies/index.asp</a>.



Have a story idea or specific questions on a topic?
Send comments and ideas for future stories to David Mrgich at <a href="mailto:dmrgich@mde.state.md.us">dmrgich@mde.state.md.us</a>.

# Maryland State Agencies' 2006 Recycling Rates

Agency Name	No. of Sites	No. of Sites Reporting	Total MRA 2006 (tons)	2005 MRA Recycling Rate (%)^	2006 MRA Recycling Rate (%)^
Department of General Services	20	20	693.84	24.0	22.1
Department of Labor, Licensing & Regulation	12	0	NR	NR	NR
Department of Agriculture	2	0	NR	NR	NR
Maryland Public Broadcasting Commission	1	1	15.57	22.2	9.7
Comptroller of the Treasury	1	1	183.34	53.9	63.8
Maryland School for the Deaf	2	2	92.76	19.3	35.3
Department of Natural Resources	5	0	NR	34.9	NR
Department of Juvenile Services	14	12	188.07	8.5	16.0
Maryland State Archives	1	1	7.19	17.7	18.3
Department of the Environment	1	1	66.06	39.5	40.9
Department of Transportation	64	54	6559.32	35.8	37.5
Department of Health and Mental Hygiene	17	10	979.89	10.5	21.3
Maryland General Assembly	1	0	NR	NR	NR
Dept. of Public Safety and Correctional Services	29	28	1472.61	12.6	9.9
Department of Human Resources	12	5	79.86	26.2	26.4
Department of Assessments and Taxation	1	1	1.03	17.9	15.2
University of Maryland System	15	14	8672.31	23.5	30.3
St. Mary's College of Maryland	1	1	107.02	17.4	8.5
Morgan State University	1	1	102.00	8.2	15.0
Department of Education	3	3	49.26	16.6	19.0
Maryland Automobile Insurance Fund	1	1	80.84	40.2	49.3
Maryland Stadium Authority	1	1	167.57	11.0	18.3
Baltimore City Community College	1	1	3.88	1.6	1.1
Maryland Environmental Service	1	1	13.29	30.0	29.9
Maryland Food Center Authority	1	1	0.00	0.0	0.0
Judiciary of Maryland	1	1	14.97	32.6	41.6
Subsequent Injury Fund Board	1	1	4.00	43.4	69.0
Department of Veterans Affairs	1	1	1.00	NR	69.4
Department of Budget and Management	1	1	7.15	16.7	12.1
Maryland State Police	27	27	241.59	29.3	29.3
Dept of Business and Economic Development	1	1	29.84	20.6	27.6
Maryland Higher Education Commission	1	1	11.30	39.2	39.7
Dept. of Housing and Community Development	1	0	NR	12.5	NR
Maryland Insurance Administration	1	1	21.80	29.1	35.9
TOTALS	243	194	19,855.10	20.2	25.8

<sup>\*</sup> State employees comprise approximately 84,929 of the total number of people at State Agency Locations.

Bold Type – Satisfied the 20% recycling rate NR – Did not report Increase in MRA tonnage over 2005 Recycling Rate greater than previous year

<sup>^</sup> The 1988 Maryland Recycling Act mandates a State Government recycling rate of at least 20%.

# Appendix B

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# **County Recycling Coordinators**

#### **Allegany**

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Allegany County Department of Public

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