



2004 Recycling Report



Delaware generated a total of **2,754,645** tons of material to be managed. A total of **994,700** tons of materials were disposed of in DSWA landfills. The remaining **1,759,945** tons, or **64%**, were recycled or reused.

The following companies purchased recyclable materials from the IPF in 2004:

<i>Company</i>	<i>Tons</i>	<i>Commodity</i>
PREI/Recycle America—Youngsville, NC	985	Plastic
Bristol Paper Recycling—Chappaqua, NY	22	
CellMark, Inc.—South Norwalk, CT	20	
Garden State Recycling—Edison, NJ	14	
Trex Co.—Winchester, VA	86	Plastic Bags
Waste Management—Cherry Hill, NJ	61	Steel Cans
Conti Group—Brooklyn, NY	19	
Canusa Hershman—Baltimore, MD	159	
Cell Mark—South Norwalk, CT	177	
Diamond State Recycling—Wilmington, DE	164	Aluminum Cans
Waste Management—Cherry Hill, NJ	13	
American Independent Paper—Tarrytown, NY	20	Cardboard
Butler Paper Recycling—Suffolk, VA	89	
Chesapeake Fiber Resources—Urbanna, VA	66	
Canusa Hershman—Baltimore, MD	157	
Cell Mark—South Norwalk, CT	175	
Lasensky Paper Stock—Lansdowne, PA	354	
Millenium Fibers, Inc.—Valley Stream, NY	137	
Garden State Recycling—Edison, NJ	4,501	
Euro-Fibers, Inc.—Franklin Center, PA	13	
Todd Heller Inc.—Northampton, PA	4,024	Glass
CitiSteel, USA—Claymont, DE	317	Oil Filters
Garden State Recycling—Edison, NJ	188	Paper
Marcal Paper Mills—Elmwood Park, NJ	2,388	
Cell Mark—South Norwalk, CT	124	
Canusa Hershman—Baltimore, MD	62	
Waste Management/RAA—Wilmington, DE	12,749	
Computer Donation Management—Baltimore, MD	1,012	Electronic Goods

Definition of Terms

RECYCLE DELAWARE

DSWA operates a voluntary recycling program for the residents of Delaware. Over 140 RECYCLE DELAWARE centers statewide provide recycling containers for most common household recyclable items. (See chart for a list of accepted items at RD centers.)

Curbside Collection

DSWA offers a voluntary curbside recycling collection service to New Castle County residents only. This once pilot program continues to grow, and in FY 2004 it reached over 2,500 customers. Customers pay a minimal fee to have recyclables collected curbside once a week. These materials are source separated into color-coded bags, thus keeping recyclables clean from contaminants. (See chart for a list of accepted items)

DSWA Facility

DSWA offers other recycling programs at each of its facilities. Programs offered include yard waste recycling, tire recycling, and white goods (appliances) recycling. These materials are kept separate from garbage, and are processed and prepared for markets.

Post Office

DSWA continues to work with over 12 United States Post Offices in an effort to divert all Undeliverable Bulk Business Mail (UBBM) from the waste stream. DSWA provides a large roll-off container for each post office, where postal employees deposit all UBBM at the end of the day.

Oil Filter

SWA provides a 55-gallon drum to over 480 service stations throughout Delaware. Each service station is asked to deposit all used oil filters into drums; DSWA employees then collect and process all filters. Once processed, all filters are sent to CitiSteel, where they are made into new steel products.

EGR (Electronic Goods Recycling)

DSWA provides a free electronics collection program for all Delaware schools, businesses, and residents. This program collects a range of electronic devices, then recycles or refurbishes over 85% of the material collected.

NKS

DSWA partners with NKS Distributors to collect and process all glass bottles collected at various NKS collection points throughout Delaware. On average, DSWA and NKS recycles over 4,500 cases of glass bottles a week.

Delaware Businesses

DSWA conducts an annual survey of all Delaware businesses involved in recycling. This survey shows the different materials recycled and identifies the collection method used, thus avoiding double counting of materials reported.

Item/Source	RECYCLE DELAWARE	Curbside Collection	DSWA Facility	Post Office	Oil Filter	EGR	NKS	Delaware Businesses	% of Total	TOTAL Tons
Paper (ONP)	12,487	100						27	0.72%	12,614
Plastic Bottles	1,159	15						73	0.07%	1,247
Clear Glass	1,186								0.07%	1,186
Brown Glass	363								0.02%	363
Green Glass	780								0.04%	780
Mixed Glass		118					1498		0.09%	1,616
Aluminum/Steel Cans	741	16						4,716	0.31%	5,473
Cardboard	2,286	14						1,917	0.24%	4,217
Household Batteries	53							0.15	0.003%	53
Grocery Bags	86								0.005%	86
Motor Oil	1,397							571	0.11%	1,968
Oil Filters					496				0.03%	496
Textiles	33								0.002%	33
Junk Mail	928	83		1,041				388	0.14%	2,440
Office Paper			615					2,484	0.18%	3,099
Yard Waste		35	6,466					41,414	2.74%	47,915
Electronics						1,076			0.06%	1,076
Special Waste (landfill applications)			657,176						37.35%	657,176
C&D (Asphalt, Concrete, Wood)			68,280					264,779	18.93%	333,059
All Aluminum								4,703	0.27%	4,703
Ferrous								485,581	27.60%	485,581
All Other Non-Ferrous								5,110	0.29%	5,110
Scrap Cars								12,908	0.73%	12,908
Automotive Batteries								1,932	0.11%	1,932
Polystyrene								266	0.02%	266
Glass								24	0.001%	24
Tires			2,724					9,516	0.70%	12,240
White Goods			3,340					10,249	0.77%	13,589
Anti-Freeze								306	0.02%	306
Other (vegetable oil, ink, soil, etc.)								148,389	8.43%	148,389
SUB TOTALS	21,499	381	737,986	1,041	496	1,076	1,498	995,355	100%	1,759,945

DSWA's Electronic Goods Recycling Program

<i>Devices</i>	
Monitors	16,985
CPU/Hard Drives	10,659
Printers	9,214
Televisions	5,593
Microwaves	338
Other	1,968
TOTAL	44,757

Beneficial Use of Special Waste Materials

Materials used for cover or construction projects

<i>Item</i>	<i>Tons</i>	<i>Metric Tons</i>
PPL Stabilized Sludge	216,157	196,054
Barrier	71,838	65,157
Clean Earth	197,650	179,269
Recover Mat	89,134	80,845
ReagentM	82,397	74,734
TOTAL	657,176	596,059

Total Per Ton Revenues and Costs by Commodities for Materials Recycled

<i>Materials</i>	<i>Avg. Market Cost Per Ton</i>	<i>DSWA's Processing Costs Per Ton</i>	<i>DSWA's Collection Costs Per Ton</i>	<i>Net Value Per Ton</i>
ONP (newspaper)	36	59	97	(120)
OCC (cardboard)	25	59	166	(200)
Plastic Bottles	136	59	380	(303)
Clear Glass	20	59	143	(182)
Brown Glass	10	59	143	(192)
Green Glass	0	59	168	(227)
Aluminum	1,067	59	233	775
Steel Cans	104	59	233	(188)
Oil Filters	5	59	59	(113)
Textiles	25	n/a	59	(34)
Office Paper	100	59	0	41
Electronic Goods	0	232	291	(523)
Junk Mail	46	59	78	(91)

Breakdown of Costs to Collect Materials for Recycling in the RECYCLE DELAWARE and Electronic Goods Recycling Programs

<i>Item</i>	<i>RECYCLE DELAWARE</i>	<i>Electronic Goods</i>
Employee Costs (wages)	329,117	34,546
Contractor's Operating Costs (contract DSWA-498)	1,511,434	0
Contractual Services (temporary services, insurance, etc.)	254,587	89,167
Professional Services (legal & auditing services)	76,869	0
Travel	487	210
Utilities	7,630	1,295
Supplies and Materials	260,730	5,046
Depreciation (land, site, equipment, vehicle depreciation)	161,306	11,256
G & A Distribution (overhead, accounting fees)	179,194	0
TOTAL RECYCLED OR REUSED	2,781,354	141,520

Breakdown of Costs to Process Materials at the Intermediate Processing Facility (IPF)

<i>Item</i>	<i>RECYCLE DELAWARE</i>	<i>Electronic Goods</i>
Employee Costs (wages)	393,564	69,092
Contractual Services (temporary services, insurance, etc.)	447,999	173,011
Professional Services (legal & auditing services)	116,352	0
Travel	1,708	0
Utilities	125,208	2,698
Supplies and Materials	89,433	3,279
Depreciation (land, site, equipment, vehicle depreciation)	212,303	1,821
G & A Distribution (overhead, accounting fees)	268,791	0
Bond Interest	0	0
TOTAL RECYCLED OR REUSED	1,655,358	249,901

Total RECYCLE DELAWARE Collection and IPF Processing Costs

Collection Cost	2,922,874
Processing Cost	1,905,259
TOTAL COSTS	4,828,133
Less Revenues from Sale of Recyclable Material	1,194,780
TOTAL COSTS OF PROGRAM AFTER REVENUES	3,633,353