

LAND

Category / Facility	Cherry Island Landfill		Sandtown Landfill		Jones Crossroads Landfill		Pine Tree Corners Transfer Station	
	Tons	Metric Tons	Tons	Metric Tons	Tons	Metric Tons	Tons	Metric Tons
Solid Waste	581,100	527,058	115,300	104,577	205,800	186,661		
	Cubic Yards	Cubic Meters	Cubic Yards	Cubic Meters	Cubic Yards	Cubic Meters		
Capacity Used (@ 1,200 lbs / cubic yard)	968,500	740,515	192,167	146,931	343,000	262,258		
	Acres	Hectares	Acres	Hectares	Acres	Hectares		
Land Area								
In Use (Active and Closed)	219	89	101	41	95	38	6	2
Future Use (For Landfilling)	104	42	187	68	130	53	0	0
Buffer	190	77	483	168	347	140	75	30
Totals	513	208	771	277	572	231	81	33
Tillable Land Use	0	0	162	65.61	0	0	0	0
Other Land Use <i>Kent Co. Aeromodeler's Club</i>	0	0	10	4.05	0	0	0	0

	Cherry Island Landfill	Sandtown Landfill	Jones Crossroads Landfill	Pine Tree Corners Transfer Station
Avg. Vehicles Across Scales (<i>per day</i>)	537	211	420	133

Soils Used for Cover Cherry Island Landfill	Cubic Yards	Alternative Materials (Tons)	Soil Saved (Tons)
Soils used for cover	689		1,034
Alternative Materials Used for Soil Avoidance			
Stabilized Sludge	111,943	134,332	167,915
Clean Earth	107,697	161,546	161,546
Barrier	84,139	63,104	189,312
Tarps (soil savings)	92,963	---	139,445
RecoverMat	2,907	2,180	4,361
ReagentM	10,698	12,838	16,047
Other Processed C&D	4,499	3,374	10,122
Totals	414,846	377,374	688,747

Soils Used for Cover Sandtown Landfill

	Cubic Yards	Alternative Materials (Tons)	Soil Saved (Tons)
Soils used for cover	47,317		70,975
Alternative Materials Used for Soil Avoidance			
Stabilized Sludge			
Clean Earth			
Barrier			
Tarps (soil savings)	16,494	---	24,741
RecoverMat	35,014	26,261	52,521
ReagentM			
Other Processed C&D			
Totals	51,508	26,261	77,262

Jones Crossroads Landfill

	Cubic Yards	Alternative Materials (Tons)	Soil Saved (Tons)
Soils used for cover	118,000		177,000
Alternative Materials Used for Soil Avoidance			
Stabilized Sludge			
Clean Earth			
Barrier			
Tarps (soil savings)	29,478	---	44,217
RecoverMat	45,953	34,465	68,930
ReagentM			
Other Processed C&D			
Totals	75,431	34,465	113,147

Pigeon Point Landfill (closed)

	Cubic Yards	Alternative Materials (Tons)	Soil Saved (Tons)
Soils used for cover			
Alternative Materials Used for Soil Avoidance			
Stabilized Sludge	59,496	71,395	89,244
Clean Earth			
Barrier			
Tarps (soil savings)			
RecoverMat			
ReagentM			
Other Processed C&D			
Totals	59,496	71,395	89,244

AIR

Category/Facility	Pigeon Point Landfill		Cherry Island Landfill		Sandtown Landfill		Jones Crossorads Landfill	
	Cubic Yards	Cubic Meters	Cubic Yards	Cubic Meters	Cubic Yards	Cubic Meters	Cubic Yards	Cubic Meters
<i>x / 000,000</i>								
Landfill Gas								
Collected	5.7	4.4	29.4	22.5	15.8	12.1	29.4	22.5
Flared	5.7	4.4	1.4	1.1	15.8	12.1	29.4	22.5
Beneficially Used	0	0	28.0	21.4	0	0.0	0	0.0
Methane Content	2.1	1.6	16.2	12.4	6.9	5.3	13.1	10.0
	Barrels		Barrels		Barrels		Barrels	
(barrels of oil equivalency) Energy Value of Gas Captured and Sold	0		66,200		0		0	
(barrels of oil equivalency) Energy Potential of Gas Captured and Flared	8,900		3,200		29,400		56,000	

WATER

Category/Facility	Pigeon Point Landfill		Cherry Island Landfill		Sandtown Landfill		Jones Crossorads Landfill	
	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters
Leachate (<i>x 000,000 gallons</i>)								
Collected	61.8	233.9	68.8	260.4	14.0	30.4	8.3	31.4
Recirculated	0		0		1	5	0	
Treated Off-site	61.8	233.9	68.8	174.2	13.0	25.9	8.3	31.4
Precipitation (<i>x 000 gallons</i>)								
Falling on Active & Closed Disposal Areas	122.0	461.8	222.6	842.5	138.7	525.0	118.5	448.5
Stormwater Runoff (<i>x 000 gallons</i>) <i>*(Runoff = precipitation-leachate)</i>	60.2	227.9	153.8	582.1	124.7	472.0	110.2	417.1
Environmental Protection	no. of units		no. of units		no. of units		no. of units	
Monitoring <i>Groundwater, surfacewater, leachates</i> Sampling Points	32		47		80		74	
Analysis Analyses Per Site	4,135		5,077		12,200		12,106	

Results

Results of groundwater analysis indicate that landfilling and recycling operations have not impacted groundwater quality at any DSWA facility.

* from leachate storage tanks

Basic Material Collected for Recycling Through the RECYCLE DELAWARE Program

Item	Tons	Metric Tons
Paper (ONP) <i>(includes newspaper, magazines, and phone books)</i>	12,991	11,783
Plastic Bottles	1,004	911
Clear Glass	1,179	1,069
Brown Glass	359	326
Green Glass	787	714
Cans	749	679
Cardboard	1,864	1,691
Batteries*	44	40
Plastic Grocery Bags	54	49
TOTAL	19,031	17,261

* 24 tons (22 metric tons) of used household batteries were collected through the RECYCLE DELAWARE program for separate storage in landfills.

Special Materials Collected at RECYCLE DELAWARE Locations

Item	Tons	Metric Tons
Used Motor Oil	1,273	1,155
Used Oil Filters	570	517
Textiles	32	29
Junk Mail	338	307
TOTAL	2,213	2,007

Electronic Goods Recycling Program

Total Material collected from residents, schools and businesses

Item	Tons	Metric Tons
TOTAL	1,020	840

Breakdown of Material Collected

Devices	Total Items
Monitors	21,494
CPU/Harddrives	15,588
Printers	10,502
Televisions	7,012
Other	7,515
TOTAL	54,596

Bulky Materials and Special Waste Recycled/Reused at DSWA Landfills

Item	Tons	Metric Tons
Tires	2,136	1,937
White Goods (washers, dryers, refrigerators, etc.)	3,214	2,915
Yard Waste	4,346	3,942
TOTAL	9,696	8,794

Construction and Demolition Debris Recycling

Item	Tons	Metric Tons
Material Collected at select DSWA facilities	37,223	33,761

Beneficial Use of Special Waste Materials

Materials used for cover or construction projects

Item	Tons	Metric Tons
CIL Stabilized Sludge	134,332	121,839
PPL Stabilized Sludge	71,395	64,755
Barrier	63,104	57,235
Clean Earth	161,546	146,522
Recover Mat	2,180	1,977
Slag	51,031	46,285
ReagentM	12,838	11,644
Other Processed C&D	3,374	3,060
Shredded Yard Waste	4,731	4,291
TOTAL	504,531	457,610

Total Materials Recycled from Delaware Businesses

Material Collected in Delaware from Businesses July 2002-June 2003

	Tons	Metric Tons
All Aluminum	5,843	5,300
All Other Non-Ferrous	3,815	3,460
All Ferrous	429,813	389,840
Scrap Cars	7,400	6,712
Automotive Batteries	1,963	1,780
Household Batteries	2	2
Newspaper	12,520	11,356
All Office Paper	242,592	220,031
Junk Mail	10	9
Corrugated Cardboard	29,601	26,848
Plastic	34,240	31,056
Polystyrene	229	208
Glass	13	12
Concrete	165,711	150,300
Asphalt	337,469	306,084
Wood	9,396	8,522
Yard Waste	78,972	71,628
Tires	8,064	7,314
White Goods	9,271	8,409
Used Motor Oil	839	761
Textiles	-	-
Anti-Freeze	54	49
Other (vegetable oil, ink, soil, etc.)	270,491	245,335
TOTAL	1,648,308	1,495,015

Total Statewide Materials Recovered and Reused

Item	Tons	Metric Tons
RECYCLE DELAWARE base Materials (paper, plastic, cans, glass, cardboard, household batteries)	19,031	17,261
RECYCLE DELAWARE special materials (used oil, oil filters, textiles, junk mail)	2,213	2,007
Electronic Goods Recycling Program (material collected from residents, schools, and businesses)	1,020	925
Bulky Materials Recycling at DSWA Facilities (tires, white goods, yard wastes, CFC's)	9,696	8,794
Construction and Demolition Debris (material collected at select DSWA facilities)	37,223	33,761
Beneficial Use of Specialized Waste (materials used for cover or construction projects)	504,531	457,610
Private/Commercial Recycling (estimate based on July 2002—June 2003 reported tonnage)	1,648,308	1,495,015
Independent Recyclers that delivered recyclables to the IPF	6,480	5,877
TOTAL RECYCLED OR REUSED	2,228,502	2,021,251

Delaware generated a total of 3,130,702 tons (2,839,546 metric tons) of materials to be managed. A total of 2,228,502 tons (2,021,251 metric tons) of the materials or about 71% were recycled or reused. A total of 902,200 tons (818,295 metric tons) of materials were disposed in DSWA landfills.

Total Per Ton Revenues and Costs by Commodities for Materials Recycled

Materials	Average Market Price Per Ton	DSWA'S Processing Costs Per Ton	DSWA's Collection Costs Per Ton	Net Value Per Ton
ONP (Newspaper)	\$36	\$77	\$91	\$(132)
OCC (cardboard)	57	77	181	(201)
OMG (magazines)	30	77	91	(138)
Plastic Bottles	82	77	390	(385)
Clear Glass	20	77	154	(211)
Brown Glass	10	77	163	(230)
Green Glass	—	77	184	(261)
Aluminum	929	77	258	594
Steel Cans	60	77	258	(275)
Oil Filters	5	77	60	(132)
Textiles	26	—	60	(34)
Office Paper	77	77	60	(60)
Electronic Goods	—	77	113	(190)
Junk Mail	35	77	60	(102)

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

Item	RECYCLE DELAWARE	Electronic Goods
Employee Costs (wages)	\$ 378,484	\$26,744
Contractor's Operating Costs (contract DSWA-422)	1,395,613	n/a
Contractual Services (temporary services, insurance, etc.)	116,211	4,306
Professional Services (legal & auditing services)	2,870	n/a
Travel	757	8
Utilities	7,723	610
Supplies and Materials	227,708	4,384
Depreciation (land, site, equipment, vehicle depreciation)	237,363	11,012
G & A Distribution (overhead, accounting fees)	214,585	n/a
	\$2,581,314	\$47,064

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

Item	RECYCLE DELAWARE	Electronic Goods
Employee Costs (wages)	\$ 422,812	\$ 53,487
Contractual Services (temporary services, insurance, etc.)	510,595	186,810
Professional Services (legal & auditing services)	105,136	342
Travel	3,289	n/a
Utilities	136,945	1,326
Supplies and Materials	76,364	4,294
Depreciation (land, site, equipment, vehicle depreciation)	243,365	1,987
G & A Distribution (overhead, accounting fees)	219,650	n/a
Bond Interest	15,556	n/a
	\$1,733,712	\$248,246

Total RECYCLE DELAWARE Collection and IPF Processing Costs

Collection Cost	\$2,581,314
Processing Cost	1,733,712
TOTAL COSTS	4,315,026
Less Revenues from Sale of Recyclable Material	1,113,882
TOTAL COSTS OF PROGRAM AFTER REVENUES	\$3,201,144

The following companies purchased recyclable materials from the IPF in 2003

COMPANY	TONS	COMMODITY
PREI/Recycle America — Youngsville, NC	1016	Plastic
Trex Co. — Winchester, VA	54	Plastic Bags
Waste Management — Cherry Hill, NJ	41	Steel Cans
Conti Group — Brooklyn, NY	55	
Canusa Corp. — Baltimore, MD	111	
Cell Mark — South Norwalk, CT	174	
Diamond State Recycling — Wilmington, DE	33	
Diamond State Recycling — Wilmington, DE	98	Aluminum Cans
Waste Management — Cherry Hill, NJ	43	
Canusa Corp. — Baltimore, MD	22	
Connecticut Metals — Monroe, CT	20	
American Independent Paper — Tarrytown, NY	574	Cardboard
Butler Paper Recycling — Suffolk, VA	631	
Chesapeake Fiber Resources — Urbanna, VA	86	
Canusa Corp. — Baltimore, MD	606	
Cell Mark — South Norwalk, CT	848	
Lasensky Paper Stock — Lansdowne, PA	680	
Millenium Fibers, Inc. — Valley Stream, NY	607	
Garden State Recycling — Edison, NJ	13	
The Conti Group — Brooklyn, NY	263	
Euro-Fibers, Inc. — Franklin Center, PA	474	
Todd Heller Inc. — Northampton, PA	2,325	Glass
CitiSteel, USA — Claymont, DE	311	Oil Filters
Euro-Fibers — Franklin Center, PA	310	Paper
Garden State Recycling - Edison, NJ	97	
Marcal Paper Mills — Elmwood Park, NJ	1,084	
Cell Mark — South Norwalk, CT	441	
Waste Management/RAA — Wilmington, DE	12,342	
Elemental Inc., — Philadelphia, PA	1,074	Electronic Goods