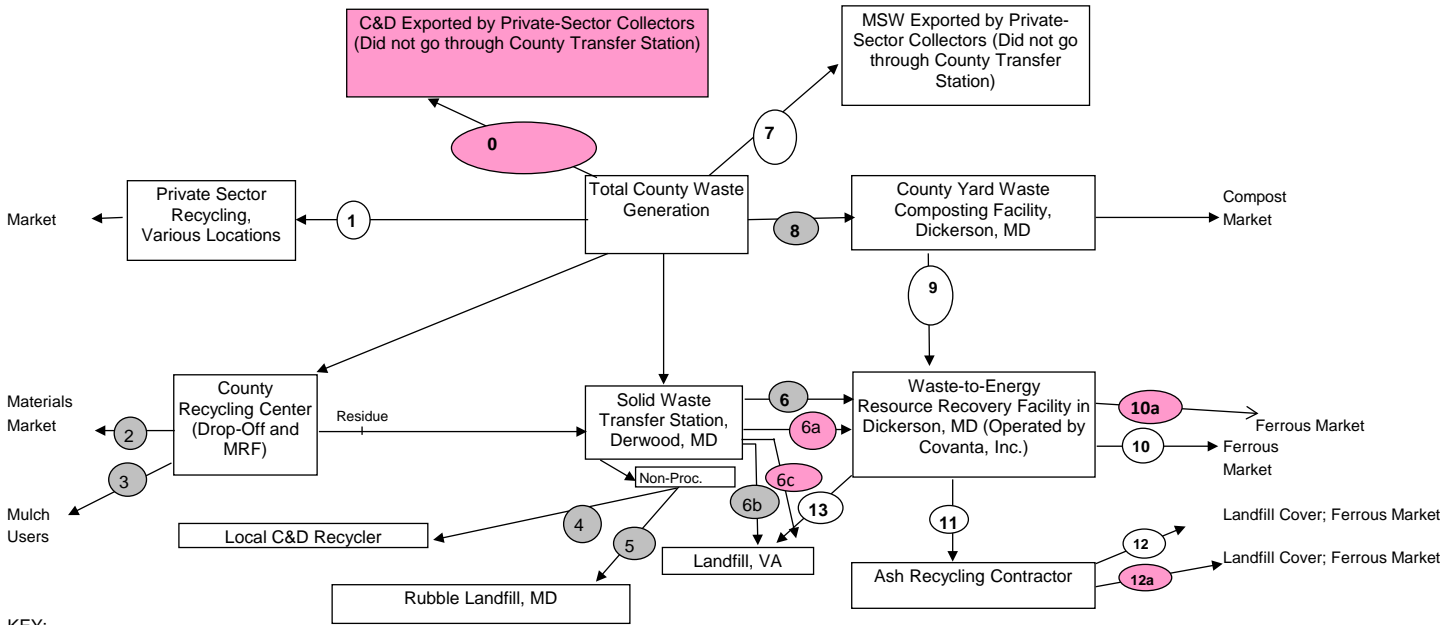


MATERIAL FLOW DIAGRAM Calendar Year 2016



KEY:

1, 7	Audited or otherwise documented. Often based on truck scales of others.
	Data is from State-certified County truck scales Owned by County.
	Data is from State-certified truck scales, privately operated under contract to County.
	This color indicates C&D waste, which is not MSW, not eligible for recycling and is not to be included in recycling rate calculation.*

Total Waste Generation, Including C&D Exported by Private Sector	1,372,923
County-Managed Waste (CMW) = 1 + 2 + 3 + 4 + 5 + 6 + 6a + 6b + 6c + 7 + 8	1,229,738
MSW Generated (above less streams 4, 5, 6a and 6c)	1,088,412

Stream No.	Material Description	Sources of Data	Total (tons/yr)	Comments
0	Construction & Demo Debris Private Export* (Recycled & Landfilled)	Licensed Collector Reports under ER 5-13AM	143,185	Not County-managed, includes both disposed and recycled C & D
1	Recycled via non-County Facilities	Collector, Processor, Business & Self-Hauler Rpts.	282,652	Filtered to avoid double-counting
2	County Recycling Facility Material Sales	County TS & MRF Scales, Outbound	81,781	Outgoing to market from County Recycling Center & Penn Waste
3	Mulch Loaded Out From TS	County Transfer Station (TS) Scale Records	27,500	Scaled out as taken to County Mulch Contractor & Preserve Locations
4	Non-Processibles Recycled**	County TS Scale Out Records	44,347	Not included in MRA recycling calculation
5	Non-Processibles Landfilled**	County Trans. Stat'n. & Covanta Scale Records	10,986	Not included in MRA recycling calculation
6	Loaded on Rail to RRF (MSW burned)	Covanta Scales as Loaded	476,860	Total tons loaded on rail to RRF Net of 6a
6a	Loaded on Rail to RRF (C&D Burned)	County Transfer Station (TS) Scale Records	77,823	In-Bound C&D less Outbound Non-Processibles Landfilled
6b	By-pass (Accepted Processible Landfilled)	County TS Scale Out Records	50,057	MSW shipped to landfill
6c	By-pass (Accepted Processible Landfilled) C&D	County Transfer Station (TS) Scale Records	8,169	In-Bound C&D less Outbound Non-Processibles Landfilled
7	Refuse Disposed Out of County	Audited 6-Mo. Hauler Reports	111,333	Private Sector MSW Collection not delivered to CountyTS
8	All Incoming Leaves and Grass	Compost Facility & TS Scale Records	58,230	Includes 0 to Backup Composters
9	Composting Residue to RRF	MES Scale Records	-	Reported by Compost Facility Manager
10	Ferrous recovered at RRF	Covanta Scale Records	7,310	Recovered from ash at County Facility
10a	Ferrous recovered at RRF (C&D Residue)	Internal Calculation	1,193	Not included in MRA recycling calculation
11	Ash Loaded to Ash Recycling Contractor	Republic Monthly Report	164,371	Total ash (includes 12, 12a, and 13)
12	Ash outgoing from Ash Recycler	Republic Monthly Report	141,309	Included in MRA recycling calculation
12a	Ash outgoing from Ash Recycler (C&D Residue)	Internal Calculation	23,062	Not included in MRA recycling calculation
13	All Ash not recycled	Covanta Scale Records	-	

Montgomery County Recycling Rate and Waste Diversion Rate Calculations (MRA Method)		Numerator	Denominator	Rate
Recycling Rate	$(1 + 2 + 3 + 8 - 9 + 10 + 12) / (CMW - 4 - 5 - 6a - 6c)$	598,782	1,088,412	55.01%
Waste Diversion Rate ***	$((1 + 2 + 3 + 8 - 9 + 10 + 12) / (CMW - 4 - 5 - 6a - 6c)) + 5.0%$	598,782	1,088,412	60.01%

Notes:

- * Construction and Demolition waste (C&D) is waste identified by place of origin - construction or land clearing sites. C&D is reported on licensed hauler reports, but there may be additional C&D tons not reported and therefore not included in stream 0.
- ** Nonprocessibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.
- *** Diversion Rate = Recycle Rate + 5.0% Source Reduction Credit

Nomenclature:

- "C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.
- "CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.
- "MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.
- "TS" stands for the County's "Transfer Station", located in Derwood, Maryland, just south of Gaithersburg.
- "MRF" stands for Material Recovery Facility
- "RRF" stands for Resource Recovery Facility