

Chapter 4 Waste Management

Purpose of Chapter 4

Chapter 3 provided a summary of how much waste the SWMD generated in the reference year and how much waste the policy committee estimates the SWMD will generate during the planning period. This chapter summarizes the policy committee's strategy for how the SWMD will manage that waste during the planning period.

A SWMD must have access to facilities that can manage the waste the SWMD will generate. This includes landfills, transfer facilities, incinerator/waste-to-energy facilities, compost facilities, and facilities to process recyclable materials. This chapter describes the policy committee's strategy for managing the waste that will be generated within the SWMD during the planning period.

To ensure that the SWMD has access to facilities, the solid waste management plan identifies the facilities the policy committee expects will take the SWMD's trash, compost, and recyclables. Those facilities must be adequate to manage all the SWMD's solid waste. The SWMD does not have to own or operate the identified facilities. In fact, most solid waste facilities in Ohio are owned and operated by entities other than the SWMD. Further, identified facilities can be any combination of facilities located within and outside of the SWMD (including facilities located in other states).

Although the policy committee needs to ensure that the SWMD will have access to all types of needed facilities, Ohio law emphasizes access to disposal capacity. In the solid waste management plan, the policy committee must demonstrate that the SWMD will have access to enough landfill capacity for all the waste the SWMD will need to dispose of. If there isn't adequate landfill capacity, then the policy committee develops a strategy for obtaining adequate capacity.

Ohio has more than 40 years of remaining landfill capacity. That is more than enough capacity to dispose of all of Ohio's waste. However, landfills are not distributed equally around the state. Therefore, there is still the potential for a regional shortage of available landfill capacity, particularly if an existing landfill closes. If that happens, then the SWMDs in that region would likely rely on transfer facilities to get waste to an existing landfill instead of building a new landfill.

Finally, the SWMD can control which landfill and transfer facilities can, and by extension cannot, accept waste that was generated within the SWMD. The SWMD accomplishes this by designating solid waste facilities (often referred to flow control). A SWMD's authority to designate facilities is explained in more detail later in this chapter.

A. Waste Management Overview

Since its formation, the Darke County Solid Waste Management District has worked in cooperation with private sector service providers to provide waste and recycling collection, processing, and disposal services. The District does not own or operate any facilities.

Table 4-1 summarizes the total amount of waste that is projected to be generated in the first six years of the planning period and the projected capacity required to manage the needs of the District.

Table 4-1 Methods for Managing Waste

Year	Generate (tons)	Recycle (tons)	Compost (tons)	Transfer (tons)	Landfill (tons)
2022	71,442	20,997	3,602	34,383	46,843
2023	72,173	21,829	3,580	34,325	46,764
2024	72,238	21,976	3,557	34,298	46,728
2025	69,282	22,121	3,534	29,907	43,627
2026	69,996	22,269	3,514	32,452	44,213
2027	70,303	22,256	3,495	32,701	44,552

Explanation of categories:

Generate: The total amount of waste. This amount is the sum of waste landfilled, recycled, and composted.

Recycle: The amount listed under “Recycle” represents all the waste that is projected to be diverted by recycling. The tonnage listed does not include material that will be diverted through composting.

Compost: The amount of projected composting capacity needed in each year.

Transfer: In the reference year 73.43% of waste that was landfilled was managed through a transfer facility. The amount listed under transfer in each year is 73.43 percent of the amount listed under landfill.

Landfill: Projected amount of waste that will require landfill capacity. The tonnage includes material transferred though transfer facilities and direct hauled to landfills.

B. Profile of Waste Management Infrastructure

1. Solid Waste Management Facilities

a. Landfills: There are no municipal solid waste landfills or captive landfills¹ in Darke County. Waste from the county is transported to eight in-state landfills and to one landfill in Indiana. All of the landfills and transfer facilities that accept waste from the District must sign Designation Contracts with the Solid Waste District agreeing to remit the designation fee which is the funding mechanism used by the District.

b. Transfer Facilities: Most of the waste collected in the District is taken to the Rumpke Transfer Facility in Greenville where it is transferred from collection vehicles into containers or larger vehicles to be transported to one of the designated landfills for disposal. A small amount of waste goes through one of four transfer facilities located in bordering or nearby Ohio counties.

c. Compost Facilities: There are three composting facilities in Darke County. There is a class IV² facility owned and operated by the Village of Versailles, and 2 privately owned facilities, a class IV and class III³ facility. All three facilities in Darke County accept yard waste from the public. Some restrictions or fees may apply. There are also compost facilities outside the District that accept material from the District including Class I and II facilities that process food waste.

d. Material Recovery Facilities: The District depends on private processors to sort, process and market recyclable material generated in the District. All of the recyclable material that is collected in the District drop-off bins and most of the curbside recycling material is transported to Rumpke material recovery facilities outside the District for processing. Best Way Waste and Recycling and Maharg Trash Services collect materials in the District and sort or processes the material in their own facilities.

e. Other Waste Management Facilities: Individuals, commercial businesses, and industries use the services of a wide variety of private businesses that collect or purchase materials to be reused or recycled. A list of the facilities available to the commercial and industrial sectors is included in Appendix J, Table J-4 Infrastructure Demonstration for the Commercial Sector.

2. Waste Collection

The only government provided waste collection service in the District is provided by the Village of Versailles. The Village manages its own residential waste collection service and also provides

¹ A captive landfill is a privately-owned industrial or residual waste landfill that is used to dispose of solid waste generated exclusively by the owner of the landfill facility.

² A class IV facility is registered with Ohio EPA and can compost only source-separated yard waste, authorized bulking agents, and approved additives.

³ A class III registered facility can add animal wastes and specified agricultural waste to the materials approved for class IV facilities.

curbside recycling and yard waste collection. The remainder of the District is served by several private waste haulers. The City of Greenville and the Village of Arcanum have entered into agreements with Rumpke to provide residential waste collection with includes curbside recycling. Rumpke also provides curbside recycling to county residents living south of St. Rt. 47. Several other private haulers provide residential, commercial, and industrial waste collection services within the District.

C. Solid Waste Facilities Used in the Reference Year

1. Landfill Facilities

Table 4-2 Landfill Facilities Used by the District in the Reference Year

Facility Name	Location		Waste Accepted from SWMD (tons)	Percent of all SWMD Waste Disposed	Remaining Capacity (years)
	County	State			
<i>In-District</i>					
None					
<i>Out-of-District</i>					
Apex Sanitary Landfill	Jefferson	Ohio	10	0.02%	33.7
Rumpke Georgetown Landfill	Brown	Ohio	0	NA	112.5
Celina Sanitary Landfill	Mercy	Ohio	1,052	2.21%	4.3
Cherokee Run Landfill	Logan	Ohio	185	0.39%	29.2
Evergreen Recycling & Disposal	Wood	Ohio	24	0.05%	37.5
Preeble County Sanitary Landfill	Preble	Ohio	14	0.03%	67.4
Rumpke Waste Inc Hughes Rd. Landfill	Hamilton	Ohio	35,839	75.42%	8.2
Stony Hollow Landfill, Inc.	Montgomery	Ohio	43	0.09%	24.4
<i>Out-of-State</i>					
Randolph Farms, Inc	Randolph	Indiana	10349	21.78%	
Total			47,516		

The remaining capacity is calculated based on the amount of useable space remaining in the landfill and the amount of waste that is accepted per year. The entries show calculated capacity reported in 2018. Although there may be a shift in the destination landfills used for disposal of waste from the District, the District is confident that there is enough landfill capacity to manage District waste for the entire planning period.

Table 4-2 shows that three-fourths of the landfilled waste generated in Darke County is sent to the Rumpke owned and operated Hughes Road Landfill in Hamilton County.

2. Transfer Facilities

Table 4-3 Transfer Facilities Used by the District in the Reference Year

Facility Name	Location		Waste Accepted from District (tons)	Percent of all District Waste Transferred	Landfill Where Waste was Taken to be Disposed
	County	State			
<i>In-District</i>					
Rumpke Greenville Transfer and Scrap Tire Facility	Darke	Ohio	34,777	99.67%	Rumpke Waste Inc Hughes Rd. Landfill
<i>Out-of-District</i>					
Maharg Inc. Solid Waste Transfer Facility	Mercer	Ohio	6	0.02%	Randolph Farms, Inc
Montgomery County South Transfer Facility	Montgomery	Ohio	11	0.03%	Rumpke Waste Inc Hughes Rd. Landfill
Shelby County Transfer Station	Shelby	Ohio	98	0.28%	Cherokee Run Landfill
Total			34,892	100.00%	

Because the landfills used for the District’s waste are outside of the District, transfer capacity is important to the District. In the reference year more than 73% of waste for disposal went through a transfer facility. Transfer capacity is also important to deliver recyclables to out of county material recovery facilities. The curbside and drop-off recycling collected by Rumpke goes through the Greenville Transfer Facility on its way to a material recovery facility for sorting and processing.

3. Composting Facilities

Table 4-4 Composting Facilities Used by the District in the Reference Year

Facility Name	Location (County)	Material Composted (tons)	Percent of all Material Composted
<i>In District</i>			
Fitzwater Trees & Lawn Care	Darke	1,649	42%
Fresh Aire Farms	Darke	464	12%
Versailles Village Composting Facility	Darke	1,642	42%
<i>Out-of-District</i>			

Facility Name	Location (County)	Material Composted (tons)	Percent of all Material Composted
Food waste recycling in an unnamed Out-of-District facility. Reported to the District through OEPA		144	4%
Total		3,899	100%

Two of the in-district composting facilities are owned and operated by landscaping companies. These facilities have both expanded the composting capacity. The amount of material they manage has grown year to year. The Versailles facility is an asset to District waste programs. Not all of the yard waste diverted goes to a composting facility. Several villages collect leaves in the fall and spread them on local farm fields where they are plowed in. This management method assists residents, keeps the leaves out of the landfill, and is an alternative to burning leaves which used to be a common practice in rural areas.

4. Processing Facilities

Table 4-5 Processing Facilities Used in the Reference Year

Name of Facility	Location		Facility Type	Recyclables Accepted from District (tons)
	County	State		
In-District				
None		OH		
Out-of-District				
Rumpke Center City - Hamilton County	Hamilton	OH	Materials Recovery Facility	3,408
Rumpke Elmwood-Commercial	Montgomery	OH	Materials Recovery Facility	24
Rumpke Recycling Commercial-Dayton	Montgomery	OH	Materials Recovery Facility	76
Out-of-State				
Bestway East Central Recycling	Delaware	Indiana	Materials Recovery Facility	Not reported
Total				3,508

Rumpke and the District have had a mutually beneficial working relationship since the formation of the District. The transfer facility has been maintained and expanded over the years to manage both waste transfer and the transfer of the residential, commercial, and industrial generated recyclables. The District appreciates the company’s commitment to recycling and intends to

work closely with them on the initiative to increase recycling in both the curbside and drop-off programs and to reduce contamination. The District will continue to be in contact with Rumpke to monitor the availability of disposal and material processing capacity needed by the District.

5. *Other Waste Management*

In addition to the facilities listed here, the District depends on the many privately owned and operated facilities and programs that provide recycling services to residents, commercial businesses, and industries. Many of the businesses that purchase or accept materials for recycling are listed on Table J-4 Infrastructure Demonstration for the Commercial Sector, in Appendix J.

D. Use of Solid Waste Facilities During the Planning Period

1. & 2. *Landfills and transfer facilities* – The Districts intends to continue using out-of-district landfills throughout the planning period in the same way that it has in the past by relying on waste haulers to direct haul waste or use transfer facilities. Top priorities of the District are reducing waste, increasing recycling, and reducing the amount of contamination in the recycling collections. Success will be good for the environment and will make recycling and collection programs more efficient saving both time and money.

3. *Composting Facilities* -- The three composting facilities in the District are definite assets. In addition to the use of composting facilities, the District will continue working to interest residents in home composting.

4. *Processing Facilities* – The District believes there is adequate processing capacity available. It is the District’s goal to work with residential and commercial waste generators to send the private sector processors a better product. Clean recycling boosts efficiency and creates a high quality, marketable product.

5. *Other Waste Management* – The District will investigate possible opportunities related to commercial and industrial food waste management. Research will be done into the sources of the food waste that is presently being composted and to identify food processors in the District that generate waste that could be composted. Depending upon the findings of the investigation, the next step will be to evaluate the availability of necessary infrastructure and a develop a plan to facilitate additional food waste composting.

E. Siting Strategy

All solid waste management plans must demonstrate that the SWMD will have access to enough capacity at landfill facilities to accept all of the waste the SWMD will need to dispose of during the planning period. In the event that existing facilities cannot provide that capacity, then the Policy Committee must develop a plan for obtaining additional disposal capacity. Although the District has no plan to construct a landfill or other solid waste management facility, if for any

reason the Policy Committee would conclude that it is in the SWMD's best interest to construct a new solid waste landfill facility to secure disposal capacity Ohio law requires the policy committee to develop a strategy for identifying a suitable location for the facility. That requirement is found in Ohio Revised Code Section 3734.53(A)(8). This strategy is referred to as a siting strategy.

A siting strategy was included in the existing approved District Plan. The strategy in the existing Plan will remain in effect. The District has adopted rules under the authority of ORC 343.01(G)(2) stating that any person, municipal corporation, township or other political subdivision that plans to construct, enlarge, or modify any solid waste facility for the disposal, transfer or composting of solid waste must submit general plans and specifications for the proposed improvement to the District Board of Directors. The District Board of Directors must approve the facility as complying with the solid waste management plan or amended plan of the District before the facility is constructed, enlarged, or modified. The rule requiring that plans be submitted does not establish design standards for solid waste facilities.

The full siting strategy is adopted as a part of this Plan and is presented in Appendix S.

F. Designation

1 The SWMD's Designation Process

Identification of Facilities Pursuant to Resolution Number R-139-03, adopted November 12, 2003, and Resolution Number R-181-05, adopted October 24, 2005, by the Board of Commissioners of Darke County, Ohio, in its capacity as the Board of Directors of the Darke County Solid Waste Management District (District), designated landfills and transfer facilities in accordance with Section 343.014 of the Ohio Revised Code. A list of the facilities that have been designated by the District as the only facilities to which solid waste within the District may be delivered is contained in Appendix P of this Plan. District Rule 6-96 provides that "No person shall deliver Acceptable Waste to any Solid Waste Facility other than a Designated Solid Waste Facility except pursuant to a waiver granted to such Person by the Solid Waste District." District Rule 7-96 provides a process for requesting a waiver from such designations. In addition, Rule 6-96 and Ohio Revised Code Section 343.01(I)(2) prohibits the delivery of solid waste to facilities other than those designated by the District, and Section 343.99 of the Ohio Revised Code provides for the imposition of a fine of not more than five thousand dollars (\$5,000.00) for each day of a violation.

The District has entered into Agreements with each Designated Facility pursuant to which each Designated Facility agrees to pay to the District a Designation Fee. As of January 1, 2016, the Designation fee stipulated by all of the Agreements is \$8.00 per ton of solid waste received at the Designated Facility which was generated within the District. The District shall re-negotiate all Designation Agreements as necessary prior to expiration to ensure continued transfer and disposal capacity and funding to implement the Plan.

Source separated recyclable materials may be given or sold by the owner to the hauler, broker, scrap collector or processor selected by the owner. Residents in communities where curbside recycling services are provided to all residential waste customers will be considered to have selected the company that provides curbside recycling collection by the act of setting out the recyclable materials at the location and time normally designated for curbside recycling collection. District Rule 8-98 prohibits the removal of Solid Waste or Recyclable Material from Solid Waste Facilities, and Solid Waste and Recycling Material Collection Sites except by persons authorized by the District to remove the material. (See District Rules included in Appendix Q of this Plan.)

Authorization Statement to Designate Facilities: The Board of Directors of the Darke County Solid Waste Management District is hereby authorized to establish and/or to continue existing facility designations in accordance with Section 343.014 of the ORC after this plan has been approved by the Director of the Ohio Environmental Protection Agency. Facility designation shall be established and governed by applicable district rules

2 *List of Designated Facilities*

Table 4-6 Facilities Currently Designated

Facility Name	Location		Facility Type
	County	State	
In-District			
Greenville Transfer Station	Darke	Ohio	Transfer
Out-of-District			
Celina sanitary Landfill	Mercer	Ohio	Landfill
Georgetown Landfill	Brown	Ohio	Landfill
Maharg Transfer Station	Mercer	Ohio	Transfer
Miami County Transfer Station	Miami	Ohio	Transfer
Montgomery County Transfer Station North	Montgomery	Ohio	Transfer
Montgomery County Transfer Station South	Montgomery	Ohio	Transfer
Preble County Landfill	Preble	Ohio	Landfill
Rumpke Sanitary Landfill, Hughes Rd	Hamilton	Ohio	Landfill
Out-of-State			
Randolph Farms, Inc. Landfill	Randolph Co.	Indiana	Landfill
Richmond Transfer Station	Wayne	Indiana	Transfer

The listed facilities are all designated facilities as of September 21, 2020. Most, but not all of the listed facilities transferred or received waste from the District in 2018.