

## II. Executive Summary of the Darke County Solid Waste Management Plan Update

**Table ES-1 General Information**

District name: Darke County Solid Waste Management District (referred to in this Plan as the District or Darke County)					
District ID# (For OEPA use only)		Reference year: 2012	Planning period: January 1, 2015 to December 31, 2029		
D	RD	DR	Approved date:	OI date:	DA

Key: D = draft, RD = ratified draft, DR = draft revised, OI = order to be implemented, DA = draft amended

**Table ES-2 District Contact/Office**

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### Overview of the Plan Update Process

Ohio law requires solid waste districts to periodically update the District’s solid waste management plan. This is the fifth update of the District Plan which was originally approved by the Ohio Environmental Protection Agency in April 1992. A draft of this Plan was submitted to the Ohio EPA for an advisory review. Following the OEPA review, revisions were made to respond to OEPA comments. After revision, this Plan was made available for a thirty-day public review and comment period.

Following the public comment period, the District Policy Committee will hold a public hearing to give interested parties an opportunity to ask questions and make comments regarding the Plan. The District Policy Committee will review the comments and will, if necessary, make changes in the Plan based on the public comments. Once the Policy Committee has approved the revised Plan, it will be delivered to the legislative authority of each municipal corporation and township in the district for review and ratification. During the 90-day ratification period, each political subdivision will be asked to vote on the Plan by means of a resolution or ordinance. The Plan must be approved by the Darke County Commissioners, the legislative authority of the largest municipality in Darke County, which is Greenville, and the legislative authorities of townships and municipalities representing at least 60 percent of the total district population. The ratified Plan will be sent to the Ohio Environmental Protection Agency for final review and approval.<sup>1</sup>

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<sup>1</sup>This paragraph will be revised after the Plan is ratified to explain the ratification process and to recognize the fact that the Plan has been ratified.

The District was assisted in the preparation of this Plan by Mary Wiard, a waste management and waste reduction planning consultant located in Pataskala, Ohio. The majority of the data regarding solid waste generation, waste flow patterns, recycling, and waste reduction is data for calendar year 2012 and was collected by District staff with the assistance of Mary Wiard in 2012 and 2013.

This Plan provides direction to the District for reducing waste and increasing recycling by continuing and expanding participation in the programs and activities the District has already initiated. During the last planning period the District added a significant number of recycling drop-off locations in villages and rural areas and added new programs for the collection of difficult to manage wastes. This Plan focuses on increasing participation in existing programs instead of adding new programs and on careful stewardship of the District's financial resources.

### **Overview of Existing Facilities and Programs**

The District has designated several landfills and transfer facilities to receive waste generated in the District for disposal. These are the only facilities authorized to receive solid waste generated in Darke County for transfer or disposal. Table ES-4 provides a list of the landfills to which District waste was transported in 2012. Although several of the landfills that are currently receiving District waste do not have permitted capacity for the entire planning period, the District believes that there is currently adequate out-of-district landfill capacity to manage the District's waste for the duration of this plan. The District is also confident that several of the landfills that are approaching the limits of the permitted capacity, will develop additional permitted capacity before the present capacity limits are reached. They will, therefore, be available for the disposal of waste generated in the District for the entire planning period.

The District does not plan to construct any new in-district transfer or disposal facilities. Disposal capacity needs will be secured through contracts with private sector service providers. To the best of the District's present knowledge, all waste will be landfilled. There are no plans to send waste to incinerators, waste-to-energy facilities, or municipal solid waste composting facilities.

In 2005, Darke County Solid Waste Management District provided permanent drop-off recycling opportunities at six locations using a roll-off container system. In 2006, two more sites were added. By 2012, there were twelve sites, and one was added in 2013 to make thirteen permanent, multi-material sites funded by the District. The drop-off locations are strategically located around Darke County to serve the communities in which they are placed and the surrounding rural areas.

Rumpke Waste, Inc., in cooperation with the Darke County Solid Waste Management District provides a commercial recycling drop-off bin on Hamilton Street in Greenville for corrugated cardboard and office paper. The Village of Versailles operates two multi-material drop-offs in Versailles Village. There is a multi-material recycling drop-off bin located at the Greenville Recycling and Transfer Facility. Several communities and organizations provide recycling drop-off opportunities or sponsor recycling drives to collect one or more materials.

There are two private recyclers located in the District, a scrap yard and a pallet reclaimer. There is another scrap yard just outside of the District in the Village of Bradford. The scrap yard is

actually in Darke County, but Bradford is part of the Miami County Solid Waste District. A number of out-of-district, private scrap recyclers provide recycling services to businesses and industry in Darke County.

In the reference year the District held a household hazardous waste collection event. The District actively promotes reduction in the use of household hazardous materials by providing information about replacing hazardous household materials with non-hazardous alternatives. The District also provides information about acceptable disposal options for HHW. The District also held several events to help residents dispose of difficult to manage items like waste tires, appliances and electronics. Information about these events is included in Chapter IV of this Plan.

There are two Class IV and one Class III registered composting facilities in the District. In the reference year, yard waste was managed at these three facilities and was sent to one out-of-district facility. Several communities also collect leaves in the fall and take the leaves to near-by farm fields where they are spread and are worked into the soil. All of the programs for the management of yard waste that were identified as operating during the reference year are listed in Table III-6.

The Darke County General Health District and the Darke County Solid Waste Management District have worked together to discourage litter and illegal dumping and to see that illegal dumping is cleaned up promptly. As of 2012, there were no sites requiring major clean-up efforts to report. There were no ash, foundry sand, and slag disposal sites in the District in the reference year.

The Darke County General Health District manages the registration and inspection of trucks that collect and haul solid waste in any part of Darke County. A list of the haulers that were registered in the reference year with information about the services provided is included in Table III-10.

**Table ES-3. Plan Data Summary**

**Plan Data:** All waste generation, reduction, and recycling numbers are expressed in tons and are rounded to the nearest whole number.

		Reference Year, 2012	2019 (year 5)	2024 (year 10)
<b>Population (Table V-1)</b>		<b>51,675</b>	<b>50,639</b>	<b>49,281</b>
Generation (Table V-3.)	Industrial	17,461	16,270	15,900
Generation (Table V-2.B.)	Residential/ commercial	58,254	50,736	49,376
Generation (Table V-4.)	Exempt	3,589	3,177	3,177
<b>Generation Total</b>		<b>79,304</b>	<b>70,183</b>	<b>68,453</b>
Waste Reduction (Table VII-4)	Industrial source reduction	0	0	0
Recycling (Table VII-4)	Industrial	14,786	13,781	13,467
Waste reduction (Table VII-3)	Res/Com source reduction	0	0	0
Recycling (Table VII-3)	Res/Com recycling including yard waste composting	25,133	18,454	18,558
	MSW composting	0	0	0
	Incineration	0	0	0
	Ash disposal	0	0	0
<b>(Table VII-5)</b>	<b>WR Total</b>	<b>32,808</b>	<b>32,235</b>	<b>32,026</b>
Landfill Disposal (Table VII-5)	In-district: None			
Exempt waste not included	Out-of-District and Out-of-state	35,797	34,771	33,250
(Table V-4) Exempt waste disposal	Out-of-District and Out-of-state	3,589	3,177	3,177
<b>Total Landfilled</b>		<b>39,385</b>	<b>37,947</b>	<b>36,426</b>
<b>WWR (From Table VII-5)</b>	<b>Exempt waste was not included in disposal amount for this calculation</b>	<b>47.5%</b>	<b>48.1%</b>	<b>49.1%</b>

Notes for Table ES-3:

Landfill disposal: 2012 landfill disposal figures were 35,151 tons in-state disposal and 1,758 tons out-of-state. In-state and out-of-state disposal is not broken out for the planning period because waste may go to any designated facility. The District cannot predict the amount of waste that will be taken to designated facilities in Ohio or out-of-state.

WRR is the waste reduction rate expressed as a percent. It is calculated by dividing the amount of waste reduction by the amount of waste generated and multiplying by 100.

**Table ES. 4. Landfills/Disposal Facilities Used by the District in the Reference Year, 2012**

Name	County/State	District tons	AMDWRL	Years left
<b>In-State Facilities</b>				
Celina Sanitary Landfill	Mercer, OH	1,158	499	7.4
Cherokee Run Landfill	Logan, OH	2,316	4,500	70.5
Rumpke Waste Inc. Hughes Rd.	Hamilton, OH	34,133	3,000	68.8
Rumpke Brown Co Sanitary Landfill	Brown OH	0	10,000	12.4
Stoney Hollow Landfill, Inc.	Montgomery, OH	17	4,500	4.0
Undetermined (Note 2)		4		
<b>Out-of-state Facilities</b>				
Caldwell Landfill	Indiana	3	Information not provided	Information not provided
Medassure of Indiana Treatment Facility	Indiana	0.14		
Merrell Bros Inc. Indy Disposal Solutions	Indiana	29.19		
National Serve-all Landfill	Indiana	8.25		
Randolph Farms Landfill	Indiana	1,709		
Twin Bridges Recycling and Disposal Facility	Indiana	8		

Information regarding the AMDWRL and remaining life was not readily available for the landfills in Indiana.

**Waste Generation Projections**

In 2012, the per capita residential/commercial waste generation in Darke County was 6.18 pounds per person per day which is higher than the estimated national average of 4.4 pounds per person per day. The residential/commercial recycling rate was 43.1%. For the purpose of calculating future recycling, the recycling rate was adjusted to 35.2% by eliminating 7,900 tons of commercial recycling, which may have been a one-time occurrence, from both the recycling and the disposal figures.

Industrial waste generation in 2012 was 17,461 tons based on actual disposal figures plus recycling reported by industries. The industrial recycling rate in 2012 was 84.7%. The combined

residential/commercial and industrial recycling rate was 47.5%. Exempt waste was not included in this calculation.

## **Planned Waste Reduction Strategies**

This Plan provides direction to the District for reducing waste and increasing recycling by continuing and expanding participation in the programs and activities the District has already initiated. During the last planning period the District added a significant number of recycling drop-off locations in villages and rural areas and added new program for the collection of difficult to manage wastes. This Plan focuses on increasing participation in existing programs with careful stewardship of the District's financial resources.

The *2001 and the 2009 State Plans* encourage Districts to implement programs that will lead to compliance with Goal #1 and Goal #2, but compliance with only one goal is required. Goals #1 and #2 as stated in the 2001 State Plan are listed in this Plan on page V-4. Goals #1 and #2 from the 2009 State Plan are as follows:

**Goal #1** The SWMD shall provide access to recycling and waste minimization opportunities for municipal solid waste to its residents and businesses. The State Plan provides specifics as to how access can be demonstrated.

**Goal #2** The SWMD shall reduce and/or recycle at least 25 percent of the solid waste generated in the residential/commercial sector and at least 66 percent of the solid waste generated by the industrial sector.

The District exceeded the residential/commercial and the industrial requirements of Goal #2 in the reference year, 2012 and has exceeded the goal for the past eight years.

The District is prepared in this Plan Update to comply with both Goal #1 and Goal #2. Details of how this Plan meets the access requirements of Goal #1 are supplied in Chapter VII. This Plan includes demonstrations that the District will be in compliance with the requirements of Goal #1 in each year of the planning period.

The District is planning on the continuation of all of the residential recycling programs that were available in the reference year, 2012. These include non-subscription curbside recycling programs in three communities: Greenville, Arcanum, Versailles, and subscription recycling in the Village of Palestine.

In order to provide convenient opportunities to recycle to residents of villages and rural areas not served by curbside, the District will continue to fund a system of drop-off bins which are available 24 hours a day, 7 days a week. As of 2014, there were 13 full-time, drop-off locations. In addition to the drop-offs provided by the District, Rumpke provides a full-time drop-off at the Greenville Transfer Facility. The Village of Versailles provides two multi-material drop-off locations within the Village. This Plan includes the continuation of all of these services, although alternations may be made in site locations to maintain program effectiveness and efficiency.

In order to help District residents manage difficult to recycle materials, the District has held a number of special collection events. In 2012, the District held the following special events: Appliance Recycling Day, Electronics Recycling Day, Shred Day, which focused on the collection and shredding of sensitive documents, and a Tire Collection Day. In addition, the District provides an ongoing dry-cell battery recycling program. The District Plan includes all of these special collection events. However, none of these events are mandatory parts of the Plan. The District will continue these events on an annual or as-need basis if funding is available and if the District deems the program to be necessary. If private sector programs are effectively managing these materials, the District will not hold an event.

The District has been and will continue to be active in providing education, training, and leadership for businesses and institutions in waste reduction and recycling. In addition, the District Plans to continue the school recycling program which places recycling bins in at least one location in all county school districts. Darke County government agencies will continue their recycling programs. And, the District is planning on the continued assistance of Rumpke in providing a recycling drop-off location in the City of Greenville for the use of businesses and government agencies. Paper and corrugated cardboard are the primary materials collected at this site.

The Darke County Solid Waste Management District is not Planning on building or operating any recycling processing or transfer facilities. The District will continue to rely on private sector providers for material recovery services and for scrap processing throughout the Planning period. No specific service provider is necessary for the implementation of this Plan. The District is confident that there will continue to be enough materials sorting and processing capacity within a reasonable hauling distance of the District to supply needed services in a competitive environment.

The District will continue to be active in public education through presentations, the District website, advertising and publicity, brochures and flyers, displays at public events and special recycling promotions. The public education program will emphasize increasing the number of residents that participate in recycling programs and the amount of material that is recycled.

### **Waste Disposal Capacity**

More than thirty-nine thousand tons of residential/commercial, industrial, and exempt waste generated in the District were sent to publicly available landfills in 2012 according to facility data reports filed at OEPA and Indiana Department of Environmental Management by landfills, (See Table III-1.) The population projections that are presently available to us predict that the population of Darke County will actually decrease somewhat during the Planning period. The decrease in population coupled with a projected modest increase in recycling will result in a decrease in the amount of waste to be landfilled.

Darke County does not have any landfills. Almost all of the waste destined for disposal is collected by private waste hauling companies that haul the waste to a transfer facility where the waste is consolidated for shipment to a landfill. A small amount of waste is hauled directly to a landfill. Landfill capacity for the entire Planning period is essential. The District does not Plan to use any other disposal option.

There appears to be available landfill capacity for the 15-year Planning period. However, several of the landfills that are presently receiving District waste will close before the end of the Planning period unless additional capacity is permitted and constructed. One of these landfills is the Hughes Road Landfill which received almost 87% of the waste from the District in 2012. The Rumpke Greenville Transfer Facility which received the majority of the waste collected in the District used that facility almost exclusively in 2012. Although the facility does not presently have permitted capacity available for the whole Planning period, Rumpke assures the District that Rumpke will make provisions for waste from Darke County so that the transfer facility can continue to operate as the primary waste delivery site for the District.

In the reference year, approximately 94% of waste destined for disposal went through a transfer facility. Because Darke County does not have a landfill, the transfer facility is an important part of the waste management system. This Plan therefore, refers to the use of both transfer and landfill capacity. Transfer capacity is a convenience and an asset, but the District does not plan to build or operate a transfer facility. The District will continue to rely on private waste management companies to provide the transfer capacity that they require to efficiently and effectively serve their customers.

At the present time, industrial, commercial and residential recyclables are sorted, processed and marketed by the private sector including waste haulers, scrap yards, recycling brokers, and end-use industries. The District is confident that there is and will continue to be sufficient capacity to process and market the expected output of recyclables from industry and businesses as long as there are available markets.

At the present time, Darke County residents may take yard waste to Fresh Aire Farms or Fitzwater Tree and Lawn Care where it is composted. The District publicizes the facilities and the two private facilities use the yard waste. This arrangement seems to be working out as a successful public-private partnership. The District will continue to rely on private sector and municipal facilities to manage yard waste.

### **Designation of Facilities to Receive District Waste for Disposal**

This Plan stipulates that 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.”

Pursuant to Resolution Number R-139-03, adopted November 12, 2003, and Resolution Number R-181-05, adopted October 24, 2005, 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. The District’s designation of facilities is included in Chapter VI of this Plan and a list of designated facilities is included in the Appendices.



## **Cost and Financing of Plan Implementation**

The funding mechanism for the Darke County Solid Waste District is a contract fee which is remitted to the Darke County Solid Waste District as a condition of the Designation Agreements between the District and disposal facilities which are designated to accept solid waste generated within the District. The District has entered into Designation Agreements with several landfills and transfer stations pursuant to which each Designated Facility agrees to pay the District a Designation Fee in the amount of \$6.00 per ton of Solid Waste received which is generated in the District. The terms of the present contracts terminate on December 31, 2018.

The Designation Fee is the District's only revenue source. The District plans to continue to fund the District's activities and programs with the proceeds of the Designation Fee. The District will re-negotiate all Designation Agreements as necessary to ensure continued transfer and disposal capacity and adequate funding to implement the Plan.

In the interval between the approval of the District's existing solid waste management plan and this Plan Update, the District has added a substantial number of drop-off recycling sites and has increased the opportunities for residents to conveniently manage difficult to recycle materials. In order to start-up and maintain the new programs, the District has utilized a substantial portion of the District's reserve funds. The District believes that the increased services have proved their value as demonstrated by the growth in the percentage of residential/commercial material that is recycled and in the decrease in the amount of waste sent for disposal.

As part of this planning process the District has examined both revenue and expenditures. It is apparent that the imbalance between in-flow and out-flow must be corrected so that the District can maintain the programs that are a mandatory part of this Plan. In addition, the District wants to continue the most effective parts of optional programs because these are programs that contribute to overall waste reduction and that provide services that the residents and communities in the District think are valuable.

For that reason, the District plans to proceed with the appropriate actions to increase the designation fee to \$8.00 per ton beginning January 1, 2016. An increase to \$9.00 per ton is planned to go into effect on January 1, 2021. However, the District will be preparing another Plan Update before 2021 and will reevaluate the District's financial situation as part of that planning process. If the increase is not needed, it will not be included in the next Plan.

The table on the following page shows the District's expected revenue, expenses, and annual carryover.

**Table ES-5 Revenue and Expenses during the Planning Period**

Planning Period	2015 (first year)	2019 (fifth year)	2024 (year 10)	2029 (year 15)
Designation fee per ton	\$6.00	\$8.00	\$9.00	\$9.00
Revenue (Table VIII-3)	\$239,665	\$285,167	\$306,246	\$294,262
Carry over from previous year (Table VIII-6)	\$292,000	\$118,693	\$48,695	\$25,686
Expenditures(from Table VIII-6)	318,333	327,358	303,436	307,933
Purpose #1 (Note 1)	3,000	3,150	3,308	3,308
Purpose #2	\$282,833	\$291,708	\$267,629	\$272,126
Purpose #3 & #7	\$32,500	\$32,500	\$32,500	\$32,500
Final balance at the end of the year	\$198,110	\$76,502	\$51,505	\$12,015

Note 1: The purpose for which the revenue will be spent:

1. Preparation and monitoring of plan implementation.
2. Implementation of approved plan.
- 3 and 7. Money may be used for either or both purposes: 3. financial assistance to boards of health for solid waste enforcement; 7. Financial assistance to local boards of health to enforce ORC 3734.03 or to local law enforcement agencies having jurisdiction within the district for anti-littering.

## Rules

The Darke County Commissioners acting in their capacity as the Darke County Solid Waste District Board of Directors adopted the first rules for the District in 1993. The District replaced the original rules with new rules adopted on November 8, 1996. The 1996 rules have been amended on several occasions. The last amendment to the Darke County Solid Waste Management District Rules and Regulations was approved on November 9, 2005. A copy of the current rules is included in Appendix I.

The District Board of Director's rule making authority is discussed in Chapter IX of this Plan. The District Plan reserves for the Board of Directors the power to make and enforce rules to the fullest extent authorized by Ohio law.