



**Adopted Draft
Solid Waste Management Plan Update**



**Miami County
Solid Waste Management District**

2022-2036

August 24, 2021

Prepared by:

GT
environmental, inc.

Miami County Solid Waste Management District

2022-2036 ADOPTED PLAN UPDATE

Table of Contents

A. Section

I. INTRODUCTION I-1

A. Plan Approval Date, Counties in District, and Planning Period Length I-1

B. Reason for Plan Submittal I-1

C. Process to Determine Material Change in Circumstances and Amend the Plan I-1

D. District Formation and Certification Statement..... I-4

E. District Policy Committee Members I-4

F. District Board of Directors I-5

G. District Address and Phone Number..... I-5

H. Technical Advisory Council and Other Subcommittees I-5

I. Policy Committee Review of Plan Update..... I-5

II. EXECUTIVE SUMMARY II-1

A. Section I. Introduction II-2

B. Section III. Inventories II-3

C. Section IV. Reference Year Population, Waste Generation and Waste Reduction II-4

D. Section V. Planning Period Projections and Strategies..... II-6

E. Section VI. Methods of Management: Facilities and Programs to be Used II-11

F. Section VII. Measurement of Progress Toward Waste Reduction Goals II-12

G. Section VIII. Cost of Financing Plan Implementation II-14

H. Section IX. District Rules (ORC Section 3734.53(C)) II-17

III. INVENTORIES III-1

A. The Reference Year..... III-1

B. Existing Solid Waste Landfills III-1

C. Existing Incinerators and Resource Recovery Facilities III-3

D. Existing Transfer Facilities III-3

E. Existing Recycling and Household Hazardous Waste Collection Activities..... III-4

F. Existing Composting/Yard Waste Management Facilities..... III-5

G. Facilities Used by the District Which are Located Outside Ohio III-6

H. Existing Open Dumps and Waste Tire Dumps..... III-6

I.	Ash, Foundry Sand, and Slag Disposal Sites	III-6
J.	Map of Facilities and Sites	III-6
IV.	REFERENCE YEAR POPULATION, WASTE GENERATION AND WASTE REDUCTION.....	IV-1
A.	Reference Year Population and Residential/Commercial Waste Generation	IV-1
B.	Residential/Commercial	IV-1
C.	Industrial Waste Generation	IV-2
D.	Exempt Waste	IV-3
E.	Total Waste Generation	IV-3
F.	Reference Year Waste Reduction	IV-3
G.	Existing Waste Reduction/Recycling Activities for the Residential, Commercial and Industrial Sectors	IV-8
H.	Total Waste Generation: Historical Trends Plus Waste Reduction	IV-57
I.	Reconciliation of Waste Generation (based on reported recycling and disposal)	IV-60
J.	Waste Composition.....	IV-61
V.	PLANNING PERIOD PROJECTIONS AND STRATEGIES	V-1
A.	Planning Period	V-1
B.	Population Projections	V-1
C.	Waste Generation Projections	V-2
D.	Projections for Waste Stream Composition	V-7
E.	Waste Reduction and Recycling Strategies through the Planning Period	V-7
VI.	METHODS OF MANAGEMENT: FACILITIES AND PROGRAMS TO BE USED.....	VI-1
A.	District Methods for Management of Solid Waste	VI-1
B.	Demonstration of Access to Capacity	VI-4
C.	Schedule for Facilities and Programs: New, Expansions, Closures, Continuations.....	VI-6
D.	Identification and Designation of Facilities.....	VI-6
E.	Authorization Statement to Designate	VI-7
F.	Waiver Process for the Use of Undesignated Facilities	VI-7
G.	Siting Strategy for Facilities	VI-9
H.	Contingencies for Capacity Assurance and District Program Implementation	VI-16

VII. MEASUREMENT OF PROGRESS TOWARD WASTE REDUCTION GOALS.....VII-1

A. Compliance with Goal #2VII-1

B. Demonstration of Compliance with Goal #2.....VII-1

VIII. COST OF FINANCING PLAN IMPLEMENTATIONVIII-1

A. Funding Mechanisms.....VIII-2

B. Cost of Plan Implementation.....VIII-6

C. Funds Allocated from ORC 3734.57(B), ORC 3734.572 and ORC 37334.573VIII-12

D. Contingent FundingVIII-13

E. Summary of Costs and RevenuesVIII-14

IX. DISTRICT RULESIX-1

A. Existing RulesIX-1

B. Proposed RulesIX-4

C. Rule Approval ProcessIX-9

B. Appendices

Appendix A Resolutions for District Formation

Appendix B Public Notices for Public Hearings and Public Comment

Appendix C Resolutions and Certification Statements

Appendix D Identification of Consultants Retained for Plan Preparation

Appendix E District Map

Appendix F Industrial Survey Results

Appendix G Survey Instruments

Appendix H Miami County Debris Management Guide Program

Appendix I District Rules

I. Introduction

A. Plan Approval Date, Counties in District, and Planning Period Length

1. Under current approved plan:

Date of Ohio EPA approval
or order to implement: December 29, 2015

Counties within district: Miami

Years in planning period: 15

2. Plan to be implemented with approval of this document:

Counties within District: Miami

Years in planning period: 15

Year 1 of the planning period: 2022

B. Reason for Plan Submittal

Mandatory five-year plan update.

C. Process to Determine Material Change in Circumstances and Amend the Plan

Ohio law [ORC Section 3734.56(D)] requires district plans to be updated when the District Board of Directors determine that circumstances are materially changed from those addressed in the approved plan. If a plan update is required due to a material change in circumstances, the plan update must address those portions of the plan that need to be modified due to the change.

A plan amendment involving fees or designation that does not require modification of any other part of the plan requires ratification, but not Ohio Environmental Protection Agency (Ohio EPA) approval. However, if any other portion of the plan is modified, the entire plan must be updated. Moreover, the updated plan must be ratified, submitted to Ohio EPA, and obtain Ohio EPA's approval prior to becoming effective.

1. Circumstances which may result in a material change.

In determining whether a material change has occurred, the Board of Commissioners will consider the following:

- a. An assessment of changes in waste generation;
- b. Capacity for disposal, transfer, composting, and management of restricted waste streams;
- c. Strategies for waste reduction and/or recycling;
- d. Substantial changes in the availability of waste reduction and recycling opportunities available to District residents;
- e. The availability of revenues for plan implementation;
- f. Procedures to be followed for plan implementation;
- g. Timetable for implementation of programs and/or activities;
- h. Facility designations and the flow of waste (the addition or removal of a facility from the designated list need not be a material change); and
- i. Any other factor that the Board considers relevant.

2. Monitoring Procedures

The determination criteria will be evaluated on the basis of the District Policy Committee's annual review of the approved plan, and/or information obtained through the District Staff's monitoring program. The staff monitoring program includes the following:

- a. Monthly and annual report data from the Miami County Transfer Facility¹;
- b. Quarterly analysis of District revenues from transfer facility fees and other solid waste management activities;
- c. Analysis of information acquired by District Staff for preparation of the District's Annual Report;
- d. Information acquired by District Staff through follow-up investigations of citizen complaints which indicate the existence of deviations from or noncompliance with the District plan; and

¹ The Miami County Transfer Facility is the only facility designated by the District for receiving municipal solid waste generated in the Miami County Solid Waste District.

- e. Analysis of information voluntarily provided to the District Staff by state or local officials and employees, or owners and operators of solid waste collection, disposal, transfer, or recycling operations, which indicate the existence of deviations from and/or noncompliance with the District's plan.

The Policy Committee or the District's staff will immediately notify the Board of Commissioners of any reliable information that is likely to establish that a material change from the circumstances addressed in the District's approved plan has occurred.

3. Timetable for Making the "Material Change" Determination

Within ten days from receipt of notification from the Policy Committee or the District Staff that there may be a material change of circumstances, the Board of Commissioners will request the District Staff to prepare a report which discusses the effects that the changed circumstances identified in the notice to the Board of Commissioners may have on the criteria listed in paragraph 1, above. The District Staff will prepare the report and submit it to the Board of Commissioners within thirty days of the Board's request. Within ten days after the receipt of the District Staff's report, the Board will determine whether additional information is necessary for the Board to determine whether a material change has occurred. If the Board determines that additional information is required, the District Staff will revise its report to include such additional information and submit its final report within twenty days from the Board's request for additional information.

Within sixty days after the Board's receipt of the District Staff's final report, the Board will make a determination of whether the changed circumstances are material pursuant to the criteria listed in paragraph 1, above. During that time, the Board may obtain such information from sources other than the District Staff as the Board deems necessary and proper to making its determination of whether a material change has occurred.

4. Notification Procedure After Making Determination

Upon the Board's determination that a material change has occurred, the Board shall notify the District Policy Committee, in writing, within ten days of the Board's determination. The Board's notice shall request the District Policy Committee to prepare a draft amended solid waste plan, pursuant to ORC 3734.56 (D), that addresses those portions of the District's existing plan that the Board has determined may be affected directly or indirectly by the material change.

D. District Formation and Certification Statement

All public notices in local newspapers publicizing hearings and comments on the *Plan Update* are included in Appendix B.

A certification statement signed by members of the Board asserting that the contents of the *Plan Update* are true and accurate is included in Appendix C. The certification statement was signed by a majority of the Board members for both the draft amended *Plan Update* and the ratified draft amended *Plan Update*.

Appendix C also includes resolutions by the Board adopting the *Plan Update* prior to ratification and certifying that the *Plan Update* has been properly ratified. A list of all political jurisdictions in the District which voted on the *Plan Update* ratification, their populations, and the percentage of the population represented by the political jurisdictions which ratified the *Plan Update* is included in Appendix C.

E. Policy Committee Members

The Policy Committee for the District is comprised of seven members from Miami County. These members will include:



The following committee members are listed in accordance with the political jurisdictions and constituencies they represent.

Policy Committee Members	Representing	Term
Ted S. Mercer	Board of County Commissioners	Unlimited
Thomas Funderburg	City of Troy	Unlimited
Neil Rhoades	Township Representative (Concord Township)	Unlimited
Dennis Propes	Miami County Public Health	Unlimited
Jerry Herbe	Commercial/Industrial Representative (Minster Bank)	2
Aurthur Haddad	General Interests of Citizens	2
Deb Oexmann	Public Representative	2

F. Board of County Commissioners

The following board members are listed:

Directors
Gregory A. Simmons
John F. Evans
Ted S. Mercer

G. District Address and Phone Number

Miami County Solid Waste Management District
 2200 North County Road 25-A
 Troy, Ohio 45373

Contact: Brad Petry
 District Coordinator

Phone: 937-440-5653

Email: bpetry@miamicountyohio.gov

H. Technical Advisory Council and Other Subcommittees

The District does not currently have any Advisory Committees involved in the *Plan Update* process.

I. Policy Committee Review of Plan Update

The Policy Committee shall annually review implementation of the *Plan Update* under section 3734.55 of the Ohio Revised Code and report its findings and recommendations regarding implementation of the plan to the Board of County Commissioners of the District.

II. Executive Summary

The Miami County Waste Management District (District) is required by Section 3734.54 of the Ohio Revised Code (ORC) to periodically update its solid waste management plan (*Plan Update*). This *Plan Update* will cover a planning period beginning in 2022 and ending in 2036. This *Plan Update* includes a description of District programs and projections for solid waste generation, recycling and disposal. This *Plan Update* identifies the District's strategies for managing the District's facilities and programs and provides an assessment on achieving statewide recycling and waste reduction goals. This *Plan Update* follows Ohio EPA's format version 3.0. The format requires specific narrative information and data tables. There are nine major sections of the solid waste plan based on the Plan Format.

Section I

- Basic information about the District and an important section on determining when material changes would require an amendment to the *Plan Update*.

Section II

- An Executive Summary and includes brief narrative descriptions of each section in the *Plan Update*.

Section III

- An inventory of facilities, activities, and haulers used by the District in the reference year (2015).

Section IV

- The reference year statistics for the *Plan Update* including population data, waste generation and waste reduction estimates for the residential/commercial sector and the industrial sector.

Section V

- Projections of population, waste generation and waste reduction for each year of the planning period.

Section VI

- The District's management of facilities and programs to be used by the District throughout the planning period.

Section VII

- Presentation of how the District meets the state waste reduction and recycling goals.

Section VIII

- A presentation of the financial resources of the District necessary to implement this Plan.

Section IX

- District rules proposed, approved and authorized for adoption are presented by the District.

This Executive Summary provides an overview of each section of the *Plan Update*.

A. Section I. Introduction

On March 17, 1989, the Board of Commissioners of Miami County formed the Miami County Solid Waste Management District (Appendix A). The District includes all incorporated and unincorporated territory in Miami County.

The Board of County Commissioners of Miami County governs the District in their capacity as the Board of Commissioners of the Miami County Solid Waste Management District (hereinafter referred to as the “Board”).

The current Plan was approved by Ohio EPA on December 29, 2015 and includes a fifteen-year planning period. This *Plan Update* begins with the planning year 2022 and includes a fifteen-year planning period.

1. Policy Committee Members

The Policy Committee prepares the solid waste management plan, monitors implementation of the Plan, and adjusts the District generation fees as appropriate. The current Policy Committee members are listed in the following table.

Policy Committee Member	Representing
Ted S. Mercer	County Commissioner
Thomas Funderburg	City of Troy Representative
Neil Rhoades	Township Representative
Dennis Propes	Health Department Representative
Jerry Herbe	Commercial/Industrial Representative
Aurthur Haddad	General Interests of Citizens
Deborah Oexmann	Public Member

2. Board of County Commissioners of the District

The Board is responsible for implementing the solid waste plan developed by the Policy Committee. The current Board members are listed in the following table.

Board Member	Role
Gregory A. Simmons	County Commissioner
John F. Evans	County Commissioner
Ted S. Mercer	County Commissioner

3. Process to Determine Material Change in Circumstances and Amend the Plan

Section I of the *Plan Update* outlines the process which will be used by the District to determine when a material change in circumstance has occurred.

If a material change in circumstances occurs, a plan amendment is required by Ohio law (ORC Section 3734.56 (D)). The District plan must be updated “...when the Board of County Commissioners...determines that circumstances materially changed from those addressed in the approved initial or amended plan of the district...”

A material change in circumstances is defined by Ohio EPA as changes in any of the following which would be judged to significantly interfere with District achievement of *Plan Update* goals in the context of statutory requirements.

Circumstance which may interfere with goal achievement:
Reduction in Available Capacity
Increase in Waste Generation
Delay in Program Implementation
Discontinuance of Essential Waste Reduction or Recycling Activities
Decrease in Waste Generation
Adequately finance implementation of the Plan

In accordance with ORC 3734.56(D), the *Plan Update* must be revised if the Board has determined that “circumstances materially changed from those addressed in the approved initial or amended plan of the district.” A material change in circumstances shall be defined as a change that adversely affects the ability of the Board to: (1) assure waste disposal capacity during the planning period; (2) maintain compliance with applicable waste reduction or access goals; or (3) adequately finance implementation of the *Plan Update*. This process is described in detail in Section I of this *Plan Update*.

B. Section III. Inventories

Section III provides an inventory of facilities, programs and activities during the reference year (2018) of the *Plan Update*.

Inventories include the following:
Landfills
Transfer Facilities
Recycling Programs
Collection Programs
Composting Facilities and Programs
Open Dumps and Waste Tire Dumps
Ash, Slag and Foundry Sand Disposal Sites
Solid Waste Haulers

C. Section IV. Reference Year Population, Waste Generation and Waste Reduction

1. Reference Year Population

The District's 2018 reference year population of 105,939 was determined by using the 2018 Ohio Department of Development's 2018 Population Estimates for Counties, Cities, Villages and Townships. This information was obtained from the Ohio Department of Development, Office of Strategic Research.

2. Waste Generation

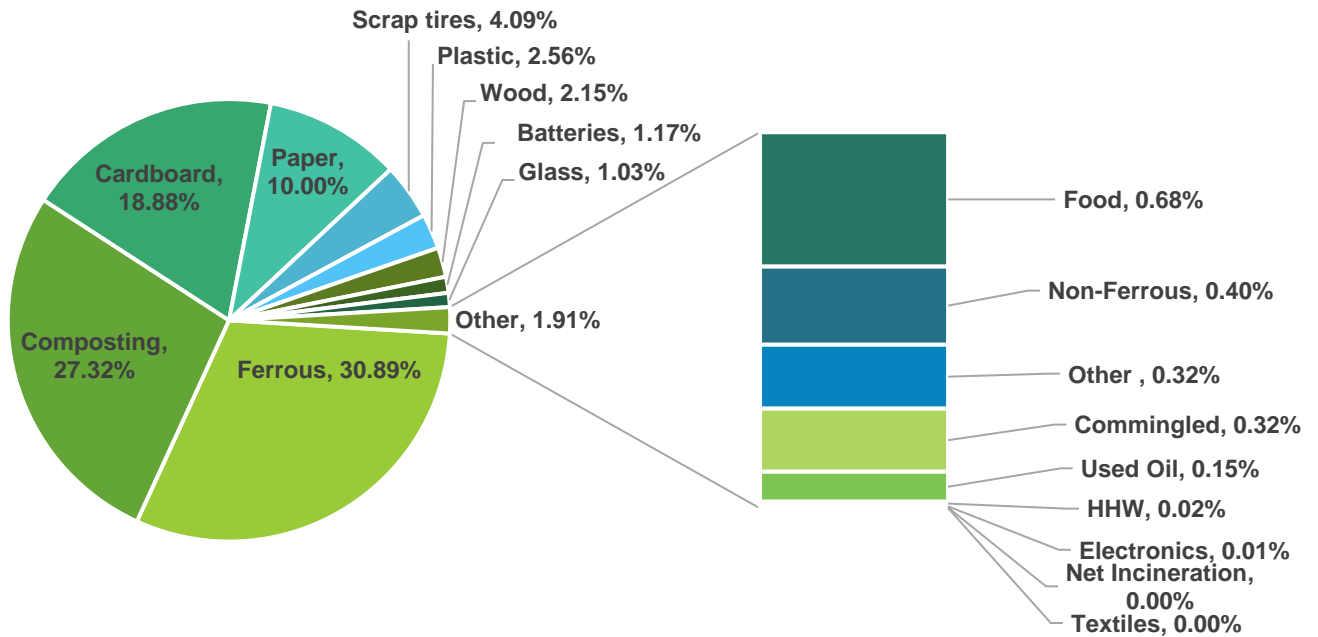
Residential and commercial waste generation was 117,874 tons including 79,831 tons landfilled (see Table III-1) and 38,043 tons recycled, including composting (see Table IV-5). Based on the District population, this is 6.1 pounds generated per person per day of residential/commercial waste generation.

Industrial waste generation was 123,448 tons. This includes 20,578 tons landfilled (see Table III-1) and 102,870 tons recycled (see Table IV-6). Based on the District population, this is 6.4 pounds of industrial waste generated per person per day.

3. Reference Year Waste Reduction

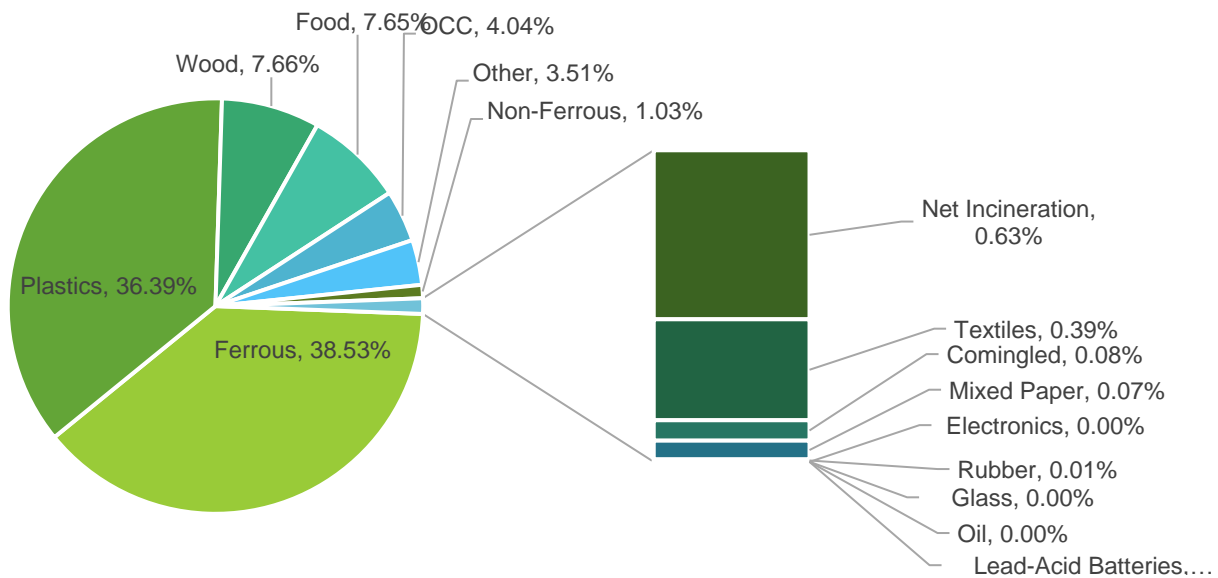
Residential/commercial waste reduction that occurred in the District during the reference year is summarized in Table IV-5. Residential/commercial waste reduction activities include curbside and drop-off collection, pay-as-you-throw collection, yard waste management, District-sponsored special collection events for items such as household hazardous waste, tires, batteries, oil, electronics, and appliances, and special events recycling. The following graph depicts the residential and commercial waste reduction totals as a percentage for 2018.

Residential/Commercial Waste Reduction (2018)



Industrial waste reduction activities that occurred during the reference year are summarized in Table IV-6. The following graph depicts the industrial waste reduction totals as a percentage for 2018.

Industrial Waste Reduction (2018)



Section IV also provides specific details for the existing waste reduction/recycling activities for the residential/commercial and industrial sectors.

4. Existing Waste Reduction/Recycling Activities for Residential, Commercial and Industrial Sectors

In 2018, the following facilities/programs were implemented.

Residential/Commercial/Industrial Waste Reduction/Recycling and Education Strategies

Program #	Program
MC-1	Curbside Recycling
MC-2	Drop-Off Recycling
MC-3	Yard Waste Management
MC-4	Household Hazardous Waste Management
MC-5	Scrap Tire Recycling
MC-6	Automobile Batteries and Used Oil Collection
MC-7	Special Event Recycling
MC-8	Electronics Recycling
MC-9	Appliance Recycling
MC-10	Recycling Market Development Grant
MC-11	"Buy Recycled" Promotion
MC-12	Internal Grant
MC-13	Community Recycling Grant
MC-14	Litter Collection Grant
MC-15	School Waste Reduction Grant
MC-16	Education and Awareness
MC-17	Miami County Transfer Facility Pay-Per-Bag
MC-18	Pay-As-You-Throw Technical Assistance
MC-19	Miami County Debris Management Guide
MC-20	Facilities: Miami County Transfer Station

D. Section V. Planning Period Projections and Strategies

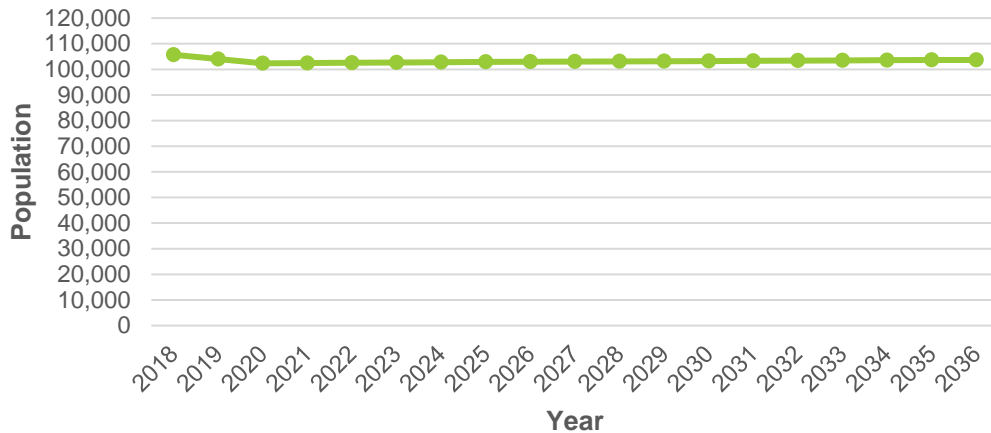
Section V includes a summary of projections of population, waste generation and recycling for the planning period (2022 to 2036). New programs and changes to existing programs are presented in this section.

1. Population Projections

The District anticipates population will increase 1.08% over the planning period. Population projections were made using growth rates from Ohio Department of Development's Projected Percent Population Change 2010

to 2040 based on the growth rate of the county that each political subdivision or portion of a political subdivision is located. The following graph depicts the population projections throughout the planning period.

District Population Estimate (2018 – 2036)

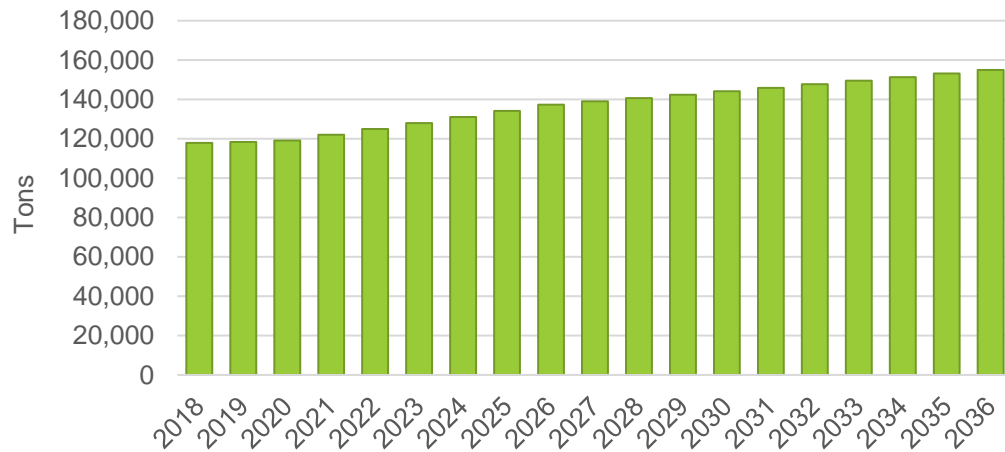


2. Waste Generation Projections

Residential/Commercial Sector

The total residential/commercial waste generation estimate for 2018 was 117,874 tons. Waste generation is projected to increase throughout the planning period from 2022 – 2036. Beginning in 2022, the first year of the planning period, residential/commercial waste is projected to be 124,933 tons. This is expected to increase to 154,959 tons in 2036, a 24.03% increase during the planning period. The following graph depicts the residential/commercial waste generation projections throughout the planning period.

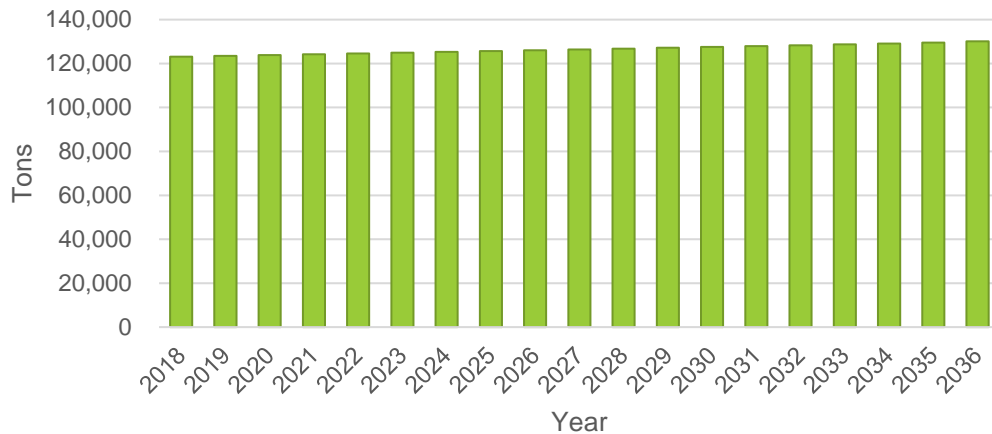
**District Residential/Commercial Waste Generation
(2018 – 2036)**



Industrial Sector

Industrial waste generation is projected for SIC codes 20 and 22-39. Table V-3 presents the average annual change in employment for each SIC code. The District projects industrial waste increase from 123,448 tons in 2018 to 125,160 tons in 2022, then increase to 131,546 tons by the end of the planning period. The following figure presents the estimated industrial waste generation throughout the planning period.

District Industrial Waste Generation (2018 – 2036)

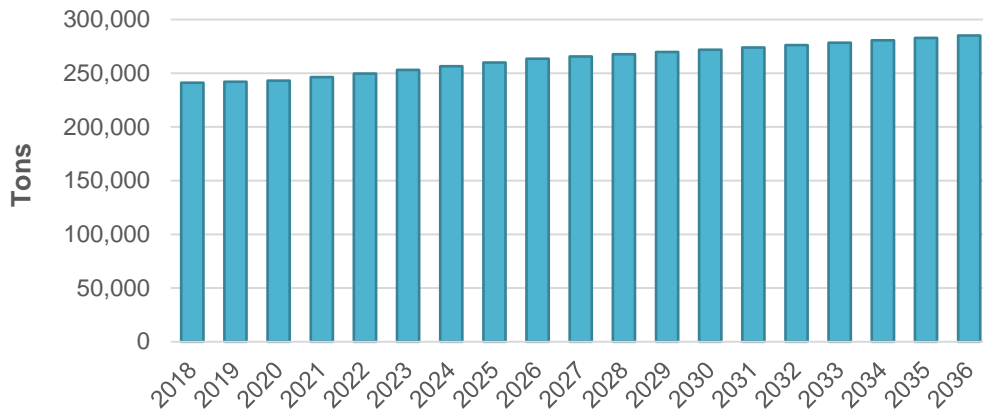


Total Waste Generation

Total waste generation projections for the District during the planning period are presented in Table V-4, “Total Waste Generation for the District during the Planning Period (in TPY)”. The total waste generation estimate for the

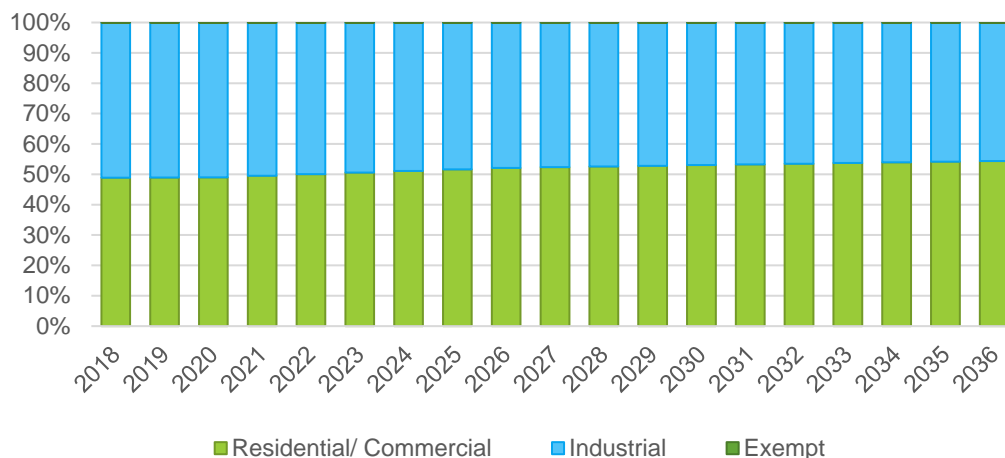
2018 reference year was 241,435 tons. This includes residential/commercial waste (117,874 tons), industrial waste (123,448 tons), and exempt waste (112 tons).

District Total Waste Generation (2018 – 2036)



The following graph depicts the waste generation per sector as a percentage of the total waste generation.

District Total Waste Generation Distribution (2018 – 2036)



3. Waste Reduction and Recycling Strategies through the Planning Period

The District must continue to develop recycling and waste reduction strategies to meet the goals established in the 1995 State Plan and to pursue continuous improvement in meeting the 1995 State Plan goals. The following table summarizes the program, initiatives, and strategies for the planning period, and which goals each program meets.

District Strategies by State Plan Goal

Program	Program #	1995 State Plan Goals						
		#1	#2	#3	#4	#5	#6	#7
Curbside Recycling	MC-01	✓	✓					
Drop-Off Recycling	MC-02	✓	✓					
Yard Waste Management	MC-03		✓					
Household Hazardous Waste Management	MC-04		✓			✓		
Scrap Tire Recycling	MC-05		✓			✓		
Automobile Batteries and Used Oil Collection	MC-06		✓			✓		
Special Event Recycling	MC-07	✓	✓					
Electronics Recycling	MC-08		✓					
Appliance Recycling	MC-09		✓					
Recycling Market Development Grant	MC-10		✓					✓
“Buy Recycled” Promotion	MC-11		✓					✓
Internal Grant	MC-12		✓					
Community Recycling Grant	MC-13		✓					
Litter Collection Grant	MC-14							
School Waste Reduction Grant	MC-15		✓					
Education and Awareness	MC-16			✓	✓			
Miami County Transfer Facility Pay-Per-Bag	MC-17		✓					
Volume-Based Technical Assistance	MC-18	✓	✓	✓	✓			
Miami County Debris Management Guide	MC-19							
Miami County Transfer Station	MC-20	✓	✓					
Annual Program Performance Assessment	MC-21							
Organic Waste Management	MC-22	✓	✓					
Number of Strategies Per Goal		6	18	2	2	3	0	2

Details for each program listed above including changes, update and new programs are included in Section V.

E. Section VI. Methods of Management: Facilities and Programs to be Used

Section VI presents the District's methods for managing solid waste. It includes management methods, a siting strategy, and a demonstration of capacity for the planning period 2022 to 2036.

1. District Methods for Management of Solid Waste

The net tons that were managed by the District in 2018 are calculated to be 241,435 tons. The landfill total in Table VI-1 is calculated by subtracting recycling, yard waste composting, and net incineration tonnage from the net tons to be managed. The District projects 250,206 tons of solid waste will need to be managed in 2022, and by the end of the planning period in 2036, the District will need to manage 286,618 tons.

2. Demonstration of Access to Capacity

During the reference year, 7 landfills managed 100,521 tons of solid waste generated by District residents, businesses, and industries.

Regional Capacity Analysis

The District's assessment of regional landfill capacity demonstrates there is sufficient permitted capacity available to manage the District's waste until December 31, 2036. The 7 landfills utilized by the District either directly or indirectly through transfer stations have permitted capacity to manage the District's solid waste through 2036.

3. Identification and Designation of Facilities

The District requires all solid waste generated within the District to be delivered to the Miami County Transfer Station unless a waiver is obtained. As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer, and resource recovery facilities and all licensed and permitted out-of-state landfill, transfer, and resource recovery facilities. The District is also identifying recycling and composting programs and facilities that are identified in Section III Inventories.

The following facilities have been designated by the District to manage solid waste.

- Miami County Transfer Station

The Board is authorized to establish facility designations in accordance with Section 343.013 and 343.014 of the Ohio Revised Code. In addition, facility

designations, if adopted, will be supported by applicable District rules.

4. Siting Strategy for Facilities

The District's Siting Strategy includes the following:

Submission and Review of Plans and Specifications and Application of Siting Strategy to Proposed Solid Waste Facilities, Maximum Feasible Utilization and Exemption of Existing in-District Solid Waste Facilities.

5. Contingencies for Capacity Assurance and District Program Implementation

The District will implement the contingency plan outlined in Section VI of the *Plan Update* if landfills or transfer facilities that service the District are required to close operations for a period of time that would be detrimental to the health and safety of District residents.

F. Section VII. Measurement of Progress Toward Waste Reduction Goals

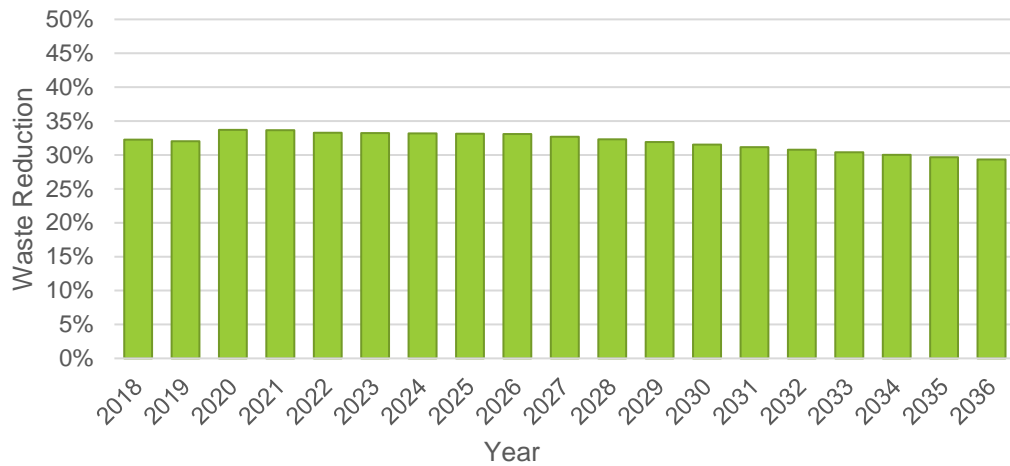
Ohio EPA's 1995 *State Plan* establishes seven goals solid waste management districts (SWMD) are required to achieve in their solid waste management plans. SWMDs are encouraged to meet both Goal #1 and Goal #2 but are only required to demonstrate compliance with one goal or the other. The following table defines Goals #1 and #2:

Goal #	Description
#1	Ensure the availability of reduction, recycling and minimization alternatives for municipal solid waste by ensuring 90% of residents have access to curbside and drop-off programs. The District must also demonstrate that there are adequate opportunities for industrial businesses to recycle.
#2	Reduce and/or recycle at least 25% of the total waste generated by the residential/commercial sector and 50% of the total waste generated by the industrial sector.

1. Compliance with Goal #2

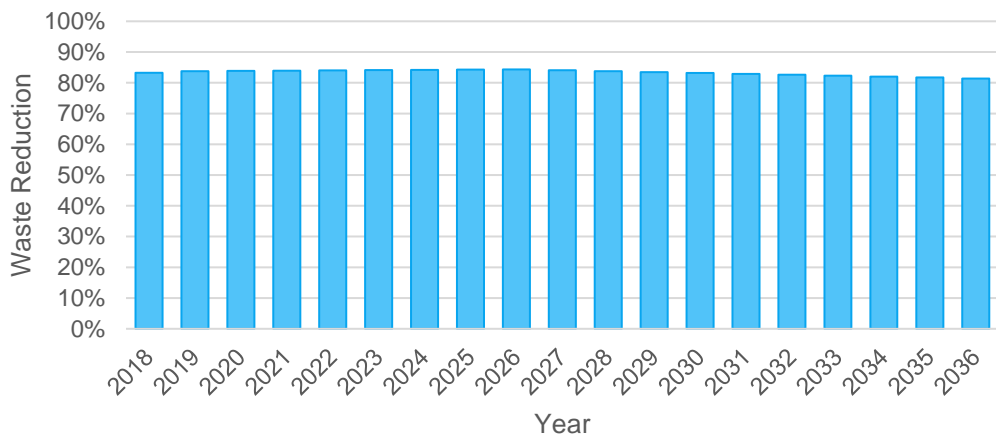
In the 2018 reference year, approximately 32% of the District's residential/commercial waste stream was reduced. This percentage reflects tonnage that was diverted from landfill disposal by recycling, composting, and waste reduction via incineration. The residential/commercial waste reduction percentage rate is expected to gradually decrease to 29% by the end of the planning period as depicted by the following chart.

**Residential/Commercial Waste Reduction Percentage
(2018 – 2036)**



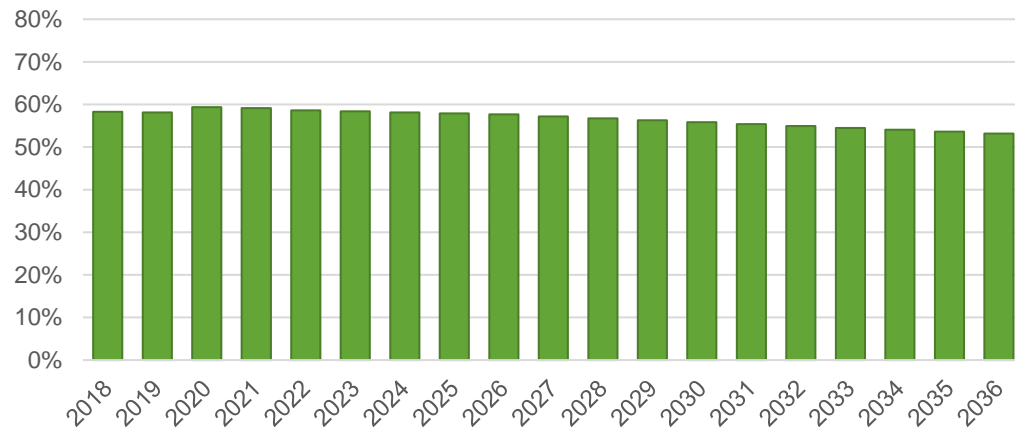
The industrial sector had a waste reduction rate of approximately 83% in 2018 and will decrease to 81% by the end of the planning period as indicated by the following chart.

Industrial Waste Reduction Percentage (2018 – 2036)



The District’s annual waste reduction rate for the reference year was 58%. The District projects the total waste reduction rate will decrease to 53% by the end of the planning period (2036). The following figure depicts the District’s projected waste reduction rate over the planning period for the residential/commercial and industrial sectors combined.

Total District Waste Reduction Percentage (2018 – 2036)



G. Section VIII. Cost of Financing Plan Implementation

1. Funding Mechanisms

a. District Disposal Fees

At this time, the District will levy no tiered disposal fees through the authority granted by Divisions B (1) to (3) of Section 3734.57 of the Ohio Revised Code. The District reserves the right to levy such fees in the future should it determine that such fees are necessary for the implementation of the plan.

b. Generation Fee

The District does not have a generation fee. The District reserves the right to implement a generation fee at any point in the planning period. Any implementation of a generation fee will require the Policy Committee to follow the requirements in the Ohio Revised Code prior to enacting the generation fee including public comment and ratification of any proposed generation fees.

c. Tipping Fee

The current tipping fee is \$53.80 per ton. This fee has been \$53.80 per ton since 2016. This tipping fee is charged to all solid waste received at the Miami County Transfer Station. This includes the \$4.75 Ohio EPA fee, and therefore, the District earns \$49.05 per ton on tipping fees.

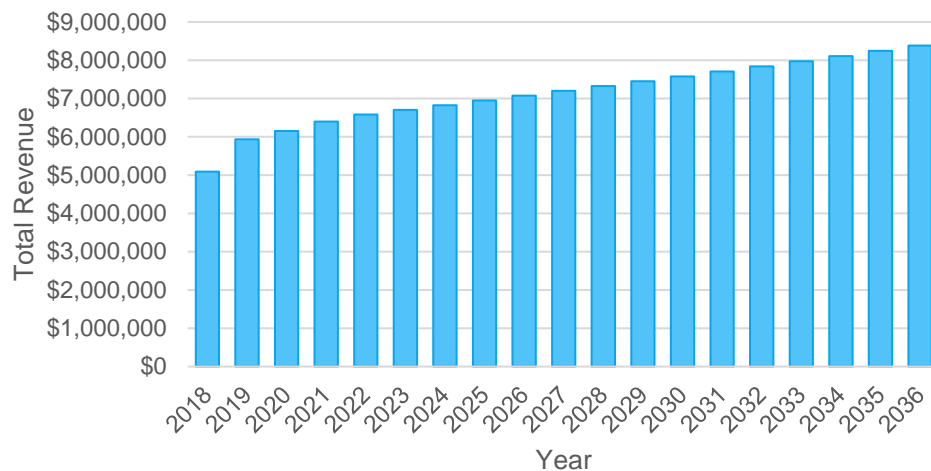
The District is projecting the tipping fee to remain at \$53.80 through

the entire planning period. The District reserves the right to adjust the fees as needed, up or down, based on current and/or projected economic conditions for each year of the planning period. The District also reserves the right to create new fees for additional services or eliminate fees and their associated services throughout the planning period.

d. Recycling Revenue and Other Revenue

In addition to tipping fees, the District also receives revenue from the sale of recyclables and other sources. Recycling revenue is projected to remain fairly constant through the entire planning period to 2020 levels of recyclables revenue. Other revenues often include fees collected by the transfer station from municipalities and other sources and reimbursements from Ohio EPA. These are also projected to remain constant through the planning period from 2020 levels.

District Revenue (2018 – 2036)

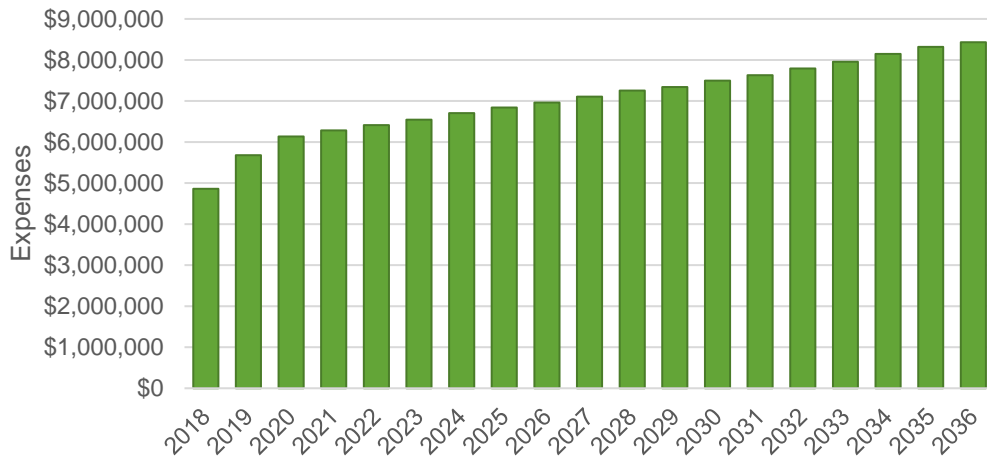


2. Cost of Plan Implementation

Section VIII includes the strategies, facilities, activities and programs that the District will use to implement the *Plan Update*.

The District is projecting to spend \$6,413,822 in 2022, the first year of the planning period and \$8,430,547 in 2036, the final year of the planning period. The following chart summarizes the District’s actual and projected expenses throughout the planning period.

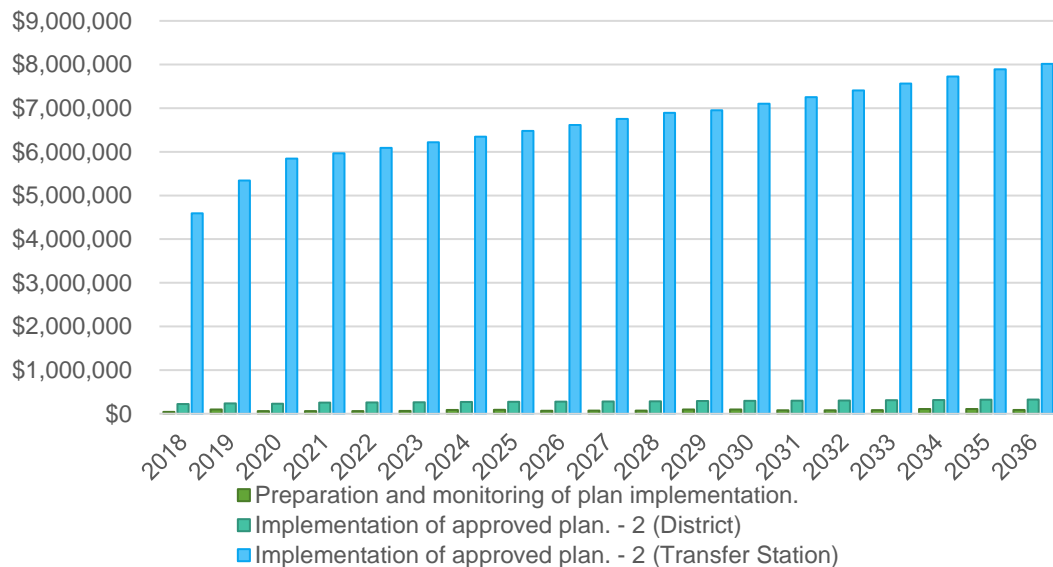
District Expenses (2018 – 2036)



The District’s budget falls into two categories: preparation and monitoring of plan implementation and implementation of the approved plan.

The following graph depicts the District’s annual expense to implement this *Plan Update*.

District Expense Distribution (2018 – 2036)



3. Contingent Funding

The Policy Committee and District Board of County Commissioners do not consider funding to be an issue of concern during this planning period. The Board would consider increasing the Miami County Transfer Station tipping

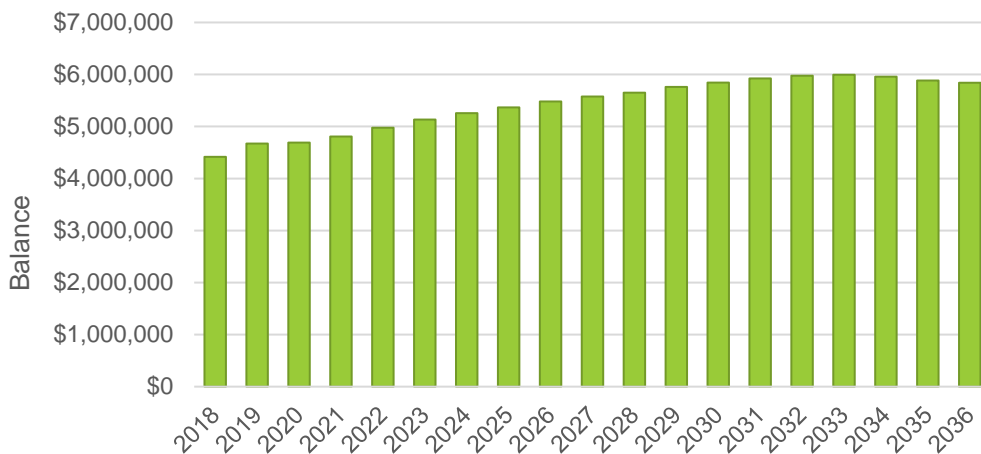
fee or other funding options if the District’s revenues and/or expenses were creating excessive budgetary shortfalls.

The District may also consider other funding mechanisms as a part of this contingent funding procedure including but not limited to generation fees. The Board of County Commissioners may choose to use this mechanism as a contingent funding source or as a replacement-funding source to tipping fees, whichever is in the best interest of the District.

4. Summary of Costs and Revenues

A summary of District revenues and expenditures for each year of the planning period is included in Table VIII-8. The District has a positive year-end cash flow for almost each year of the planning period. At the end of the planning period in 2036, the District projects a carryover of approximately \$5,839,465. The following figure presents the District’s year-end cash flow from 2018 through 2036.

District Fund Balance (2018 – 2036)



H. Section IX. District Rules (ORC Section 3734.53(C))

1. Existing Rules

The District has existing rules that are summarized in this section. The District reserves the right to create make, publish and enforce rules in accordance and pursuant to Divisions (F) (1), (2) and (3) of Section 343.01 of the Revised Code and Divisions (C) (1), (2), (3), and (4) of Section 3734.53 of the Revised Code, to the extent any such rules are determined by the Board from time to time to be necessary or desirable to implement any provision or to accomplish any objective of this Solid Waste Management Plan or any amended Plan.

2. Proposed Rules

No new rule changes are included with this *Plan Update*. The District intends to keep its options open with the development of additional rules. The District reserves the right under Section 343.01 of the ORC and Division (C) (1), (2), (3) and (4) of Section 3734.53 to adopt from time to time new revised rules.

**Table ES-1
General Information**

District Name: Miami County Solid Waste District		
District ID # (for OEPA use only)	Reference Year 2018	Planning Period: 2022-2036
Plan Status (underline one)		
<u>D</u> RD DR Approved (date) / / OI (date) / / DA	Reason for Plan Submittal: Mandatory five year update	

Abbreviations: D=draft; RD=ratified draft, DR=draft revised, OI=ordered to be implemented, DA=draft amended

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

Name: Brad Petry, Coordinator		
Address: 2200 N. Co. Rd. 25A		
City: Troy	State: Ohio	Zip: 45373
Phone: (937) 440-5653	Fax: N/A	

**Table ES-3
Plan Data Summary**

Plan Data		Reference Year 2018	2022 (year 1)	2026 (year 5)	2031 (year 10)	2036 (year 15)
Population		105,656	102,550	102,956	103,309	103,656
Generation	Industrial	123,448	125,160	126,906	129,138	131,546
	Res/Comm	117,874	124,933	137,332	145,884	154,959
	Exempt	112	112	112	112	112
Total Generation (tons)		241,435	250,206	264,350	275,134	286,618
Waste Reduction	Industrial Source Reduction	0	0	0	0	0
	Industrial Recycling	102,197	104,717	106,597	106,597	106,597
	Res/Comm Source Reduction	0	0	0	0	0
	Res/Comm Recycling	27,650	30,041	32,839	32,483	30,970
	Yard Waste Composting	10,393	10,625	11,606	12,961	12,961
	MSW Composting	0	0	0	0	0
Total Waste Reduction (tons)		140,894	145,383	151,043	152,041	150,528
Disposal	In-District Landfills	21	21	23	25	28
	Out-of-District Landfills	100,500	100,213	109,607	120,300	134,003
Total Landfill (tons)		100,521	100,234	109,630	120,325	134,031
Waste Reduction Rate	Industrial	83.2%	83.9%	84.3%	83.2%	83.2%
	Residential/Commercial	32.3%	33.6%	33.1%	31.5%	31.5%

Source(s) of information: Tables IV-1, IV-5, IV-6, V-2, V-3, V-4, V-6, and VI-4A

**Table ES-4
Existing Disposal Facilities**

Name	County	District Tons	Total Tons	Years Left
In-District Landfills				
None				
Out-of-District Landfills				
Celina Sanitary Landfill	Mercer	21	212,188	4.3
Carbon Limestone Landfill LLC	Mahoning	12	60,161,693	51.5
Cherokee Run Landfill	Logan	98,050	12,274,913	29.2
Rumpke Waste Inc Hughes Rd Landfill	Hamilton	772	19,274,188	8.2
Stony Hollow Landfill Inc	Montgomery	271	4,361,525	24.4
Out-of-State Landfills				
Bavarian Trucking Co Inc	Boone, KY	5	8,792,856	22.07
Jay County Landfill	Jay, IN	1,391	9,808,127	42.61
Total/Average		100,521	114,885,490	182

Source(s) of information: 2018 Ohio Facility Data Report Tables, Table III-1, and Table VI-4A

III. Inventories [ORC Section 3734-53(A)(1)-(4)]

This section of the plan update describes how solid waste was collected, reduced, recycled, disposed, incinerated, and ultimately managed in the Miami County Solid Waste Management District (District) during 2018.

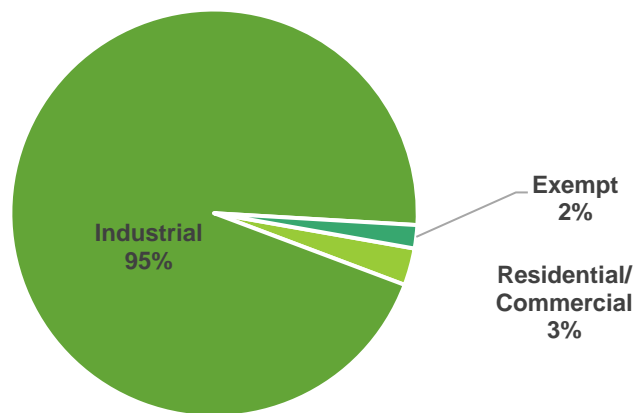
A. The Reference Year

The District will use calendar year 2018 as a reference year for all subsequent projections in the Plan.

B. Existing Solid Waste Landfills

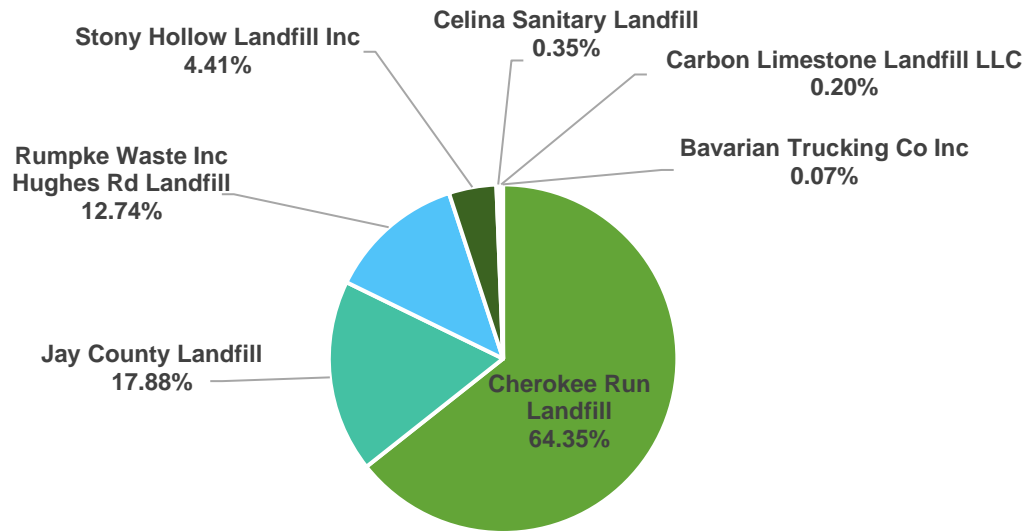
Table III-1, “Landfills Used by the District” presents a list of the landfills that received directly hauled solid waste from the District. There are currently no operating MSW landfills located in the District. District-generated solid waste that was directly hauled (versus transferred) was managed at five out-of-District landfills and two out-of-state landfills. Approximately 6,057 tons of solid waste were directly hauled to landfills for disposal in 2018. The residential/commercial sector generated 3% of the waste that was directly hauled, and the industrial sector generated 95% of all directly hauled waste. Exempt waste represented approximately 2% of the waste that was directly hauled. Exempt waste can include earth or materials from construction, mining, or demolition operations, non-toxic fly ash, non-toxic bottom ash, or slag. The following figure presents the percent of directly hauled solid waste generated by each sector in 2018.

2018 Percentage of Directly Hauled Solid Waste Generated by Sector



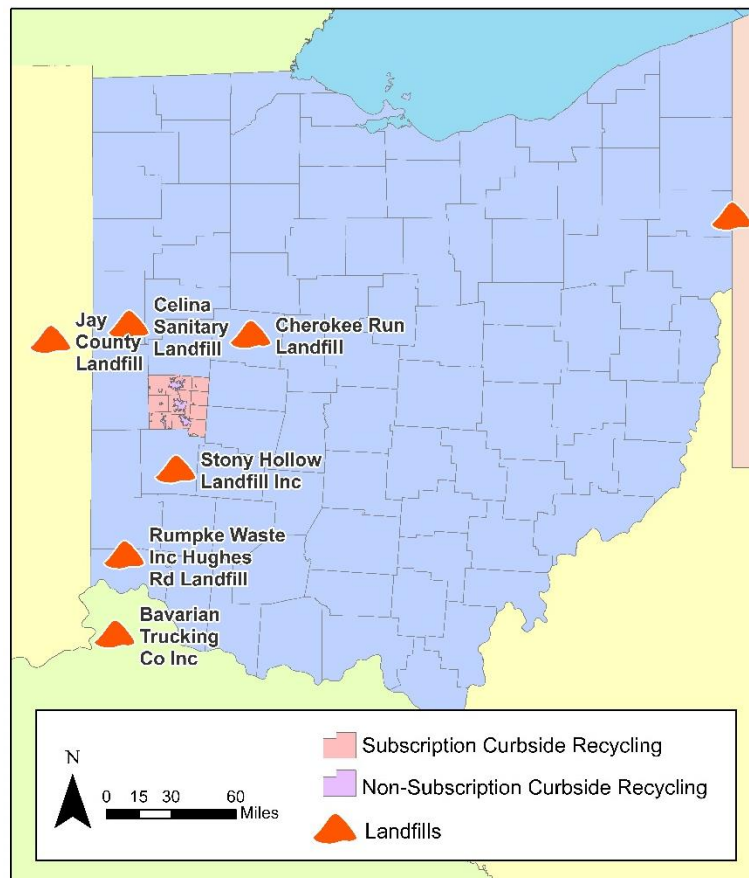
Cherokee Run Landfill managed approximately 64% (3,898 tons) of the District’s solid waste. Jay County Landfill, Rumpke Waste Inc Hughes Rd Landfill, and Stony Hollow Landfill also received a significant portion of the District’s solid waste (18%, 13%, and 4% respectively). The following chart depicts the landfills used by the District for direct hauled solid and exempt waste in 2018.

2018 Direct Haul Landfills Receiving District Solid/Exempt Waste



The following map presents the location of these facilities in relation to Miami County.

2018 Landfills that Accepted Directly Hauled Solid Waste



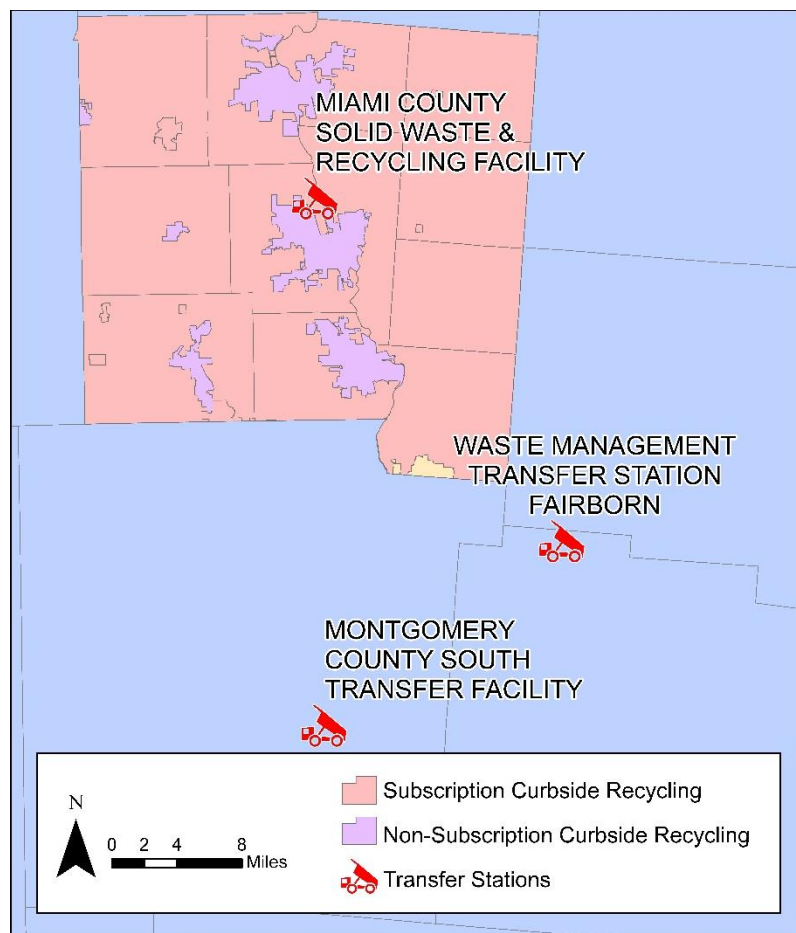
C. Existing Incinerators and Waste-to-Energy Facilities

There were 6 incinerators or waste-to-energy facilities used by the District in 2018 (see Table III-2). A couple of industrial facilities located in Miami County reported to the District reported a total of 898.77 tons waived and sent to an incinerator in 2018.

D. Existing Transfer Facilities

Table III-3 presents transfer facilities used by the District. Miami County Solid Waste and Recycling Facility was the only in-District transfer station 2018. The transfer station reported accepting and processing 94,051 tons. Two transfer stations located outside of the District included the Waste Management Transfer Station in Fairborn Ohio and Montgomery County South Transfer Facility located in Dayton Ohio which accepted 105 tons of solid waste in 2018. No transfer facilities that accepted District solid waste were located outside of Ohio in 2018. The following figure presents the transfer stations in relation to Miami County.

2018 Transfer Stations Used by the District



E. Existing Recycling and Household Hazardous Waste Collection Activities

Table III-4, “Residential Curbside Recycling Activities,” identified six communities that provided non-subscription curbside recycling services. Additionally, there were eighteen subscription curbside programs operating in the District. The non-subscription curbside programs offered community residents weekly collection of recyclable materials including #1 and #2 plastics, glass, aluminum and tin cans, corrugated cardboard, paper board, newspapers, and aseptic containers. In 2018, all curbside programs collected 5,061 tons of recyclable materials.

Table III-5, “Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities, and HHW Collection Used by the District,” lists four in-District drop-off facilities available for public use that accept, at a minimum, five materials defined as highly amenable to recycling for the residential sector. These materials include #1 and #2 plastics, glass, aluminum and tin cans, corrugated cardboard, paper board, newspapers, and aseptic containers. All of the drop-off recycling centers are full-time, meaning they are available at least 40 hours per week. All Miami County residents have access to these four public drop-off sites. The following figure presents the locations of the drop-off recycling centers and curbside recycling programs.

2018 Curbside and Drop-Off Recycling Facilities

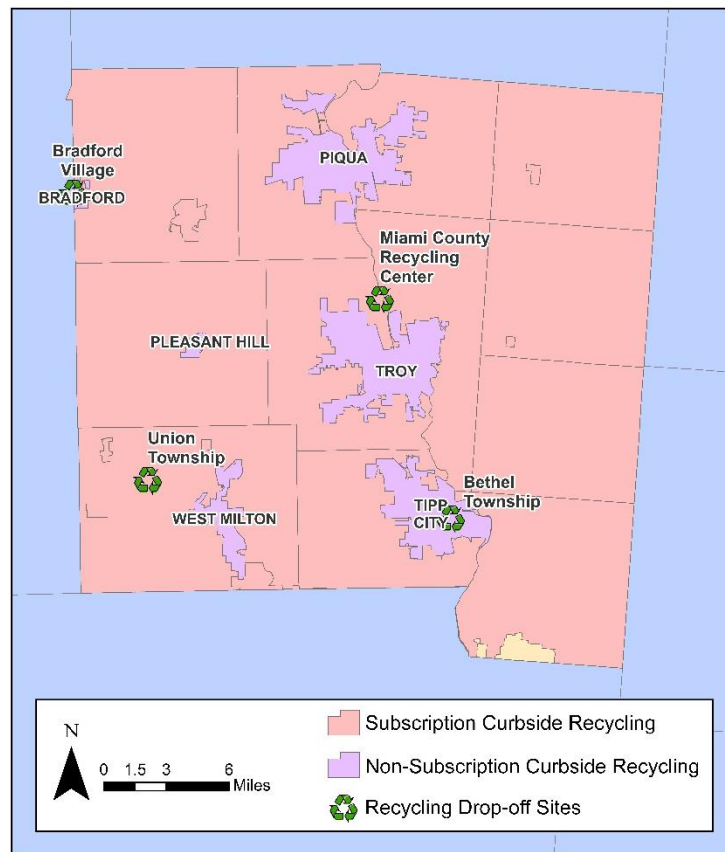


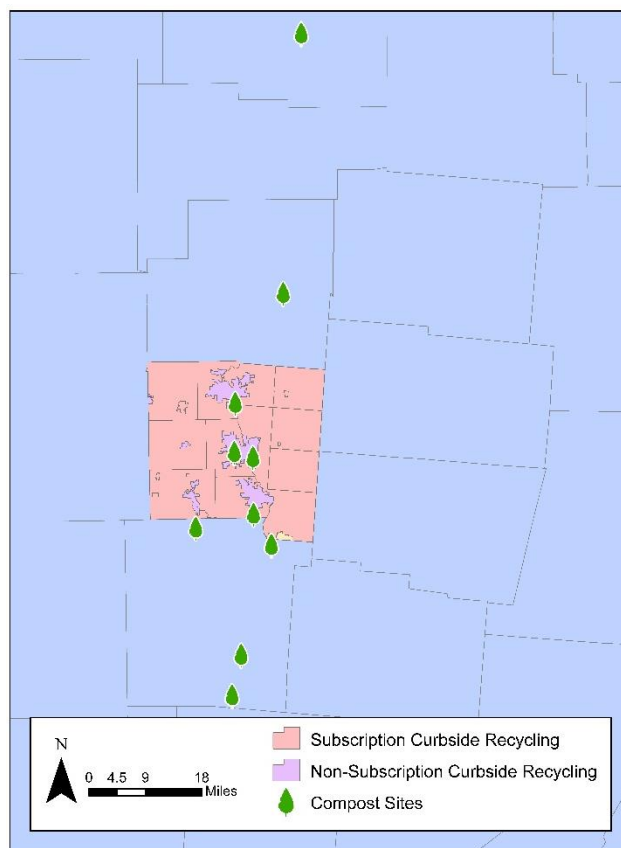
Table III-5 also lists private use drop-off facilities, drop-off recycling sites that accept less than the minimum 5 materials, brokers, and special collection programs operating in the District. The District hosts a drop-off site at the Miami County Transfer Station. This site collects a minimum of 5 recyclable materials and the District operates household hazardous waste (HHW) collections April through September, every Wednesday from 9:00 am to 1:00 pm.

F. Existing Composting/Yard Waste Management Facilities

Compost facilities that are located within the District are presented in Table III-6, “Composting/Yard Waste Management Activities Used by the District.” There were four Class IV and no Class III compost facilities operating in Miami County during 2018. These facilities managed 4,301 tons of yard waste in 2018. Two Class III and five Class IV compost facilities that were located outside of the District processed 6,091 tons of yard waste in 2018. Additionally, 259 tons of food waste were processed by haulers and grocers in the District. The overall organics composted by the District totaled 10,652 tons.

The following map presents the locations of registered composting facilities used to manage organics generated in the District.

2018 Yard Waste Facilities and Activities



G. Facilities Used by the District Which are Located Outside Ohio

Table III-7 presents seven facilities that are located outside of Ohio that received District waste.

H. Existing Open Dumps and Waste Tire Dumps

Table III-8 identifies no open dumps in the Miami County Solid Waste Management District. There is one identified waste tire dump and three that closed prior to the reference year for this Plan Update.

I. Ash, Foundry Sand, and Slag Disposal Sites

Table III-9 identifies no ash, foundry sand and slag disposal sites located in the Miami County Solid Waste Management District.

J. Map of Facilities and Sites

Figure III-7 displays a map of the District’s facilities. A full-size version of this map is included in Appendix E.

2018 District Facilities and Sites

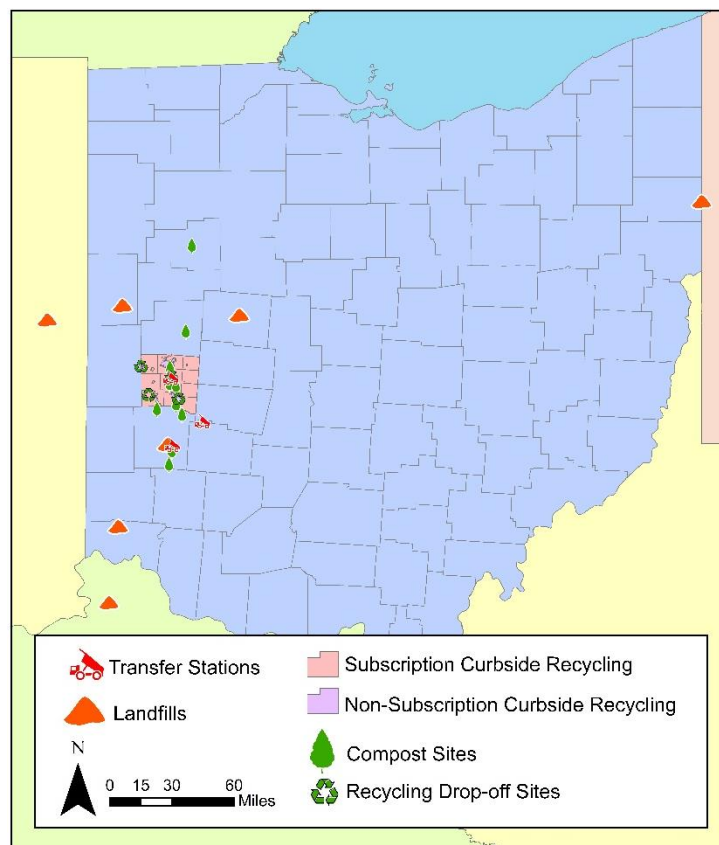


Table III-10, "Solid Waste Haulers Operating in the District," contains the public and private sector waste haulers providing service to waste generators in the District.

There were sixteen known private sector haulers (not counting Scrap Tire Haulers) and four public sector haulers that provided collection services within the District. The list of haulers was taken from the 2018 ADR survey results; haulers were researched to identify whether they were still in business and/or still providing hauling services in the District.

**Table III-1
Landfills Used by the District**

Facility Name	Type	Location		Waste Received from the SWMD (TPY)			
		County	State	Residential/ Commercial	Industrial	Exempt	Total
In-District Landfills							
None							0
Out-of-District Landfills							
Celina Sanitary Landfill	PO, PA	Mercer	OH	0	0	21	21
Carbon Limestone Landfill LLC	PO, PA	Mahoning	OH	0	0	12	12
Cherokee Run Landfill	PO, PA	Logan	OH	0	3,894	4	3,898
Rumpke Waste Inc Hughes Rd Landfill	PO, PA	Hamilton	OH	13	759	0	772
Stony Hollow Landfill Inc	PO, PA	Montgomery	OH	161	31	75	267
Out-of-State Landfills							
Bavarian Trucking Co Inc	PO, PA	Boone	KY	5	0	0	5
Jay County Landfill	PO, PA	Jay	IN	0	1,083	0	1,083
Landfill Total				179	5,767	112	6,057
Incinerator Facilities				1	31	0	33
Transfer Stations				79,652	14,504	0	94,156
Total Disposal				79,832	20,302	112	100,246

PA = publicly available, PO = privately-operated, GO = government-operated, N/A = not applicable

Source(s) of information: Ohio EPA, 2018 Ohio Facility Data Report Tables; Indiana Department of Environmental Management, 2018 Complete Solid Waste Quarterly Report Database; Kentucky 2018 Solid Waste Branch - Waste Quantity Report

Table III-2
Solid Waste Incinerators, Waste-to-Energy, and Processing Facilities Used by the District

Facility Name	Type	Location		Waste Received from the SWMD (TPY)					Total Ash Produced (TPY)
		County	State	Residential/Commercial	Industrial	Exempt	Total	Volume Reduction (TPY)	
In-District Facilities									
None.							0		
Out-of-District Facilities									
None.							0		
Out-of-State Facilities									
Medassure Of Indiana Treatment Facility	MWP	Marion	IN	1.22	31.33	0	32.55	22.13	10.42
Midwest Resource Recovery Center	SF	Clark	IN	0	29.23	0	29.23	19.88	9.35
Tradebe Treatment & Recycling LLC	SF	Lake	IN	0	0.54	0	0.54	0.37	0.17
EQ Industrial Services Processing Facility	SF	Marion	IN	0	1.37	0	1.37	0.93	0.44
Stericycle Specialty Waste Solutions, Inc.	RRS	Lake	IN	0	0.19	0	0.19	0.13	0.06
Covanta Environmental Solutions, LLC*	SF	Marion	IN	0	898.77	0	898.77	611.16	287.61
Totals				1.22	961.43	0.00	962.65	654.60	308.05

MWP = Medical Waste Processor, INP = Incinerator, RRS = Resource Recovery System, PFO = Processing Facility Other, SF = Solidification Facility

*A couple of industrial facilities located in Miami County reported to the District reported a total of 898.77 tons waived and sent to an incinerator in 2018.

Table III-3
Solid Waste Transfer Facilities Used by the District

Facility Name	Type	Location		Waste Received from the SWMD (TPY)				Recyclables Processed	
		County	State	Residential/Commercial	Industrial	Exempt	Total	Recovered from Waste	Total
In-District Facilities									
Miami County Solid Waste & Recycling Facility	GO, PA	Miami	OH	79,547	14,504	0	94,051	0	94,051
Out-of-District Facilities									
Waste Management Transfer Station Fairborn	PO, PA	Greene	OH	4	0	0	4	0	4
Montgomery County South Transfer Facility	GO, PA	Montgomery	OH	101	0	0	101	0	101
Out-of-State Facilities									
None.							0	0.00	0.00
Totals				79,652	14,504	0	94,156	0	94,156

PA = publicly available, PO = privately-operated, GO = government-operated, PFO = Processing Facility - Other

Source(s) of information: Ohio EPA, 2018 Ohio Facility Data Report Tables; Indiana Department of Environmental Management, 2018 Complete Solid Waste Quarterly Report Database; Kentucky 2018 Solid Waste Branch - Waste Quantity Report

**Table III-4
Residential Curbside Recycling Activities Used by the District**

Community	Type	Population	Service Provider	Collection Frequency	Types of Materials Accepted							Tons Processed from SWMD
					AC	GL	PL	ONP	OCC	SC	MxP	
Non-Subscription Curbside Recycling												
Bradford Village	NS	1,867	Rumpke	Weekly	x	x	x	x	x	x	x	943
Piqua City	NS	21200 (Urban)	City of Piqua	Weekly	x	x	x	x	x	x	x	1,325
Pleasant Hill Village	NS	1244 (Rural)	Rumpke	Weekly	x	x	x	x	x	x	x	29
Tipp City (Volume-based Trash)	NS	10056 (Urban)	Subscription available through Rumpke.	Weekly	x	x	x	x	x	x	x	778
Troy City	NS	26132 (Urban)	Rumpke	Weekly	x	x	x	x	x	x	x	1,917
West Milton (Volume-based Trash)	NS	4795 (Rural)	Rumpke	Weekly	x	x	x	x	x	x	x	N/A
2018 Non-Subscription Curbside Recycling Total											4,993	
Subscription Curbside Recycling												
Bethel Township	SC	5,027	Rumpke service; township also manages a drop-off site for residents.	Weekly	x	x	x	x	x	x	x	N/A
Brown Township	SC	1,167	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Casstown Village	SC	276	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Concord Township (unincorporated)	SC	5,501	Rumpke and Waste Management services available.	Weekly	x	x	x	x	x	x	x	N/A
Covington Village (Volume-based Trash)	SC	2683 (Rural)	Subscription available through Rumpke.	Weekly	x	x	x	x	x	x	x	N/A
Elizabeth Township	SC	1,704	Rumpke and Waste Management services available.	Weekly	x	x	x	x	x	x	x	N/A
Flecher Village	SC	482	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Laura Village	SC	485	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Lostcreek Township	SC	1,460	Rumpke and Waste Management services available.	Weekly	x	x	x	x	x	x	x	N/A
Ludlow Falls Village	SC	215	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Monroe Township (unincorporated)	SC	6,095	Rumpke, Waste Management, and Allied services available.	Weekly	x	x	x	x	x	x	x	N/A
Newberry Township	SC	2,869	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Newton Township	SC	2,289	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Potsdam Village	SC	295	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Spring Creek Township	SC	2,026	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Staunton Township	SC	2,005	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Washington Township	SC	1,636	Rumpke services available.	Weekly	x	x	x	x	x	x	x	N/A
Union Township	SC	4,795	Rumpke services contracted with township.	Weekly	x	x	x	x	x	x	x	68
2018 Subscription Curbside Recycling Total											68	
2018 Total Curbside Recycling Total											5,061	

NS = non-subscription curbside recycling; S = subscription curbside recycling

AC = aluminum containers; GL = glass containers; PL = plastic containers; ONP = newspaper; OCC = cardboard; SC = steel containers; MxP =

Source(s) of information: 2018 Annual District Report. Population: Ohio Development Services Agency Office of Research, 2018 Population Estimates: Cities, Villages, and Townships by County

**Table III-5
Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities and HHW Collection Used by the District**

Facility/Activity Name, Address, Phone	Type															Service Area			Hours Available to Public	Tons of Recyclables from SWMD	% of Tons by Sector
																County	Twp./ City	Population Served			
		GL	PL	ONP	OCC	FM	NFM	MxP	LAB	ST	WG	OM	W	Oth							
Full Time Drop-Off Recycling Centers																					
Bethel Township 8735 South Second Street, Tipp City, Ohio	PA, DO, Rural		x	x	x	x	x	x								Miami	Liberty Cente	5,027	24 Hours 7 days/w week	N/A	100% R
Bradford Village 115 N. Miami Ave, Bradford Ohio	PA, DO, Rural		x	x	x	x	x	x								Miami	Napoleon	1,867	24 Hours 7 days/w week	N/A	100% R
Miami County Recycling Center 2200 N. Co. Rd 25A Troy Ohio	PA, DO, Urban		x	x	x	x	x	x								Miami	Deshler	26,132	24 Hours 7 days/w week	1,635.73	100% R
Union Township 9497 Markley Road, Laura Ohio	PA, DO, Rural		x	x	x	x	x	x								Miami	McClure	4,430	24 Hours 7 days/w week	N/A	100% R
Part-Time Drop-Off Recycling Centers																					
None																					
Brokers, Processors, and Scrap Yards																					
AbiBow Recycling LLC 995 Marion Rd, Columbus, OH 43207	BR, PR			x				x								Miami	In District	105,939	24/7	DNR	100% R/C
Angie Shred 300 Peters Ave. Troy, OH 45373 (937) 332-0300	BR, PR			x				x								Miami	In District	105,939	Varies	DNR	100% R/C
Miami County Shrine Club 1823 Park Ave. Piqua, OH 45356	Other							x								Miami	In District	105,939	Varies	DNR	100% R/C
Newark Recycled Fibers 2601 E. River Rd. Moraine, OH 45439	BR, PR			x	x			x								Miami	In District	105,939	N/A	DNR	100% I
Franklin Iron & Metal 1939 E. First St. Dayton, OH 45403	BR, PR, SY					x	x									Miami	In District	105,939	Mon.-Fri.: 8AM-5PM Sat.: 8AM-12PM	DNR	DNR
1 Shot Services 6377 Hahn Rd. Bradford, OH 45308	BR, PR					x	x									Miami	In District	105,939	MW: 8AM-6PM Tu/Th: 8AM-8PM Fri.: 8AM-5PM Sat.: 8AM-12PM	DNR	DNR
Polings Auto Parts 2226 N County Road 25A Troy, OH 45373 (937) 335-7855	SY, Other					x	x			x	x					Miami	In District	105,939	Mon.-Fri.: 8:30AM- 5:30PM	DNR	100% R/C
G A Wintzer & Son 12279 Co. Rd. 25A/Dixie Hwy. Wapakoneta, Ohio 45895	PR													x		Miami	In District	105,939	Varies	DNR	100% R/C
Rumpke Center City Recycling - Hamilton County	PUO	x	x	x	x	x	x	x								Miami	In District	N/A	N/A	428.71	100% C
Rumpke Recycling - Dayton	PUO	x	x	x	x	x		x								Miami	In District	N/A	N/A	3,656.40	100% R
Rumpke Recycling - Dayton	PUO	x	x	x	x	x	x	x								Miami	In District	N/A	N/A	877.80	100% I
Rumpke Recycling - Dayton	PUO	x	x	x	x	x	x	x						x		Miami	In District	N/A	N/A	3,718.20	100% C

**Table III-5
Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities and HHW Collection Used by the District**

Facility/Activity Name, Address, Phone	Type														Service Area			Hours Available to Public	Tons of Recyclables from SWMD	% of Tons by Sector			
		GL	PL	ONP	OCC	SC	MAG	MxP	LAB	ST	WG	OM	W	Oth	County	Twp./ City	Population Served						
		Registered Scrap Tire Transporters																					
Cohen Brothers Inc	ST																	Miami	District	105,939	Business Hours	14.25	100% R/C
Jim's Tire Centers LLC	ST																	Miami	District	105,939	Business Hours	4.95	100% R/C
Kelbley Tire Recycle	ST																	Miami	District	105,939	Business Hours	153.00	100% R/C
Liberty Tire Service of Ohio	ST																	Miami	District	105,939	Business Hours	1,048.94	100% R/C
R & R Tire Disposal	ST																	Miami	District	105,939	Business Hours	27.08	100% R/C
R Willig Tire Distributions Inc	ST																	Miami	District	105,939	Business Hours	0.40	100% R/C
R Willig Tire Distributions Inc	ST																	Miami	District	105,939	Business Hours	48.00	100% R/C
Rumpke Transportation Company, LLC	ST																	Miami	District	105,939	Business Hours	258.74	100% R/C
Commercial Box Store Recycling																							
Wal-Mart	PJO		x		x			x	x								x	Miami	In District	N/A	N/A	937.27	100% C
Low'e's Companies, Inc.	PJO		x		x	x	x											Miami	In District	N/A	N/A	147.90	100% C
Home Depot Corporation	PJO		x		x												x x	Miami	In District	N/A	N/A	215.08	100% C
Meijer Corporation	PJO		x		x	x												Miami	In District	N/A	N/A	1,388.86	100% C
Dollar General Corporation	PJO				x													Miami	In District	N/A	N/A	211.65	100% C
Big Lots Corporation	PJO				x													Miami	In District	N/A	N/A	20.69	100% C
Kohl's Corporate Office & Headquarters	PJO		x		x													Miami	In District	N/A	N/A	125.24	100% C
Kroger	PJO		x		x												x	Miami	In District	N/A	N/A	1,081.83	100% C
United States Postal Service	PJO		x		x													Miami	District	N/A	N/A	111.47	100% C
Special District Collections																							
Salvation Army (multiple-locations)	PA, DO, Other				x	x												Various	In District	105,939	Mon.-Sat.: 9AM-8PM	DNR	100% R/C
Goodwill Industries 1511 Kuntz Rd, Dayton, OH 45404 (937) 461-4800	PA, DO, Other				x	x												Various	In District	105,939	Mon.-Sat.: 9AM-8PM Sun.: 10AM-8PM	DNR	100% R/C
Electronics Collection Events	Other																x	Miami	District- Wide	105,939	Annually	4.86	100% R
HHW Collection	Other																x	Miami	District- Wide	105,939	Annually	7.26	100% R
District Shred Fest	Other				x												x	Miami	District- Wide	105,939	Annually	12.92	100% R
Special Event Recycling	Other	x	x	x	x	x	x	x										Miami	District- Wide	105,939	Varies	308.70	100% R
Totals																							
																						16,566.91	

R = residential; C = commercial; I = industrial; PA = publicly available; PJO = private-use only; A = automotive service store; DO = drop-off; BR = broker; MRF = material recovery facility; CB = commercial box store chain; PR = processor; SC = special collection; ST = scrap tire transporter; SY = scrap yard; N/A = not applicable/not available; DNR = did not report

AC = aluminum containers; GL = glass; PL = plastic; OCC = corrugated cardboard; SC = steel containers; LAB = lead-acid batteries; MxP = mixed paper; ST = scrap tires; WG = white goods/appliances; OM = other metals; Oth = other (household batteries, used oil, wood, etc.)

Source(s) of information: 2018 Annual District Report

**Table III-6
Composting/Yard Waste Management Activities Used by the District**

Facility Name or Activity	Class	County	Waste Received from the SWMD		
			Address/Phone	Food Waste Tons	Yard Waste Tons
<i>In-District Registered Compost Facilities</i>					
BR Mulch Inc	IV	Miami	620 Ginghamburg Road Tipp City	0	560
Chaney's Nursery Inc	IV	Miami	1610 Mckaig Avenue Troy	0	1,113
City of Piqua Composting Facility	IV	Miami	6030 N Piqua Troy Rd Piqua	0	954
Dye Mill Road Facility	IV	Miami	1200 Dye Mill Road Troy	0	1,674
Subtotal				0	4,301
<i>Out-of-District Registered Compost Facilities</i>					
Roe Transportation Inc	IV	Shelby	3680 State Rte 47 Sidney	0	5,081
City of Huber Heights - Yard Waste Drop Off Site	IV	Montgomery	8201 Wildcat Road Huber Heights	0	15
Ohio Mulch	IV	Montgomery	220 Shaw Road Dayton	0	209
The Grunder Landscape Co	IV	Montgomery	1900 Old Byers Road Miamisburg	0	48
Resource Recycling West	III	Allen	1596 Neubrecht Road Lima	0	351
Resource Recycling	III	Allen	1596 Neubrecht Road Lima	0	351
The Siebenthaler Company	IV	Montgomery	5250 Cobblegate Drive Moraine	0	37
Subtotal				0	6,091
<i>Other Activities</i>					
Hauler and grocer food waste data	N/A	Miami	N/A	259	0
Bradford Village Yard Waste Collection	N/A	Miami	N/A	N/A	N/A
Covington Village Yard Waste Collection	N/A	Miami	N/A	N/A	N/A
City of Piqua Yard Waste Collection	N/A	Miami	N/A	N/A	N/A
City of Troy Yard Waste Collection	N/A	Miami	N/A	N/A	N/A
City of West Milton Yard Waste Collection	N/A	Miami	N/A	N/A	N/A
Subtotal				259	0
Grand Total				259	10,393

NA = not applicable, YW = yard waste

Source(s) of information: Ohio EPA, 2018 Compost Facility Planning Report, 2018 ADR

**Table III-7
Facilities Used by the District Which are Located Outside Ohio: Additional Data**

Facility Name	Facility Mailing Address	Facility Owner	Facility Operator	2018 Tons Received	Operating Days/Year
Bavarian Trucking Co Inc	12764 McCoys Fork Rd, Walton, KY 41094	Bavarian Trucking Co Inc	Bavarian Trucking Co Inc	4.50	305
Jay County Landfill	5825 W 400 S, Portland, IN 47371	Waste Management	Waste Management	1,082.79	254
EQ Industrial Services Processing Facility*	2650 Shadeland Ave, Indianapolis, IN 46219	EQ Industrial Services Incorporated	EQ Industrial Services Incorporated	1.37	N/A
Medassure of Indiana Treatment Facility	1013 S Girls School Rd, Indianapolis, IN 46231	Medassure of Indiana LLC	Medassure of Indiana LLC	35.83	N/A
Midwest Resource Recovery Center	11452 IN-62 #6, Charlestown, IN 47111	Midwest Environmental Services	Midwest Environmental Services	1.22	N/A
Stericycle Specialty Waste Solutions*	2670 Executive Dr, Indianapolis, IN 46241	Stericycle Incorporated	Stericycle Incorporated	0.19	260
Tradebe Treatment & Recycling LLC*	1433 83rd Ave Suite 200, Merrillville, IN 46410	Pollution Control industries Inc	Pollution Control industries Inc	0.54	260

Source(s) of information: Indiana Department of Environmental Management, 2018 Authorized Operating Solid Waste Facilities
*Inceration under 10 tons was not counted in the District's disposal totals.

**Table III-8
Open Dumps and Waste Tire Dumps Located in the District**

Site Location (description)	Land Owner Contact Information	Description of Materials Dumped	Approximate Size of Site	Time Period Site has Existed	Update
Open Dump Sites					
None.					
Waste Tire Dump Sites					
651 Union St Troy, OH 45373	Mike Hogland	Scrap tires	0.5 Acres	N/A	Open
Shannons Auto Parts 5055 W. US Route 36 Piqua, OH 45356	Howard William (937) 615-0144	Scrap tires	3.34	July-05	Closed
S R Scott Trucking 185 Dye Mill Rd. Troy, OH 45373	Stanley R. Scott 937-335-5888	Scrap tires	1.61	July-05	Closed
Poling's Auto Parts 2226 N County Road 25A Troy, OH 45373	Bill Didier Sr.	Scrap tires	9.196	July-05	Closed

N/A=Not available

Source(s) of information: Ohio EPA

**Table III-9
Ash, Foundry Sand, and Slag Disposal Sites Used by the District**

Site Location (describe briefly)	Land Owner Contact Information	Description of Materials Dumped	Approximate Size of Site	Time Period Site has Existed
None.				

Source(s) of information: Miami County Health Department

**Table III-10
Solid Waste Haulers Operating in the District**

Hauler	Mailing Address	Service Area	Materials Collected	Trash Collected	Recyclables Collected	Name of Facility Used by Hauler
<i>Private Sector Haulers</i>						
Allied Waste	1577 W. River Rd. Dayton, OH 45418 800-228-1336	Subscription service routes	R/C SW Industrial recycling	DNR	DNR	Miami County Transfer Station
First Choice Disposal	893 S Main St PMB 128, Englewood, Ohio 45322	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Rumpke	1300 E. Monument Ave. Dayton, OH 45402	Miami County	Residential SW and recycling Industrial recycling Roll-off services	DNR	9,871	Miami County Transfer Station
Waste Management	1700 N. Broad St. Fairborn, OH 45324 937-663-5506 800-228-1336	Tipp City	Residential SW	DNR	DNR	Miami County Transfer Station
Waste Management	1700 N. Broad St. Fairborn, OH 45324 937-663-5506 800-228-1336	West Milton	Residential SW	DNR	DNR	Miami County Transfer Station
Waste Management	1700 N. Broad St. Fairborn, OH 45324 937-663-5506 800-228-1336	Union Township	Residential SW	DNR	DNR	Miami County Transfer Station
Waste Management	1700 N. Broad St. Fairborn, OH 45324 937-663-5506 800-228-1336	Other Miami County routes via subscription service	R/C SW Industrial recycling Roll-off services	DNR	DNR	Miami County Transfer Station
Urban Elsass & Son	600 E. Statler Rd. Piqua, OH 45356 937-773-3337	Miami County	Industrial Recycling	DNR	DNR	Miami County Transfer Station
CAN-Do Recycling	300 Peters Ave. Troy, OH 45373	Miami County	R/C recycling	DNR	DNR	Miami County Transfer Station
Lee's Hauling	1206 South St. Piqua, OH 45356	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Winston Roberts	655 W. Loy Rd. Piqua, OH 45356 937-778-006	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Terry Iddings	710 W. Market St. Troy, OH 45373 937-339-4706	Miami County	Residential SW	DNR	DNR	Miami County Transfer Station
Jimmy Roberts	406 E. Peterson Rd. Troy, OH 45373 937-773-3237	Miami County	Residential SW	DNR	DNR	Miami County Transfer Station
Curt Roberts	2473 Old Springfield Rd. Vandalia, OH 45377 937-898-2178	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Professional Roll-Off	22808 Brousker Rd. Cridersville, OH 45806 419-657-6891	Miami County	DNR	DNR	DNR	Miami County Transfer Station
SRI	1550 Soldiers Home Rd, Dayton, Ohio 45417	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Hemmelgarn Services	624 N. Knoop-Johnston Rd. Sidney, OH 45365 937-498-1553	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Smith's Wrecking and Bobcat	2855 Oletha, Springfield, Ohio 45505	Miami County	DNR	DNR	DNR	Miami County Transfer Station
Waste Collection of Christiansburg	P.O. Box 296 Christiansburg, OH 45389	Miami County	DNR	DNR	DNR	Miami County Transfer Station

**Table III-10
Solid Waste Haulers Operating in the District**

Public Sector Haulers						
City of Piqua	201 W Water St. Piqua OH 45356 937-778-2060	City of Piqua	Residential SW Industrial recycling	DNR	DNR	Miami County Transfer Station
City of Troy	100 S. Main St. Troy, OH 45373	City of Troy	Residential SW, recycling, and YW	DNR	DNR	Miami County Transfer Station
Union Township	9497 Markley Rd. Laura, OH 45337	Union Township	Residential SW	DNR	DNR	Miami County Transfer Station
Village of Covington	1 S. High Street Covington, OH 45318 937-473-2102	Village of Covington	Residential SW and recycling	DNR	DNR	Miami County Transfer Station
Businesses Providing Special Hauling Services						
Goodwill - Piqua	Operations Mgr. 1584 Covington Ave. Piqua, OH 45356	City of Piqua	Reusables, electronics	DNR	DNR	DNR
Goodwill - Troy	Operations Mgr. 1660 W. Main St. Troy, OH 45373	City of Troy	Reusables, electronics	DNR	DNR	DNR
Miami County Shrine Club	1823 Park Ave. Piqua, OH 45356	Miami County	Reusables	DNR	DNR	DNR
Newark Recycled Fibers	Operations Mgr. 2601 E. River Rd. Moraine, OH 45439	Miami County	Fibers	DNR	DNR	DNR
Polings Auto Parts	2226 N. Co. Rd. 25A Troy, OH 54373	Miami County	Automobiles, ferrous and non-ferrous metals	DNR	DNR	DNR
Miami Metropolitan Housing	1695 Troy Sidney Rd, Troy, Ohio 45373	Miami County	Reusables	DNR	DNR	DNR
Salvation Army	Manager 707 S. Crawford Troy, OH 45373	City of Troy	Reusables	DNR	DNR	DNR
Salvation Army	Manager PO Box 615 Piqua, OH 45373	City of Piqua	Reusables	DNR	DNR	DNR
Franklin Iron & Metal	Operations Mgr. 1939 E. First St. Dayton, OH 45403	Miami County	Ferrous and non-ferrous metals	DNR	DNR	DNR
Angie Shred	Teri Bevington 300 Peters Ave. Troy, OH 45373	Miami County	Fibers	DNR	DNR	DNR
1 Shot Services	Manager 6377 Hahn Rd. Bradford, OH 45308	Miami County	Ferrous and non-ferrous metals	DNR	DNR	DNR
G A Wintzer & Sons	Manager 12279 Dixie 25A Wapakoneta, OH 45895	Miami County	Oils and food scraps	DNR	DNR	DNR
Total				N/A	N/A	

SW = solid waste, R = recyclables, FW = food waste, DNR=Did not respond

IV. Reference Year Population, Waste Generation and Waste Reduction [ORC Section 3734.53(A)(5)-(6)]

This section of the Plan Update presents information regarding the District's population, waste generation, and waste reduction estimates for the reference year.

A. Reference Year Population and Residential/Commercial Waste Generation

Table IV-1, "Reference Year Population and Residential/Commercial Generation," presents an estimate of the District's population and projected residential/commercial waste generation for 2018. The District's base population was 106,222. This population estimate was adjusted for political subdivisions located in more than one solid waste district.

Population Adjustments

The following adjustments were made for political subdivisions located partially within the District and partially within surrounding solid waste districts. In accordance with Ohio law, the entire population of political subdivisions located in more than one solid waste district was credited to the district containing the largest portion of the jurisdiction's population.

- The Village of Bradford had more than 50% of the population living inside Miami County and less than 50% living inside Darke County. For the Village of Bradford, 753 was added to the District's population.
- The Cities of Huber Heights and Union had less than 50% of the population living inside Miami County and more than 50% living inside Montgomery County. For the City of Huber heights, 1,010 was subtracted from the District's population, while 26 was subtracted for the City of Union.

The District's total adjusted 2018 population was 105,939 residents.

B. Residential/Commercial Waste Generation

The 2018 residential/commercial waste generation rate was projected using historical data, which is summarized in the following table:

Year	Waste + Recycling	Population	Per Capita Gen Rate (lbs./person/day)	Average Rate of Change for Per Capita Gen Rate
2014	95,701	102,506	5.12	
2015	108,704	103,900	5.73	10.76%
2016	113,230	104,679	5.93	3.28%
2017	112,873	105,122	5.88	-0.74%
Average:				4.43%

The reference year residential/commercial total generation was projected by increasing the per capita generation rate reported in 2017 (5.88 PPD) by the average annual rate of change in per capita residential/commercial waste generation from 2014 through 2017 (4.43%) based upon the generation rates reported on the Annual District Reports.

The 2018 per capita residential/commercial waste generation projection was 6.14 pounds per person per day. Table IV-1 shows the formula used for estimating the residential/commercial waste generation. This methodology calculated the District's residential/commercial waste generation to be 118,794 tons in 2018. For further discussion on reconciling the waste generation values, see Section IV.H of this *Plan Update*.

C. Industrial Waste Generation

The District conducts annual solid waste and recycling surveys of its local industries. Detailed results from the industrial survey are included in Appendix F and copies of the commercial and industrial survey forms are included in Appendix G. Due to limited reporting from industrial entities, brokers and processors are surveyed for materials collected from the industrial sector. Table IV-2 presents the summarized results of the District's 2018 Industrial Survey, as well as the estimated total for the District's entire industrial sector. A total of 25 industries in SIC codes 20 and 22-39 were identified throughout the District. Two industries and several brokers of the District's industrial sector responded to the survey.

Approximately 1032,197 tons (5,569 tons from SIC code 20 and 3,338 tons from SIC code 24, and 94,786 tons from other SIC codes) of recycled materials were identified in 2018.

The following table presents the types of industries that reported the largest per capita solid waste generation rates:

SIC Code	Description	Solid Waste Generation Rate (Tons/Employee)	Total Tons Reported on Survey
20	Food & Kindred Products	19.89	5,569
24	Lumber & Wood Products, except Furniture	95.36	3,338

To estimate total industrial waste generated, a list was compiled that contained all industrial sector businesses located in the District and the total number of employees by SIC code. The District determined the quantity of industries and employees that were not represented in the survey responses. Average per capita generation rates by SIC code from Appendix JJ of the Ohio EPA Plan format were used to project the total tons generated by industries that did not respond to the District's survey. Using this projection methodology, a total of 79,533 tons of industrial waste was generated in the District from non-responding industries. The

resulting total is 181,730 tons generated by both responding and non-responding industries.

D. Exempt Waste

Exempt waste is material that is not defined as solid waste, such as earth or materials from construction, mining, or demolition operations, nontoxic fly ash, nontoxic bottom ash, or slag. Exempt wastes can be managed in landfills that have different and often less stringent environmental control requirements. Table IV-3 shows that the total exempt waste generated by the District was 112 tons. This includes the exempt waste reported by the landfills and transfer stations receiving the District's waste in Table III-1. The generation rate was 0.01 pounds per person per day (PPD).

Exempt waste does not have a direct correlation to changes in population. It may be related to factors such as changes in construction employment. The volume of exempt waste generated within the District fluctuated over the 5-year period from 2014 to 2018, from a high of 112 tons in 2017 to a low of 24 tons in 2014.

E. Total Waste Generation (based on national statistics and projections)

Table IV-4, "Reference Year Total Waste Generation for the District," presents the total waste generated using District data and statewide projections. Using these sources of information, the District estimated that approximately 302,131 tons of waste was generated in 2018. The total generation rate was projected to be 15.55 pounds per person per day. This included 118,794 tons (Table IV-1) of residential/commercial waste, 181,730 tons (Table IV-2) of industrial waste, and 112 tons (Table IV-3) of exempt waste. The total waste generation listed in Table IV-4 is 58,807 tons more than the total in Table IV-8 (241,828 tons) as calculated using disposal facility data and reported recycling and waste reduction, including exempt waste. For further discussion on reconciling the waste generation values, see Section IV.H.

F. Reference Year Waste Reduction

The District obtained data from service providers, scrap yards, Ohio EPA, and program contractors to obtain data on residential, commercial, institutional, and industrial recycling for 2018. Residential/commercial waste reduction data reported in Table IV-5 and industrial waste reduction data reported in Table IV-6 was obtained from these data collection activities.

The District was careful to eliminate double-counting as described in the sections below.

Residential Data

Most residential sector recycling is collected from community curbside programs, drop-off recycling sites, and special material collection drives held by the District or District communities. The District ensured that there was no double counting by subtracting the recycled tons reported by the communities from the tons reported by the recycling processor, broker, or hauler for that same community.

Commercial/Institutional Data

A survey of commercial businesses and institutions was completed by the District in the spring of 2019 to gather 2018 recycling and disposal data. Surveys were sent through a third-party mailing service for 2018. SWD receives updated business listings annually from County Chamber of Commerce. The District surveys commercial businesses and institutions located in the District. The results of these individual surveys were used to compile recycling by commercial businesses and institutions. Brokers, haulers, and MRFs (material recovery facilities) were also surveyed. These surveys requested only tonnage that was generated within the District.

Data from businesses was not blended with data from brokers, haulers, or MRFs when calculating the total tons for the majority of materials. The District typically used the greatest total tons reported by either business, brokers, haulers, or MRFs but not a combination of totals to avoid double counting.

Industrial Data

A survey of industries was completed by the District in the spring of 2019 to gather 2018 recycling and disposal data. Surveys were sent through a third-party mailing service for 2018. SWD receives updated business listings annually from County Chamber of Commerce. In 2018, the District compiled surveys from haulers, brokers, or MRFs and the largest industry in the District. The results of these individual surveys were used to compile industrial sector recycling. The District analyzed where the materials were sent to in order to avoid double counting.

The District annually surveys industries. Responses from recipients that submitted a completed survey previously were compared to identify possible errors. In cases where current survey responses showed a significant increase or decrease in tonnage or omitting materials that were reported on a previous survey, follow up calls and e-mails were placed to confirm data.

Residential/Commercial Waste Reduction

Table IV-5, "Reference Year Residential/Commercial Waste Reduction in the District," shows that the District's residential and commercial sectors diverted

38,046 tons of materials from landfills in 2018 by recycling, composting, and reducing waste via incineration.

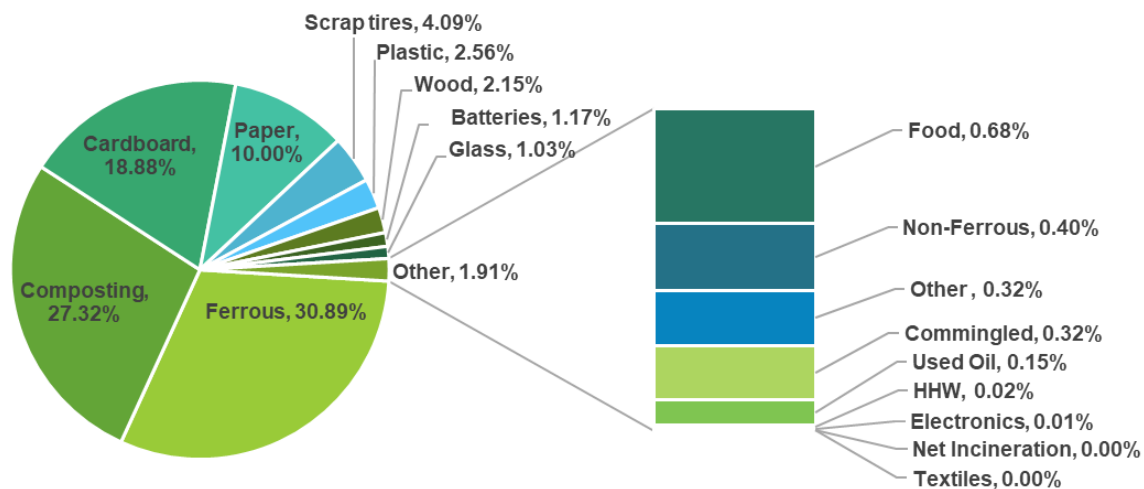
Ferrous Metals represented the most diverted material based on weight (11,751 tons), followed by yard waste (10,393 tons), cardboard (7,184 tons), paper (3,805 tons), and scrap tires (1,555 tons). The following table summarizes the residential and commercial recycling totals by commodity.

2018 Residential/Commercial Sector Recycling by Commodity

Material Recycled	Tons
Cardboard	7,184
Paper	3,805
Scrap tires	1,555
Glass	393
Wood	819
Plastic	973
Food	259
Other	123
Ferrous	11,751
Non-Ferrous	151
Textiles	1
Commingled	122
HHW	7
Used Oil	58
Electronics	4
Batteries	446
Composting	10,393
Net Incineration	3
Total	38,046

The following figure depicts the waste reduction percentages for the residential/commercial sector.

2018 District Residential/Commercial Waste Reduction



Industrial Waste Reduction

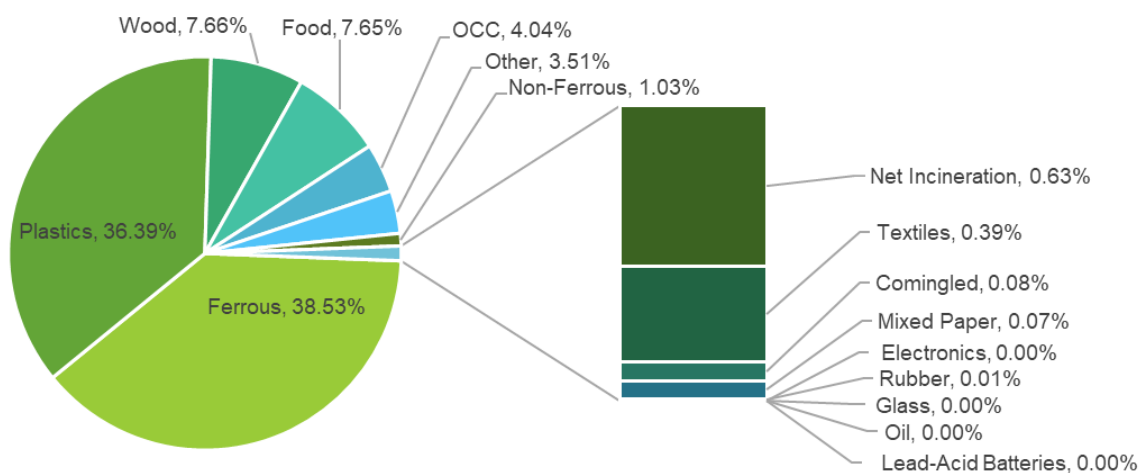
Table IV-6, “Reference Year Industrial Waste Reduction in the District” shows that industries located in the District reduced 102,848 tons of materials in 2018. Ferrous metals represented approximately 38.5% of the industrial sector recycling; plastics represented approximately 36.4%; and wood represented approximately 7.7%. The following table summarizes the industrial recycling totals by commodity.

2018 Industrial Sector Recycling Tonnage by Commodity

Material Recycled	Tons
Ferrous	39,628
Plastics	37,424
Wood	7,882
Food	7,870
OCC	4,155
Oil	0
Non-Ferrous	1,064
Other	3,608
Textiles	402
Mixed Paper	75
Comingled	81
Rubber	9
Lead-Acid Batteries	0
Electronics	0
Glass	1
Net Incineration ¹	673
Total	102,870

The following figure is a graphical representation of the commodities recycled by the industrial sector in 2018.

2018 Industrial Waste Reduction in the District



¹ An additional 898.77 tons were sent to Covanta for incineration but were not included on OEPA's reports.

G. Existing Waste Reduction/Recycling Activities for the Residential, Commercial and Industrial Sectors

The following section summarizes the reference year residential/commercial programs and District initiatives. This section reflects the District's commitment to reducing solid waste from being disposed at landfills. The following table is an inventory of the District's programs during the reference year.

Program
Curbside Recycling
Drop-Off Recycling
Yard Waste Management
Household Hazardous Waste Management
Scrap Tire Recycling
Automobile Batteries and Used Oil Collection
Special Event Recycling
Electronics Recycling
Appliance Recycling
Recycling Market Development Grant
"Buy Recycled" Promotion
Internal Grant
Community Recycling Grant
Litter Collection Grant
School Waste Reduction Grant
Education and Awareness
Miami County Transfer Facility Pay-Per-Bag
Volume-Based Technical Assistance
Miami County Debris Management Guide
Miami County Transfer Station
Annual Program Performance Assessment

An analysis on strengths and weaknesses was used to evaluate each of the District's existing programs. The results of the analysis are discussed following each program in this Section and will guide the District's planning efforts, which is reflected in Section V.

RESIDENTIAL/COMMERCIAL RECYCLING PROGRAMS

Political subdivisions are responsible for developing and implementing recycling programs. The District provides financial resources, technical assistance, solid waste management expertise and other education and outreach services to political subdivisions, businesses, residents, haulers, and policymakers. The following recycling efforts were in operation in 2018:

1. Curbside Recycling Program

A variety of curbside recycling programs operated in the District, including:

- **Non-Subscription Curbside Recycling:** All residents in a political subdivision have recycling service; customers cannot opt out, but participation in the program is not mandatory.
- **Subscription Curbside Recycling:** Residents must request recycling services for a fee in order to participate in a curbside program.
- **Volume-based:** Non-subscription curbside recycling program paired with a tiered solid waste fee structure where residents must pay per bag of waste or pay more according to the size of waste container, but unlimited recycling is provided for no additional cost. This is the most effective style of residential recycling program. It is convenient and creates a financial incentive for residents to recycle more and waste less.

Subscription Curbside Recycling Programs

The following seventeen communities offered subscription curbside recycling programs in the District in 2018:

2018 Subscription Curbside Recycling Programs	
Bethel Township	Ludlow Falls Village
Brown Township (new in 2018)	Monroe Township (unincorporated)
Casstown Village	Newberry Township
Concord Township (unincorporated)	Newton Township
Covington Village (Volume-based)	Potsdam Village
Elizabeth Township	Spring Creek Township
Flecher Village	Staunton Township
Laura Village	Washington Township
Lostcreek Township	Union Township (new in 2018)

Non-Subscription Curbside Recycling Programs

The following six communities provided non-subscription curbside recycling programs to residents in 2018:

2018 Non-Subscription Curbside Recycling Programs	
Bradford Village	Tipp City (Volume-based)
Piqua City	Troy City
Pleasant Hill Village	West Milton (Volume-based)

- a. **Bradford Village**

The Village of Bradford began a non-subscription curbside recycling program in June of 2012. Red open top bins were distributed to residents to collect recyclables and a letter was sent out to residents explaining the purpose of the bins and the collection schedule, which was on the same day as trash collection. Recyclables were collected by Rumpke Waste and Recycling in 2018.

b. Piqua City



The City of Piqua provided residents with a non-subscription curbside recycling program in 2018. Recyclables were collected in 96-gallon red top cart that were to be placed alongside regular refuse prior to 7:00AM on residents' regularly scheduled refuse collection day. Customers may request a smaller cart, either 64-gallon or 32-gallon. Recyclables are collected and delivered to the Miami County Transfer Station and Recycling Center. From the Recycling Center, the materials are taken to Rumpke's facility. The City of Piqua accepted the following materials:

Plastic Bottles

- Plastic beverage bottles, 2-liter soda bottles, frozen food boil-in-bag pouches, microwave food trays, etc.
- Milk jugs, detergent bottles, bleach bottles, aspirin bottles, etc.
- Vinyl cooking oil bottles, mouthwash bottles, etc.

Glass Bottles & Jars

- Clear, green, blue, and brown glass bottles and jars in which food products are packaged

Paper

- Newspapers; junk mail; magazines; corrugated cardboard; chipboard; paper board such as cereal boxes, shoe boxes, and detergent boxes; beverage containers with a "gable" top and polycoated paperboard like milk cartons and juice cartons, wet strength cardboard like soda & beer carriers; and phonebooks.

Cans

- Aluminum and bi-metal beverage cans, aluminum foil & steel food cans

Recyclables were collected by the City of Piqua and Recycling in 2018.

c. Pleasant Hill

The Village of Pleasant Hill continued to provide a weekly non-subscription curbside recycling program for residents in 2018. Recyclables were collected by Rumpke Waste and Recycling in 2018.

d. Troy

The City of Troy continued to provide a weekly non-subscription, automated curbside recycling program for residents in 2018. The City's municipal collection crew only collects solid waste, so Rumpke was contracted to collect recyclables. The City's program accepts the following materials:

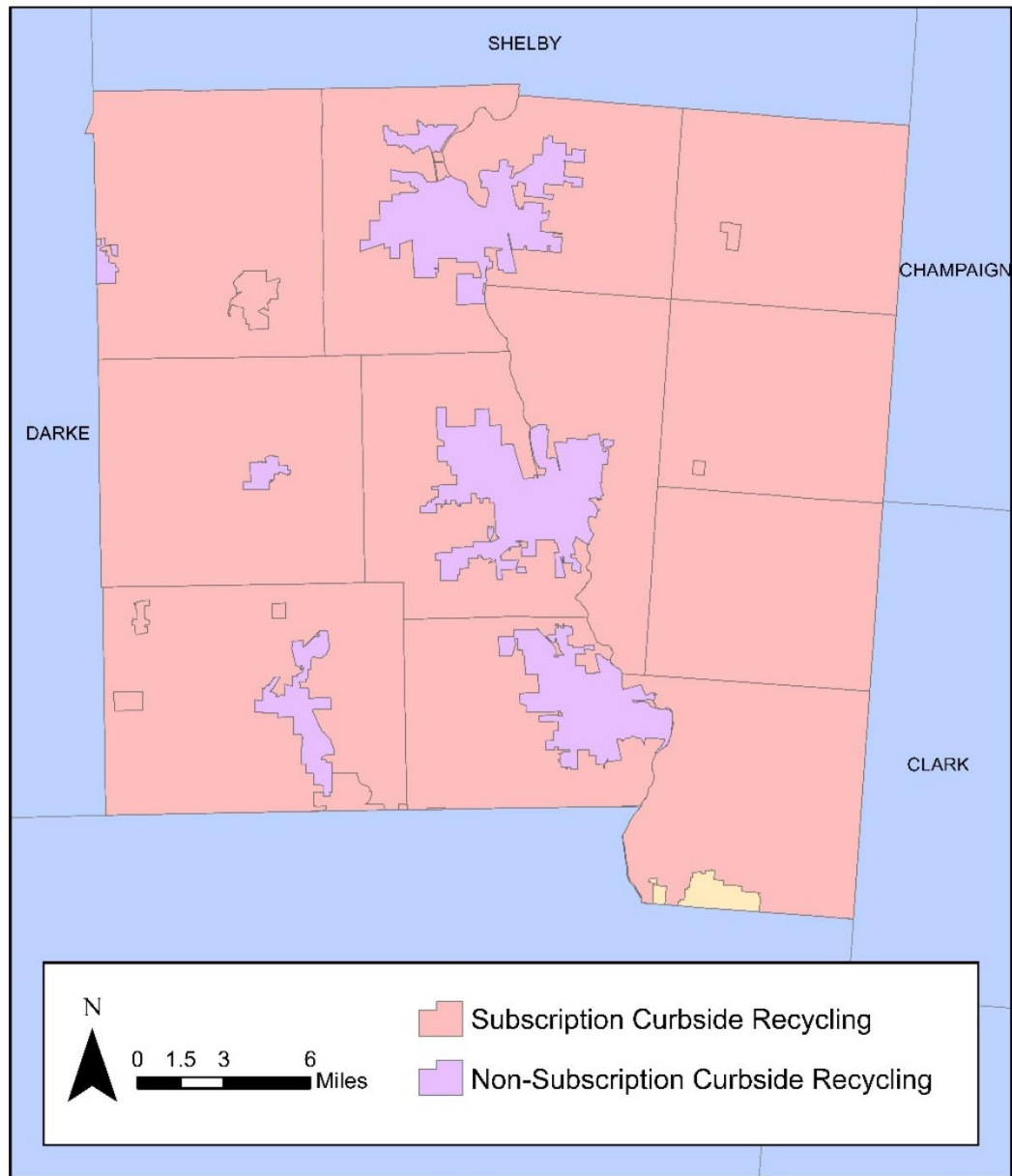


PLEASE RECYCLE THESE ITEMS

Residents may obtain a 65-gallon recycling cart by calling the Troy Central Maintenance Facility at 335-1914.

The following figure presents access to curbside collection programs throughout the District:

District Curbside Recycling Activities



Each of the programs collected at a minimum aluminum cans, steel cans, glass, #1-2 plastics, mixed paper, and cardboard. A total of 4,215 tons of recyclables was reported to the District for 2018 from the seven communities for non-subscription services. Tonnage was from subscription curbside recycling programs for Tipp City (778) and Union Township (68) accounted for 846 tons. Total reported curbside was 5,061 tons.

Volume-based

In volume-based programs, residents pay for waste disposal based on the volume of solid waste disposed, but unlimited recycling is provided at no extra cost. Volume-based programs create an economic incentive for the resident to recycle more and waste less. These programs have proven to be effective not only in Ohio, but around the world. Volume-based programs generally divert a considerably higher percent of the waste stream compared to other curbside programs and drop-off programs.

During 2018, three municipalities provided volume-based programs, and the transfer station also operated a volume-based option. The municipalities that provided volume-based programs were the City of West Milton, the City of Tipp City, and the Village of Covington.

2018 Volume-based Programs	
Covington Village (Volume-based)	Tipp City (Volume-based)
West Milton (Volume-based)	

a. Tipp City Volume-based Program

Tipp City’s volume-based program was operated by Rumpke. The city signed a contract with Rumpke for city-wide residential refuse collection. The contract began October 1, 2017 and will run through September 30, 2018 with one-year renewals. The city and hauler designed a package which included three program options for residential customers:

Regular Refuse Collection Program:

- Customer utilizes their own bags/cans along with the provided recycling bin for curbside/alley pick-up.

Cart Program

- A 96-gallon cart and a recycling bin is provided to residents.

Low Volume Rate Program

- A 35-gallon cart and recycling bin is provided to residents.

The monthly residential rates for weekly service from October 1, 2015 to September 30, 2018 were as follows:

Regular Refuse Collection Program

- \$20.93
- *Customer provides trash cans, hauler provides recycling bin*

Cart Program

- \$23.93
- *Hauler provides 96-gallon waste cart and recycling bin*
- *Additional refuse carts are \$3.00 each*

Low Volume Program

- \$13.64
- *Hauler provides a 35-gallon waste cart and recycling bin*

Recycling Cart

- \$2.00 each
- *Choice of 35-gallon or 96-gallon*

Yard Waste Bags

- \$1.75 each
- *Year-round curbside pickup*

Recycling service is an opt-in subscription program. Tipp City's volume-based option is the Low Volume Program. Residents are provided with a 35-gallon carts for waste and a recycling bin. All customers, including Low Volume customers, are eligible for bulk/white goods pick-up for no additional cost. Christmas tree pick-up is also provided, approximately the first two weeks in January, for no additional charge. Billing for refuse and recycling collection is included on residential utility bills.

The following figure is from the recycling brochures that residents in each city received from Rumpke:

✓ Recycle This



Plastic Bottles



Glass Bottles



Paper & Cardboard



Metal Cans



Cartons

RECYCLING TIPS

- Mix all items together—no separation required
- Empty all bottles, jugs and cans
- No need to remove labels
- Plastic bottles—empty, crush and reattach lids
- Cartons—remove plastic caps and straws and discard in the trash
- Cardboard—break down to fit inside your bin or cart
- Pizza boxes should be clean and free of grease/food residue—if the pizza box is too contaminated, it cannot be recycled
- NO fast food wrappers or cups
- DON'T use plastic bags

b. West Milton Volume-based Program

The City of West Milton also contracted with Rumpke for city-wide refuse collection. Residential customers have two options for recycling and refuse service:

Standard Volume

- Hauler provides 96-gallon waste cart at an additional cost.

Low-Volume (35 gal. toter)

- Hauler provides 35-gallon waste cart

Monthly pricing for weekly residential services and other details regarding the City of West Milton's recycling and refuse collection options are as follows:

Standard Volume

- \$22.00
- \$2.00 per month to lease a 96-gallon cart (optional)

Standard Volume (96 gal. toter)

- \$20.00
- Hauler provides 35-gallon waste cart

Curbside Yard Waste Collection

- Included in cost of refuse/recycling collection
- No special bag or container needed
- Residents who previously used a cart for yard waste can continue to lease it for \$3.00 per month
- Brush and limbs must be cut into lengths no longer than 4'-0" and bundle and tied. Bundles cannot exceed 7" in diameter.

Bulk Items and White Goods

- Customers must call Waste Management
- White goods are collected on the 3rd Saturday of each month
- Customers must notify Waste Management of the items to be picked up by the Tuesday before the third Saturday
- No additional charge for bulk or white goods pick-up

Recycling is serviced by Waste Management. Service is free but residents must opt-in. The City of West Milton’s volume-based option is the Low-Volume Program. Residents are provided with a 35-gallon cart for waste and a recycling bin. All customers, including Low Volume customers, are eligible for bulk/white goods pick-up for no additional cost.

Materials accepted by the recycling programs in West Milton include:

- Mixed paper
- Aseptic containers
- Chipboard (cereal boxes)
- Corrugated cardboard
- Telephone books
- Aerosol cans
- Aluminum foil, pans, and cans
- Tin and steel cans
- Plastic containers #1 & #2 (no lids or film plastics accepted)

c. Covington Volume-based Program

The Village provides each household with a cart for waste and as many recycling bins as needed. Carts and bins must be returned to the Village if residents move. Additional carts can be obtained for a monthly fee of \$5.00.

Service	July 2018 - July 2019	July 2019 - July 2020	July 2020 - July 2021	July 2021 - July 2022	July 2022 - July 2023
Trash (96-gal)	\$16.50	\$16.75	\$17.00	\$17.25	\$17.50
Trash (48-gal)	\$14.75	\$14.75	\$15.00	\$15.25	\$15.50
Recycling	\$3.50	\$3.75	\$4.00	\$4.25	\$4.50

There is no charge or limit for recycling bins. Waste must be placed inside the cart. If additional waste is placed outside the cart, it is subject to a fee. The Village also collects yard waste. Grass must be placed in paper biodegradable bags (available locally).

The following figure is from the recycling brochures that residents in each city received from the City. It presents the materials accepted by both cities’ recycling programs:



PLEASE RECYCLE THESE ITEMS

The program accepted plastic bottles and jugs, glass, mixed paper, aluminum containers, and steel containers. Recyclables were collected as single stream and delivered to the Rumpke MRF in Dayton, Ohio.

d. Transfer Station Volume-based Program

The volume-based program operated at the Miami County Transfer Station and Recycling Facility is referred to as the SWARF, or “Blue Bag” program. The program is for residents who drop-off waste and recyclables directly to the transfer station in lieu of having curbside collection. Residents are able to purchase bundles of five 30-gallon blue trash bags for \$6.00 at the scale house. When bags are full, residents come to the recycling center and drop-off the blue bags along with their recycling. There is no charge for recyclables.

The District offered technical assistance to the cities that offer volume-based programming, as well as to other municipalities in the District that are interested in beginning volume-based programs.

Volume-based Program Comparison

The following table presents a comparison of the curbside recycling programs operating in the District based on per capita recycling rates.

Type	Volume-based	Program	Population	# HH	2018 Recycling Tonnage	Per Capita Recycling (lbs./person /year)
NSC		Bradford Village	1,867	771	943	619
NSC		Piqua City	21,200	9,039	1,325	293
NSC		Pleasant Hill Village	1,244	464	29	125
NSC		Troy City	26,132	11,457	1,917	335
NSC	✓	Tipp City	10,056	4,347	778	155
NSC	✓	Covington Village	2,683	1,157	N/A	N/A
NSC	✓	West Milton	4,796	2,241	N/A	N/A

The table above presents data available. The District was unable to obtain information from individual political subdivisions or contracted service providers regarding more specific data needed for a meaningful analysis. Additional information needed for such an analysis include the number of residents in each political subdivision that have selected the volume-based service option versus the unlimited collection option.

Technical Assistance to Implement Volume-based

The District is available to provide assistance to municipalities regarding Volume-based.

Community Consortium

The District offers to aide communities for improving or creating curbside trash and recycling services as well as to reduce the cost of service, the District helps in developing a curbside trash and recycling community consortium. The consortium can be made up of contiguous or non-contiguous communities (cities, villages and/or townships) that either currently contract for curbside trash and recycling services or operate as subscription communities (non-contracted services).

The objective of the consortium is for communities to work together to develop joint contracting of curbside trash and recycling services for its residents. Communities that already provide publicly operated curbside trash and recycling services would not be a part of a consortium unless they chose to change their program.

The consortium(s) would be designed to accomplish the following:

- Lower monthly or quarterly costs
- Reduce truck traffic through neighborhoods
- Manage fuel costs or fuel surcharges currently charged to communities and/or residents by their haulers
- Increase recycling
- Create consistent and accountable service
- Allow for communities to opt-in or out of consortium

Joint purchasing consortiums are not a new concept as they are practiced around the State of Ohio on a variety of services as well as for product purchases. Even with this said, curbside trash and recycling services purchased through a consortium can be complicated. Based on this, the District would first educate all political subdivisions on the concept of a consortium along with the benefits. This would be accomplished through either one or a series of meetings. Based on the results of the meetings, the District would determine what communities present the best opportunity to form a consortium.

If communities are interested, the District's role would include providing seed money for professional services needed to begin the consortium bidding process, which may include consulting and/or legal assistance. Professional services may be required in order to assist with organizing/running meetings with potential consortium members, drafting

the request for proposals (RFP), and other related activities. A funding mechanism would be designed so the District can recuperate the seed money put forth for the consortium.

The District’s goal is to form a consortium for communities that currently do not contract for curbside trash and recycling services but would work with any group of communities that are interested in the benefits of forming a consortium.

No communities requested assistance in 2018.

Subscription Curbside Promotion

To address the challenges associated with increasing participation in curbside recycling programs in communities that offer subscription-based services, the District would implement a variety of strategies to promote curbside recycling. The District would work with haulers that provide services in subscription-based communities to promote the availability of curbside recycling by using mailers, placing ads in newspapers, or including information on customer invoices. The District would also add information on its website identifying which haulers provide subscription curbside recycling services for targeted communities and contact information to obtain service.

In 2018, the District partnered with the City of Piqua to create a mailer for Piqua residents showing which materials should be recycled. The mailer was printed by the District, then mailed through Piqua's water billing system. In addition, "what can I recycle" has been a theme on the website, on billboards placed around the county, and on paid Facebook ads.

The following table summarizes the program details:

Curbside Recycling Program Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	5,061
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Communities have access for curbside technical assistance provided by the District

- Three communities in the District provide volume-based options
- Branding of programs and messaging

Challenges of the program include:

- Participation is low (in subscription communities)
- Limited vendor processors
- Contamination

2. Drop-Off Recycling Program

The District, municipalities, and privately-owned recycling entities provide 4 full-time drop-off centers and drop-off locations. Each drop-off collects at least 4 target materials that are recognized by Ohio EPA as highly amenable materials for recovery. The District has identified aluminum/bimetal cans, glass, plastic, and newspaper as highly amenable materials to recover for the residential/commercial sector.

The following table summarizes the drop-off recycling locations that accept at least 4 highly amenable materials for recovery.

There were four full-time/full-service recycling drop-off locations operating in 2018. The following is a list of each location (additional details in Table III-5):

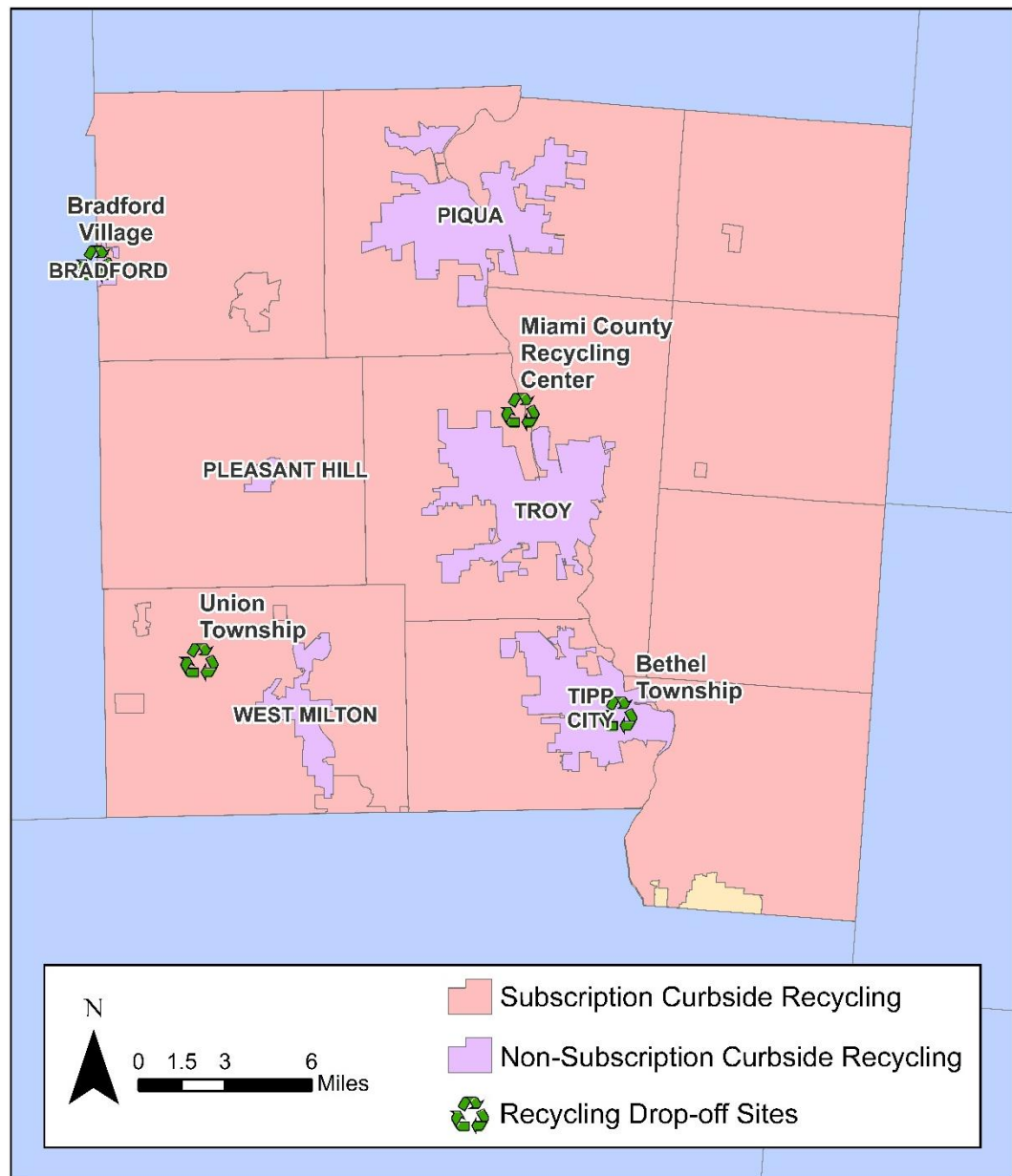
2018 Drop-Off Locations

Location	Hours
Bethel Township 8735 South Second, Street, Tipp City, Ohio	24 Hours 7 Days/Wk.
Bradford Village 115 N. Miami Ave, Bradford Ohio	24 Hours 7 Days/Wk.
Miami County Recycling Center 2200 N. Co. Rd 25A, Troy Ohio	Open during Hours of Operation
Union Township 9497 Markley Road, Laura Ohio	24 Hours 7 Days/Wk.

The amount recycled from each drop-off is included in the District totals summarized in Table III-5. Each of the drop-offs accepted at a minimum aluminum and steel containers, paper, #1-2 plastics, glass, and cardboard. The drop-off located at the Miami County Transfer Station was the largest and most comprehensive in terms of materials accepted. Political subdivisions where the drop-offs were located were responsible for the operation and maintenance of the recycling program. The District managed

the site located at the Transfer Station. There were no contracted service arrangements needed for this program. The District bales the cardboard and the transfer station manager markets the cardboard and other materials to local recycling companies. The following figure presents the locations of the drop-off recycling facilities:

2018 Drop-Off Recycling Facilities



There were numerous private businesses in the District that accepted single or limited materials for recycling such as motor oil, antifreeze, car batteries, clothing/reusables, and aluminum cans. The District maintains a resource list of locations that accept these materials.

Since 1994, the District has provided a pay-per-bag waste disposal system at the transfer station. Residents can self-haul bagged waste to the transfer facility. They can drop-off recyclables at the same time. The system offers potential savings to households that recycle. The residential waste disposal and recycling drop-off areas at the transfer facility are situated to facilitate quick and easy service for residents. The recycling drop-off is open Monday through Friday from 6:00 am to 6:00 pm and Saturday from 7:00 am to 2:30 pm.

Bar/Restaurant Glass Drop-Off

The District has a focused glass drop-off program. Bars and restaurants are the primary focus of this program because they typically generate a significant amount of recyclable glass. Glass is one of the heaviest components in the waste stream. The following table shows that glass containers weight approximately 1,000 pounds per cubic yard.

Material	Lbs./CY³
Food Waste	1,070
Glass Containers (Uncrushed)	1,000
Mixed Paper (Loose)	875
Yard Waste (Raw/Mulched)	350
Textiles	240
Steel Cans (Uncrushed)	150
Aluminum Cans (Uncrushed)	62
Plastic Soda Bottles (Loose)	35

Each cubic yard of glass diverted contributes more significantly to increasing the District's diversion rate than almost all other materials commonly found in the residential/commercial waste stream (except food waste).

This program had 13 participants in 2018. The Miami County Solid Waste District provides containers for glass to be placed at bars - recycling containers for use inside the establishment, and larger wheeled carts for collecting the glass from the smaller containers. RT Industries, a work program for clients of the county's Board of Developmental Disabilities, is paid by the District to collect the glass from the bars and take it to the roll-off container at the Recycling Center. This program was founded in 2014 through a grant from the OEPA for containers, a glass tipper, and a hauling contract. The District has since assumed all ongoing costs for the program.

Increasing Drop-Off Participation

Participation in the drop-off program in the past has been low. Using data from the Miami Valley Regional Planning Commission (MVRPG), the

District identified areas prime areas where participation could be improved. This may be based on population density or the density of multi-family residential units that commonly do not qualify for curbside recycling services.

The District conducted a brief survey of residents using the drop-off in July of 2018. Questions included:

“What would make your trip more convenient?”

Sampled responses:

- “Collecting plastic bags and #5 and 6 plastics would be helpful”
- “Now that you take magazines, I can bring a lot more paper”
- “I bought labeled bins to sort my material at home so it’s very fast to drop off here”

“Have you used our marketing materials or website?”

Sampled responses:

- “I’ve used the website to look up policies about brush removal”
- “No, I just heard about you from a friend and I just show up!”
- “I check the hours on the website”

Feedback was largely positive, although many mentioned an interest in commingled recycling at the Recycling Center. Information on the recycling center is made available online, through the District website and the county’s website, as well as through periodic newspaper advertisements.

The following table summarizes the program details:

Drop-Off Recycling Program Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	1,635.73
2018 Annual Program Costs	\$35,783
Program Operator/Contractor	District

Strengths of the program include:

- The District provides a glass drop-off program when many programs in the state are removing glass as an acceptable material
- Communities and the public sector assume the costs to operate the program except for the Miami County Transfer Station site
- Not a prevalent recycling program because of strong curbside recycling options
- Provides recycling opportunities to apartments, condominiums, and other multi-family housing
- Assists with bar glass consortiums
- Glass recycling in bars and restaurants improved

Challenges of the program include:

- Contamination
- Increasing participation rates in areas that do not have drop-off or curbside recycling services (i.e., encouraging residents to use a nearby drop-off)
- Abuse of drop-off sites
- Glass processing costs

3. Yard Waste Management Program

The District has adequate infrastructure to manage organic materials. There were four registered Class IV compost facilities, five collection programs operated by political subdivisions, and various food waste haulers servicing the District in 2018.

Registered Facilities

There were four registered compost facilities in Miami County, including:

- BR Mulch in Monroe Township – 560 tons
- Chaney’s Nursery in Concord Township – 1,113 tons
- City of Piqua Compost Facility – 954 tons
- City of Troy Dye Mill Road Facility – 1,674 tons

Collection Activities

In addition to the registered compost facilities, there were several communities that operated their own leaf composting facilities. The District has made an effort to obtain yard waste numbers from area compost facilities. In 2018, the compost facilities reported approximately 10,393 tons of yard waste that was composted. Each private and public sector compost operation is responsible for their program or facility. The private sector operations provide service to the entire District. The public sector facilities were typically limited in service area to their respective communities.

Some of the facilities listed in Table III-6 were not registered or licensed with Ohio EPA. The District does not work directly with any of the facilities listed in this table and, therefore, the District does not have direct control of their regulatory status. The following yard waste collection activities were conducted during the reference year:

a. City of Troy

The City of Troy provided weekly curbside yard waste collection to the residents. Yard waste collected included grass clippings, tree trimmings, and leaves throughout the spring, summer and fall seasons. Residents who utilize the service are required to either place items in a paper biodegradable yard waste bag or bundle their items.

Residents are also encouraged to utilize the Dye Mill Road Compost Facility as an alternative disposal method to curbside collection.

The Dye Mill Road Compost Facility is a registered Class IV compost facility that is owned and operated by the City. The facility is available to all the City of Troy residents. The compost facility accepts compost materials including grass, brush, leaves, and garden refuse (excluding fruit) and non-compost materials such as rocks, bricks, and concrete. The City contracts with a local contractor to periodically grind all the compostable materials received at the facility. The contractor is responsible for properly managing the grindings. The City composts approximately 6,500 cubic yards of material annually.

The Facility is open from the end of March through the end of November each year. The Compost Facility is closed for holidays during the open season.

The use of the Compost Facility is free of charge for residents. Residents must show proof of Troy residency in order to utilize the Compost Facility. The following materials are accepted:

Acceptable Materials:

- Brick
- Brush
- City of Troy brown biodegradable T-bags (Resident dumps T-bags)
- Concrete
- Dirt
- Garden waste / vines /plants No fruits or vegetables)
- Grass
- Gravel
- Leaves
- Logs
- Masonry / concrete block
- Non dumping trucks and trailers
- Non painted concrete yard figures
- Rock
- Sand
- Shrubs
- Sod
- Stumps
- Trees and limbs
- Wood chips

Prohibited Materials:

- Asbestos
- Batteries
- Commercial Dumping
- Commingled yard waste (with solid waste)
- Concrete with re-bar or any foreign material attached
- Construction and demolition debris (Except for the clean untreated wood)
- Containerized bulk liquids
- Dead animals
- Food of any kind
- Hazardous waste
- Infectious waste
- Landscaping timbers and plastic edging
- Painted concrete, brick, and block
- Painted lumber and pallets
- Plant pots
- Solid Waste

The City of Troy curbside leaf collection on the resident's scheduled trash and recycling day for collection. In lieu of curbside collection, residents may also deliver leaves directly to the Dye Mill Road Compost Facility.

b. City of Piqua

The City of Piqua operates its own sanitation department and provides weekly collection of yard waste, grass, leaves, trimmings, and brush. Piqua operates a registered yard waste composting

facility to which materials are taken and only accepted from Piqua residents and public entities.

City crews provide three rounds of leaf pick-up during the fall each year, plus additional coverage, as needed, in areas with a heavy concentration of leaves. During the fall, leaves should not be bagged.

Curbside collection of twigs, branches, limbs, and other tree trimmings is provided to residents. Bundles must be less than six feet in length and less than four inches in diameter. Brush and tree trimmings must be tied into bundles no larger than 24 inches in diameter or placed in bags or cans and kept separate from trash.

Grass clippings and yard waste must be placed loose in trash cans or in biodegradable paper, and clearly separated from any garbage or trash. They will be collected on the same days as regular trash.

Holiday tree collection is also provided by the city. Residents are asked to place holiday trees in the tree lawn in front of the house throughout the month of January.

Trees are chipped and piled for use as a mulch material in the City of Piqua Composting Facility. For residents to utilize the compost facility, they must first purchase a voucher at the Public Works Department office at 859 S. Main Street.

Compost Facility

The City of Piqua maintains a compost facility located at 6030 N. Piqua-Troy Road that is operated by the Public Works Department. To utilize the compost facility, you must first purchase a voucher at the Public Works Department office at 859 S. Main Street.

The Public Works Department also collects unbagged leaves placed at the curbs during the fall season.

c. West Milton

Leaves were collected from West Milton by the City and is land applied. The City published the leaf collection schedule on the electronic sign in front of 701 South Miami Street, on its website, and on the local public access cable station (WMPA Cable TV Channel 5 on analog channels and 99.1 on the digital channels).

Leaf collection typically begins in mid-to-late-October and ends in early-December of each year.

d. Covington

The Village of Covington collects leaves in the fall and spreads them on local fields.

The Village also collects yard waste on a weekly basis. Grass must be placed in paper biodegradable bags (available locally).

e. Bradford

The Village of Bradford collects leaves and yard waste and takes them to a compost site on village owned property.

Leaf collection begins in October and ends the day before Thanksgiving. After Thanksgiving, residents may make arrangements with the Village Administrator to access the compost site to deposit yard waste.

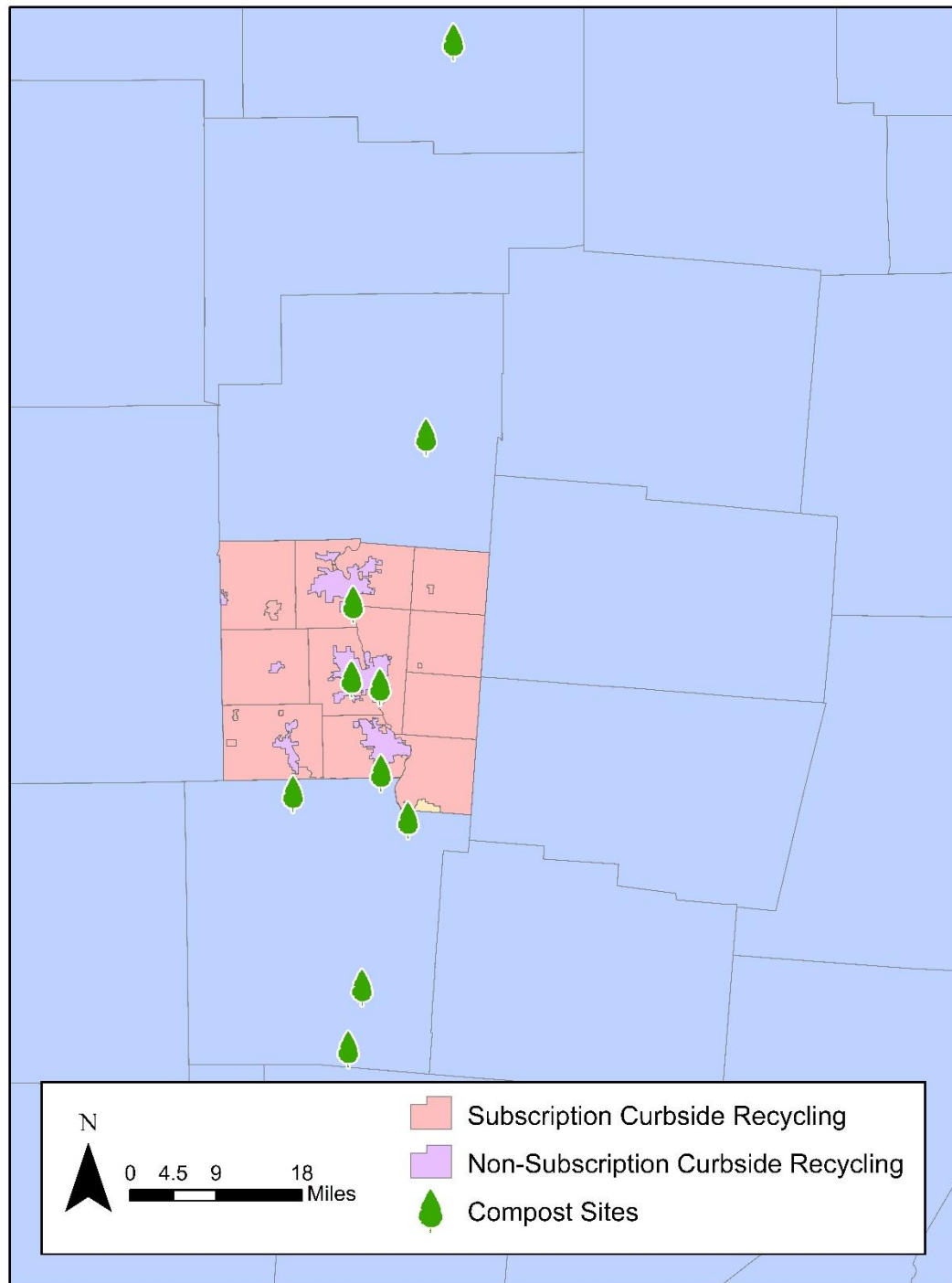
Residents are also encouraged to drop off yard waste materials directly at the compost facility located on Klinger Road.

f. Miami County Solid Waste and Recycling Facility

Holiday trees collected throughout the County were accepted at the Miami County Transfer Station for processing. The trees were ground for the purposes of producing mulch products. Multiple private and public haulers also collected holiday trees and provided processing. Typically, trees are accepted December 26th through January 31st.

The following figure presents the locations of registered facilities and yard waste collection activities:

2018 Yard Waste Management Facilities



The District annually evaluates changes in yard waste collection programs and infrastructure to identify whether there is adequate capacity to manage yard waste materials in Miami County. The District works with communities that are interested in enhancing current yard waste collection programs and advocates for new programs when necessary.

In 2018, there were no changes to the yard waste composting infrastructure in the District and all programs operating in 2018 continued.

Technical Assistance for New Yard Waste Programs

The District is available to provide assistance to municipalities regarding their yard waste programs.

The following table summarizes the program details:

Yard Waste Management Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0 (yard waste not broken down in District's financial system)
Program Operator/Contractor	District

Strengths of the program include:

- The District offers technical assistance to communities which may need assistance with current or future yard waste programs
- Less yard waste is being delivered to the Miami County Transfer Station for disposal
- The District's cost for yard waste grinding services has decreased due to the need for more volume in the system

Challenges of the program include:

- Participation

4. Household Hazardous Waste Management

In 2018, the District operates collections April through September, every Wednesday from 9:00 am to 1:00 pm and collected 7.26 tons of household hazardous waste (HHW). Residents were charged \$1 per pound for proper disposal, which was collected to pay the vendor.

In addition, household batteries and cans of paint were collected at the Miami County Transfer Station. Rechargeable batteries were shipped to the

Call2Recycle program. Paint is collected for the usual tipping fee at the Transfer Station (up to 15 gallons per resident per visit), then dried and disposed with the regular trash.

The District answered HHW questions over the phone as well as provided information on the website. On average, 15 calls pertaining to HHW were received by the District each month. The District consults with businesses to find hazardous waste solutions as needed.

Miami County Sheriff's Department Drug Drop-Off Event

The Sheriff's Office holds two drug drop-off events, held on the national DEA Take-Back Days in April and October.

Drug Drop-offs

Drug drop-offs are available at six locations in Miami County. Two are operated by the Sheriff's Office; the others are operated by local police departments.

“Sharps” Drop-off

The Miami County Solid Waste District sponsors medical sharp drop-offs in Miami County. Six boxes were picked up by Stericycle in 2018. The District had three locations throughout the county:

- District office
- City of Piqua Police Station
- Miami County Health Department

HHW Webpage

The District developed a household hazardous waste management section on its website to educate residents on the District's program as well as on proper management techniques. This may include the following:

- Household hazardous waste recycling program description
- Materials collected
- Materials not accepted
- Dates and hours of collections
- Reuse options for household hazardous waste
- Alternative products that are not hazardous
- Paint calculator for estimating the amount of paint needed for a given sized room or project
- Local household hazardous waste recycling and disposal options

HHW and special waste information is available through the county and District websites, on the District Facebook page, through various newspaper and publication advertisements, and on literature available at county buildings.

Please see the Education and Awareness Program below for further details on the District Website.

The following table summarizes the program details:

Household Hazardous Waste Management Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	7.69 Tons
2018 Annual Program Costs	\$5,262 + \$318 for "Sharps" vendor
Program Operator/Contractor	District

Strengths of the program include:

- The District offers frequent HHW collection at the transfer station for all residents
- The program is offered April-September
- Residents pay a user fee that off-sets the cost to manage the program
- A significant portion of the HHW material collected is recycled
- Education on reuse and source reduction

Challenges of the program include:

- Participation
- Cost of program

5. Scrap Tire Recycling

The District maintained a scrap tire collection program at the Miami County Transfer Station. Scrap tires are accepted for a fee at the transfer station during normal business hours. Residents were charged \$3.00 per

passenger tire, \$6.00 per large truck tire, and \$20.00 per tractor tire. Liberty Tire was used to manage tires collected at the transfer station.

More than 112 tons of scrap tires were collected at the Miami County Transfer Station. There were also many tire dealers and wholesalers that accepted scrap tires throughout the county. In all, more than 1,555 tons of scrap tires were collected and recycled from the District.

Scrap Tire Grants Ohio EPA

The Miami County Solid Waste District did not apply for any grants in 2018. Grants are prepared on an as needed basis or as projects are identified. The District also assists businesses or other entities that wish to apply for a scrap tire grant upon request. In 2018, no requests were made.

The following table summarizes the program details:

Scrap Tire Recycling Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	112.42 tons
2018 Annual Program Costs	\$14,300
Program Operator/Contractor	District

Strengths of the program include:

- The District offers on-going scrap tire collection at the transfer station for all residents and businesses
- Decreases illegal dumping of scrap tires, which can pose risks to human and environmental health

Challenges of the program include:

- Participation
- Cost of program

6. Automobile Batteries and Used Oil Collection

The District annually surveys the majority of the automotive supply stores, parts stores, and dealerships in the County that service the residential sector to determine if automotive batteries and used oil were accepted from

the public and recycled. Surveys requested the total number of automotive batteries separately from lawn tractor, farm tractor, or truck lead-acid batteries (LABs) to ensure that the total reported on the Annual District Report only included residential sector LABs.

The results of the survey indicated that collection and recycling was available in multiple locations across the County. LABs were also collected at the Miami County Transfer Station. Batteries are collected for the usual tipping fee at the Transfer Station. A total of 3 tons of lead acid batteries and 1.205 tons of used oil were recycled by the District.

An additional 443 tons of lead acid batteries and 6 tons of used oil was recycled in 2018 found by survey collection by businesses in Miami County.

The following table summarizes the program details:

Automobile Batteries and Used Oil Collection Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	3 tons LAB & 1.205 tons of Used Oil
2018 Annual Program Costs	\$2,169
Program Operator/Contractor	District

Strengths of the program include:

- The District offers on-going battery collection at the transfer station for all residents
- Lead acid batteries are recycled year-round at the Miami County Transfer Station
- Local vendors also provide recycling services for batteries and used oil

Challenges of the program include:

- Participation

7. Special Event Recycling

The District assisted organizations and establishments with special event recycling by providing labor and loaning temporary collection infrastructure.

Clear Stream recycling stands and lids were loaned to the Miami County Fair, and other events in the County.

The District has an agreement with First Systems to handle the event recycling labor. The agreement between the District and First Systems is a continuing contract that must be approved annually. Materials collected included beverage containers. First Systems is responsible for collecting the recycling stands, transporting the stands to the location of the special event, and returning them after the event. It is up to the event organizer whether the District will receive recyclables collected at the event, or whether the contracted hauler for the event will deliver them to an alternate location for processing.

Employees of First Systems are paid by the day under the current contract with the District. In addition to providing event recycling labor, program costs also include pickup costs for materials collected at some events.

Special event recycling was implemented for 14 outdoor fairs and festivals (such as the Miami County Fair, Bradford pumpkin show, Troy Strawberry Festival, Tipp City Mum Festival) in 2018, up from 11 events in 2017 and 7 events in 2016. A new contractor has been hired to assist with handling event recycling.

Vendor Agreement Assistance

The District works with each special event venue that requests assistance from the District in the planning period to create a vendor agreement document that encourages or requires special event vendors, that sell consumable products, to provide acceptable recyclable options for the product. This would include drink and food containers.

The District consults with event hosts as requested. The SWD provided assistance in connecting the Troy-Hayner Cultural Center, which hosts concerts and other events through the year, with a recycling service. In addition, the SWD provided literature and materials for Brukner Nature Center's conservancy-themed 5k this year.

The following table summarizes the program details:

Special Event Recycling Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$9,330.57
Program Operator/Contractor	District

Strengths of the program include:

- The demand for this program has increased

Challenges of the program include:

- Program is underutilized

8. Electronics Recycling

Electronics collection is offered on an ongoing basis. The cost to residents is equal to the usual tipping fee. The District collected 4.86 tons of electronics in 2018.

Materials accepted included:

- Computers (desktop & laptop)
- Printers (laser and inkjet)
- Scanners
- Hard drives (external or internal)
- Keyboards
- Mice
- Speakers
- Cords and cables
- Software
- Cell phones
- Tablets
- VCRs/DVD players
- Other electronic office equipment

The District does not accept televisions or monitors.

The following table summarizes the program details:

Electronics Recycling Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	4.86
2018 Annual Program Costs	\$1,920
Program Operator/Contractor	District

Strengths of the program include:

- Provides residents with on-going recycling opportunities with the local service providers

Challenges of the program include:

- Local and regional electronics recyclers charge for acceptable materials
- Cost of program

9. Appliance Recycling

The District accepts appliances for recycling at the Miami County Solid Waste and Recycling Facility. Appliances and other metals were stored in the same container at the Transfer Station, so the total tons of appliances were not available, but a total of 173.48 tons of scrap metals including appliances were collected in 2018. The District charges a fee for Freon removal. Records indicate that approximately 530 Freon-containing appliances were collected and processed in 2018. Scrap metal and appliances were recycled at the Polings Scrap Yard. Freon Filled Appliances at the Transfer Station are \$10 per appliance.

The following table summarizes the program details:

Appliance Recycling Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Provides residents with an on-going recycling opportunity for white goods, including those which may contain Freon at the Transfer Station
- Metal recycling property is in close proximity

Challenges of the program include:

- Prices

MARKET DEVELOPMENT PROGRAMS

The District promoted recycling markets through a variety of education and awareness activities, grant applications and direct market support. The following section summarizes the District’s Market Development Programs.

10. Recycling Market Development Grant

The District educates and promotes market development through a variety of efforts including promoting recycled content products and providing technical assistance to residents and businesses seeking products with recycled content materials.

The Recycling Market Development Grant was not utilized in 2018.

The following table summarizes the program details:

Recycling Market Development Grant Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Provides an opportunity for the District to work directly with local businesses to increase recycling

Challenges of the program include:

- The program is dependent on State funding which may or may not be available in the future

11. “Buy Recycled” Promotion

Buying products made with recycled materials closes the recycling loop. When consumers “buy recycled,” it promotes a stable market for secondary materials, causing the cost of products or packaging made with recycled materials to be competitive or lower than their counterparts made with virgin materials. The use of recycled materials also reduces the need to extract or harvest virgin raw materials and natural resources, thereby saving energy and reducing air and water pollution.

The District incorporates the “buy recycled” philosophy into residential, commercial, and industrial reduction and recycling programs as often as possible. The District’s activities related to promoting the “buy recycled” philosophy is generally hosting a with information about materials and items that contain recycled content. Booths are hosted upon request. In 2018, continues to promote "buy recycled" through information at the county fair, along with school presentations.

The District also maintains information about products that contain recycled content materials. Most office supplies purchased, and promotional items purchased by the District are made with recycled materials. Additionally, the Transfer Station uses tire wear pads made from recycled rubber on its bucket loader.

In 2019, two recycled benches were purchased for the Miami County Park District. Benches were placed near the transfer station in order to be an advertisement for the District. The benches were placed along the bike path that passes in front of the Transfer Facility.

The following table summarizes the program details:

“Buy Recycled” Promotion Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$2,500
Program Operator/Contractor	District

Strengths of the program include:

- Promotes stable market for recycled materials by supporting the market

Challenges of the program include:

- Price market limits feasibility for many businesses

12. Internal Grant

The District has supported the Miami County Court System since the ODNR Recycle Ohio Grant was stopped. The court system receives \$20,000 per year for litter pickup throughout the county. The program utilized community service workers for litter collection activities. No deputies are involved in this program; only court officers, such as probation offers, manage the community service workers.

The SWD awarded a \$20,000 grant for Intensive Service Program cleanup in 2018.

The Internal Grant program has been expanded to assist with the clean-up of I-75 which will involve a deputy for traffic control and be in partnership with ODOT. The amount will increase from \$20,000 to \$54,000.

Source Separated Recyclables Collection

The District worked with the court system to provide recycle bags and recycling procedures to source separate litter that is recyclable. The separated materials are then be recycled by the District. Miami County Transfer Station staff pull recyclable materials from litter collection as time allows.

The following table summarizes the program details:

Internal Grant Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$20,000
Program Operator/Contractor	District

Strengths of the program include:

- This program provides the opportunity to make the community aware of litter issues
- Helps maintain a litter free environment in Miami County

Challenges of the program include:

- Litter was collected as a single stream and recyclable materials that were collected with litter were disposed as waste. Materials were too contaminated to sort after they were collected.

13. Community Development Grant

The Community Development Grant (CDG) program is operated by Ohio EPA. The District applies for the CDG when a need is identified and when funding is available. The CDG provides financial assistance to governments that propose projects that aid in the collection or processing of recyclable materials and other solid waste projects. A fifty percent cash match is required to win a CRG. In 2018, the District did not apply for this grant.

The District also provides outreach and education to municipalities that may benefit from the CDG program. When Ohio EPA announces the grant cycle, the District emails communities to inform them about the timeline and provides them with a link to the application. The District also offers assistance with preparing grant applications to interested communities upon request.

The following table summarizes the program details:

Community Development Grant Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Provides financial assistance to local governments to improve or expand recycling infrastructure.

Challenges of the program include:

- Funding is limited and must be matched
- Program is underutilized

14. Litter Collection Grant

The Litter Collection & Prevention (LCPG) Grant program is operated by Ohio EPA.

The District provides outreach and education to litter collection and beautification groups that may benefit from Ohio EPA's LCPG program. When the grant cycle is announced, the District emails the targeted groups to inform them about the timeline and provides them with a link to the application. The District also offers assistance with preparing grant applications to interested groups upon request.

The following table summarizes the program details:

Litter Collection Grant Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$2,150
Program Operator/Contractor	District

Strengths of the program include:

- Provides financial assistance to local governments to remove litter or illegally dumped tires

Challenges of the program include:

- Program is underutilized

15. School Waste Reduction Grant

The District operates a grant program for public and private schools to assist administrators, teachers, and educators with environmental education programming as it relates to solid waste issues. Schools may apply for up to \$500 in grant funding for waste reduction projects including but not limited to:

- Purchasing containers and other supplies for a school recycling program
- Purchasing recycled content materials and supplies
- Implementing a school waste reduction practice
- Creating a composting area
- Developing activities that teach about recycling, waste reduction, litter prevention, pollution, landfills, or other solid waste topics
- Supplies for solid waste related classroom activities; and
- Waste reduction or recycling kits

The District provides up to \$3,000 in grant funds to community schools each year.

The SWD awarded six grants, totaling \$2,350.85, to Miami County educators in 2018. This annual grant program allows for up to ten grants to be awarded.

The following table summarizes the program details:

School Waste Reduction Grant Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$2,350.85
Program Operator/Contractor	District

Strengths of the program include:

- Provides financial assistance to local schools for waste reduction and environmental education activities

Challenges of the program include:

- Program is underutilized

RESIDENTIAL/COMMERCIAL/INDUSTRIAL SECTOR EDUCATION AND AWARENESS PROGRAMS

16. Education and Awareness Program

The District provides a variety of activities and materials to raise awareness and promote recycling and waste reduction. The education and awareness program was developed to reach all sectors and appeal to a wide audience. The following section summarizes the District's education and awareness programs.

School Presentations

The District conducts presentations pertaining to recycling and solid waste management issues with local school groups upon request. The District utilizes its displays, educational brochures, and other tools to educate students on the solid waste issues facing Miami County. In 2018, the District gave presentations at schools.

The District Coordinator held presentations for 14 school groups reaching 2,100 student reach in 2018. In addition, the SWD contracts with The Illusion Maker, an educator who discusses recycling through an interactive performance, to perform fourteen presentations at county schools in 2018.

The District keeps an email list of teachers and sends information regularly, including lesson plans available on the website, upcoming contests, and grant information.

Civic Presentations

The District conducts adult presentations on a variety of topics related to solid waste management, recycling, or composting. In 2018, the District gave nine presentations to civic groups upon request.

Contests

The District hosted several contests at schools related to recycling and conservation. Contests hosted in 2018 included the following:

The District held its two fall recycling events, the pop tab collection contest and the Christmas ornament contest, in 2018. Six schools participated in each contest. The District also held an Earth Day essay contest and billboard art contest in 2018, the first year for both contests. These programs were less popular, with only a handful of students participating.

- Recycled Ornament Contest: Teachers and parents could enter students or children into the Recycled Ornament Contest. The objective of the contest was to create holiday inspired ornaments using only recyclable or reclaimed objects. Ornaments could be no more than 6" x 6" x 6" in size, lightweight enough to hang on a tree, and free of safety hazards or perishable items. Rules are to make an ornament out of recyclable materials. Glue, glitter, wire etc. were allowed and 3 winners were chosen.
- Pull Tab Contest: The District and the County Commissioners sponsored the America Recycles Day Pull Tab Contest among local schools. Local schools collected pop tabs that would be used to make a donation to the Ronald McDonald House in Dayton.
- Earth Day Essay Contest: The District hosted a contest in 2018, but not in 2019.
- Billboard Art Contest: 2018 theme was "What can I recycle?" three winners were chosen, and their drawings were displayed on a billboard in Miami County for 30 days.

District Displays

The District owns a tabletop display that is utilized in school presentations and at special events. The District routinely attends the Miami County Fair where the display is used as a solid waste education and awareness tool in the Miami Soil & Water Conservation Area. The District purchased two new educational displays for use at the county fair and school events in 2018.

A new display was created for the County Fair as well as other events. It included retractable banners, tabletop tri-fold display, rack cards, tote bags, non-woven tote bags, and "Roscoe" our stuffed Raccoon. It also included sunglasses. Rack cards topics included medication disposal, sharps disposal, paint disposal, light bulb recycling, hazardous waste disposal, and special waste disposal. Another card was printed for information on the Transfer Station and our Recycling Center.



Publicity and Advertising

The District utilizes local media outlets to spread the word about solid waste management issues. The District typically uses press releases along with newspaper ads and the District's website to disseminate information and publicity regarding District events and or solid waste management issues.

Publicity and advertising have been a major and ongoing goal for the SWD since 2016. The District keeps approximately a marketing budget of \$50,000 per year, and the District coordinator works with a local agency to develop effective marketing materials.

HHW education was a major focus for 2018. Educational efforts included Facebook ads, billboards placed in every city in the county, and information made available at the county fair. The District utilized Facebook, starting their own page being helped and monitored by Artistic Inspirations locally. They have created multiple graphics. Bumper stickers were printed, pens created, and age specified lesson plans and coloring pages have been made available through our website. All of which have promoted our recycling efforts as well as events.

HHW is one of the District's most-called-about subjects. The District employed one new customer service agent in 2018; this employee has been trained on answering HHW questions.

Miami County updated their graphics and signs on our recycling containers. Simplified the design and made logos the same throughout our recycling center.

Informational Flyers and Brochures

The District produced educational brochures on the following topics:

- Household Hazardous Waste Management
- Composting
- Recycling Means Business in Ohio
- Recycling in Ohio
- Plant Pride Not Litter

Brochures are made available as needed and are distributed to residents and businesses as requested.

The SWD's informational flyers and brochures were completely revamped in 2017-18. The district makes an effort to deliver these to businesses that may find them useful; the coordinator frequently takes flyers on paint disposal to hardware stores, flyers on sharps disposal to pharmacies, etc.

This literature is also available at the Sanitary Engineering Office and the main county buildings.

District Website

The website contains many informational resources for residents about recycling. The District also supports political subdivisions by sharing any community recycling events or news on its website. The new District website was created in 2017 and has been continually updated. It now receives an average of 28 visitors per day within the state of Ohio. With the District's advertising company, they have created videos for our website that have been shared through our social media platforms.

- *HHW Webpage:* The HHW section is one of the most-visited sections on miamicountyrecycles.com. The District also advertised HHW through social media and receives inbound traffic through that source.

Drop-Off Recycling Education

A part-time employee at the Recycling Center located at the Miami County Transfer Station provides residents with education on how to properly recycle. The goal of the customer service employee, as well as the District Coordinator, is to reduce contamination and promote the program when residents call in to obtain information about services. The recycling drop-off at the Transfer Station is advertised on the District's website for residents that do not have access to curbside recycling.

The District conducted a brief survey of residents using the drop-off in July of 2018. Feedback was largely positive, although many mentioned an interest in commingled recycling at the Recycling Center. Information on the recycling center is made available online, through the District website and the county's website, as well as through periodic newspaper advertisements.

Commercial Technical Assistance

The District conducts waste audits as requested. The SWD also offers commercial businesses a directory of local waste management vendors and recycling programs (including workshop programs through the county's Board of Developmental Disabilities). No audits were performed in 2018.

Industrial Technical Assistance

The District offers technical assistance to industrial sector businesses. Every year on the industrial and commercial surveys, recipients are asked

if they would like a waste audit. Depending on time constraints, businesses are contacted to see if they would like to follow through with having a waste audit completed. The District provides suggestions for businesses that complete the waste audit process on how waste can further be minimized.

The District finds that most industrial businesses recycle due to the economics and ease of collecting uncontaminated recyclable waste materials from operational processes.

The District conducts waste audits as requested. Collins Aerospace contacted the District for support in late 2018. The District Coordinator met to determine needs and assess plans going forward. No audits were performed in 2018.

The following table summarizes the program details:

Education and Awareness Program Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$48,735
Program Operator/Contractor	District

Strengths of the program include:

- Creates the opportunity for the District to work with industry on waste reduction and solid waste issues.
- Allows the District to promoting recycling and waste reduction techniques to a broad audience.
- The District provides a vast array of promotional literature as well as direct engagement with residents, institutions, and businesses.
- Illusion maker offers education and outreach in schools.

Challenges of the program include:

- Behavior change strategies lacking
- Measurement of education and outreach outcomes
- Direct engagement with curbside recycling programs lacking

OTHER PROGRAMS

17. Miami County Transfer Facility Pay-Per-Bag

The District operated a direct-haul version of a volume-based waste and recycling system. Residents could purchase packs of five thirty-gallon trash bags for \$6.00. The cost of the trash bag includes the cost of disposal. A recycling center is available for residents at the transfer station. There is no limit or charge for recyclables delivered to the transfer station. The program provides a financial incentive to consumers to recycle more and produce less garbage. More than 5,555 bags (1,111 bundles) were sold in 2018.

The District promotes this program through literature and on its website. Many program participants said that they learned about the program through word-of-mouth. Most users typically come from single person or small households.

The following table summarizes the program details:

Miami County Transfer Facility Pay-Per-Bag Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$2,274.53
Program Operator/Contractor	District

Strengths of the program include:

- Program continues to grow in popularity each year.

Creates financial incentives for residents to recycle more and produce less garbage

Challenges of the program include:

- None

18. Volume-based Technical Assistance

The District offered technical assistance to any political subdivision interested in implementing a volume-based collection system. The Transfer Station Manager and the Solid Waste Coordinator will work with any District

political subdivision that requests information on volume-based programming options. No communities requested assistance in 2018.

Two communities that previously implemented a volume-based program, Tipp City and West Milton, maintained their programs. In 2012, the Village of Covington started a program that was volume based for their residents and still continues through 2018. No municipalities reached out in 2018 for assistance.

The following table summarizes the program details:

Volume-based Technical Assistance Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Creates financial incentives for residents to recycle more and produce less garbage.
- Provides assistance to political subdivisions to upgrade recycling programs.

Challenges of the program include:

- Program is underutilized

19. Miami County Debris Management Guide

The District prepared the Miami County Debris Management Guide in cooperation with numerous agencies from throughout Miami County, including the Miami County Emergency Management Agency, the Miami County Health District, and the Ohio EPA Southwest District Office. The response guide incorporates best practices from debris management plans produced by local, state, and Federal agencies. After it was prepared, the guide was submitted to FEMA. FEMA communicated with the Emergency Management Agency that the draft plan was approved and is in effect immediately, although no written notification was received. Ohio EMA is currently reviewing the plan as a result of new standards. The Debris Management Guide was utilized during the 2019 Memorial Day tornado.

The District’s role if a debris event occurs is as follows:

- The SWMD Coordinator will assist debris managers (DMs) from the county, townships, cities, and villages with oversight and coordination of debris management operations.
- The District will aid in the disposal debris and will coordinate the removal of hazardous waste from commercial operations as well as from private property with the jurisdictional DM, Ohio EPA Emergency Response Group, and hazardous waste vendors.
- The District’s Office will be utilized as the centralized Command Post for all Debris Managers in case of a large-scale debris gathering event occurs within the boundaries of Miami County. This facility is equipped with an emergency backup generator in case of a large power outage throughout Miami County.
- The SWD is available to assist the county EMA during updates to the Debris Management Guide.

For more information on the Miami County Debris Management Guide Program, see Appendix H.

The following table summarizes the program details:

Miami County Debris Management Guide Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Provides plan to manage debris in the event of a natural disaster

Challenges of the program include:

- Employee knowledge of guide

20. Miami County Transfer Station

The District owns and operated the Miami County Transfer Station during 2018. The Transfer Station has been in operation since 1998 when the incinerator was taken out of service. For many years, the District has designated the Transfer Station as the facility where municipal solid waste generated in Miami County must be delivered.



The District's enforcement of flow control protects the operations of the Miami County Transfer Station by ensuring that it will receive sufficient quantities of solid waste and generate adequate revenue to pay back public debt for construction of the facility and finance its ongoing operations.

Designating the transfer station under flow control has also helped the District achieve a sufficient economy of scale to obtain lower disposal rates for solid waste. The Miami County SWMD and the Montgomery County SWMD were able to aggregate the solid waste streams collected at their transfer stations and direct them to a single landfill facility in order to obtain a better disposal price.

The Transfer Station continues to see volumes increase and are capable to handle these projected volumes for the foreseeable future. Key upgrades included:

- Addition of a residential drop-off site in 2016
- 8,000 square feet of tipping floor replaced in 2018
- LED lighting was updated over the 2018 to 2019

The Transfer Station is a resource available to all District residents. Residents can bring municipal solid waste to the Transfer Station that their hauler may not accept anytime during normal business hours:

Monday – Friday: 6:00AM – 6:00PM

Saturday: 7:00AM – 2:30PM

The Transfer Station operates a variety of programs that accept the following special materials:

- Lead-acid batteries
- Appliances, including Freon-containing

- Wood/tree waste
- Latex paint
- Scrap tires
- Scrap metal
- Light bulbs
- Cell phones
- Propane Tanks

The Pay-Per-Bag program is also operated out of the Transfer Station. This program provides residents living in jurisdictions that do not offer curbside waste and recycling collection with a volume-based program, where residents can dispose of waste after buying bags at the scales house and utilize the recycling center for no cost.

The drop-off recycling center, located behind the Sanitary Engineering Administration office at the Transfer Station, is open to all residents during regular business hours.

Materials accepted at the drop-off recycling center include:

- Glass bottles and jars (all colors)
- Mixed paper
- Paperboard
- Cardboard
- #1 & #2 plastic jugs and containers
- Steel cans
- Aluminum cans
- Household batteries



Containers should be rinsed, and plastic lids should be discarded. Cans, boxes, and plastic containers should be crushed or flattened.

Miami County continues to sell commodities from the Recycling Center to local private scrap yards and recyclers, and to connect residents to private recyclers through online disposal guide and references to customer service callers.

Paper Shred Events

In 2018 the District offered two public shredding events each year, and also provided shredding for other county offices in 2018. The vendor for all three events was Crowe Shredding; they recycled all material collected. The two public events brought in 7.35 tons of paper. The office event brought in 5.57 tons. Event statistics:

May 12, 2018: 136 cars with 10,200 lbs shredded paper

October 6, 2018: 82 cars with 4,500 lbs shredded paper

Election Sign Drop-off

The District hosted an election sign drop-off for 3 weeks after Election Day. The District collects a low volume of election signs each year. This service provides residents a way to recycle their signs in lieu of placing in curbside program.

The following table summarizes the details of this facility.

Miami County Transfer Station and Recycling Center Details	
Description	Details
Location	2200 N. County Rd. 25A, Troy, OH 45373
Phone	937-440-3488
Transfer Station Hours	Monday through Friday from 6 a.m. to 6 p.m. Saturday from 7:00 a.m. to 2:30 p.m. Sunday closed
Costs for Residents	Charges for refuse: \$49.05/ton + \$4.75/ton Ohio EPA fee. There is a \$5.00 minimum for items brought in under 200 pounds
Passenger Tires	\$3.00 each
Large Truck Tires	\$6.00 each
Farm Tires	\$20.00 each
Low Density Surcharge	\$16.50/ton x difference in minimum & actual weight
Labor for Digout	\$65.00 per hour
Vehicle Weigh	\$10.00 each
Returned check fee	\$35.00
Freon Filled Appliances	\$10.00 per appliance
Spill Cleanup	\$40/hour + material, equipment, and disposal
Payment Methods	Credit/debit cards are taken at this time

The following materials were not accepted at the center for recycling:

- Windows
- Grass clippings
- Metal drums with ends intact
- Ceramic materials
- Plastic insulation
- #3 - #7 plastics
- Polystyrene
- Liquids
- Hazardous materials
- Items over 8' in length or 2' in diameter

The following table summarizes the program details:

Miami County Transfer Station Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$35,783 Recycling Center + \$78,735 Transfer Station
Program Operator/Contractor	District

Strengths of the program include:

- Provides many services for a variety of materials to the community
- Operates as a transfer station and recycling collection center
- Open long business hours

Challenges of the program include:

- None

21. Annual Program Performance Assessment

The District's strategy is to maintain or improve the performance of its residential/commercial recycling programs by monitoring program performance routinely. The criteria for evaluating program performance will vary for different types of programs. The criteria used to evaluate most programs will be annual tons collected. The District realizes that continued engagement with the residential/commercial sector is very important and will remain a strong focus during the planning period.

Education & Awareness (MC-16):

- Presentations
 - Number of students/adults reached
 - Number of presentations, district displays, contests, advertisements, flyers/brochures distributed, updates to website
- Waste Audits
 - Number of meetings held
 - Number of performed audits
 - Number of interested establishments
 - Qualitative measurements (i.e., progress made at meetings)

Programs are evaluated on a continual basis, with assistance from the SWMPC and in accordance with EPA goals and regulations. No major programming changes were made in 2018.

The following table summarizes the program details:

Annual Program Performance Assessment Summary	
Description	Details
Entity Responsible for Maintaining Program	District
Service Area for Program	District
Materials Reduced/Recycled	N/A
2018 Recycled Tonnage	N/A
2018 Annual Program Costs	\$0
Program Operator/Contractor	District

Strengths of the program include:

- Programs are reviewed annually
- District recognizes the importance of maintaining or improving the performance of its residential/commercial recycling programs

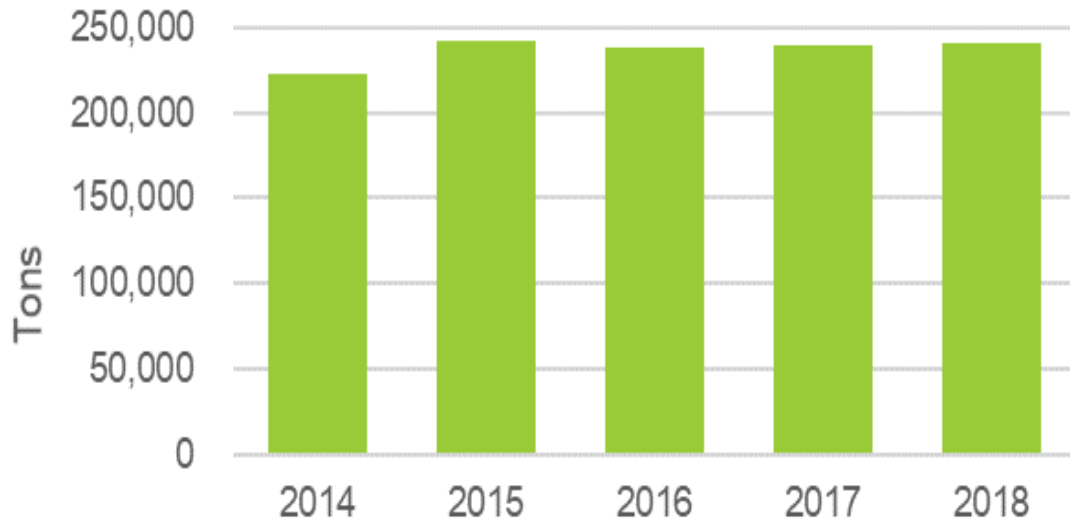
Challenges of the program include:

- It is difficult to measure certain programs such as data collection and event recycling

H. Total Waste Generation: Historical Trends Plus Waste Reduction

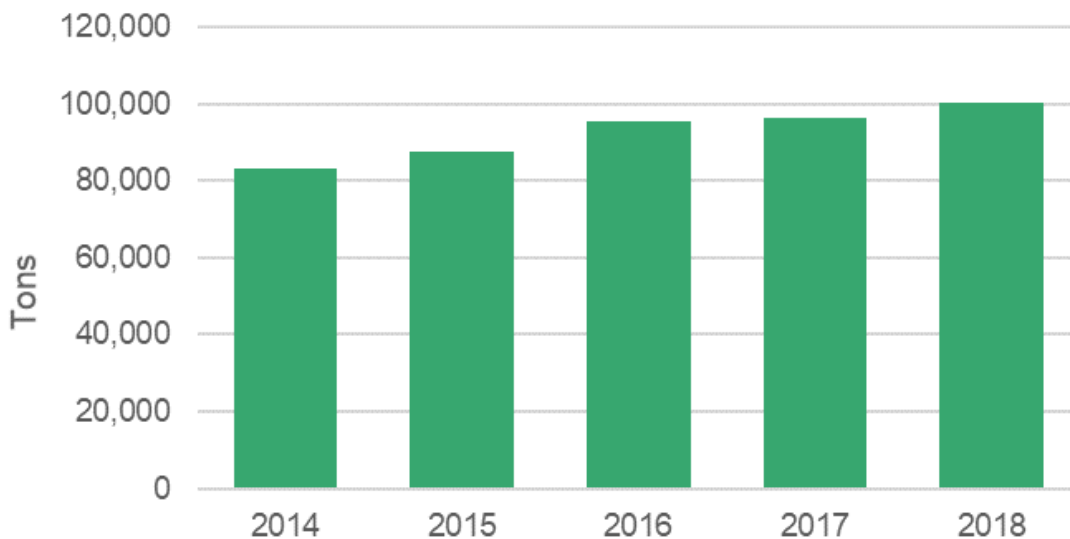
Table IV-7, "Total Waste Generation Based Upon Disposal Plus Waste Reduction", presents total waste generation based upon disposal plus waste reduction. In 2018, the District generated 241,143 tons of solid waste based on landfill disposal, yard waste composting and recycling. Historically, the District generated a high of 242,616 tons in 2015 and a low of 222,359 in 2014. The following graph presents the fluctuations in District waste generation over the past five years. The initial downward trend is likely a result of economic decline. Tonnage has been decreasing since 2014, indicative of modest economic recovery.

District Historical Total Generation



Landfilled waste tonnage has been within a 20,000-ton range level between 2014-2018 and tended to fluctuate up and down. Landfilled waste has ranged from a high of 100,249 in 2018 to a low of 83,180 in 2014. The following graph depicts the historical landfill totals which include residential, commercial, industry, and exempt waste from 2014-2018.

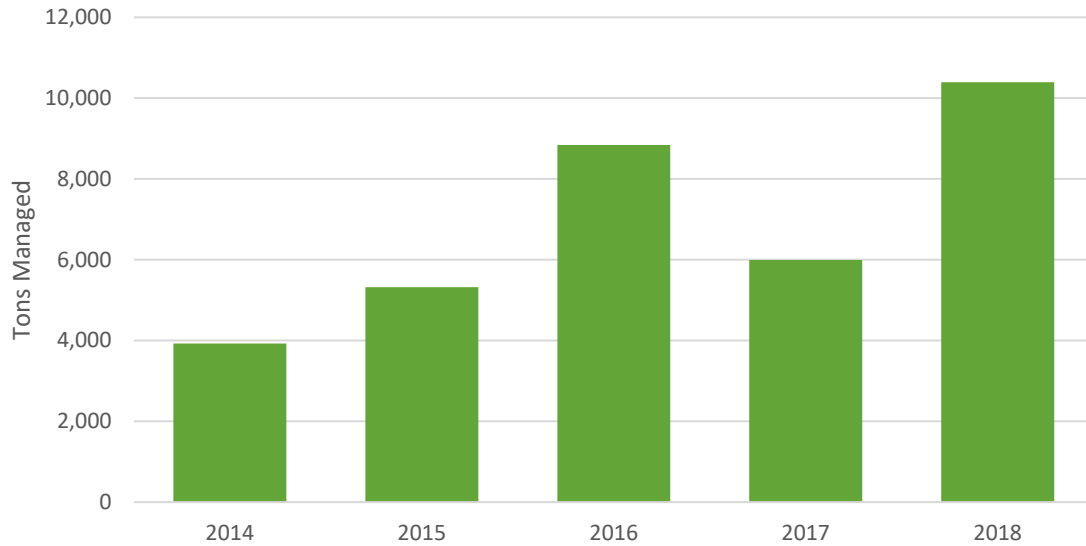
District Historical Landfill Disposal



Yard waste generally increased from 2014-2018. A rise occurred from 2016 to 2015 by approximately 3,000 tons. Yard waste has ranged from a low in 2014 of

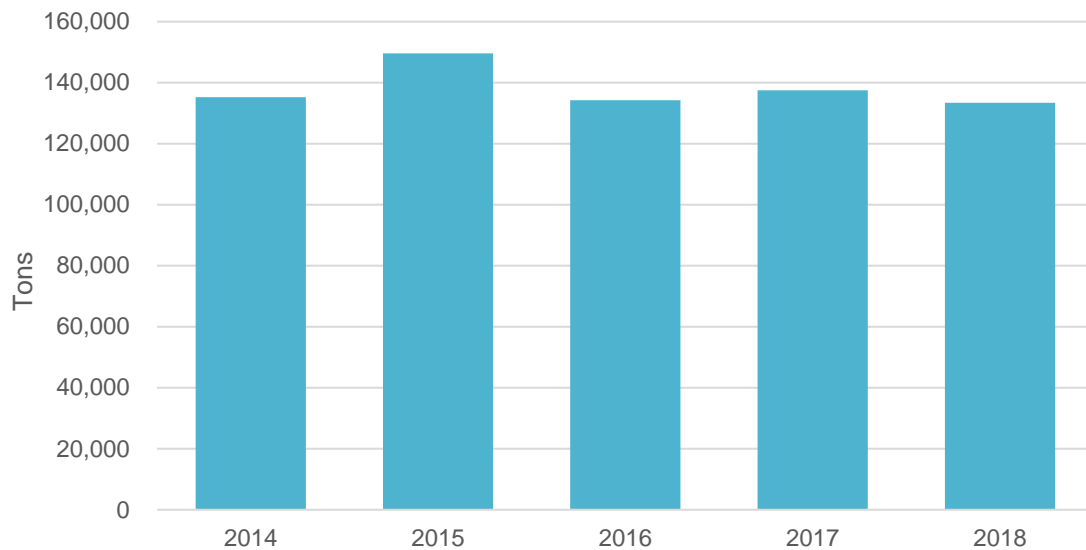
3,926 tons to a high of 10,393 tons in 2018. The following graph depicts the historical yard waste totals from 2014-2018.

District Historical Yard Waste Management



Waste reduction had stayed about the same from 2014 to 2018. Waste reduction has ranged from a low in 2018 of 130,501 tons to a high of 149,614 in 2015. The drastic difference mainly comes from data collected from the industrial sector. The following graph depicts the historical waste reduction totals from 2014-2018.

District Historical Waste Reduction



I. Reconciliation of Waste Generation (based on reported recycling and disposal)

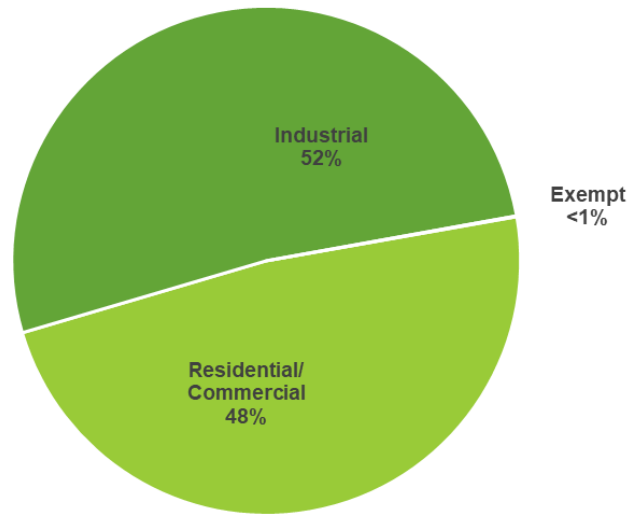
Table IV-8, "Adjusted Reference Year Total Waste Generation for the District", presents adjusted reference year total waste generation for the District. This is based on actual reported recycling and disposal.

The District calculated waste generation using two methods. The first method outlined in Part E of this Section (see Table IV-4) uses statewide generation estimates to determine industrial waste generation projections. Residential/commercial generation was determined based upon the rate of change in generation rate observed within the District during the past several years. Finally, exempt waste was obtained from actual landfill and transfer station operating reports. Using this methodology, the District estimated 300,635 tons of solid waste generated in 2018. The resulting total generation rate was 15.55 pounds per person per day (Table IV-4).

The second method used to calculate solid waste generation is based on actual reported recycling and disposal in the District during the reference year (Table IV-8). For 2018, District residents, businesses, and industry generated 241,828 tons. The total generation rate was 12.51 pounds per person per day (Table IV-8), which includes recycling and waste disposal from all sectors. The residential/commercial sector generated 117,915 tons or 6.10 pounds per person per day, which includes recycling and yard waste composting. Industrial generation was calculated to be 123,801 tons or approximately 6.40 pounds per person per day. Exempt waste generation was 112 tons or approximately 0.01 pounds per person per day.

The District selected the second method as the most accurate method of projecting waste generation because waste at the landfills and transfer stations is weighed. This method of collecting solid waste data has been fairly consistent for several years. The first method of projecting waste generation is based on surveys, projections, and secondary data sources, which are generally not as accurate as actually weighing the materials. The following figure depicts the reference year waste generation by sector based upon using the second method of waste generation estimation.

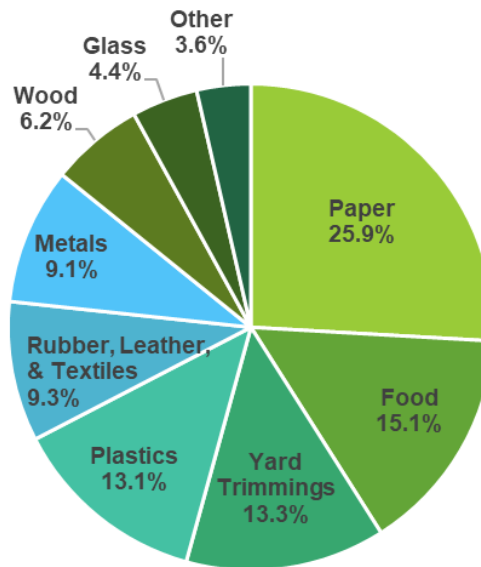
2018 Adjusted Waste Generation by Sector



J. Waste Composition

The District estimated the residential/commercial waste stream composition in Table IV-9, “Estimated Residential/Commercial Waste Stream Composition for the District for the Reference Year”, using the national averages from US EPA for 2015. The largest component of the residential/commercial waste stream is projected to be paper and paperboard at 25.9% (30,531 tons), followed by food scraps at 15.1% (17,800 tons), and yard trimmings at 13.3% (15,678 tons). The following figure depicts the residential/commercial waste composition for the reference year.

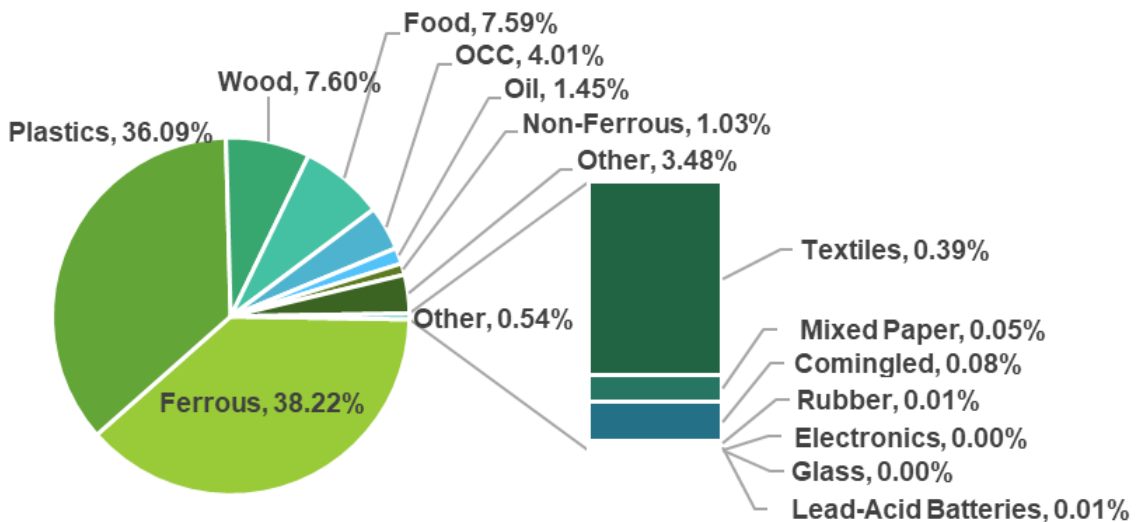
**2018 Residential/Commercial Waste Stream Composition
(in TPY and Percent of Waste Stream)**



The industrial waste composition included in Table IV-10, “Estimated Industrial Waste Composition for the Reference Year in the District”, was estimated based on the amount of industrial waste disposed and recycled. Non-hazardous waste, concrete, ash, and sludge were eliminated from the acceptable waste materials for recycling calculations only. All recycled materials are provided as actual totals. The remainder of material disposed in the landfill is categorized as general solid waste.

The largest component of the industrial waste stream was ferrous metals, comprising 38% of the total waste composition. Plastics (36%) followed by wood (7.6%) and food (7.59%) were the next three largest components of the industrial waste stream. The following figure depicts the industrial waste composition for the reference year.

2018 Industrial Waste Composition by Percent and Tonnage



**Table IV-1
Reference Year Population and Residential/Commercial Generation**

County/Community Name	2018 Population		2018 Generation Rate (lbs/person/day)	2018 District Residential/Commercial Generation (Tons)
	Before Adjustment	After Adjustment		
Miami County	106,222	106,222	6.14	118,794
Village of Bradford (Darke County portion; Majority residing in Miami County)	753	106,975		
City of Huber Heights (Montgomery County portion; Minority residing in Miami County)	(1,010)	105,965		
City of Union (Montgomery County portion; Minority residing in Miami County)	(26)	105,939		
Total		105,939		

Source(s) of information:

Population - Ohio Development Services Agency Office of Research
"2018 Population Estimates by County, City, Village, and Township", May 2019.

Example calculations:

$$\text{Total Res/Com Generation} = \frac{\text{Population} \times \text{Generation Rate (lbs/person/day)} \times 365 \text{ (days/year)}}{2,000 \text{ (lb/ton)}}$$

$$118,794 \text{ tons} \quad \frac{105,939 \times 6.14 \times 365}{2,000}$$

**Table IV-2
Industrial Waste Generation Survey Respondents vs. Unreported**

Standard Industrial Classification (SIC) Code	Survey Respondents				Amounts Based Upon Secondary Data (Unreported)				Total Industrial Waste Generated
	# of Industries	# of Employees	Tons of Waste Generated	Generation Rate (T/employee)	# of Industries	# of Employees	Generation Rate (T/employee)	Tons of Waste Generated	
20	2	280	5,569	19.89	10	284	13.92	3,953	9,522
22	0	0	0	0.00	1	1	9.99	10	10
23	0	0	0	0.00	2	57	2.80	160	160
24	1	35	3,338	95.36	10	240	51.62	12,389	15,726
25	1	611	276	0.45	2	20	1.79	36	311
26	1	0	314	0.00	6	183	17.50	3,203	3,516
27	1	101	19	0.19	18	208	6.70	1,394	1,413
28	2	180	1,219	6.77	5	74	12.43	920	2,139
29	0	0	0	0.00	6	235	7.33	1,723	1,723
30	1	7	6	0.86	12	530	7.29	3,864	3,870
31	0	0	0	0.00	0	0	3.41	0	0
32	0	0	0	0.00	12	187	10.55	1,973	1,973
33	1	35	18	0.51	8	409	36.93	15,104	15,122
34	2	106	39	0.37	36	1,210	11.16	13,504	13,543
35	8	386	3,636	9.42	72	1,540	5.72	8,809	12,445
36	0	0	0	0.00	15	1,519	2.98	4,527	4,527
37	4	1,670	39,342	23.56	5	464	3.21	1,489	40,831
38	0	0	0	0.00	8	146	1.74	254	254
39	1	200	197	0.99	26	1,347	4.62	6,223	6,420
Industrial Totals from Brokers and Processors Surveyed	N/A	N/A	48,225	N/A	N/A	N/A	N/A	N/A	N/A
Total	25	3,611	102,197	28.30	254	8,654	N/A	79,533	181,730

Source(s) of information:

2018 District Industrial survey responses
 Total number of industries and employees as obtained from the Reference USA online database.
 Appendix JJ-2 from the Ohio EPA Plan Format 3.0 was used to calculate the unreported data for the Generation Rate (T/employee).

Example calculations (SIC 20):

Survey Respondents:

$$\text{Generation Rate} = \frac{\text{Waste Generated}}{\# \text{ of Employees}}$$

$$19.89 \text{ lbs/person/day} = \frac{5,569 \text{ tons}}{280 \text{ employees}}$$

Non-Respondents:

$$\text{Generation Rate} \times \text{Number of Employees (Unreported)} = \text{Tons of Waste Generation}$$

$$13.92 \times 284 = 3953.28 \text{ tons}$$

**Table IV-3
Exempt Waste Generated in the District
and Disposed in Publicly Available Landfills**

Type of Waste Stream	Generation Rate	Total Exempt Waste
	(lb/person/day)	Generation (TPY)
Construction/Demolition	0.01	112
Total	0.01	112

Source(s) of information: Table III-1

$$\text{Generation Rate (lbs/person/day)} = \frac{\text{Total Exempt Waste (tons/yr)} \times 2,000 \text{ (lb/ton)}}{\text{Population} \times 365 \text{ days/yr}}$$

Example calculation:

$$0.01 = \frac{112 \times 2,000}{105,939 \times 365}$$

**Table IV-4
Reference Year Total Waste Generation for the District**

Type of Waste	Generation Rate	Tons/Year
	(lb/person/day)	
Residential/Commercial	6.14	118,794
Industrial	9.40	181,730
Exempt	0.01	112
Total Waste Generation	15.55	300,635

Source(s) of information:

Residential/Commercial - Table IV-1

Exempt - Table IV-3

Industrial - Table IV-2

Example calculation (Industrial):

$$\text{Generation Rate (lbs/person/day)} = \frac{\text{Total Industrial Waste (tons/yr)} \times 2,000 \text{ (lb/ton)}}{\text{Population} \times 365 \text{ days/yr}}$$

$$9.4 = \frac{181,730 \times 2,000}{105,939 \times 365}$$

**Table IV-5
Reference Year Residential/Commercial Waste Reduction in the District**

Type of Waste Source	TPY	Type of Waste Recycled	TPY	Composting, Resource Recovery		
				Total Waste Received	Residual Landfilled	Net Waste Reduced
None	0	Cardboard	7,184	Incineration	Ash	Net Incineration
		Paper	3,805		1	0
		Scrap tires	1,555	Composting	Residuals	Net Compost
		Glass	393		10,393	10,393
		Wood	819	Resource Recovery	Ash	Net Resource
		Plastic	973			0
		Food	259			
		Other	123			
		Ferrous	11,751			
		Non-Ferrous	151			
		Textiles	1			
		Commingled	122			
		HHW	7			
		Used Oil	58			
		Electronics	4			
		Batteries	446			
Subtotal	0		27,649.80		10,394	0
Grand Total						10,393
						38,043

Source(s) of information:

2018 District Annual Report and Residential/Commercial Surveys

Net Incineration - Table III-2

**Table IV-6
Reference Year Industrial Waste Reduction in the District**

Source Reduction	TPY	Type of Waste Recycled	TPY	Incineration, Composting, Resource Recovery		
				Total Waste Received	Residual Landfilled	Net Waste Processed
None	0	Ferrous	39,628	Incineration	Ash	Net Incineration
		Plastics	37,424	961	288	673
		Wood	7,882	Resource	Ash	Net Resource
		Food	7,870			0
		OCC	4,155	Composting	Residuals	Net Composted
		Oil	0			0
		Non-Ferrous	1,064			
		Other	3,608			
		Textiles	402			
		Mixed Paper	75			
		Comingled	81			
		Rubber	9			
		Lead-Acid Batteries	0			
		Electronics	0			
		Glass	1			
Subtotal	0		102,197	961	288	673
Grand Total						102,870

Source(s) of information:

2018 District Annual Report and Industrial Surveys

Net Incineration - Table III-2 & 2018 District Annual Report and Industrial Surveys

**Table IV-7
Total Waste Generation Based Upon Disposal Plus Waste Reduction**

Year	Management Method Used (TPY)								Total Waste Generation
	Source Reduction & Recycling			Yard Waste Composting	Landfill Disposal				
	Res/Com	Industrial	Total		Res/Com	Industrial	Exempt	Total	
2014	23,136	112,117	135,253	3,926	68,639	14,517	24	83,180	222,359
2015	31,590	118,024	149,614	5,318	71,796	15,856	32	87,684	242,616
2016	29,726	104,531	134,257	8,842	74,662	20,582	58	95,302	238,401
2017	30,462	107,035	137,497	5,993	76,418	19,970	85	96,473	239,963
2018	27,651	102,870	130,521	10,393	79,831	20,291	112	100,234	241,147

Source(s) of information:

District Annual Reports and Ohio EPA Facility Data Reports.

Sample calculation (2018):

Total waste generation = Total source reduction & recycling + yard waste composting + total landfill disposal

241,147 tons = 130,521 tons + 10,393 tons + 100,234 tons

**Table IV-8
Adjusted Reference Year Total Waste Generation for the District**

Type of Waste	Generation Rate (lbs/person/day)	Tons/Year
Residential/ Commercial	6.10	117,874
Industrial	6.37	123,161
Exempt	0.01	112
Total Waste Generation	12.47	241,147

Source(s) of information:

Exempt -Table IV-3

Residential/Commercial and Industrial - Tables III-1, IV-5 and Table IV-6

Example Calculation:

$$\text{Generation Rate (lbs/person/day)} = \frac{\text{Total Waste (tons/yr)} \times 2,000 \text{ (lb/ton)}}{\text{Population} \times 365 \text{ days/yr}}$$

$$12.47 = \frac{241,147 \times 2,000}{105,939 \times 365}$$

Table IV-9
Estimated Residential/Commercial Waste Stream
Composition for the District for the Reference Year

Waste Stream Type	Percentage of the Waste Stream	Tons
Paper	25.9%	30,529
Food	15.1%	17,799
Yard Trimmings	13.3%	15,677
Plastics	13.1%	15,442
Rubber, Leather, & Textiles	9.3%	10,962
Metals	9.1%	10,727
Wood	6.2%	7,308
Glass	4.4%	5,187
Other	3.6%	4,244
Totals	100.0%	117,874

Source(s) of information:

Total tons - Table IV-8

US EPA Advancing Sustainable Materials Management: 2015 Fact Sheet, July 2018.

Table IV-10
Estimated Industrial Waste Composition for the Reference Year in the District

Waste Stream Type	TPY	Waste Stream Type	TPY	Waste Stream Type	TPY
Ferrous	47,756	Oil	0	Comingled	98
Plastics	45,100	Non-Ferrous	1,282	Rubber	11
Wood	9,498	Other	4,348	Lead-Acid Batteries	0
Food	9,485	Textiles	484	Electronics	0
OCC	5,007	Mixed Paper	90	Glass	1
Subtotal	116,847	Subtotal	6,205	Subtotal	109.75
Grand Total					123,161

Source(s) of information:

Tons generated - Appendix F

Each industrial waste component was projected using the adjustment factor to account for non-respondent industries.

Example Calculation:

$$\text{Adjustment Factor} = \frac{\text{Total Industrial Waste Generated (Table IV-8)}}{\text{Total Industrial Waste Generated (Table IV-2 - Survey)}}$$

$$\text{Adjustment Factor} = 1.2051 = 123,161 \text{ tons} \div 102,197 \text{ tons}$$

$$\begin{aligned} &\text{Type of Industrial} \\ &\text{Waste Generated} \\ &\text{(tons)} = \text{Type of Industrial Waste Generated (Appendix F)} \times \text{Adjustment Factor} \end{aligned}$$

$$47,756 \text{ (tons of cardboard)} = 39,627.54 \text{ (tons of Ferrous from Appendix F)} \times 1.2051$$

V. Planning Period Projections and Strategies

[ORC Section 3734.53(A)(5)-(6)]

This Section of the *Plan Update* includes population projections for the District. Projections and estimates are also provided for solid waste generation and recycling for the planning period. Existing District programs and activities that will continue are presented. Most of the detailed descriptions for existing programs refer the reader back to Section IV for details. The details for new programs and activities are described in this section of the *Plan Update*.

A. Planning Period

Solid waste management plans must provide projections for population, waste generation, and waste reduction for a planning period covering a minimum of ten years. Plans must also provide strategies to manage the District's current and foreseen waste management needs of the residents, businesses, and institutions. This *Plan Update* is based on a fifteen-year planning period. The planning period for this *Plan Update* is January 1, 2022 to December 31, 2036. The projections and tables in this *Plan Update* include the years 2019 through 2036.

B. Population Projections

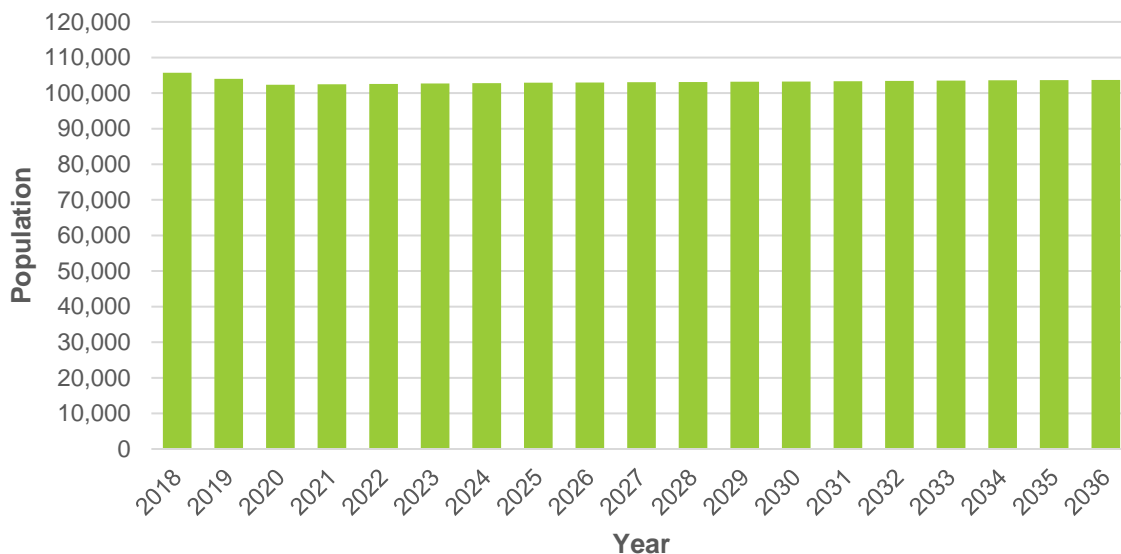
The District's population projections from the reference year (2018) through the end of the planning period are presented in Table V-1. The Ohio Development Services Agency's (ODSA) 2018 population estimates by county, city, village, and township were used to calculate a base population for the District. Using a second ODSA publication which presents population projections by county in 10-year intervals from 2010 to 2040, District population projections were interpolated for intermediate years using a straight-line average.

Ohio Law requires that the population of a political subdivision that lies within two or more solid waste management districts shall be credited to the district within which the majority of the population resides. The District's reference year population was adjusted from the base population by subtracting the City of Huber Heights and City of Union, populations living in Miami County because the majority of those communities' populations reside in Montgomery County. The portion of the population of the Village of Bradford that resides in Darke County was added to the District's population because the majority of its population is in Miami County. The District's total adjusted reference year population was 105,692.

Population is anticipated to decrease annually throughout the planning period. Population is expected to decrease by 1,102 residents or 1.1% from 2018 to 2036. The District is projected to begin the planning period in 2022 with a population of 102,572 and end in 2036 with a total population of 103,674. The

following figure presents the estimated District population from the reference year to the end of the planning period. The population drops in 2020 based on projections from the Population projections 2000-2040 - Ohio Development Services Agency, Ohio County Profiles.

District Population Estimate (2018 – 2036)



C. Waste Generation Projections

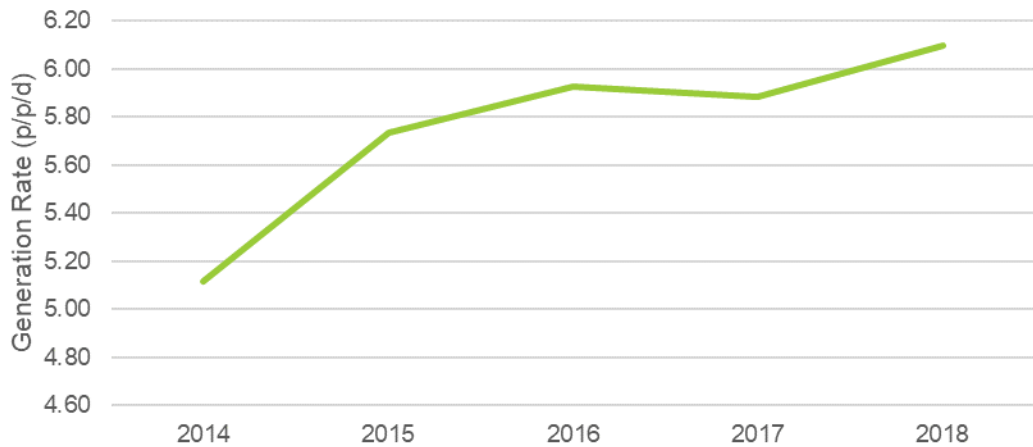
1. Residential/Commercial Sector

The District’s residential/commercial waste generation projections are presented in Table V-2, “District Residential/Commercial Waste Generation (TPY).” Waste generation is presented for the 2018 reference year and each subsequent year through 2036. In 2018, the District calculated the per capita generation rate based on Ohio EPA’s Facility Data Reports for disposal and from the District’s 2018 Annual District Report for recycling (with adjustments). The following data was used for this calculation:

2018 Disposal tonnage:	79,831 tons
2018 Recycling tonnage:	38,043 tons
2018 Total generation:	117,874 tons
2018 Residential/commercial per capita generation rate per day:	6.10 pounds

Historic generation rates among the residential/commercial sector have increased from 2014 to 2018. In 2014, the residential/commercial sector generated 95,701 tons, and in 2018, the residential/commercial sector generated 117,874 tons. This is a 23% increase from 2014.

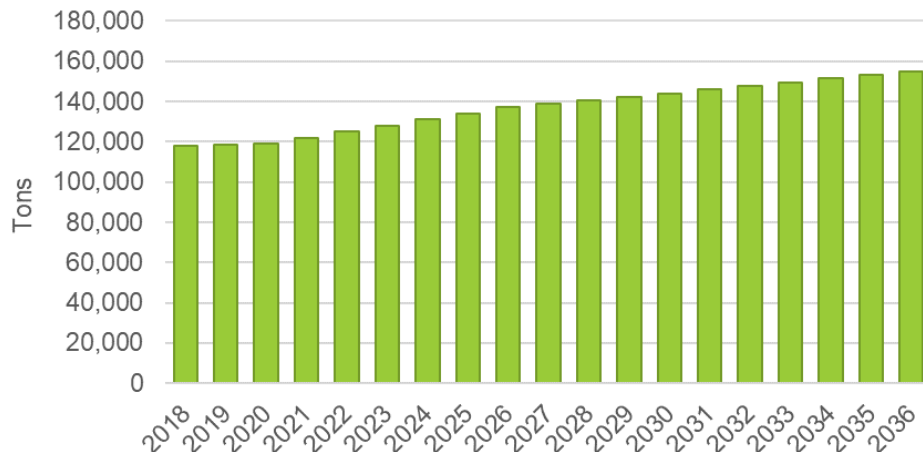
2014-2018 District Residential/Commercial Per Capita Daily Generation Rates



Per capita generation rates have increased, on average, by 1.02% annually from 2014-2018.

Table V-2 presents the residential and commercial sector waste generation projections for the reference year through the end of the planning period. This table includes the actual generation amounts for 2018. In order to be conservative, the District has applied an annual increase of 2.29% per year (half of the average historical rate of change) to the 2018 generation rate to calculate the generation rate for years 2018 through 2026, and an annual increase of 1.15% per year (a quarter of the historical rate of change) to calculate the generation rate for years 2027 through 2036. The District believes that the actual average annual change in the generation rate of 4.59% discussed above would result in an unrealistic large increase in R/C generation.

District Residential/Commercial Waste Generation (2018 – 2036)



2. Industrial Sector

The District's industrial waste generation projections are presented in Table V-3. Industrial waste generation is presented by Standard Industrial Classification (SIC) code for the 2018 reference year through 2036.

The industrial waste generated by each SIC code in 2018 is based on the ratio of waste reported by industries in industrial SIC codes in Table IV-2. The totals have been adjusted to correspond to the total industrial waste generation in Table IV-8, which is based on volumes recorded by landfills and transfer stations, plus recycling and composting.

Industrial waste generation projections are based on historical data trends. The following table presents the District's historic generation totals for the industrial sector.

2013-2018 Historic District Industrial Generation in Tons

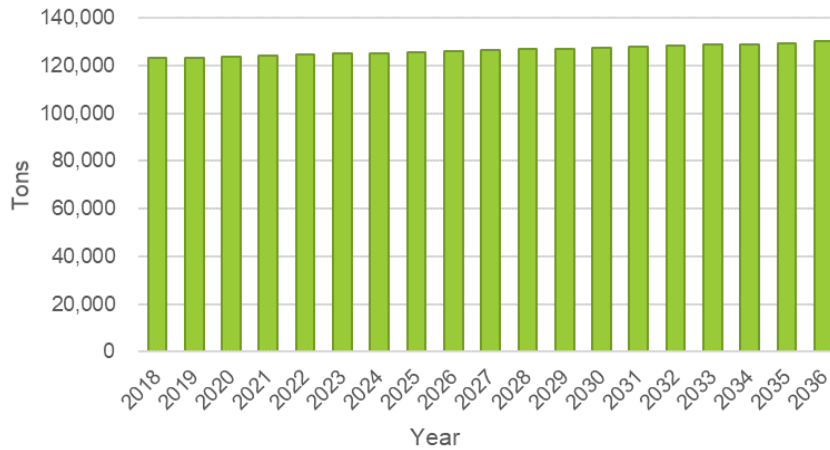
Year	Recycling	Disposal	Total Generation
2013	114,393	16,122	130,515
2014	112,117	14,517	126,634
2015	118,024	15,856	133,880
2016	104,531	20,582	125,113
2017	107,035	19,970	127,005
2018	102,870	20,291	123,161
Average	109,828	17,890	127,718

Generation, recycling, and disposal tonnages in 2019 through 2036 are projected to be average generation, recycling, and disposal from 2015, 2017, 2018 (2016 was excluded as an outlier).

Year	Annual rate of change		
	Recycling	Disposal	Total Generation
2013	-	-	-
2014	-2.0%	-10.0%	-3.0%
2015	5.3%	9.2%	5.7%
2016	-11.4%	29.8%	-6.5%
2017	2.4%	-3.0%	1.5%
2018	-3.9%	1.6%	-3.0%
Average 2014-2018	-1.9%	5.5%	-1.1%
Average 2014, 2015, 2017, & 2018	0.4%	-0.5%	0.3%

The District projects industrial waste to increase from 123,161 tons in 2018 to 130,085 tons in 2036. The following figure presents the estimated industrial waste generation throughout the planning period.

District Industrial Generation (2018 – 2036)

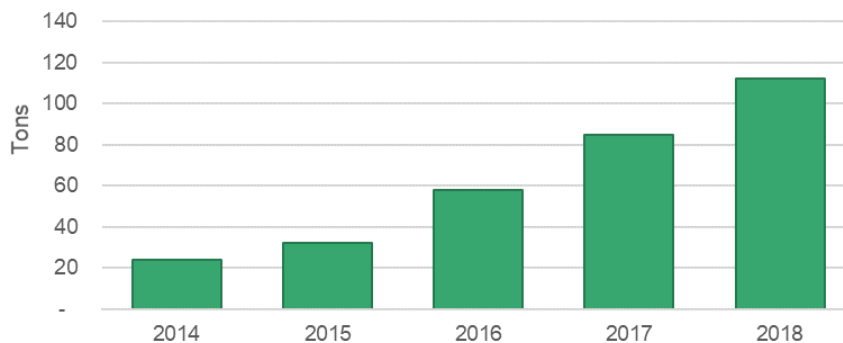


3. Total Waste Generation

Total waste generation projections for the District during the planning period are presented in Table V-4. In 2018, the District generated a total of 241,147 tons. This includes residential/commercial waste at 117,874 tons, industrial waste at 123,161 tons, and exempt waste at 112 tons.

Exempt waste does not have a direct correlation to population or market/economic factors. Exempt waste is a term used to describe construction and demolition debris, nontoxic fly ash and bottom ash, spent nontoxic foundry sand, slag, and other materials excluded from the definition of solid waste in the Ohio Revised Code (ORC) § 3734.01(E). The figure below presents the District’s exempt waste generation totals from 2014 to 2018.

2014-2018 District Exempt Waste Generation

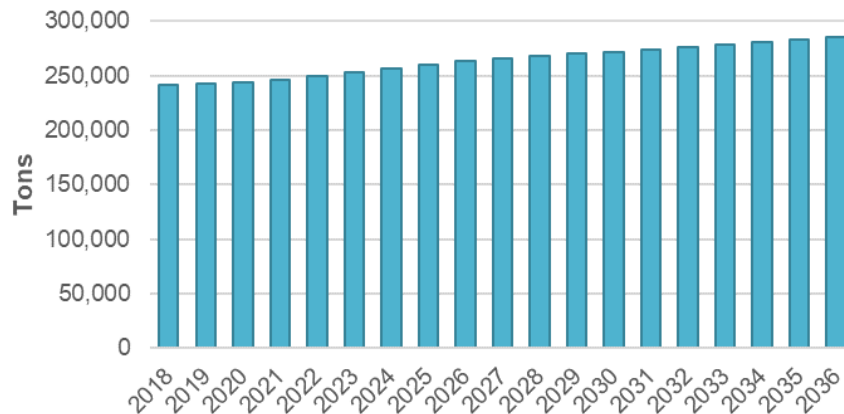


Exempt waste generation patterns increased from 2014 to 2018. Exempt waste in 2019 was projected using the average rate of change in historical years. Generation projections were made by keeping constant the tons for 2018 throughout the planning period.

The overall generation rate which includes residential/commercial, industrial, and exempt waste generation in pounds per person per day (PPD) for the reference year is 12.50. The projected per capita generation rate will increase slightly to 15.07 PPD in the final year of the planning period. Total waste generation is projected to increase from 249,657 tons in the first year of the planning period (2022) to 285,182 tons in the last year of the planning period (2036), which is an increase of 35,526 tons or 14.2%.

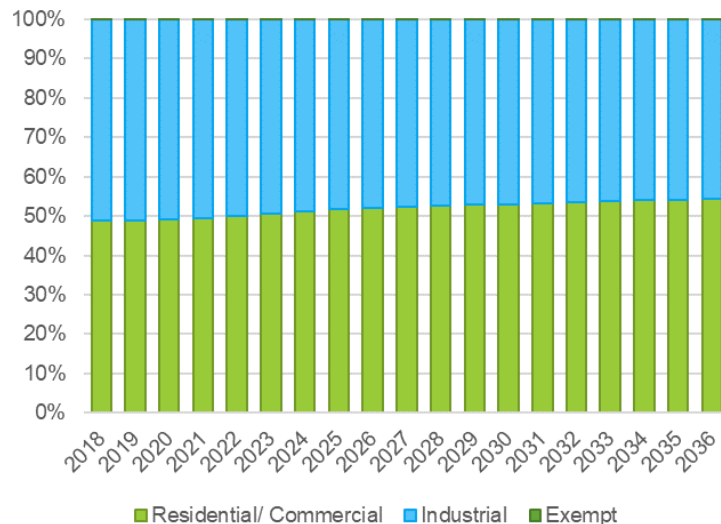
The following figure presents the District’s total waste generation projections throughout the planning period.

**Total District Waste Generation Projections
(2018 – 2036)**



The following figure presents waste generation by sector as a percentage of the District’s total waste generation.

**District Total Waste Generation Distribution
(2018 – 2036)**



D. Projections for Waste Stream Composition

The District does not anticipate any major changes in the composition of the waste stream during the planning period. However, a change in economic conditions or the closure of a plant could greatly impact the industrial as well as residential/commercial projections.

Responses to the District's annual survey should alert the District to any major changes in generation or waste stream composition. Any significant changes will be noted in the Annual Report.

E. Waste Reduction and Recycling Strategies through the Planning Period

The District must continue to develop recycling and waste reduction strategies to meet the goals established in the *1995 State Plan*. The goals include:

Goal #1 Access to Alternate Waste Management Opportunities

- The District shall provide access to recycling and waste minimization opportunities for municipal solid waste to its residents and businesses. At a minimum, the District must provide access to recycling opportunities to 90% of its residential population.

Goal #2 Waste Reduction and Recycling Rates

- The District shall reduce and/or recycle at least 25% of the solid waste generated in the residential/commercial sector and at least 50% of the solid waste generated in the industrial sector.

Goal #3 Source Reduction

- Provide informational and technical assistance on source reduction.

Goal #4 Technical and Informational Assistance

- Provide informational and technical assistance on recycling, reuse and composting opportunities.

Goal #5 Restricted Wastes and Household Hazardous Waste

- Develop strategies for managing scrap tires, lead acid batteries and household hazardous waste (HHW).

Goal #6 Annual Reporting of Plan Implementation

- Districts are required to submit an annual report to Ohio EPA.

Goal #7 Market Development Strategy (Optional)

- The following table summarizes all of the District strategies for meeting the 1995 State Plan Goals:

District Strategies for Meeting 1995 State Plan Goals

Program	Program #	1995 State Plan Goals						
		#1	#2	#3	#4	#5	#6	#7
Curbside Recycling	MC-01	✓	✓					
Drop-Off Recycling	MC-02	✓	✓					
Yard Waste Management	MC-03		✓					
Household Hazardous Waste Management	MC-04		✓			✓		
Scrap Tire Recycling	MC-05		✓			✓		
Automobile Batteries and Used Oil Collection	MC-06		✓			✓		
Special Event Recycling	MC-07	✓	✓					
Electronics Recycling	MC-08		✓					
Appliance Recycling	MC-09		✓					
Recycling Market Development Grant	MC-10		✓					✓
“Buy Recycled” Promotion	MC-11		✓					✓
Internal Grant	MC-12		✓					
Community Recycling Grant	MC-13		✓					
Litter Collection Grant	MC-14							
School Waste Reduction Grant	MC-15		✓					
Education and Awareness	MC-16			✓	✓			
Miami County Transfer Facility Pay-Per-Bag	MC-17		✓					
Volume-Based Technical Assistance	MC-18	✓	✓	✓	✓			
Miami County Debris Management Guide	MC-19							
Miami County Transfer Station	MC-20	✓	✓					
Annual Program Performance Assessment	MC-21							
Organic Waste Management	MC-22	✓	✓					
Number of Strategies Per Goal		6	18	2	2	3	0	2

Residential/Commercial Waste Reduction/Recycling and Education Strategies

The District’s residential/commercial waste reduction strategies are presented in Table V-5. Residential curbside, drop-off recycling, and special event recycling programs are projected to change on an escalating basis using the population rate of change from 2021 through 2036. The yard waste management programs are also projected to change each year from 2021 through 2036 based on a fourth of the average historical rate of change from 2014 – 2018. In 2022, yard waste is projected at 10,857 tons and at 14,797 tons in 2036. All other programs are projected to remain constant. The District projects a slight increase in

residential/commercial recycling from 41,579 tons in 2022 to 45,444 tons by 2036.

RESIDENTIAL/COMMERCIAL RECYCLING AND COLLECTION PROGRAMS

The District's primary strategy for this *Plan Update* is to continue with the successful core programs detailed in Section IV with a few exceptions and modifications. The District is committed to implementing these programs and to continue their success throughout the planning period.

The following section details the specific initiatives by program that will be implemented during the planning period. In addition, the District evaluated each of the programs in Section IV for their strengths and challenges. The results of this analysis assisted the District with the improvements of the programs contained in this section.

Unless a program is new or a change is being initiated, this section does not provide the details of how each program operates, as that information is contained in Section IV.

1. MC-1 – Curbside Recycling Program (State Plan Goals #1 and #2)

This program will continue (see description in Section IV).

The District will continue to work with communities in the County to promote and support curbside recycling. The District's main objective with this program is:

- Increase the availability of curbside recycling in the County
- Improve participation
- Decrease contamination

The District's overall goal for the planning period is to maintain the existing curbside programs and add new programs, if possible. The challenges of this program presented in Section IV include:

- Participation is low (in subscription communities)
- Limited vendor processors
- Contamination

The District acknowledges these challenges and reserves the right to

evaluate this program at any point in the planning period based on available funds and District resource availability. The following initiative has been created to assist any community in the District that wishes to evaluate and or start-up a curbside recycling program at any point in the planning period:

Initiative MC-1.1: Curbside Technical Assistance

The District will provide technical assistance to any community that desires to either evaluate, start-up or improve a residential curbside recycling program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options for curbside recycling
- Sponsor community for Ohio EPA recycling grants as an incentive for communities to improve their recycling programs
- Provide technical assistance and guidance as needed

Implementation Schedule: 2022-2036

Initiative MC-1.2: Participation Promotion

The District will provide technical assistance to any community that desires to increase participation in their program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options to increase participation for both residential homes and small commercial accounts
- Conduct targeted advertising and or social media posts
- The District may conduct a participation study with interested communities. This would be in partnership with the community's recycling program hauler or other resource to collect participation information. This will allow the District and community to identify areas which may need focused outreach and education.
- Direct engagement initiatives such as tagging projects to communicate with residents on proper way to recycle in addition to understanding their local recycling program

Implementation Schedule: 2022-2036

Initiative MC-1.3: Contamination Reduction

The District will provide technical assistance to any community that desires to decrease contamination in their program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options to decrease contamination
- Conduct targeted advertising and or social media posts
- Direct engagement initiatives such as tagging projects to communicate with residents on proper way to recycle

Implementation Schedule: 2022-2036

2. MC-2 – Drop-off Recycling Program (State Plan Goals #1 and #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Contamination
- Increasing participation rates in areas that do not have drop-off recycling services (i.e., encouraging residents to use a nearby drop-off)
- Abuse of drop-off sites
- Glass processing costs

To address these challenges, the following initiatives have been developed.

Initiative MC-2.1: Drop-Off Technical Assistance

The District will provide technical assistance to any community that desires to either evaluate, start-up or improve a residential curbside recycling program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options for drop-off recycling

- Sponsor community for Ohio EPA recycling grants
- Provide technical assistance and guidance as needed

Implementation Schedule: 2022-2036

Initiative MC-2.1: Participation Promotion

The District will provide technical assistance to any community that desires to increase participation in their program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options to increase participation for both residential homes and small commercial accounts
- Conduct targeted advertising and or social media posts

Implementation Schedule: 2022-2036

Initiative MC-2.2: Contamination Reduction

The District will provide technical assistance to any community that desires to decrease contamination in their program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options to decrease contamination
- Conduct targeted advertising and or social media posts

Implementation Schedule: 2022-2036

3. MC-3 – Yard Waste Management Program (State Plan Goal #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Participation

To address these challenges, the following initiatives have been developed.

Initiative MC-3.1: Participation Promotion

The District will provide technical assistance to any community that desires to increase participation in their program. The following may be provided, if requested, by the District.

- Meet with community leaders to discuss options to increase participation
- Conduct targeted advertising and or social media posts such as links to yards waste information posted on community websites or social media.

Implementation Schedule: 2022-2036

4. MC-4 – Household Hazardous Waste (HHW) Collection Program

(State Plan Goals #2 and #5)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Participation
- Cost of program

To address these challenges, the following initiative has been developed.

Initiative MC-4.1: Promoting Reduction of Household Hazardous Waste Generation

The District's long-term goal is to reduce the amount of HHW materials collected from its program by informing residents of alternative methods of disposal via education and outreach opportunities. Materials that are truly household hazardous waste and not household hazardous products that are still usable include the following materials:

- Used oil;
- Used antifreeze;
- Spent household and automotive batteries;
- Empty propane cylinders;
- Empty aerosol containers; and
- Other non-usable household hazardous products that, through their normal use according to the manufacturer, have become contaminated, depleted or otherwise unusable.

Materials that contain hazardous constituents, but if entirely used as intended by their manufacturer, do not end up as waste products include the following materials:

- Paint products, sealers and coatings;
- Certain automotive car care products;
- Household cleaners;
- Pesticides, herbicides and insecticides;
- Fertilizers; and
- Pool chemicals.

To accomplish this long-term goal, the District will enhance its education and awareness program to include the following:

- Teach students and adults the value of products that contain hazardous constituents, to buy what is needed and use the entire product for its intended purpose.
- Promote the use of alternative non-hazardous products such as latex paint, plant-based cleaners or other non-hazardous alternatives;
- Add HHW management techniques to education presentations (as appropriate for different age groups).

The District believes that the long term cost to manage HHW has the potential to be reduced as the efforts above are implemented and become effective. The District cannot project the savings that may occur in the future at the time of this *Plan Update* development.

Implementation: 2022-2023

Initiative MC-4.2: Participation Promotion

The District will provide conduct promotional activities and initiatives to increase participation in the HHW program while educating residents on the use of alternative products and to reduce generation of HHW materials. The following may be conducted by the District.

- Develop online calculators to plan for paint purchases to reduce waste
- Develop education materials for proper HHW management and purchasing/use techniques
- Conduct targeted advertising and or social media posts

- Add HHW management to existing education and outreach presentations as needed

Implementation: 2022-2036

5. MC-5 – Scrap Tire Recycling
(State Plan Goals #2 and #5)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Participation
- Cost of program

To address these challenges, the following initiative has been developed.

Initiative MC-5.1: Cost Containment

The District will continue to seek competitive bids for scrap tire services throughout the planning period to realize the best price possible under market conditions.

Implementation: 2022-2036

The District's long-term goal is to have residents recycle their tires at the time of new tire purchase. Much of the messaging and education that will be conducted by the District will focus on this goal. As this goal is being achieved, the cost of scrap tire recycling and disposal to the District will decrease. This initiative is covered below.

Initiative MC-5.2: Participation Promotion

The District will conduct promotional activities and initiatives to increase participation in the scrap tire program to reduce generation of scrap tires at District events. The following may be conducted by the District.

- Develop education materials for proper scrap tire purchasing
- Conduct targeted advertising and or social media posts
- Add scrap tire management to existing education and outreach presentations as needed

Implementation: 2022-2024

Initiative MC-5.3: Participation Promotion

The District will conduct promotional activities to educate residents on the use of existing tire dealer options to reduce generation of scrap tires at District events. The following may be conducted by the District.

- Develop a list of existing tire dealer options
- Conduct targeted advertising and or social media posts

Implementation: 2022-2024

Initiative MC-5.4: *Development and Distribution of Educational Poster*

The District will develop an educational poster that will include messaging on the drawbacks of illegal tire disposal as well as the positives of turning in old tires when purchasing new tires. The poster may compare the average tire disposal fee charged by local tire retailers versus the costs of illegal tire disposal which includes court costs, fines, community service, jail sentences, and a criminal record.

The District will work with local tire retailers and businesses that accept scrap tires to educate them about the local problems related to tire dumping as well as tire storage on properties.

The District will encourage these businesses to display the poster in a highly visible area in their establishment. The goal is to capture more scrap tires at the point of sale when a scrap tire is being replaced, which should reduce the quantity of scrap tires dumped throughout the District, as well as at the Miami County Transfer Station.

Implementation: 2022-2023

The District will provide conduct promotional activities and initiatives to increase

6. MC-6 – Automobile Batteries and Used Oil Collection
(State Plan Goals #2 and #5)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Participation

To address these challenges, the following initiative has been developed.

Initiative MC-6.1: Participation Promotion

The District will provide conduct promotional activities and initiatives to increase participation in the automobile batteries and used oil program. The following may be conducted by the District.

- Conduct targeted advertising and or social media posts
- Add automobile batteries and used oil to existing education and outreach presentations as needed
- Work with local automobile battery retailers to develop education and outreach opportunities for their customers so used batteries are returned as a core for proper recycling
- Work with local car parts stores and other retailers to develop education and outreach opportunities for their customers so used oil is returned to their locations if allowed or to other recyclers for proper recycling

7. MC-7 – Special Event Recycling (State Plan Goals #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Program is underutilized

To address these challenges, the following initiative has been developed.

Initiative MC-7.1: Special Event Recycling Promotion

The District will create/update a contact database for community events and send out a notification about the program. The database will contain contact information (name, email, mailing address).

The District will develop a community event recycling planning guidance manual to assist event planners with recycling and waste reduction techniques. Once developed, the manual will be advertised on the website for anyone to contact and request.

Implementation Schedule: 2022-2036

8. MC-8 – Electronics Recycling (State Plan Goals #2)

This program will continue (see description in Section IV). The challenge of this program presented in Section IV include:

- Local and regional electronics recyclers charge for acceptable materials
- Cost of program

The District acknowledges these challenges and reserves the right to evaluate this program at any point in the planning period based on available funds and District resource availability.

However, the District's program offers local residents and business with a local option for the proper management of electronics. The District continually strives to operate the program as cost effectively as possible.

9. MC-9 – Appliance Recycling
(State Plan Goal #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Prices

The District acknowledges these challenges and reserves the right to evaluate this program at any point in the planning period based on available funds and District resource availability.

However, the District's program offers local residents and business with a local option for the proper management of appliances. The District continually strives to operate the program as cost effectively as possible.

10. MC-10 – Recycling Market Development Grant
(State Plan Goal #2 and #7)

This program will continue (see description in Section IV). The challenge of this program presented in Section IV include:

- The program is dependent on State funding which may or may not be available in the future

The District acknowledges these challenges and will support the program by promoting recycled content products and providing technical assistance to residents and businesses seeking products with recycled content

materials.

The District will continue to promote this grant opportunity and work with any entity that proposes a viable project for this grant.

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

11. **MC-11 – “Buy Recycled” Promotion**
(State Plan Goals #2 and #7)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Price market limits feasibility for many businesses

The District acknowledges these challenges and will support the program by promoting recycled content products and providing technical assistance to residents and businesses seeking products with recycled content materials.

12. **MC-12 – Internal Grant**
(State Plan Goals #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Litter was collected as a single stream and recyclable materials that were collected with litter were disposed as waste. Materials were too contaminated to sort after they were collected.

To address these challenges, the following initiative has been developed.

Initiative MC-12.1: Court System/Community Workers Technical Assistance

The District will provide technical assistance to the court system staff and to the community service workers that educates them on what is recyclable and what is not from their litter clean-up tasks. The District will first spend time with litter crews to observe the collection process and how the workers are source separating recyclables from trash. Based on this observation, the District will create an easy to understand user friendly

guidance document that would be disseminated to all workers prior to the collection process. In addition, The District will conduct routine training sessions with the court system staff on how to communicate the source separation process to the community service workers to reduce contamination.

Implementation Schedule: 2022-2025

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

13. MC-13 – Community Development Grant
(State Plan Goals #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Funding is limited and must be matched
- Program is underutilized

To address these challenges, the following initiative has been developed.

Initiative MC-13.1: Community Recycling Grant Promotion

The District will create/update a contact database for service groups within the District and send out a notification about the grant and how a group can apply.

The District will continue to promote this grant opportunity and work with any governmental entity that proposes a viable project for this grant.

Implementation Schedule: 2022-2036

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

14. MC-14 – Litter Collection Grant

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Program is underutilized

To address these challenges, the following initiative has been developed.

Initiative MC-14.1: Litter Collection Grant Promotion

The District will create/update a contact database for service groups and send out a notification about the grant and how a group can apply.

The District will continue to promote this grant opportunity and work with any governmental entity that proposes a viable project for this grant.

Implementation Schedule: 2022-2036

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

15. MC-15 – School Waste Reduction Grant
(State Plan Goals #2)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Program is underutilized

To address these challenges, the following initiative has been developed.

Initiative MC-15.1: School Waste Reduction Grant Promotion

The District will create/update a contact database for school principals and send out a notification about the grant and how a school can apply.

In 2020, the grant will increase for applicants to apply for up to \$10,000.

Implementation Schedule: 2022-2023

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details

of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

RESIDENTIAL/COMMERCIAL/INDUSTRIAL SECTOR EDUCATION AND AWARENESS PROGRAMS

16. MC-16 – Education and Awareness Program (State Plan Goals #3 and #4)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Behavior change strategies lacking
- Measurement of education and outreach outcomes
- Direct engagement with curbside recycling programs lacking

To address these challenges, the following initiative has been developed.

Initiative MC-16.1: Targeted Curbside Education

The District will work towards implementing technical assistance to targeted communities for curbside recycling program education. The goal is to reduce contamination levels for single stream recycling communities that deliver recyclables for processing at District facilities or District processing partners. The goal will also be to increase participation in curbside recycling. The District will conduct the following to achieve this goal:

- Evaluate and develop a resident engagement initiative that will be designed to decrease contamination in curbside recyclables collected in single stream recycling communities that are processed by District facilities and increase participation. The District will begin the evaluation phase by first conducting a waste characterization of single stream recyclables delivered to District facilities or District partner's facilities to better understand the types of materials in the stream that are not processable or recyclable.

The District will then develop an engagement process to target reduction in the key materials delivered to District facilities that are not acceptable. The resident engagement process may include the following options:

1. Spot checking program participation by inspecting curbside recycling set-out materials.
2. Providing residents with information on how to improve their participation in the program.
3. Engaging residents directly to provide education and awareness on the acceptable materials for their curbside single stream recycling program.
4. Engaging contracted haulers in the single stream recycling communities that deliver collected materials to District facilities for processing.
5. Work with the targeted communities to ensure proper guidelines are available for residents via their web site or printed materials.
6. Working with communities on ongoing permanent direct engagement initiatives that are built into the communities contractual agreements with their hauler to provide the engagement.
7. Other options as identified in the evaluation.

Implementation Schedule: 2022-2036

Initiative MC-16.2: Signage and Newspaper

The District plans to add additional signage to all recycling drop-off locations as well as create ads to place in local newspapers on recycling updates, changes, and reminders. The content of these signs and ads may include reminders on what materials are and are not accepted, locations to take special materials, contact information, special event information, and more.

In an effort to combat contamination, the District generated a flyer to be mailed to Piqua residents. It is mailed with their utility bills. Approximately 11,000 address were reached in 2018 and are expecting to reach 13,100 in 2019. In 2019 changes and corrections were included to make it “fit” with materials accepted today. In 2019, the flyer has been made available to all residents. Future mailings will include a direct mail to Piqua residents as well as Covington village residents.

Implementation Schedule: 2022-2036

COMMERCIAL, INSTITUTIONAL AND INDUSTRIAL SECTOR PROGRAMS

Industrial Waste Reduction/Recycling and Education Strategies

The District's industrial waste reduction strategies are presented in Table V-6, "Industrial Waste Reduction Strategies". Industrial programs waste reduction are projected to increase at the average rate of change in years 2014-2018. The District projects an increase in industrial recycling from 38,569 tons in 2022 to 39,839 tons by 2036.

In 2020, the District created a tour of the Transfer Station and Recycling Center using a drone to bring an aerial perspective of the property. This video was post on the District's digital media.

17. MC-17 – Miami County Transfer Facility Pay-Per-Bag (State Plan Goals #2)

This program will continue (see Section IV for program details). No meaningful challenges were addressed in Section IV; therefore, the District will maintain the program as is and will monitor any significant changes that would require District intervention.

OTHER PROGRAMS/INITIATIVES

18. MC-18 – Volume-based Technical Assistance (State Plan Goals #1, #2, #3, #4)

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Program is underutilized

To address these challenges, the following initiative has been developed.

In addition, the District will develop a grant information packet for all District and EPA grants. The packet will be designed to include the details of each grant program and how to apply. The packet will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant information packet within the first three years of the new planning period.

If a grant is awarded, it can help the community start or promote their volume-based program.

19. MC-19 – Miami County Debris Management Guide

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- Employee knowledge of guide

To address these challenges, the following initiative has been developed.

Initiative MC-19.1: Annual Debris Management Guide Review

The District will offer an annual review training. This could be in the form of a conference call or webinar. This can be advertised to the community service centers in the District.

Implementation Schedule: 2022-2036

20. MC-20 – Miami County Transfer Station

(State Plan Goals #1 and #2)

This program will continue (see Section IV for program details). No meaningful challenges were addressed in Section IV; therefore, the District will maintain the program as is and will monitor any significant changes that would require District intervention.

21. MC-21 – Annual Program Performance Assessment

This program will continue (see description in Section IV). The challenges of this program presented in Section IV include:

- It is difficult to measure certain programs such as data collection and event recycling

To address these challenges, the following initiative has been developed.

Initiative MC-21.1: Performance Metrics Evaluation

The District will evaluate current performance metrics and will decide if new data measurement opportunities are efficient and worth the time investment. Data measurement may include but not limited to: tons, transactions, events, and/or meetings with stakeholders.

Implementation Schedule: 2022-2036

Initiative MC-21.2: Annual Recycling Audit

The District will audit recycling loads which come to the transfer facility. The loads will be noted by the location where the trucks collected (community and curbside, drop-off or commercial program). The goal is to perform audits two times per year on at least 2 samples (200 pounds to 500 pounds). Large materials of contamination will be pulled out of loads to evaluate current performance metrics. The transfer station has the ability to weigh a load before and after removing contamination. The District will decide if new data measurement opportunities are efficient and worth the time investment. The District plans to start these audits between 2022-2023.

Implementation Schedule: 2022-2036

22. MC-22 – Organic Waste Management

This is a new program which assesses the infrastructure for food waste management and then offers technical assistance for the management of food waste and other organics in Miami County.

Initiative MC-22.1: Organic Waste Regional Assessment

An assessment will be done by the District to identify the food waste/organics management infrastructure in the District and/or the region. This will involve the identification of Class 2 compost facilities that commercially accept food waste and solid waste or specialty haulers that collect and transport food waste and other organics. Part of the process will be to assess the willingness and or capability of the identified compost facilities and haulers to provide organics waste management services to District generators.

Based on this assessment, the District will determine if Initiative MC-22.2 will be implemented during the planning period.

Implementation Schedule: 2022-2023

Initiative MC-22.2: Business Food Waste Technical Assistance

The District may provide technical assistance to any business or institution in the District that desires to start a food waste reduction program in their facility or premises. The following may be provided, if requested, by the District.

- Meet with the businesses or generators to understand their food waste generation and frequency along with other factors as identified

- Presentation of identified compost facilities and haulers from Initiative MC-22.1.
- Discussion on options for food waste diversion
- Assist with program development, procurement of services, education and other factors as needed

Implementation Schedule: 2023-2036

**Table V-1
District Population Projections**

Year	Miami County Population	Population Adjustments			Total District Population
		Village of Bradford	City of Huber Heights	City of Union	
2018	105,939	753	-1,010	-26	105,656
2019	106,987	745	-1,022	-26	106,684
2020	102,590	747	-988	-988	101,362
2021	102,704	743	-984	-984	101,478
2022	102,818	738	-981	-25	102,550
2023	102,932	733	-977	-25	102,663
2024	103,046	729	-974	-25	102,776
2025	103,160	724	-970	-25	102,889
2026	103,228	720	-967	-25	102,956
2027	103,296	716	-964	-25	103,023
2028	103,364	712	-961	-24	103,090
2029	103,432	708	-958	-24	103,158
2030	103,500	704	-955	-24	103,225
2031	103,586	700	-953	-24	103,309
2032	103,672	696	-950	-24	103,393
2033	103,758	692	-948	-24	103,477
2034	103,844	687	-946	-24	103,561
2035	103,930	683	-944	-24	103,645
2036	103,942	682	-943	-24	103,656

Source(s) of information:

Population - Ohio Development Services Agency Office of Research, "2018 Population Estimates by County, City, Village, and Township", May 2019.

Population projections 2000-2040 - Ohio Development Services Agency, Ohio County Profiles.

Sample calculation (2018):

2018 Total District Population = Miami County County Population + Village

105,656 residents =

105,939 residents + 753 residents residents + residents - 1,010 residents - 26 residents

**Table V-2
District Residential/Commercial Waste Generation (TPY)**

Year	District Population	Per Capita Generation Rate	Total Residential/Commercial Waste Generation (TPY)
2018	105,656	6.10	117,874
2019	106,684	6.24	121,425
2020	101,362	6.38	118,012
2021	101,478	6.53	120,856
2022	102,550	6.68	124,933
2023	102,663	6.83	127,938
2024	102,776	6.99	131,016
2025	102,889	7.15	134,167
2026	102,956	7.31	137,332
2027	103,023	7.39	138,997
2028	103,090	7.48	140,682
2029	103,158	7.56	142,388
2030	103,225	7.65	144,114
2031	103,309	7.74	145,884
2032	103,393	7.83	147,677
2033	103,477	7.92	149,491
2034	103,561	8.01	151,328
2035	103,645	8.10	153,187
2036	103,656	8.19	154,959

Source(s) of information:

District Population - Table V-1

2018 Per Capita Generation Rate - Table IV-8

2018 Per Capita Generation Rate - 2018 Facility Data Report and Annual District Report

Sample calculation (2018):

District population x per capita generation rate (lb/person/day) x 365 days/year x 1 ton/2,000 lbs = Total Residential/Commercial Generation (tons)

105,656 residents x 6 ppd x 365 days ÷ 2,000 pounds/ton = 117,874 tons

**Table V-3
Projected Industrial Waste Generation**

SIC Code	Year																													
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036											
20	6,453	6,472	6,490	6,509	6,528	6,547	6,566	6,585	6,605	6,624	6,644	6,664	6,684	6,704	6,724	6,745	6,765	6,786	6,816											
22	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7											
23	108	108	109	109	109	110	110	110	111	111	111	112	112	112	113	113	113	114	114											
24	10,658	10,688	10,719	10,750	10,781	10,813	10,844	10,876	10,908	10,940	10,973	11,006	11,039	11,072	11,105	11,139	11,173	11,207	11,257											
25	211	212	212	213	213	214	215	215	216	217	217	218	219	219	220	221	221	222	223											
26	2,383	2,390	2,397	2,404	2,411	2,418	2,425	2,432	2,439	2,446	2,454	2,461	2,468	2,476	2,483	2,491	2,498	2,506	2,517											
27	957	960	963	966	969	971	974	977	980	983	986	989	992	995	998	1,001	1,004	1,007	1,011											
28	1,449	1,454	1,458	1,462	1,466	1,470	1,475	1,479	1,483	1,488	1,492	1,497	1,501	1,506	1,510	1,515	1,519	1,524	1,531											
29	1,167	1,171	1,174	1,177	1,181	1,184	1,188	1,191	1,195	1,198	1,202	1,205	1,209	1,213	1,216	1,220	1,224	1,228	1,233											
30	2,623	2,630	2,638	2,645	2,653	2,661	2,668	2,676	2,684	2,692	2,700	2,708	2,716	2,724	2,733	2,741	2,749	2,758	2,770											
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
32	1,337	1,341	1,345	1,349	1,352	1,356	1,360	1,364	1,368	1,372	1,377	1,381	1,385	1,389	1,393	1,397	1,402	1,406	1,412											
33	10,249	10,278	10,307	10,337	10,367	10,397	10,428	10,458	10,489	10,520	10,552	10,583	10,615	10,647	10,679	10,711	10,744	10,777	10,825											
34	9,178	9,205	9,231	9,258	9,284	9,311	9,339	9,366	9,394	9,422	9,450	9,478	9,506	9,535	9,564	9,593	9,622	9,651	9,694											
35	8,434	8,458	8,482	8,507	8,531	8,556	8,581	8,606	8,632	8,657	8,683	8,709	8,735	8,761	8,788	8,815	8,841	8,868	8,908											
36	3,068	3,077	3,085	3,094	3,103	3,112	3,121	3,131	3,140	3,149	3,158	3,168	3,177	3,187	3,197	3,206	3,216	3,226	3,240											
37	27,672	27,751	27,831	27,911	27,992	28,073	28,155	28,238	28,321	28,405	28,490	28,575	28,660	28,747	28,834	28,921	29,009	29,098	29,227											
38	172	173	173	174	174	175	175	176	176	177	177	178	178	179	179	180	180	181	182											
39	4,351	4,363	4,376	4,389	4,401	4,414	4,427	4,440	4,453	4,466	4,480	4,493	4,506	4,520	4,534	4,547	4,561	4,575	4,596											
Industrial Generation Reported from Brokers and Processors Surveyed	N/A	N/A	6,344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
Totals	123,161	123,513	123,868	124,225	124,585	124,948	125,313	125,681	126,052	126,425	126,801	127,180	127,561	127,945	128,331	128,721	129,113	129,507	130,085											

Source(s) of information:

2018 Generation by SIC Code - Table IV-2 (adjusted to correspond to total industrial waste on Table IV-8)

Sample calculation (2018):

SIC Code 20: 2019 Generation = (2018 SIC 20 generation ÷ 2018 total generation) × 2019 total generation
 6,472 tons = (6,453 tons ÷ 123,161 tons) × 123,513 tons

Table V-4
Total Waste Generation for the District During the Planning Period

Year	Residential/ Commercial	Industrial	Exempt	Total Waste	Generation Rate (lbs/person/day)
2018	117,874	123,161	112	241,147	12.51
2019	121,425	123,513	112	245,050	12.59
2020	118,012	123,868	112	241,992	13.08
2021	120,856	124,225	112	245,194	13.24
2022	124,933	124,585	112	249,631	13.34
2023	127,938	124,948	112	252,998	13.50
2024	131,016	125,313	112	256,441	13.67
2025	134,167	125,681	112	259,960	13.84
2026	137,332	126,052	112	263,496	14.02
2027	138,997	126,425	112	265,534	14.12
2028	140,682	126,801	112	267,595	14.22
2029	142,388	127,180	112	269,679	14.32
2030	144,114	127,561	112	271,786	14.43
2031	145,884	127,945	112	273,941	14.53
2032	147,677	128,331	112	276,120	14.63
2033	149,491	128,721	112	278,324	14.74
2034	151,328	129,113	112	280,553	14.84
2035	153,187	129,507	112	282,806	14.95
2036	154,959	130,085	112	285,156	15.07

Source(s) of information:

Residential/Commercial Table V-2

Industrial Table V-3

Sample calculation (2018):

Total Waste = Residential/Commercial + Industrial + Exempt

241,147 tons = 117,874 tons + 123,161 tons + 112 tons

$$\text{Generation Rate (lb/person/day)} = \frac{\text{Total Waste Generated (tons)} \times 2,000 \text{ pounds /ton}}{\text{Population} \times 365 \text{ days/year}}$$

$$12.51 = \frac{241,147.06 \text{ tons} \times 2,000}{105,939 \times 365}$$

Table V-5
Residential/Commercial Waste Reduction Strategies

Strategy	Program #	Type of Material Reduced or Recycled	Tons of Waste Reduction																		
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Curbside Recycling	MC-01	AC, GL, PL, ONP, MXP, SC, OCC	5,061	5,061	5,066	5,120	5,126	5,131	5,137	5,140	5,143	5,147	5,150	5,154	5,158	5,162	5,166	5,170	5,175	5,200	
Drop-Off Recycling	MC-02	AC, GL, PL, ONP, MXP, SC, OCC	1,636	1,636	1,638	1,655	1,657	1,659	1,660	1,661	1,663	1,664	1,665	1,666	1,667	1,669	1,670	1,671	1,673	1,681	
Yard Waste Management	MC-03	YW	10,393	10,393	10,625	10,862	11,104	11,352	11,606	11,865	12,130	12,401	12,678	12,961	13,250	13,546	13,849	14,158	14,474	14,797	
Household Hazardous Waste Management	MC-04	HHW	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Scrap Tire Recycling	MC-05	LAB	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	
Automobile Batteries and Used Oil Collection	MC-06	EW	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Special Event Recycling	MC-07	ST	1,555	1,555	1,557	1,574	1,575	1,577	1,579	1,580	1,581	1,582	1,583	1,584	1,585	1,587	1,588	1,589	1,590	1,598	
Electronics Recycling	MC-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Appliance Recycling	MC-09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Internal Grant	MC-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Community Recycling Grant	MC-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Residential - Commercial - Education-Awareness Programs	MC-12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Recycling Market Development Grant	MC-13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Commercial/Industrial - Technical Programs	MC-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
"Buy Recycled" Promotion	MC-15	Oth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Other Programs	MC-16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Other Commercial Recycling	MC-17	N/A	18,941.9	19,796.7	20,670.6	21,322.7	21,911.8	22,594.3	23,292.3	24,006.3	24,740.2	24,469.8	24,193.5	23,911.1	23,622.6	23,326.3	23,023.6	22,714.3	22,398.2	22,075.2	21,711.2
		Total	38,043	38,898	39,772	40,666	41,579	42,513	43,469	44,445	45,444	45,444	45,444	45,444	45,444	45,444	45,444	45,444	45,444	45,444	45,444

AC = aluminum containers, GL = glass, PL = plastic, OCC = corrugated cardboard, SC = steel containers, Pbd = paperboard, MXP = mixed paper, AsC = aseptic containers, YW = yard waste, HHW = hazardous household waste, UO = used oil, EW = electronic waste, LAB = lead-acid batteries, ST = scrap tires, FW = food waste, WG = White Goods, n/a = not applicable

Sources of information:
2018 District Annual Report and Residential/Commercial Surveys

**Table V-6
Industrial Waste Reduction Strategies**

Strategy	Program #	Type of Material Reduced/Recycled	Tons of Source Reduction/Recycling																				
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
Industrial Recycling	N/A		102,870	103,329	103,789	104,252	104,717	105,184	105,653	106,124	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597
		Total	102,870	103,329	103,789	104,252	104,717	105,184	105,653	106,124	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597	106,597

AL = aluminum; FM = ferrous metals; NFM = non-ferrous metals; PL = plastic; OCC = corrugated cardboard; MixP = mixed paper, W = wood, OTH = other

Source(s) of information:
2018 tons - Table IV-6

**VI. Methods of Management: Facilities and Programs to be Used
[ORC Section 3734.53(A)(7)-(12)]**

This section of the *Plan Update* demonstrates that the District has capacity through facilities and its programs to manage the waste generated for the planning period. A regional capacity analysis provides information to demonstrate the District meets or exceeds capacity requirements under Ohio law. The District will continue to reserve its right to exercise flow control but does not currently designate facilities. The designation of facilities is a power granted to SWMDs under Ohio law allowing the District to designate where solid waste generated within or transported into the District shall be taken for disposal, or transfer.

Additionally, this section of the *Plan Update* includes a detailed siting strategy for new proposed facilities.

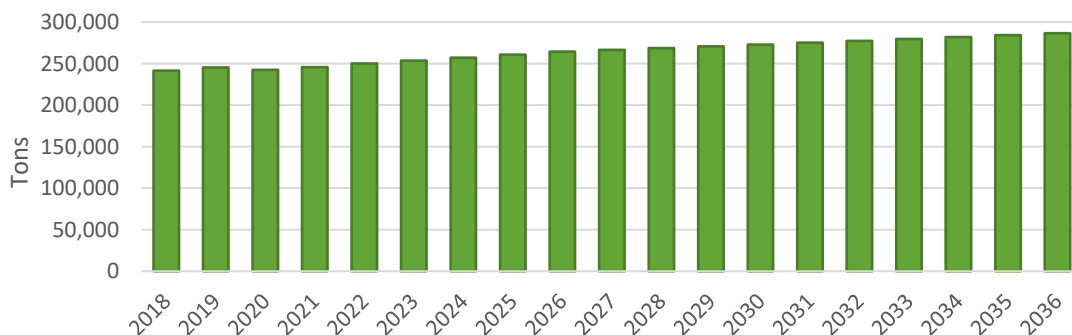
A. Waste Management Methods

Table VI-1 presents the waste management methods used and capacity needed for each year of the planning period. The District managed approximately 241,435 tons of solid waste in 2018. Approximately 250,206 tons of solid waste will need to be managed in 2022 (the first year of the planning period) and 286,618 tons will need to be managed by 2036 (the final year of the planning period).

The District will manage the projected waste through recycling, yard waste composting, incineration, the use of transfer stations, and landfilling. In Table VI-1, the total tons landfilled in 2018 (100,521 tons) was calculated by subtracting recycling, yard waste composting, and the volume of waste reduced by incineration. The District projects a need of 103,364 tons of landfill capacity in 2022 and 134,031 tons in 2036.

The following figure shows the projected total tons to be managed by the District throughout the planning period.

Net Tons to be Managed by the District (2018 – 2036)



The following figure shows the projected tons to be landfilled throughout the planning period.

Total Landfill Tons to be Managed by the District (2018 – 2036)

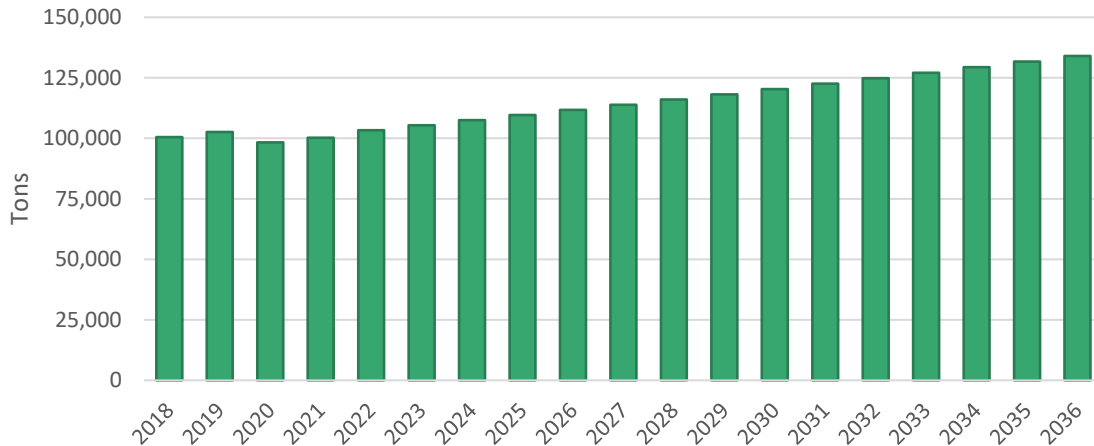


Table VI-2 presents a summary of waste management methods for residential/commercial solid waste generated by the District: recycling, composting, transferring, incineration, and landfilling. In 2018, the residential/commercial sector generated a total of 117,874 tons. This sector is projected to generate 124,933 tons of solid waste at the beginning of the planning period and 154,959 tons of solid waste by the end of the planning period. The following figure presents the management methods used to manage residential/commercial waste generation throughout the planning period.

**Residential/Commercial Sector
Waste Management Methods (2018 – 2036)**

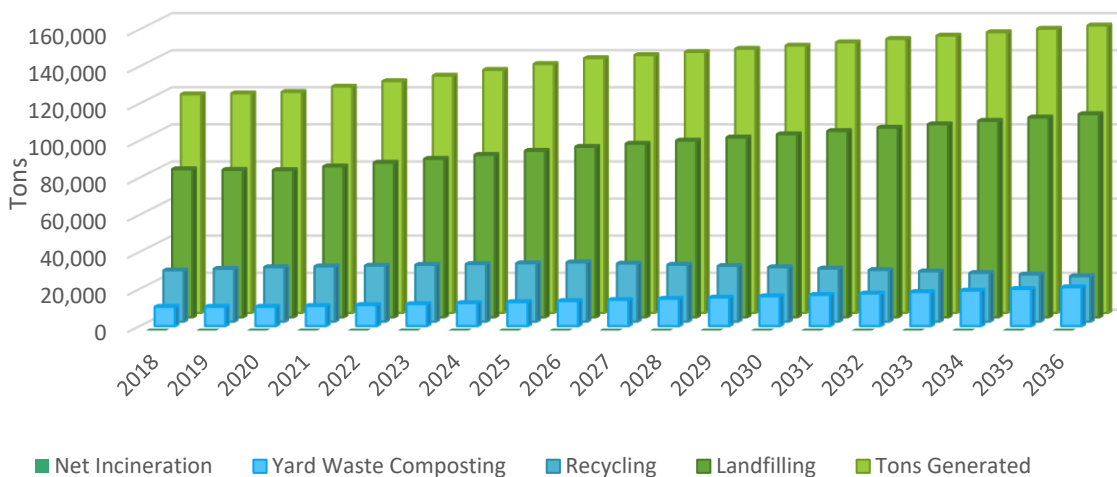


Table VI-3 presents a summary of waste management methods for industrial solid waste generated by the District. This sector’s waste was managed by recycling, transferring, incineration, and landfilling. In 2018, the industrial sector generated a total of 123,448 tons. The industrial sector is projected to generate 125,160 tons of solid waste at the beginning of the planning period and 1301546 tons of solid waste by the end of the planning period. Total annual waste generation will increase 6,386 tons or 5.1% from 2022 to 2036.

The following figure presents the management methods used to manage industrial waste generation throughout the planning period.

Industrial Sector Waste Management Methods (2018 – 2036)

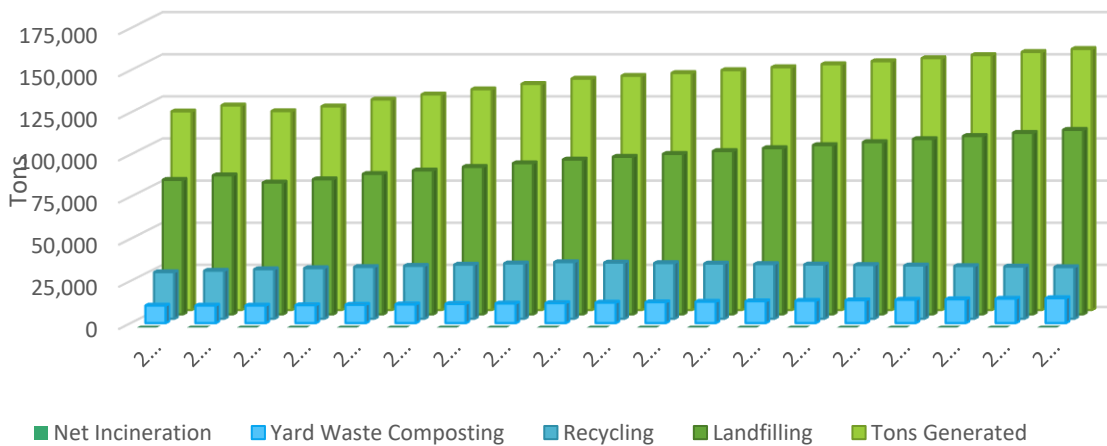


Table VI-4A, “Waste Management Method: Landfill,” presents the reference year landfill capacity utilization and anticipated landfill capacity needs throughout the planning period. The projections in Table VI-4A present the landfill capacity demands from 2018 to 2036. Total tons landfilled includes waste that was directly hauled to landfills, transferred waste, and ash produced through incineration.

Seven landfills received waste generated in the District during the reference year, including waste that was first accepted at incinerators or transfer stations. For the purposes of the analysis in Table VI-4A and future year projections on landfill capacity, the District assumes that each facility that managed District waste during the reference year will manage the same percent of total tons as during the reference year unless a landfill ceases operation or runs out of permitted airspace before the end of the planning period.

There are no in-District landfills. Five of the landfills were located in Ohio, one landfill was located in Indiana, and one landfill was located in Kentucky. Six of the seven landfills have sufficient remaining airspace to manage 100% of the District’s landfilling needs throughout the planning period.

Table VI-4B, “Waste Management Method: Incineration, presents the total tons projected to be managed by incineration throughout the planning period. The District used six medical waste incinerators, resource recovery systems, solidification facilities in the reference year to manage 962.65 tons of waste. The total tons of waste managed by incineration are projected to change at the same rate as population. The overall tonnage managed by incineration annually from 2022 to 2036 is projected to increase by only 0.07 tons.

Table VI-4C, “Waste Management Method: Transfer,” the District projects transferred waste will manage the same percent of total tons as during the reference year throughout the planning period. In 2022, the first year of the planning period, the District projects approximately 96,061 tons of solid waste will be managed by transfer facilities. This increases to 124,984 tons in 2036, the final year of the planning period.

Table VI-4D, Waste Management Method: Recycling,” presents the total tons projected to be managed by recycling. The District is projected to recycle an average of 138,340 tons of material annually throughout the planning period.

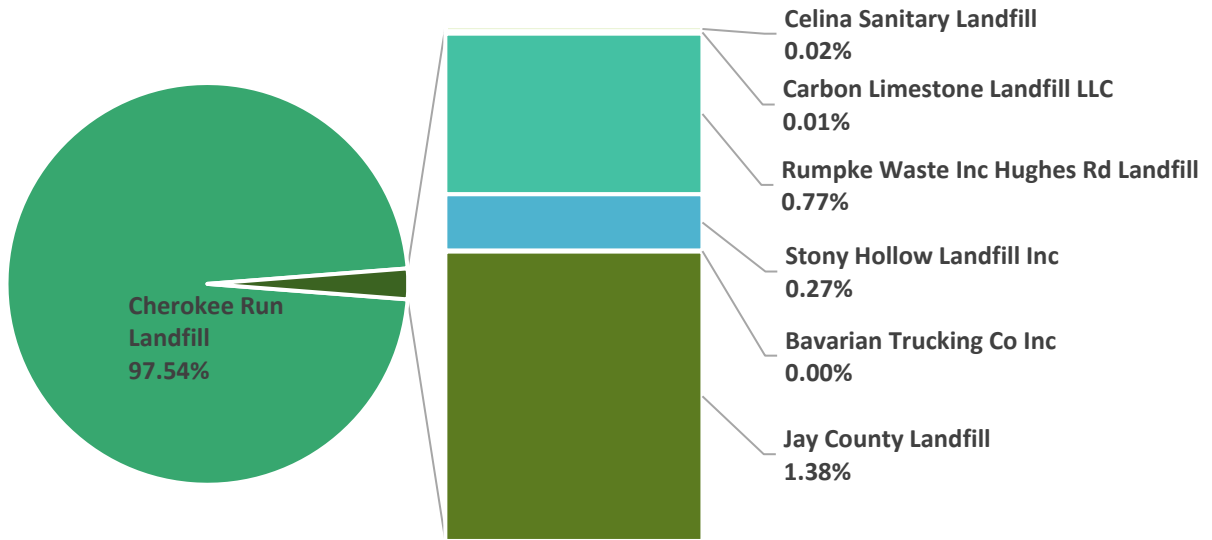
Table VI-4E, “Waste Management Method: Composting,” presents the total tons projected to be managed by composting. Composting was projected based on half of the historical average. The District does not anticipate any major changes to facilities or programs operating during the reference year.

B. Demonstration of Access to Capacity

During 2018, five out-of-District landfills and two out-of-State landfills managed 100,521 tons of solid waste generated by District residents, businesses, and industries.

The following figure presents the landfills used by the District in 2018, and the percentage of District-generated waste landfilled at each facility.

Landfills Used by District (2018)



Regional Capacity Analysis

The purpose for the regional capacity analysis is to evaluate and demonstrate that the District has access to adequate disposal capacity during the planning period. The District’s assessment of regional landfill capacity demonstrates there is sufficient permitted capacity available to manage the District’s solid waste until December 31, 2036.

The District projects an average need of approximately 118,364 tons or 177,545 cubic yards of landfill capacity annually throughout the planning period. The District will dispose of approximately 1,775,455 tons or 5.3 million cubic yards of solid waste total throughout the planning period. Using a 3:1 conversion factor for cubic yards to tons and applying an average 2:1 compaction ratio for landfilled solid waste, the District will need approximately 2,663,182 cubic yards of airspace capacity over the fifteen-year planning period.

The landfills used by the District in 2018 had sufficient permitted airspace to dispose of 100,521 tons of District solid waste. The Cherokee Run Landfill, which currently manages the majority of the District’s waste, has enough permitted capacity to manage the entirety of the waste generated within the District from the reference year to the end of the planning period. Overall, the landfills used by the District in 2018 had an average remaining lifespan of more than 26 years.

C. Schedule for Facilities and Programs: New, Expansions, Closures, Continuations

Table VI-5, Implementation Schedule for Facilities, Strategies, Programs and Activities: Dates and Description, presents descriptions and dates of operation for each facility, program or activity presented in the *Plan Update*.

Programs for residential/commercial sector recycling and composting, financial incentive programs, commercial/industrial sector recycling programs, education and awareness, technical assistance, and other programs are presented in Table VI-5. These programs are discussed in detail in Sections IV and V.

D. Identification and Designation of Facilities

Table VI-6 includes the solid waste facilities identified and current designations. As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer and resource recovery facilities and all licensed and permitted out-of-state landfill, transfer and resource recovery facilities. The District is also identifying recycling and composting programs and facilities that are identified in Section III Inventories.

The District does not plan on designating any additional facilities in this *Plan Update*. The District currently has in place the following facility designations.

Designated Facilities	
Facility	Solid Waste Management District
Miami County Transfer Station 2200 North County Road 25A Troy, Ohio	Miami County Solid Waste Management District

The District reserves the right to designate one or more additional facilities to receive solid waste during the planning period.

1. Contract

The District may contract (during the planning period and beyond) for the transport and delivery of solid waste to any identified solid waste disposal, transfer, or resource recovery facility for the appropriate disposal, resource recovery or recycling of solid waste. The District may contract with identified recycling facilities or legitimate recycling facilities both in-Ohio or out-of-state for the processing of recyclables. Contracting for the transport and delivery of solid waste will be conducted through appropriate District procedures to procure these types of services.

Residential recyclables may be dropped off at the Miami County Transfer Facility recycling drop-off. Recyclables dropped off are the property of the Miami County Transfer Facility. Commingled or source separated recyclable materials may be placed at the curb for collection and processing or they may be delivered to or sold by the resident or business owner to a hauler, broker, scrap collector or processor selected by the resident or business owner of the recyclable materials.

A political subdivision or the District may select a recycling hauler that provides curbside recycling collection. The residential recyclables will be considered the property of the selected recycling hauler through the act of setting out the recyclable materials at the location and time normally designated for curbside recycling collection.

E. Authorization Statement to Designate

The Board is authorized to establish facility designations in accordance with Section 343.013 and 343.014 of the Ohio Revised Code. In addition, facility designation will be established and governed by applicable District rules.

F. Waiver Process for the Use of Undesignated Facilities

The District is authorized to designate solid waste management facilities. The following waiver process must be followed by any person, municipal corporation, township or other entity that wishes to deliver waste to a solid waste facility not designated by the District.

In the event that any person, municipal corporation, township or other entity requests permission to use a facility, other than a designated facility, for the disposal of solid waste generated within the District, the entity must submit a written request for a waiver of designation to the Board of County Commissioners (Board). The written request must contain the following information:

1. Identification of the persons, municipal corporation, township or other entity requesting the waiver
2. Identification of the generators(s) of the solid waste for which the waiver is requested
3. Identification of the type and quantity (in tons per year) of solid waste for which the waiver is requested
4. Identification of the time period(s) for which the waiver is requested
5. Identification of the disposal facility(s) to be used if the waiver is granted
6. If the solid waste is to be disposed in an Ohio landfill, a letter from the

solid waste management district where the solid waste will be disposed, acknowledging that the activity is consistent with that District's current plan

7. An estimate of the financial impact to the District that would occur with issuance of the requested waiver
8. An explanation of the reason(s) for requesting the waiver

Upon receipt of the written request containing all of the information listed above, the District staff will review it and may request additional information necessary to conduct its review. The Board shall act on a waiver request within ninety days following receipt of the request. The Board may grant the request for a waiver only if the Board determines that:

1. The waiver request is not inconsistent with the projections contained in the District's initial or amended solid waste management plan
2. The waiver request will not adversely affect the implementation and financing of the District's initial or amended solid waste management plan
3. The waiver request includes solid waste that cannot be processed through the normal operation of the Miami County Transfer Station
4. The waiver request includes solid waste that is unsafe for processing at the Designated Facility
5. The waiver request includes solid waste that is unacceptable waste at the Designated Facility
6. The waiver request assures the Maximum Feasible Utilization of existing in-District Solid Waste Facilities
7. The waiver request includes solid waste that will be beneficially used or managed through recycling, reuse, energy recovery or other forms of management that are accepted by Ohio EPA as diversion from the landfill
8. The length of time requested for the waiver
9. The location for the alternate final disposal facility
10. The detailed explanation for the waiver request.
11. The entity is willing to enter into an agreement requiring the payment of a waiver fee to the District

The Board and or the District Coordinator (as authorized by the Board), within ninety days following receipt of a request for a waiver authorizing the delivery of

solid waste generated within the District to an undesignated solid waste facility, shall act upon the waiver request. The waiver request will be evaluated pursuant to section 343.01(I)(2) of the Revised Code and the policy herein. The District Coordinator will notify the Person requesting the waiver of the action/decision of the Board or District Coordinator. If the waiver is approved, the District Coordinator will notify the Person identified on the District's Application for Waiver from Designation Requirements that the Board or District Coordinator approved the waiver.

If a waiver is granted, the terms and conditions that provide the basis for the approval of the waiver request shall be included in a Waiver Agreement. The Waiver Agreement shall be effective on the date of last execution of the Waiver Agreement. The Waiver Agreement will include a waiver fee. The Board may assess the waiver fee on each ton of solid waste covered by the waiver, by a waiver application fee, or other mechanism decided by the Board. The waiver fees are decided by the Board and reviewed as needed.

All waivers will be reviewed periodically, by the District Coordinator to determine whether the waiver should be terminated or continued.

This waiver policy does not apply to any contract by and between the Board and any Person relating to the transportation, delivery, disposal or processing of Solid Waste or Solid Waste Recyclable Materials generated within the District.

G. Siting Strategy for Facilities

The District's Siting Strategy includes the following:

Submission and Review of Plans and Specifications and Application of Siting Strategy to Proposed Solid Waste Facilities, Maximum Feasible Utilization and Exemption of Existing in-District Solid Waste Facilities.

1. Definitions

For the purposes of this section, the following definitions shall apply:

- a. **Solid Waste Facilities** shall mean all collection, storage, disposal, transfer, recycling, processing, and resource recovery facilities.
- b. **Siting Strategy** shall mean the process by which the Board of Directors (Board) shall review proposals for the construction or modification of any Solid Waste Facility and determine whether such proposal complies with the *Plan Update*. This complies with the Plan Update as required by District Rules adopted pursuant to R.C. 343.01(G).

- c. **General Plans and Specifications** shall mean that information required to be submitted to the Board for review for the construction or modification of any proposed Solid Waste Facility and includes, but is not limited to, a site plan for the proposed facility, architectural drawings or artists renderings of the proposed facility, the projected size and capacity of the proposed facility and all other information identified in this Siting Strategy.
- d. **Applicant** shall mean a person, municipal corporation, township or other political subdivision proposing to construct or modify a Solid Waste Facility within the District.
- e. **Modify** shall mean a significant change in the operation of an existing in-District Solid Waste Facility: (1) that requires the approval of the Director of the Ohio Environmental Protection Agency; or (2) that involves a change in the type of material, manner of operation, or activities conducted at the facility (e.g., a conversion of a legitimate recycling facility to a transfer station).

2. **Purpose and Objective**

The District's Siting Strategy for Solid Waste Facilities ensures that proposals to construct a new Solid Waste Facility within the District or modify an existing Solid Waste Facility within the District are in compliance with the *Plan Update*. The Board shall not approve the General Plans and Specifications for any proposed Solid Waste Facility or the modification of any existing in-District Solid Waste Facility where the construction and operation of the proposed facility, as determined by the Board, will:

- 1) have significant adverse impacts upon the Board's ability to finance and implement the *Plan Update*;
- 2) interfere with the Board's obligation to provide for the maximum feasible utilization of existing in-District Solid Waste Facilities;
- 3) materially and adversely affect the quality of life of residents within 300 feet of the proposed facility; or
- 4) have material adverse impacts upon the local community, including commercial businesses within 500 feet of the proposed facility and the adequacy of existing infrastructure to serve the proposed facility.

Except as otherwise provided herein, all proposed Solid Waste Facilities, whether to be sited by or on behalf of the District, or by or on behalf of any person, municipal corporation, township or other political subdivision, shall be subject to this Siting Strategy and shall comply with the requirement to submit General Plans and Specifications to the District.

a. Siting Procedure Limited Exemption:

Notwithstanding the foregoing requirement, existing in-District Solid Waste Facilities specifically identified in this Siting Strategy are not subject to this Siting Strategy unless the owner or operator of any such in-District Solid Waste Facility proposes a modification to the operation of the in-District Solid Waste Facility:

(1) that requires the approval of the Director of the Ohio Environmental Protection Agency; or

(2) that involves a change in the type of material, manner of operation or activities conducted at the facility (e.g., a conversion of a legitimate recycling facility to a transfer station).

b. Maximum Feasible Utilization of Existing In-District Solid Waste Facilities:

The Board has determined that the owners and operators of existing in-District Solid Waste Facilities rely on market factors in the determination of whether to expand or modify the facilities or current operations and activities at such existing facilities. The private corporate decisions of those owners and operators determine and establish the maximum feasible utilization of those existing in-District Solid Waste Facilities and the limited exemption for such existing in-District Solid Waste Facilities from the application of this Siting Strategy permits the owners and operators of those facilities to determine the maximum feasible utilization of those facilities. Other than the limited exemption from the application of this Siting Strategy, the Board has no additional obligation with respect to the continuing operation or modification of those facilities.

3. Requirements

The District requires that General Plans and Specifications for all proposals to construct any new Solid Waste Facility within the District or modify any existing in-District Solid Waste Facility be submitted for a determination by the Board of whether such General Plans and Specifications and the proposals comply with the *Plan Update*.

4. Procedure Implementing Siting Strategy

Unless otherwise provided herein, or an exemption or waiver from this requirement has been granted by the Board, the following procedure and process shall be followed in the event the construction of a new Solid Waste Facility or the modification of an existing in-District Solid Waste Facility is proposed within the District:

a. Step 1: Submittal of Plans and Specifications

Any person, municipal corporation, township or other political subdivision proposing to construct a new Solid Waste Facility or modify an existing in-District Solid Waste Facility shall:

- a. Provide General Plans and Specifications of the proposed facility to the Board. Such General Plans and Specifications shall include, but may not be limited to, the following documents and information:
 - i. a site plan for the proposed Solid Waste Facility;
 - ii. architectural drawings or artist's renderings of the proposed Solid Waste Facility;
 - iii. availability of necessary utilities;
 - iv. projected size and capacity of the proposed Solid Waste Facility;
 - v. hours of operation;
 - vi. anticipated source of solid waste or recyclable materials to be received at the proposed Solid Waste Facility. If recycling activities will be conducted at the proposed facility, a detailed description of the recycling activity including materials to be recycled, technology to be utilized to accomplish the separation and processing of the recyclable materials, the anticipated percentage of waste reduction anticipated from the operation of the facility and the identification of the market for the sale of the recyclable materials recovered at the facility must be submitted;
 - vii. types and anticipated number of vehicles utilizing the proposed Solid Waste Facility on an hourly and daily basis;
 - viii. routes to be used by vehicles utilizing the facility and methods of ingress and egress to the facility; and
 - ix. any other information necessary for the Board to evaluate whether the proposed Solid Waste Facility complies with each of the criteria listed below.
- b. Adequately demonstrate to the Board that the construction or modification and subsequent operation of the proposed Solid Waste Facility will:
 - i. be consistent with the goals, objectives, projections and strategies contained in the *Plan Update*;

- ii. not adversely affect financing for the implementation of the *Plan Update*;
 - iii. not adversely affect the Board's obligation to provide for the maximum feasible utilization of existing in-District solid waste facilities;
 - iv. be installed, operated and maintained to be harmonious and appropriate in appearance and use with the existing or intended character of the area;
 - v. be adequately served by essential public facilities and services;
 - vi. not create excessive additional requirements at public cost for public facilities or services;
 - vii. not be detrimental to the economic welfare of the community;
 - viii. not involve the excessive production of traffic, noise, smoke, fumes or odors;
 - ix. have vehicular approaches to the property that are designed not to create an interference with traffic;
 - x. not result in the destruction, loss or damage of a natural, scenic, or historic feature of major importance; and
 - xi. not adversely affect property values within the surrounding community.
- c. The Applicant shall submit any additional information as the Board requests to establish, to the reasonable satisfaction of the Board, that the construction or modification and subsequent operation of the proposed Solid Waste Facility or proposed modification of an existing in-District Solid Waste Facility will comply with the *Plan Update*.
- b. Step 2: Board Review

The Board shall conduct a review of the information submitted for the proposed Solid Waste Facility to determine whether the Applicant has adequately demonstrated that the proposed Solid Waste Facility will be constructed or modified and subsequently operated in compliance with the *Plan Update* and demonstrated that the impacts listed in Step I do not adversely affect the District, its residents and businesses. The Board may expend District funds to employ a consultant or consultants familiar with Solid

Waste Facility construction and operation, land use planning and solid waste planning to assist the Board in implementing this Siting Strategy and in its determination of whether a proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility complies with the *Plan Update*.

Within sixty days of receiving the General Plans and Specifications from an applicant, the Board shall make a determination as to whether the General Plans and Specifications submitted by the applicant contain sufficient information for the Board to complete its review of the proposal. In the event the Board determines that more information is necessary to complete its review of the proposal, the Board shall notify the Applicant of such request in writing within ten days.

Within ninety days of determining that the Applicant has submitted a complete set of General Plans and Specifications, the Board shall determine whether the proposal complies with the *Plan Update* and the criteria identified in Step 1 herein. The Board shall notify the Applicant of its decision in writing. While the Board has broad discretion regarding the approval of General Plans and Specifications for a proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility, it is the intent of this Siting Strategy that the Board shall not approve General Plans and Specifications for a proposed Solid Waste Facility unless the Board determines that the proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility complies with the *Plan Update* and the criteria identified in Step 1 herein.

c. Step 3: Development Agreement

In the event the Board determines that the proposed construction or modification and subsequent operation of a Solid Waste Facility complies with the *Plan Update*, the person, municipal corporation, township or other political subdivision proposing to construct or modify the Solid Waste Facility shall enter into a development agreement with the District which memorializes the obligations that are the basis of the Board's conclusion that the General Plans and Specifications demonstrate that the proposed facility or its modification complies with the *Plan Update*. The party proposing to construct a Solid Waste Facility shall have an ongoing obligation to comply with the *Plan Update* and the development agreement.

5. Waiver

A determination by the Board to construct or modify any District-owned Solid Waste Facility shall be deemed to be in compliance with the *Plan Update* and the other requirements of these rules.

The Board has a strong commitment to encourage the development of recycling and waste reduction activities that are consistent with the waste reduction, reuse and recycling goals as may be required by the Ohio Revised Code, the Ohio Administrative Code, the State Solid Waste Management Plan and the *Plan Update*. Upon adequate demonstration to the Board of the likelihood of attainment of certain waste reduction goals, the Board may waive application of the Siting Strategy for any facility determined by the Board as likely to qualify as a “legitimate recycling facility” as defined in Section 3745-27-01(L)(2) of the Ohio Administrative Code.

In the event an Applicant desires a waiver from the application of the Siting Strategy for a legitimate recycling facility, the Applicant shall submit sufficient information to the Board regarding the proposed facility, the waste reduction method to be implemented, technology to be used in the operation of the facility, the source and type of waste to be received at the facility, the materials to be removed from the waste stream and the anticipated amount of waste reduction.

The Board shall review the proposal following the procedures and process in Step 2 of this Siting Strategy and determine whether the waste reduction standards required by OAC Section 3745-27-01(L)(2) are likely to be satisfied at the proposed facility. In the event the Board determines that such facility is likely to qualify as a legitimate recycling facility, the Board may grant a waiver of the application of the Siting Strategy to the proposed facility.

Such waiver may be made contingent upon the execution of a development agreement by which the proposed facility will be obligated to meet the proposed waste reduction standards on a continuing basis and such other obligations regarding operation of the facility as the Board shall require, including such recordkeeping and reporting requirements as may be necessary to establish compliance with the waste reduction goals. Failure to comply with the terms of any such agreement may result in the revocation of Board approval for operation of any such facility. As part of any such development agreement, the Board may require such bond or other assurances in such amounts as the Board determines, in its discretion, shall be necessary to assure that funds are available for the removal of the facility or conversion of the facility to a legal use in the event of non-compliance with waste reduction standards or other obligations as set forth in the development agreement.

For further information on applying for a Waiver from Designation, see rule number 6-01 in the Miami County Solid Waste Management Rules and Regulations.

H. Contingencies for Capacity Assurance and District Program Implementation

The District does not anticipate any capacity assurance or program implementation problems during this planning period. There are 5 landfills used by the District that have ample capacity available throughout the planning period, and 2 others have some capacity during the planning period. There are also several landfills in Ohio and eastern Indiana with the capability to provide capacity if an emergency arose with the landfills used by the District.

If there is an emergency impacting the District, the Board will meet on an emergency basis and determine the appropriate actions to take to ensure compliance with this *Plan Update*. The following section defines the District's specific contingencies:

1. Disposal Capacity

The District is prepared, if necessary and determined by the Board, to explore the following options if landfill capacity through the District's contract with its current landfill vendor, solid waste management or the cost of solid waste collection, transportation and disposal deteriorates to unacceptable levels:

1. Prepare bid documents and invite competitive bids from qualified firms for solid waste disposal or other necessary services.
2. Accept the best, responsive bid and enter into a contract.

2. Transfer Capacity

Since the District operates the only transfer station in the County and all solid waste is flow controlled to the District facility, capacity issues would be addressed per the process listed in the disposal capacity section.

3. Recycling Capacity

Recycling in the District remains strong with ample infrastructure to handle the District's current and future needs from within and outside the District. In the unlikely event that future District residential recycling needs are not met by the private sector, the District will evaluate whether the District should provide, directly or indirectly, recycling services.

While it is highly likely that the private sector will continue to serve the recyclable materials processing needs of the District, the District reserves the right to respond in a timely fashion to changing market and/or management conditions without seeking a full amendment of the adopted *Plan Update*.

**Table VI-1
Waste Management Methods Used and Processing Capacity Needed for Each Year of the Planning
Period**

Year	Tons of SW Generated	Tons Source Reduced	Net Tons to be Managed	Management Method Used and Processing Capacity Required in TPY					
				Recycling	Transfer	Yard Waste Composting	Gross Incineration	Waste Reduced by	Landfilling
2018	241,435	0	241,435	129,866	94,156	10,393	963	655	100,521
2019	245,410	0	245,410	131,834	94,156	10,393	797	542	102,641
2020	242,424	0	242,424	133,169	91,040	10,393	803	546	98,317
2021	245,698	0	245,698	134,293	93,033	10,625	803	546	100,234
2022	250,206	0	250,206	135,434	96,061	10,862	803	546	103,364
2023	253,644	0	253,644	136,593	98,094	11,104	803	546	105,401
2024	257,157	0	257,157	137,769	100,139	11,352	803	546	107,489
2025	260,745	0	260,745	138,963	102,255	11,606	803	546	109,630
2026	264,350	0	264,350	140,176	104,354	11,865	803	546	111,764
2027	266,457	0	266,457	139,911	106,307	12,130	803	546	113,870
2028	268,586	0	268,586	139,640	108,278	12,401	803	546	115,999
2029	270,738	0	270,738	139,363	110,273	12,678	803	546	118,151
2030	272,912	0	272,912	139,080	112,288	12,961	803	546	120,325
2031	275,134	0	275,134	138,791	114,349	13,250	803	546	122,547
2032	277,379	0	277,379	138,495	116,433	13,546	803	546	124,792
2033	279,649	0	279,649	138,192	118,540	13,849	803	546	127,062
2034	281,943	0	281,943	137,883	120,671	14,158	803	546	129,356
2035	284,261	0	284,261	137,567	122,825	14,474	803	546	131,674
2036	286,618	0	286,618	137,244	124,984	14,797	803	546	134,031

Source(s) of information:

Tons of SW Generated - Table V-4

Tons Recycling and Yard Waste Composting - Tables V-5 and V-6

Tons Transferred - Table VI-2 and VI-3

Sample calculations:

$$\begin{aligned} \text{2018 Net tons to be managed by SWMD} &= \text{Tons of SW generated} - \text{tons source reduced} \\ 241,435 \text{ tons} &= 241,435 \text{ tons} - . \text{ tons} \end{aligned}$$

$$\begin{aligned} \text{2018 Landfilling} &= \text{Net tons to be managed by SWMD} - (\text{recycling} + \text{yard waste composting}) \\ 100,521 \text{ tons} &= 241,435 \text{ tons} - (129,866.09 \text{ tons} + 10,392.63 \text{ tons}) \end{aligned}$$

**Table VI-2
Summary for Residential/Commercial Waste Management Methods**

Year	Tons Generated	Management Method in TPY					
		Recycling	Yard Waste Composting	Gross Incineration	Net Incineration	Transfer	Landfilling
2018	117,874	27,650	10,393	1	1	79,652	79,831
2019	121,425	28,505	10,393	0	0	79,652	82,527
2020	118,012	29,379	10,393	0	0	76,769	78,240
2021	120,856	30,041	10,625	0	0	78,683	80,191
2022	124,933	30,717	10,862	0	0	81,786	83,354
2023	127,938	31,409	11,104	0	0	83,818	85,425
2024	131,016	32,116	11,352	0	0	85,900	87,547
2025	134,167	32,839	11,606	0	0	88,034	89,721
2026	137,332	33,579	11,865	0	0	90,160	91,888
2027	138,997	33,314	12,130	0	0	91,794	93,553
2028	140,682	33,043	12,401	0	0	93,447	95,238
2029	142,388	32,766	12,678	0	0	95,120	96,944
2030	144,114	32,483	12,961	0	0	96,814	98,670
2031	145,884	32,194	13,250	0	0	98,552	100,441
2032	147,677	31,898	13,546	0	0	100,310	102,233
2033	149,491	31,595	13,849	0	0	102,091	104,048
2034	151,328	31,286	14,158	0	0	103,893	105,884
2035	153,187	30,970	14,474	0	0	105,717	107,743
2036	154,959	30,647	14,797	0	0	107,456	109,516

Source(s) of information:

Tons Generated - Table V-2

Recycling and Yard Waste Composting - Table V-5

Transfer - Table III-3

Sample calculations (2018):

Landfilling = Tons Generated - (Recycling + Yard Waste Composting)

79,831 tons = 117,874 tons - (27,649.8 tons + 10,392.63 tons)

**Table VI-3
Summary for Industrial Waste Management Methods**

Year	Tons Generated	Management Method in TPY				
		Recycling	Gross Incineration	Net Incineration	Transfer	Landfilling
2018	123,448	102,216	961	654	14,504	20,578
2019	123,873	103,329	796	541	14,504	20,003
2020	124,300	103,789	802	545	14,272	19,966
2021	124,729	104,252	802	545	14,350	19,932
2022	125,160	104,717	802	545	14,275	19,898
2023	125,594	105,184	802	545	14,276	19,865
2024	126,029	105,653	802	545	14,239	19,831
2025	126,467	106,124	802	545	14,221	19,797
2026	126,906	106,597	802	545	14,194	19,764
2027	127,348	106,597	802	545	14,513	20,206
2028	127,792	106,597	802	545	14,831	20,650
2029	128,238	106,597	802	545	15,152	21,096
2030	128,687	106,597	802	545	15,474	21,545
2031	129,138	106,597	802	545	15,798	21,995
2032	129,590	106,597	802	545	16,123	22,448
2033	130,045	106,597	802	545	16,450	22,903
2034	130,503	106,597	802	545	16,778	23,360
2035	130,962	106,597	802	545	17,108	23,820
2036	131,546	106,597	802	545	17,528	24,404

Source(s) of information:

Tons Generated - Table V-4

Tons Source Reduction & Recycling - Table V-6

Tons Transferred - Table III-3

Sample calculations (2018):

Landfilling = Tons Generated - Source Reduction & Recycling

20,578 tons = 123,448 tons - 102,216.27 tons

Table VI-4A
Waste Management Method: Landfill

Facilities Used by District	County	Average Daily Waste (Tons)	Remaining Capacity Data Source	Airspace		Tons of District SW Managed																				
				Gross (YD ³)	Net (tons)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
Celina Sanitary Landfill	Mercer	180	4.3	OEPA	182,898	212,188	21	21	21	21	22	22	22	22	23	23	24	24	25	25	26	26	27	27	28	28
Carbon Limestone Landfill LLC	Mahoning	4,282	51.5	OEPA	65,295,217	60,161,683	12	12	12	12	12	13	13	13	13	13	14	14	14	14	15	15	15	15	16	16
Cherokee Run Landfill	Logan	1,515	29.2	OEPA	16,210,453	12,274,913	98,050	100,118	95,900	97,770	100,822	102,809	104,846	106,935	109,016	111,071	113,147	115,246	117,367	119,534	121,724	123,938	126,175	128,437	130,735	
Rumpke Waste Inc Hughes Rd Landfill	Hamilton	6,427	8.2	OEPA	20,950,205	19,274,188	772	788	755	770	794	809	826	842	858	875	891	907	924	941	958	976	993	1,011	1,029	
Stony Hollow Landfill Inc	Montgomery	687	24.4	OEPA	5,974,857	4,361,525	271	277	265	270	279	284	290	296	301	307	313	319	324	330	336	343	349	355	361	
Baxanian Trucking Co Inc	Boone, KY	1,171	22.07	IDEM	10,224,251	8,792,856	5	5	4	4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	
Jay County Landfill	Jay, IN	491	42.61	IDEM	14,712,191	9,808,127	1,391	1,420	1,360	1,387	1,430	1,458	1,487	1,517	1,546	1,576	1,605	1,635	1,665	1,696	1,727	1,758	1,790	1,822	1,854	
Total					133,560,072	114,855,490	100,521	102,641	99,317	100,234	103,364	105,401	107,489	109,630	111,764	113,870	115,999	118,151	120,325	122,547	124,792	127,062	129,356	131,674	134,031	

Source(s) of information:

2018 tons - Tables III-1 - III-3
 Projected value for each landfill is calculated as a ratio based on the 2018 distribution.
 2014 Indiana Municipal Solid Waste (MSW) Landfill Capacity & Life
 Solid Waste Branch - Annual Survey Report Kentucky Energy and Environment Cabinet
 2018 Ohio Facility Data Report Tables

Sample calculation:
 2019 Celina Sanitary Landfill = $\frac{\text{Celina Sanitary Landfill 2018}}{\text{Total 2018}} \times \text{Total 2019}$
 21 tons = $\frac{21 \text{ tons}}{100,521 \text{ tons}} \times 102,641 \text{ tons}$

**Table VI-4B
Waste Management Method: Incinerator**

Facilities Used by District	Location	Tons of District SW Managed																		
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Medassure Of Indiana Treatment Facility	Marion County, IN	32.55	32.56	32.52	32.52	32.52	32.52	32.52	32.52	32.52	32.52	32.53	32.53	32.53	32.53	32.53	32.53	32.53	32.53	32.53
Midwest Resource Recovery Center	Clark County, IN	29.23	29.24	29.20	29.20	29.20	29.20	29.20	29.20	29.20	29.21	29.21	29.21	29.21	29.21	29.21	29.21	29.21	29.21	29.21
Tradebe Treatment & Recycling LLC	Lake County, IN	0.54	0.55	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
EQ Industrial Services Processing Facility	Marion County, IN	1.37	1.38	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Stericycle Specialty Waste Solutions, Inc.	Lake County, IN	0.19	0.20	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Covanta Environmental Solutions, LLC*	Marion County, IN	898.77	733.42	739.04	739.04	739.04	739.04	739.04	739.04	739.04	739.04	739.04	739.04	739.04	739.05	739.05	739.05	739.05	739.05	739.05
Totals		962.65	797.35	802.76	802.77	802.77	802.78	802.79	802.79	802.80	802.80	802.80	802.81	802.81	802.82	802.82	802.83	802.83	802.84	802.84

N/A=Not Available

*A couple of industrial facilities located in Miami County reported to the District reported 2018, 2019, and estimated 2020 (585.07 tons for 9.5 months).

Table VI-4C
Waste Management Method: Transfer

Facilities Used by District	Tons of District SW Managed																			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Miami County Solid Waste & Recycling Facility	79,547	79,547	77,015	78,584	81,135	82,792	84,486	86,227	87,961	89,568	91,192	92,835	94,497	96,198	97,918	99,658	101,418	103,198	105,017	
Waste Management Transfer Station Fairborn	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	
Montgomery County South Transfer Facility	101	101	98	100	103	105	107	109	112	114	116	118	120	122	124	127	129	131	133	
Total	94,156	94,156	91,159	93,016	96,035	97,997	100,002	102,063	104,115	106,017	107,940	109,885	111,852	113,864	115,901	117,960	120,043	122,151	124,304	

Source(s) of information:
2018 Tons by Facility - Table III-3
Total Tons - Table VI-1

Table VI-4D
Waste Management Method: Recycling

Facilities Used by District	Area Served	Tons of District SW Managed																		
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Bethel Township 8735 South Second Street, Tipp City, Ohio	Liberty Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bradford Village 115 N. Miami Ave, Bradford Ohio	Napoleon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Miami County Recycling Center 2200 N. Co. Rd 25A Troy Ohio	Deshler	1,636	1,661	1,677	1,691	1,706	1,720	1,735	1,750	1,766	1,762	1,759	1,755	1,752	1,748	1,744	1,741	1,737	1,733	1,729
Union Township 9497 Markley Road, Laura Ohio	McClure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AbiBow Recycling LLC 995 Marion Rd, Columbus, OH 43207	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Angie Shred 300 Peters Ave. Troy, OH 45373 (937) 332-0300	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Miami County Shrine Club 1823 Park Ave. Piqua, OH 45356	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Newark Recycled Fibers 2601 E. River Rd. Moraine, OH 45439	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Franklin Iron & Metal 1939 E. First St. Dayton, OH 45403	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
1 Shot Services 6377 Hahn Rd. Bradford, OH 45308	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Polings Auto Parts 2226 N County Road 25A Troy, OH 45373 (937) 335-7855	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
G A Wintzer & Son 12279 Co. Rd. 25A/Dixie Hwy. Wapakoneta, Ohio 45895	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Rumpke Center City Recycling - Hamilton County	Multiple	429	435	440	443	447	451	455	459	463	462	461	460	459	458	457	456	455	454	453
Rumpke Recycling - Dayton	Multiple	3,656	3,712	3,749	3,781	3,813	3,846	3,879	3,913	3,947	3,939	3,932	3,924	3,916	3,908	3,899	3,891	3,882	3,873	3,864
Rumpke Recycling - Dayton	Multiple	878	891	900	908	915	923	931	939	947	946	944	942	940	938	936	934	932	930	928
Rumpke Recycling - Dayton	Multiple	3,718	3,775	3,813	3,845	3,878	3,911	3,944	3,979	4,013	4,006	3,998	3,990	3,982	3,974	3,965	3,957	3,948	3,939	3,929
Dayton Glass Plant	Multiple	121	123	124	125	126	127	128	129	131	130	130	130	129	129	129	129	128	128	128
Cohen Brothers Inc	District	14	14	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Jim's Tire Centers LLC	District	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Kebley Tire Recycle	District	153	155	157	158	160	161	162	164	165	165	165	164	164	164	163	163	162	162	162
Liberty Tire Service of Ohio	District	1,049	1,065	1,076	1,085	1,094	1,103	1,113	1,122	1,132	1,130	1,128	1,126	1,123	1,121	1,119	1,116	1,114	1,111	1,109
R & R Tire Disposal	District	27	27	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29
R Willig Tire Distributions Inc	District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R Willig Tire Distributions Inc	District	48	49	49	50	50	50	51	51	52	52	52	52	51	51	51	51	51	51	51
Rumpke Transportation Company, LLC	District	259	263	265	268	270	272	274	277	279	279	278	278	277	277	276	275	275	274	273
Wal-Mart	Multiple	937	951	961	969	977	986	994	1,003	1,012	1,010	1,008	1,006	1,004	1,002	1,000	997	995	993	991
Lowe's Companies, Inc.	Multiple	148	150	152	153	154	156	157	158	160	159	159	159	158	158	158	157	157	157	156
Home Depot Corporation	Multiple	215	218	221	222	224	226	228	230	232	232	231	231	230	230	229	229	228	228	227
Meijer Corporation	Multiple	1,389	1,410	1,424	1,436	1,448	1,461	1,473	1,486	1,499	1,496	1,493	1,490	1,487	1,484	1,481	1,478	1,475	1,471	1,468
Dollar General Corporation	Multiple	212	215	217	219	221	223	225	226	228	228	228	227	227	226	226	225	225	224	224
Big Lots Corporation	Multiple	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Kohls Corporate Office & Headquarters	Multiple	125	127	128	130	131	132	133	134	135	135	135	134	134	134	134	133	133	133	132
Kroger	Multiple	1,082	1,098	1,109	1,119	1,128	1,138	1,148	1,158	1,168	1,166	1,163	1,161	1,159	1,156	1,154	1,151	1,149	1,146	1,143
United States Postal Service	Multiple	111	113	114	115	116	117	118	119	120	120	120	120	119	119	119	119	118	118	118
Salvation Army (multiple-locations)	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Goodwill Industries 1511 Kuntz Rd, Dayton, OH 45404 (937) 461-4800	Multiple	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Electronics Collection Events	District-Wide	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
HHW Collection	District-Wide	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
District Shred Fest	District-Wide	13	13	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Special Event Recycling	District-Wide	309	313	317	319	322	325	327	330	333	333	332	331	331	330	329	328	328	327	326
Total		129,866	131,834	133,169	134,293	135,434	136,593	137,769	138,963	140,176	139,911	139,640	139,363	139,080	138,791	138,495	138,192	137,883	137,567	137,244

Source(s) of information:
The total recycled is from Table VI-1.
Projected value for each Recycling Facility is
calculated as a ratio based on the 2018
distribution

Sample calculation:

$$\text{Rumpke Center City Recycling - Recycling 2019} = \frac{\text{2018 Rumpke Center City}}{\text{2018 Total}} \times \text{Total 2019}$$

$$435 \text{ tons} = \frac{429 \text{ tons}}{129,866 \text{ tons}} \times 131,834 \text{ tons}$$

Table VI-4E
Waste Management Method: Composting

Facilities Used by District	County	Tons of District SW Managed																	
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
BR Mulch Inc	Miami	560	560	573	586	599	612	626	640	654	669	684	699	714	730	747	763	780	798
Chaney's Nursery Inc	Miami	1,113	1,113	1,138	1,163	1,189	1,216	1,243	1,271	1,299	1,328	1,358	1,388	1,419	1,451	1,483	1,516	1,550	1,585
City of Piqua Composting Facility	Miami	954	954	975	997	1,019	1,042	1,065	1,089	1,113	1,138	1,163	1,189	1,216	1,243	1,271	1,299	1,328	1,358
Dye Mill Road Facility	Miami	1,674	1,674	1,674	1,712	1,750	1,829	1,870	1,912	1,954	1,998	2,043	2,088	2,135	2,182	2,231	2,281	2,332	2,384
Roe Transportation Inc	Shelby	5,081	5,081	5,195	5,311	5,429	5,551	5,675	5,801	5,931	6,063	6,199	6,337	6,479	6,623	6,771	6,922	7,077	7,235
City of Huber Heights - Yard Waste Drop Off Site	Montgomery	15	15	15	15	16	16	16	17	17	17	18	18	19	19	19	20	20	21
Ohio Mulch	Montgomery	209	209	213	218	223	228	233	238	243	249	254	260	266	272	278	284	290	297
The Grunler Landscape Co	Montgomery	48	48	49	51	52	53	54	55	56	58	59	60	62	63	64	66	67	69
Resource Recycling West	Allen	351	351	358	366	375	383	392	400	409	418	428	437	447	457	467	478	488	499
Resource Recycling	Allen	351	351	358	366	375	383	392	400	409	418	428	437	447	457	467	478	488	499
The Siebenthaler Company	Montgomery	37	37	38	39	40	41	42	42	43	44	45	46	47	48	50	51	52	53
Hauler and grocer food waste data	Miami	259	259	259	271	277	283	289	296	302	309	316	323	330	338	345	353	361	369
Bradford Village Yard Waste Collection	Miami	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covington Village Yard Waste Collection	Miami	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Piqua Yard Waste Collection	Miami	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Troy Yard Waste Collection	Miami	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City of West Milton Yard Waste Collection	Miami	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		10,393	10,393	10,625	10,862	11,104	11,352	11,606	11,865	12,130	12,401	12,678	12,961	13,250	13,546	13,849	14,158	14,474	14,797

Source(s) of information:
2018 tons - Table III-6
2018 tons - 2018 Annual District Report survey data
2018 - 2036 tons - Table VI-1

**Table VI-5
Implementation Schedule for Facilities,
Strategies, Programs and Activities: Dates and Description**

Facility, Strategy, Program, or Activity	Program ID	Location	Description of Program/Facility	Approximate Dates	
				Begin	Cease
Curbside Recycling	MC-1	Covington Village	Each political subdivision is expected to continue their Pay-As-You-Throw non-subscription curbside recycling program. Residents in each political subdivision do not have to opt-in to receive curbside recycling. Program is provided to all single-family housing units. Resident fees are based on the volume of garbage disposed, but unlimited recycling is provided at no additional cost. Programs accept at a minimum aluminum cans, tin/steel cans, glass, #1-#7 plastic bottles and jugs, mixed paper, and cardboard.	Ongoing	Ongoing
		West Milton		Ongoing	Ongoing
		Tipp City		Ongoing	Ongoing
		Transfer Station	Though the volume-based recycling program at the Transfer Station is technically not a curbside program, it does fall under the other pay-as-you-throw District programs. Residents purchase bags for disposing of waste at the facility.	Ongoing	Ongoing
		Bradford Village	Each political subdivision is expected to continue their non-subscription curbside recycling program. Residents in each political subdivision do not have to opt-in to receive curbside recycling. Program is provided to all single-family housing units. Materials accepted vary by program but at a minimum include #1-2 plastic bottles, aluminum cans, tin/steel cans, glass bottles, corrugated cardboard, chipboard/paperboard, and newsprint.	2012	Ongoing
		Piqua City		Ongoing	Ongoing
		Pleasant Hill Village		Ongoing	Ongoing
		Troy City		Ongoing	Ongoing
		Bethel Township		Ongoing	Ongoing
		Brown Township		Ongoing	Ongoing
		Casstown Village		Ongoing	Ongoing
		Concord Township	Ongoing	Ongoing	
		Elizabeth Township	Ongoing	Ongoing	
		Flecher Village	Each political subdivision is expected to continue their subscription curbside recycling program. Residents in each political subdivision that live in single family housing units can opt-in to receive curbside recycling services. Programs accept at a minimum aluminum cans, tin/steel cans, glass, #1 and #2 plastic bottles, newspaper, and cardboard.	Ongoing	Ongoing
		Laura Village		Ongoing	Ongoing
		Lostcreek Township		Ongoing	Ongoing
		Ludlow Falls Village		Ongoing	Ongoing
		Monroe Township		Ongoing	Ongoing
		Newberry Township		Ongoing	Ongoing
		Newton Township		Ongoing	Ongoing
		Potsdam Village		Ongoing	Ongoing
		Spring Creek Township		Ongoing	Ongoing
		Staunton Township		Ongoing	Ongoing
		Washington Township	Ongoing	Ongoing	
		Union Township	Ongoing	Ongoing	
		District	The District helps in developing a curbside trash and recycling community consortium. If communities are interested, the District's role would include providing seed money for professional services needed to begin the consortium bidding process, which may include consulting and/or legal assistance.	Ongoing	Ongoing
		District	The District is available to provide assistance to municipalities regarding volume-based curbside services.	Ongoing	Ongoing
	District	The District will implement a variety of strategies to promote participation in subscription curbside recycling programs. Strategies could include working with haulers to raise awareness of the availability of curbside recycling services, using mailers, placing ads in newspapers, and adding information on the District website identifying haulers that provide subscription curbside recycling.	Ongoing	Ongoing	
	MC-1.1	District	Curbside Technical Assistance: The District will provide technical assistance to any community that desires to either evaluate, start-up or improve a residential curbside recycling program.	2021	2036
	MC-1.2	District	Participation Promotion: The District will provide technical assistance to any community that desires to increase participation in their program.	2022	2036
	MC-1.3	District	Contamination Reduction: The District will provide technical assistance to any community that desires to decrease contamination in their program.	2021	2036
	Drop-Off Recycling	MC-2	Bethel Twp./Tipp City	Full-time, full-service recycling drop-off locations accept at a minimum aluminum and steel containers, paper, #1 and #2 plastics, glass, and cardboard. The District will continue to manage the site located at the Miami County Transfer Station. All other drop-offs will continue to be operated and maintained by the political subdivision in which they are located.	Ongoing
Bradford Village			Ongoing		2012
City of Troy/Recycling Center			Ongoing		Ongoing
Union Twp./Village of Laura			Ongoing		Ongoing
District		Bar/Restaurant Glass Drop-Off: The Miami County Solid Waste District provides containers for glass to be placed at bars - recycling containers for use inside the establishment, and larger wheeled carts for collecting the glass from the smaller containers. The District has since assumed all ongoing costs for the program.	Ongoing	Ongoing	
District		Increasing Drop-Off Participation: Using data from the Miami Valley Regional Planning Commission (MVRPG), the District identified areas prime areas where participation could be improved. Information on the recycling center is made available online, through the District website and the county's website, as well as through periodic newspaper advertisements.	2016	Ongoing	
MC-2.1		District	Drop-Off Technical Assistance: The District will provide technical assistance to any community that desires to either evaluate, start-up or improve a residential curbside recycling program.	2021	2036
MC-2.2		District	Participation Promotion: The District will provide technical assistance to any community that desires to increase participation in their program.	2021	2036
MC-2.3		District	Contamination Reduction: The District will provide technical assistance to any community that desires to decrease contamination in their program.	2021	2036

**Table VI-5
Implementation Schedule for Facilities,
Strategies, Programs and Activities: Dates and Description**

Yard Waste Management	MC-3	Public and private entities and the District	Registered composting facilities and collection activities operated by private and public sector entities are expected to continue operating. The District will continue accepting holiday trees at the Transfer Station. Technical assistance will be provided to political subdivisions interested in expanding current organics recycling programs or implementing new organics recycling programs.	Ongoing	Ongoing
	MC-3.1	District	Participation Promotion: The District will provide technical assistance to any community that desires to increase participation in their program.	2022	2036
Household Hazardous Waste Management	MC-4	District	The District will continue hosting weekly user fee-based HHW collection events from April-September. There are also multiple drop-offs permanently and at events for sharps and drugs at sheriff's office and multiple police offices throughout the District.	Ongoing	Ongoing
		District	HHW Webpage: The District has a section on its website to include detailed information on upcoming HHW collections and other useful information on managing HHW.	Ongoing	Ongoing
	MC-4.1	District	Promoting Reduction of Household Hazardous Waste Generation: Reduce the amount of HHW materials collected from its program by informing residents of alternative methods of disposal via education and outreach opportunities. To accomplish this long-term goal, the District will enhance its education and awareness program to include the following: <ul style="list-style-type: none"> • Teach students and adults the value of products that contain hazardous constituents, to buy what is needed and use the entire product for its intended purpose. • Promote the use of alternative non-hazardous products such as latex paint, plant-based cleaners or other non-hazardous alternatives; • Add HHW management techniques to education presentations (as appropriate for different age groups). 	2022	2036
	MC-4.2	District	Participation Promotion: The District will provide conduct promotional activities and initiatives to increase participation in the HHW program while educating residents on the use of alternative products and to reduce generation of HHW materials. The following may be conducted by the District. <ul style="list-style-type: none"> • Develop online calculators to plan for paint purchases to reduce waste • Develop education materials for proper HHW management and purchasing/use techniques • Conduct targeted advertising and or social media posts • Add HHW management to existing education and outreach presentations as needed 	2022	2036
Scrap Tire Recycling	MC-5	District	The District will continue to accept scrap tires at the Miami County Transfer Station for a fee. The District will apply for scrap tire grants on an as-needed basis.	Ongoing	Ongoing
	MC-5.1	District	Cost Containment: Seek competitive bids for scrap tire services throughout the planning period to realize the best price possible under market conditions. Have residents recycle their tires at the time of new tire purchase. Much of the messaging and education that will be conducted by the District will focus on this goal.	2022	2036
	MC-5.2	District	Participation Promotion: Conduct promotional activities and initiatives to increase participation in the scrap tire program to reduce generation of scrap tires at District events. The following may be conducted by the District. <ul style="list-style-type: none"> • Develop education materials for proper scrap tire purchasing • Conduct targeted advertising and or social media posts • Add scrap tire management to existing education and outreach presentations as needed 	2022	2024
	MC-5.3	District	Participation Promotion: Conduct promotional activities to educate residents on the use of existing tire dealer options to reduce generation of scrap tires at District events. The following may be conducted by the District. <ul style="list-style-type: none"> • Develop a list of existing tire dealer options • Conduct targeted advertising and or social media posts 	2022	2024
	MC-5.4	District	Development and Distribution of Educational Poster: The District will develop an educational poster that will include messaging on the drawbacks of illegal tire disposal as well as the positives of turning in old tires when purchasing new tires. Encourage local tire retailers and businesses to display the poster in a highly visible area in their establishment.	2022	2023

**Table VI-5
Implementation Schedule for Facilities,
Strategies, Programs and Activities: Dates and Description**

Automobile Batteries and Used Oil Collection	MC-6	District	Automotive (lead-acid) batteries will continue to be accepted at the Miami County Transfer Station. The District will also maintain a current list of acceptable lead-acid battery and used oil recyclers in the Miami County area.	2022	2036
	MC-6.1	District	Participation Promotion: The District will conduct promotional activities and initiatives to increase participation in the automobile batteries and used oil program. The following may be conducted by the District. <ul style="list-style-type: none"> • Conduct targeted advertising and or social media posts • Add automobile batteries and used oil to existing education and outreach presentations as needed • Work with local automobile battery retailers to develop education and outreach opportunities for their customers so used batteries are returned as a core for proper recycling • Work with local car parts stores and other retailers to develop education and outreach opportunities for their customers so used oil is returned to their locations if allowed or to other recyclers for proper recycling 	2016	Ongoing
Special Event Recycling	MC-7	District	The District will assist with recycling at special events upon request by providing labor and loaning temporary collection containers.	Ongoing	Ongoing
		District	The District will provide technical assistance upon request to special event managers to create vendor agreements that encourage or require food/beverage vendors to provide products in recyclable packaging.	Ongoing	Ongoing
	MC-7.1	District	Special Event Recycling Promotion: Create/update a contact database for community events and send out a notification about the program. Develop a community event recycling planning guidance manual to assist event planners with recycling and waste reduction techniques.	2022	2036
Electronics Recycling	MC-8	District	Electronics collection is offered on an ongoing basis at the Transfer Station.	Ongoing	Ongoing
Appliance Recycling	MC-9	District	The District will continue to accept appliances for recycling at the Transfer Station. Freon removal services will continue to be available for a reasonable fee.	Ongoing	Ongoing
Market Development Programs					
Recycling Market Development Grant	MC-10	District	The District will act as a pass-through agent for Ohio EPA's Market Development Grant. The District will also assist viable candidates with their applications for the Market Development Grant.	2009	Ongoing
		District	The District will develop a grant manual for all District and EPA grants. The manual will be designed to include the details of each grant program and how to apply. The manual will also include an application and grant agreement for District grants and other details for the EPA grants. The District will develop the grant manual within the first three years of the new planning period.	2025	2036
"Buy Recycled" Promotion	MC-11	District	The District educates and promotes market development through a variety of efforts including promoting recycled content products and providing technical assistance to residents and businesses seeking products with recycled content materials. The District will purchase office supplies, promotional materials, and other goods made with recycled-content materials as often as possible. The District will also maintain information about products containing recycled materials.	Ongoing	Ongoing
Grant Programs					
Internal Grant	MC-12	District	The District will continue to provide funding for the Miami County Court System's litter collection program, which utilizes community service workers to collect litter from roadways and the area surrounding the transfer station.	Ongoing	Ongoing
		District	The District worked with the court system to provide recycle bags and recycling procedures to source separate litter that is recyclable. The separated materials are then be recycled by the District. Miami County Transfer Station staff pull recyclable materials from litter collection as time allows.	Ongoing	Ongoing
	MC-12.1	District	Court System/Community Workers Technical Assistance: The District will provide technical assistance to the court system staff and to the community service workers that educates them on what is recyclable and what is not from their litter clean-up tasks. The District will first spend time with litter crews to observe the collection process and how the workers are source separating recyclables from trash. Based on this observation, the District will create an easy to understand user friendly guidance document that would be disseminated to all workers prior to the collection process. In addition, The District will conduct routine training sessions with the court system staff on how to communicate the source separation process to the community service workers to reduce contamination.	2022	2025

**Table VI-5
Implementation Schedule for Facilities,
Strategies, Programs and Activities: Dates and Description**

Community Recycling Grant	MC-13	District	The District will apply for Ohio EPA's Community Recycling Grant on an as-needed basis when funding is available. The District will also promote the grant opportunity to political subdivisions within Miami County.	Ongoing	Ongoing
	MC-13.1	District	Community Recycling Grant Promotion: The District will create/update a contact database for service groups and send out a notification about the grant and how a group can apply. The District will continue to promote this grant opportunity and work with any governmental entity that proposes a viable project for this grant.	2022	2036
Litter Collection Grant	MC-14	District	The District will apply for Ohio EPA's Litter Collection & Prevention Grant on an as-needed basis when funding is available. The District will also promote the grant opportunity to targeted groups.	Ongoing	Ongoing
	MC-14.1	District	Litter Collection Grant Promotion: The District will create/update a contact database for service groups and send out a notification about the grant and how a group can apply. The District will continue to promote this grant opportunity and work with any governmental entity that proposes a viable project for this grant.	2022	2036
School Waste Reduction Grant	MC-15	District	The District will annually provide \$500 grants up to \$3,000 total to local schools that apply. Funding may be used on waste reduction activities, programming, and education.	Ongoing	Ongoing
	MC-15.1	District	School Waste Reduction Grant Promotion: The District will create/update a contact database for school principals and send out a notification about the grant and how a school can apply.	2022	2036
Education and Awareness Programs					
Education and Awareness	MC-16	District	The District will provide education and awareness using the following strategies: school presentations, civic presentations, contests, displays, publicity and advertising, flyers and brochures, the District website, drop-off recycling education, commercial technical assistance, and industrial sector technical assistance.	Ongoing	Ongoing
	MC-16.1	District	Targeted Curbside Education: The District will work towards implementing technical assistance to targeted communities for curbside recycling program education. The goal is to reduce contamination levels for single stream recycling communities that deliver recyclables for processing at District facilities or District processing partners. The goal will also be to increase participation in curbside recycling.	2022	2036
	MC-16.2	District	Signage and Newspaper: The District plans to add additional signage to all recycling drop-off locations as well as create ads to place in local newspapers on recycling updates, changes, and reminders. The content of these signs and ads may include reminders on what materials are and are not accepted, locations to take special materials, contact information, special event information, and more.	2022	2036
Economic Incentive Programs					
Miami County Transfer Facility Pay-Per-Bag	MC-17	District	Garbage bags will be sold to residents at the Miami County Transfer Station. Residents will pay per bag disposed, but unlimited recycling will be provided at no extra cost. The District promotes this program through literature and on its website.	Ongoing	Ongoing
Pay-As-You-Throw Technical Assistance	MC-18	District	The District will provide technical assistance upon request to political subdivisions interested in implementing PAYT systems.	Ongoing	Ongoing
Other Programs					
Miami County Debris Management Guide	MC-19	District	The District will continue to update the Miami County Debris Management Guide on an as-needed basis. If an emergency debris event occurs, the District will assist with oversight and coordination of debris management operations, and aid in the disposal of debris. The District's office will also be available to use as a centralized Command Post for Debris Managers throughout the county.	2009	Ongoing
Annual Program Performance Assessment	MC-21	District	The District will annually evaluate each program and identify opportunities to improve program performance or effectiveness.	2016	Ongoing
	MC-21.1	District	Performance Metrics Evaluation: The District will evaluate current performance metrics and will decide if new data measurement opportunities are efficient and worth the time investment.	2022	2036
	MC-21.2	District	Annual Recycling Audit: The District will audit recycling loads which come to the transfer facility.	2022	2036
Organic Waste Management	MC-22	District	The District assesses the infrastructure for food waste management and then offers technical assistance for the management of food waste and other organics in Miami County.	2022	Ongoing
	MC-22.1	District	Organic Waste Regional Assessment: An assessment will be done by the District to identify the food waste/organics management infrastructure in the District and/or the region. This will involve the identification of Class 2 compost facilities that commercially accept food waste and solid waste or specialty haulers that collect and transport food waste and other organics. Part of the process will be to access the willingness and/or capability of the identified compost facilities and haulers to provide organics waste management services to District generators.	2022	2023
	MC-22.2	District	Based on this assessment, the District will determine if Initiative MC-Business Food Waste Technical Assistance: The District may provide technical assistance to any business or institution in the District that desires to start a food waste reduction program in their facility or premises.	2023	2036
Other Facilities					
Facilities: Miami County Transfer Station	MC-20	District	This facility will continue to operate throughout the planning period.	Ongoing	Ongoing

**Table VI-6
Facilities Identified and Current Designations**

Facilities Identified	
Name	Location (SWMD)
Landfills	
Ohio EPA permitted and licensed solid waste landfills.	
Transfer Facilities	
Ohio EPA permitted and licensed solid waste transfer facilities.	
Recycling Facilities	
Recycling Facilities presented in Section III of this Plan.	
Designated Facilities	
Miami County Transfer Station	Miami County Solid Waste Management District

VII. Measurement of Progress Toward Waste Reduction Goals

[ORC Section 3734.53(A)]

The Ohio EPA *1995 State Plan* establishes seven goals solid waste management districts (SWMDs) are required to achieve in their solid waste management plans. These goals are as follows:

Goal #	Description
#1	Ensure the availability of reduction, recycling and minimization alternatives for municipal solid waste by ensuring 90% of residents have access to curbside and drop-off programs. The District must also demonstrate that there are adequate opportunities for industrial businesses to recycle.
#2	Reduce and/or recycle at least 25% of the total waste generated by the residential/commercial sector and 50% of the total waste generated by the industrial sector.
#3	Provide informational and technical assistance on source reduction.
#4	Provide informational and technical assistance on recycling, reuse, and composting opportunities.
#5	Strategies for scrap tires and household hazardous wastes.
#6	Annual reporting of plan implementation.
#7	Market development strategy (optional).

SWMDs are encouraged to meet Goal #1 and Goal #2 but are only required to demonstrate compliance with one goal or the other. Goals #3 through #6 are mandated goals to which SWMDs must demonstrate compliance, and Goal #7 is optional. This section will cover the goal selected by the District, its progress toward achieving the goal, and plans to maintain compliance throughout the planning period.

A. Compliance with Goal #2

The District will comply with Goal #2 of the 1995 State Plan, which requires solid waste districts to:

- Reduce or recycle at least 25% of the residential/commercial waste generated; and
- Reduce or recycle at least 50% of the industrial waste generated.

B. Demonstration of Compliance with Goal #2

The District has demonstrated compliance with Goal #2 for the last several solid waste plan updates as documented in all of its Annual District Reports (ADR) submitted to Ohio EPA each year (2010-2018). The recycling and waste reduction data, as reported to Ohio EPA and ultimately to the Legislators of Ohio, documents compliance for Goal #2 for the following years (except 2012):

- 2018 – Res/Com 32.29% and Industrial 83.55%
- 2017 – Res/Com 32.52% and Industrial 84.09%
- 2016 – Res/Com 34.06% and Industrial 83.55%
- 2015 – Res/Com 33.62% and Industrial 96.97%
- 2014 – Res/Com 28.28% and Industrial 88.54%
- 2013 – Res/Com 32.18% and Industrial 87.65%
- 2012 – Res/Com 24.47% and Industrial 87.02%
- 2011 – Res/Com 34.17% and Industrial 97.24%
- 2010 – Res/Com 32.92% and Industrial 83.86%

The above precedence of reporting to EPA based on survey data that was obtained by following the Version 3.0 Format requirements for solid waste generator sector differentiation is clear and shows that the District should continue as a Goal #2 District.

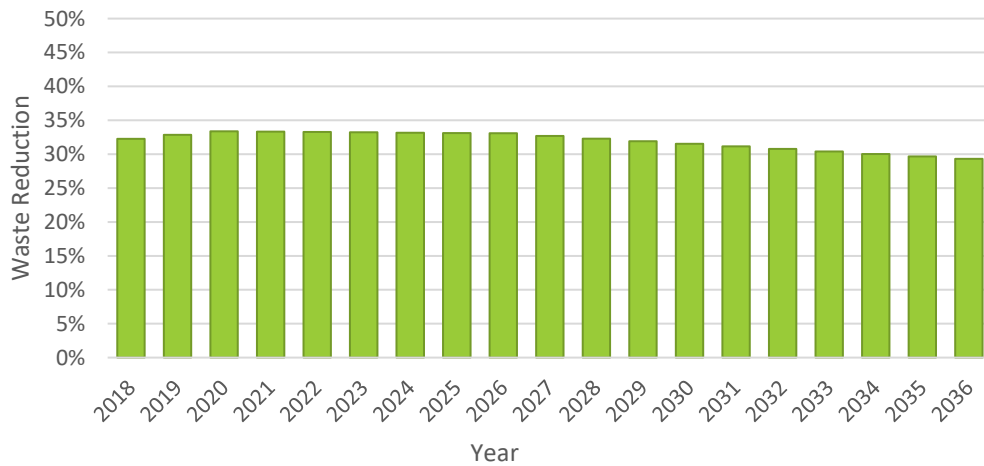
In 2018, approximately 32% of the District’s residential/commercial waste stream was recycled including yard waste (see Table VII-3). This equates in a pounds per person per day (PPD) rate of 1.97.

The District is committed to maintaining or exceeding the state goals for recycling and waste reduction. The programs presented in Section V and included in Table VI-5 illustrate the District’s plans to continue to maintain or increase the amount of recyclable materials that are recycled.

The District will continue to exceed the 25% waste reduction rate throughout the planning period based on the District’s projections for successful recycling programs and waste generation within the District. In 2036, the final year of the planning period, the District anticipates a 29% waste reduction rate for the residential/commercial section. This equates to a pounds per person per day (PPD) rate of 2.40.

The following graph depicts the residential/commercial sector waste reduction rate throughout the planning period.

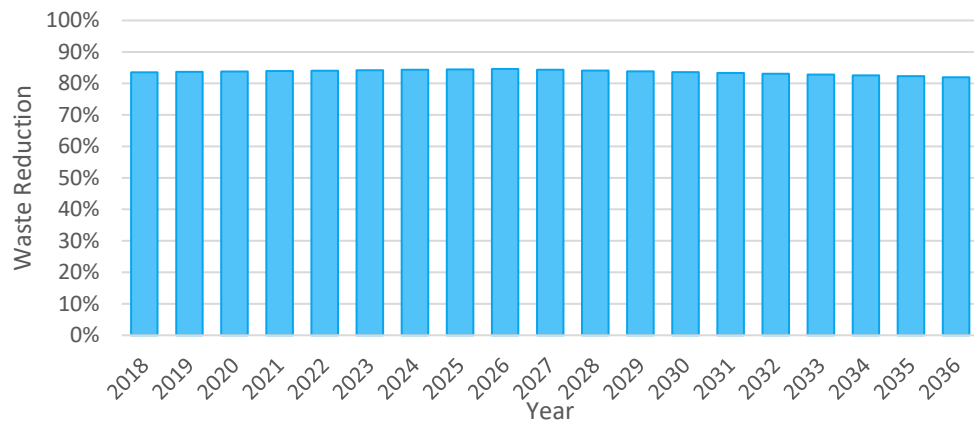
Residential/Commercial Waste Reduction Percentage (2018 – 2036)



In 2018, 83% of industrial solid waste was recycled (Table VII-4). This equates in a pounds per person per day (PPD) rate of 5.30. In 2036, the final year of the planning period, the District anticipates a waste reduction rate of 81% for the industrial sector. This equates in a pounds per person per day (PPD) rate of 5.63. This projection was made to stay conservative in the event of fluctuations in the industrial sector.

The following graph depicts the industrial sector waste reduction rate throughout the planning period.

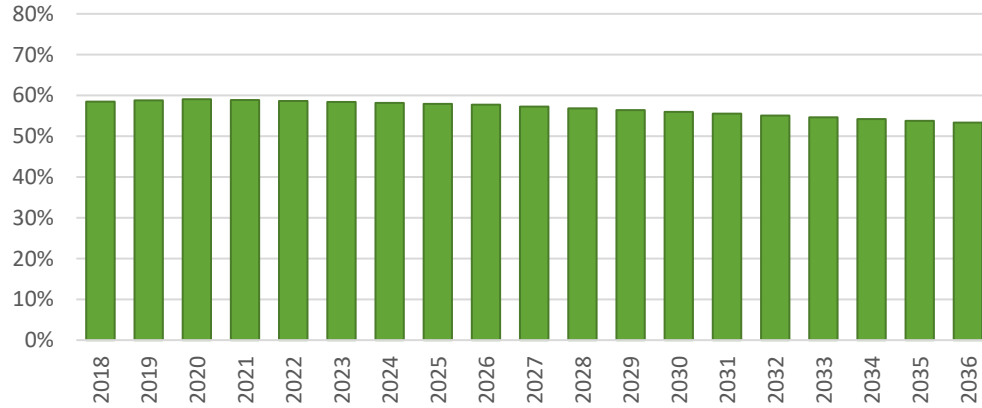
Industrial Waste Reduction Percentage (2018 – 2036)



In 2018, the District’s total waste reduction rate (residential/commercial plus industrial) was 58% (Table VII-5). This equates in a pounds per person per day (PPD) rate of 7.27. The District anticipates that the total waste reduction rate will decrease to 53% by 2036, the final year of the planning period. This equates in a pounds per person per day (PPD) rate of 8.04. The projected decrease is primarily based on the projected increases in waste generation from the residential/commercial sector.

The following graph depicts all sectors waste reduction rate throughout the planning period.

Total District Waste Reduction Percentage (2018 – 2036)



**Table VII-3
Annual Rate of Waste Reduction: Residential/Commercial Waste**

Year	Recycling	Composting	Gross Incineration	Waste Reduction via Incineration	Landfill	Total Waste Reduction	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (PPD)
2018	27,650	10,393	1	1	79,831	38,043	105,656	32%	1.97
2019	28,505	10,393	0	0	82,527	38,898	106,684	32%	2.00
2020	29,379	10,393	0	0	78,240	39,772	101,362	34%	2.15
2021	30,041	10,625	0	0	80,191	40,666	101,478	34%	2.20
2022	30,717	10,862	0	0	83,354	41,579	102,550	33%	2.22
2023	31,409	11,104	0	0	85,425	42,513	102,663	33%	2.27
2024	32,116	11,352	0	0	87,547	43,469	102,776	33%	2.32
2025	32,839	11,606	0	0	89,721	44,445	102,889	33%	2.37
2026	33,579	11,865	0	0	91,888	45,444	102,956	33%	2.42
2027	33,314	12,130	0	0	93,553	45,444	103,023	33%	2.42
2028	33,043	12,401	0	0	95,238	45,444	103,090	32%	2.42
2029	32,766	12,678	0	0	96,944	45,444	103,158	32%	2.41
2030	32,483	12,961	0	0	98,670	45,444	103,225	32%	2.41
2031	32,194	13,250	0	0	100,441	45,444	103,309	31%	2.41
2032	31,898	13,546	0	0	102,233	45,444	103,393	31%	2.41
2033	31,595	13,849	0	0	104,048	45,444	103,477	30%	2.41
2034	31,286	14,158	0	0	105,884	45,444	103,561	30%	2.40
2035	30,970	14,474	0	0	107,743	45,444	103,645	30%	2.40
2036	30,647	14,797	0	0	109,516	45,444	103,656	29%	2.40

Source(s) of information:

Recycling, composting, incineration, and landfill tonnage - Table VI-2

Gross incineration and waste reduction via incineration - Table VI-1

Population - Table V-1

Sample calculations (2018):

Recycling + composting = Total waste reduction

27,650 tons + 10,393 tons = 38,043.28 tons

Total waste reduction ÷ (total waste reduction + landfill) x 100 = Waste reduction rate

38,043 tons / (38,043 tons + 79,830.89 tons) x 100 = 32%

(Total waste reduction x 2,000 lbs) ÷ (District population x 365 days) = Per capita waste reduction rate

(38,043 tons x 2,000 pounds) / (105,656 x 365) = 1.97 lbs/day

**Table VII-4
Annual Rate of Waste Reduction: Industrial Waste**

Year	Recycling	Gross Incineration	Waste Reduction via Incineration	Landfill	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (PPD)
2018	102,216	961	654	20,578	105,656	83%	5.30
2019	103,329	796	541	20,003	106,684	84%	5.31
2020	103,789	802	545	19,966	101,362	84%	5.61
2021	104,252	802	545	19,932	101,478	84%	5.63
2022	104,717	802	545	19,898	102,550	84%	5.60
2023	105,184	802	545	19,865	102,663	84%	5.61
2024	105,653	802	545	19,831	102,776	84%	5.63
2025	106,124	802	545	19,797	102,889	84%	5.65
2026	106,597	802	545	19,764	102,956	84%	5.67
2027	106,597	802	545	20,206	103,023	84%	5.67
2028	106,597	802	545	20,650	103,090	84%	5.67
2029	106,597	802	545	21,096	103,158	83%	5.66
2030	106,597	802	545	21,545	103,225	83%	5.66
2031	106,597	802	545	21,995	103,309	83%	5.65
2032	106,597	802	545	22,448	103,393	83%	5.65
2033	106,597	802	545	22,903	103,477	82%	5.64
2034	106,597	802	545	23,360	103,561	82%	5.64
2035	106,597	802	545	23,820	103,645	82%	5.64
2036	106,597	802	545	24,404	103,656	81%	5.63

Source(s) of information:

Recycling and landfill data - Table VI-3

Population - Table V-1

Sample calculations (2018):

$$\text{Recycling} \div (\text{recycling} + \text{landfill}) \times 100 = \text{Waste reduction rate}$$

$$102,216 \text{ tons} / (102,216 \text{ tons} + 20,578.45 \text{ tons}) \times 100 = 83\%$$

$$\text{Recycling} \times 2,000 \text{ pounds} \div (\text{district population} \times 365 \text{ days}) = \text{Per capita waste reduction rate}$$

$$(102,216 \text{ tons} \times 2,000 \text{ pounds}) / (105,656 \times 365) = 5.3 \text{ lbs/day}$$

**Table VII-5
Annual Rate of Waste Reduction: Total District Solid Waste**

Year	Recycling	Composting	Gross Incineration	Waste Reduction via Incineration	Landfill	Tons Waste Reduction	Population	Waste Reduction Rate	Per Capita Waste Reduction Rate (lb/person/day)
2018	129,866	10,393	963	655	100,409	140,259	105,656	58%	7.27
2019	131,834	10,393	0	0	102,530	142,227	106,684	58%	7.30
2020	133,169	10,393	0	0	98,206	143,561	101,362	59%	7.76
2021	134,293	10,625	0	0	100,123	144,918	101,478	59%	7.83
2022	135,434	10,862	0	0	103,252	146,296	102,550	59%	7.82
2023	136,593	11,104	0	0	105,290	147,697	102,663	58%	7.88
2024	137,769	11,352	0	0	107,378	149,122	102,776	58%	7.95
2025	138,963	11,606	0	0	109,519	150,569	102,889	58%	8.02
2026	140,176	11,865	0	0	111,652	152,041	102,956	58%	8.09
2027	139,911	12,130	0	0	113,759	152,041	103,023	57%	8.09
2028	139,640	12,401	0	0	115,888	152,041	103,090	57%	8.08
2029	139,363	12,678	0	0	118,040	152,041	103,158	56%	8.08
2030	139,080	12,961	0	0	120,214	152,041	103,225	56%	8.07
2031	138,791	13,250	0	0	122,436	152,041	103,309	55%	8.06
2032	138,495	13,546	0	0	124,681	152,041	103,393	55%	8.06
2033	138,192	13,849	0	0	126,951	152,041	103,477	54%	8.05
2034	137,883	14,158	0	0	129,245	152,041	103,561	54%	8.04
2035	137,567	14,474	0	0	131,563	152,041	103,645	54%	8.04
2036	137,244	14,797	0	0	133,919	152,041	103,656	53%	8.04

Note: Columns for incineration have not been included in this table since the District has not used this management method for solid waste.

Source(s) of information:

Recycling, composting, incineration, waste reduction via incineration, landfill, and population - Tables VII-3 and VII-4

Sample calculations (2018):

Recycling + composting + waste reduction via incineration = Tons waste reduction

129,866 tons + 10,393 tons = 140,258.7 tons

Total waste reduction ÷ (total waste reduction + landfill) x 100 = Waste reduction rate

140,259 tons / (140,259 tons + 100,409.34 tons) x 100 = 58%

(Total waste reduction x 2,000 lbs) ÷ (District population x 365 days) = Per capita waste reduction rate

(140,259 tons x 2,000 pounds) / (105,656 x 365) = 7.27 lbs/day

VIII. Cost of Financing Plan Implementation

[ORC Section 3734.53(A)(9), (12) and (B)]

This section of the Plan provides information on the District's revenues and expenditures. The revenues and expenditures presented for 2018 and 2019 are based on amended budgets and actual revenues received and costs expended. The planning period includes cost projections based on these initial years.

A projection on the estimated funds needed to operate is provided for each District program. The budget is a demonstration that the District can implement the initiatives, strategies, programs and facilities detailed in Sections IV and V of this *Plan Update*. The District put forth a diligent and honest effort to prepare the budget in this section; actual revenues and costs may change, and adjustments will be made by the District as appropriate. The tables referenced throughout Section VIII of this *Plan Update* are included at the end of the section.

Budget Demonstration

The District has prepared the budget section of this *Plan Update* to meet the requirements in the Ohio Revised Code, Section 3734.53 (A)(13)(d):

The methods of financing implementation of the plan and a demonstration of the availability of financial resources for that purpose.

The budget tables prepared for this *Plan Update* demonstrate that the District has the financial funding throughout the planning period to implement the planned programs and initiatives. Nothing contained in these budget projections should be construed as a binding commitment by the District to spend a specific amount of money on a particular strategy, facility, program and/or activity. The Board, with the advice and assistance of the District Coordinator, will review and revise the budget as needed to implement the planned strategies, facilities, programs and/or activities as effectively as possible with the funds available. Revenues, not otherwise committed to an existing strategy, facility, program or activity may be used to increase funding to improve the effectiveness of an existing strategy, facility, program or activity and to provide funding for a new strategy, facility, program or activity the Board concludes is justified based on the District Coordinator's recommendations and the content of this *Plan Update*.

The District reserves the right to revise the budget and reallocate funds as programs change or when otherwise determined to be in the best interest of the District. If the budget in this *Plan Update* is affected to the point that it must be revised, the District will first determine if a material change in circumstance has occurred. If a material change in circumstance has not occurred but budget revisions are needed that go beyond normal adjustments, the District may revise the budget per ORC Section 3734.56(E) and follow the appropriate ratification requirements to finalize the budget revisions.

The District is committed to implementing planned strategies, facilities, programs and/or activities in a cost-effective manner. The District is committed to improving the effectiveness and reduce the cost of all District strategies, facilities, programs and activities. The District Board is authorized to expend District funds among other uses included in the *Plan Update* when costs are reduced. Additionally, the Board is authorized to use reduced costs to provide grant funds or direct funding to evaluate, test and/or implement new strategies, facilities, programs and activities that are in compliance with this *Plan Update* are not a “material change in circumstance” regarding the implementation of this *Plan Update*.

Finally, the District reserves the right to fund some of the programs identified in this *Plan Update* through its unencumbered fund balance rather than through a direct line item in the budget. This allows flexibility to the District in the event the particular program is not implemented and/or there are gaps in funding provided. The District will not spend money from its unencumbered fund balance in such a way as to deplete the balance to levels that would put the District at risk financially.

A. Funding Mechanisms

The District has prepared this Solid Waste Management *Plan Update* with the most reliable and best information available at the time of its development. There may be discrepancies between the information presented in this *Plan Update* and previous reports (i.e., Annual District Reports, Quarterly Fee Reports, etc.) submitted to Ohio EPA. Some of these discrepancies come from the differences in categories from Ohio EPA reports and the programs presented in this *Plan Update*. The District believes that all previous reports were prepared with the best information available at that time. Since this *Plan Update* was prepared using data from comprehensive survey efforts that included all industrial and commercial businesses, institutions, municipalities, compost facilities, brokers/buy backs and solid waste haulers, the data will supersede all other reports. In addition, the District has committed to comprehensive annual surveying of all sectors in Miami County with assistance from solid waste consultants.

1. District Disposal Fees

Table VIII-1 is not applicable to the District because the District does not currently assess a tiered disposal fee. The District is not proposing to adopt or impose a tiered disposal fee with the ratification of the Plan Update or at any juncture during the current planning period.

2. Generation Fee

The District does not currently assess a generation fee; thus, Table VIII-2 is not applicable to the District. The District is not proposing to adopt or impose a

generation fee with the ratification of the Plan Update or at any juncture during the current planning period.

The District reserves the right to implement a generation fee at any point in the planning period. Any implementation of a generation fee will require the Policy Committee to follow the requirements in the Ohio Revised Code prior to enacting the generation fee including public comment and ratification of any proposed generation fees.

3. Grants

The District applied for and received grants from Ohio EPA in 2017 and 2018. Grants are competitive and not guaranteed; therefore, grant revenue is not projected. However, the District will continue to apply for grants on an as-needed basis.

4. Summary of District Revenues

Table VIII-3, "Summary of Revenue Generated and Mechanisms Used," presents the District's actual revenues received by all funding mechanisms for 2018 and 2019. Following are descriptions of each funding mechanism used by the District throughout the planning period and the methodology used to project each amount:

Revenue Source	2022 Projected Revenue Total
Transfer Station Tipping Fees	\$6,550,830
Transfer station tipping fees are collected on solid waste delivered to the Miami County Solid Waste Transfer Station. Tipping fee revenue projections from 2018-2036 are calculated by multiplying projected in-district tonnage plus out-of-district tonnage that will be managed at the transfer station by projected per ton tipping fees plus state fees. This line item also includes the Ohio EPA fee of \$4.75 per ton. User Fees are included in these tipping fees.	
Recycling Revenue	\$23,121
Revenue generated from the sale of secondary commodities collected at the transfer station. Recycling revenue projections from 2020-2036 are projected to remain constant from 2020 projected number. This is to remain conservative because of the volatile nature of the secondary commodities market.	
Other Revenue	\$24,260
Other revenue includes revenue collected from the sale of bags for the Blue Bag program and waived waste from selected industrial facilities. Miscellaneous revenue projections from 2020-2036 are projected to remain constant throughout the planning period.	

The Miami County Transfer Station is the only designated facility for all municipal solid waste generated in the District. Tipping fees collected at the transfer station cover its operational costs as well as District programming.

The transfer facility charge on incoming waste was \$49.05 per ton plus an Ohio EPA Fee of \$4.75 per ton, or a total of \$53.80 per ton from the reference year to 2018. The District relies on the tipping fee approved pursuant to the procedures required by Chapter 343 of the Ohio Revised Code as a rate and charge. The revenue generated from this rate and charge provides the funds necessary to manage and dispose of the waste that is delivered to the transfer facility and implement the Solid Waste Management Plan. Table VIII-3 presents the projected revenue generated by the tipping fee at the Miami County Transfer Station, recycling revenues and miscellaneous revenues. Table VI-4C presents the amount of in-district waste that is anticipated to be managed at the transfer facility during each year of the planning period.

The District Board of County Commissioners reserves its right to determine the most appropriate fee schedule and fee collection mechanism to fund the operation of the transfer station and implementation of the Plan consistent with the statutory authority of Chapter 3734 and 343 of the Ohio Revised Code; and specifically, section 343.08, without amending the Plan.

Tipping fees are based on current and projected economic conditions at the Miami County Transfer Station. The District projects that tipping fees will remain flat throughout the planning period; however, the District reserves the right to increase or decrease the fees as needed, based on current and/or projected future economic conditions for each year of the planning period. The District also reserves the right to create new fees for additional services or eliminate fees and their associated services throughout the planning period. The following table summarizes the tipping fee adjustments from 1994-2016.

Date	Tipping Fee
January 1, 1994	Increased from \$47.00 to \$50.00
March 27, 1998	Decreased from \$50.00 to \$44.50
February 1, 2002	Increased from \$44.50 to \$46.50
September 1, 2005	Increased from \$46.50 to \$50.00
March 1, 2006	Increased from \$50.00 to \$51.50*
November 20, 2006	Increased from \$51.50 to \$55.00*
January 22, 2007	Decreased from \$55.00 to \$54.30*
August 1, 2008	Increased from \$54.30 to \$57.80*
July 1, 2009	Increased from \$57.80 to \$59.05**
April 1, 2010	Increased from \$59.05 to \$61.80**
January 1, 2015	Decreased from \$61.80 to \$57.80**
January 1, 2016	Decreased from \$57.80 to \$53.80**

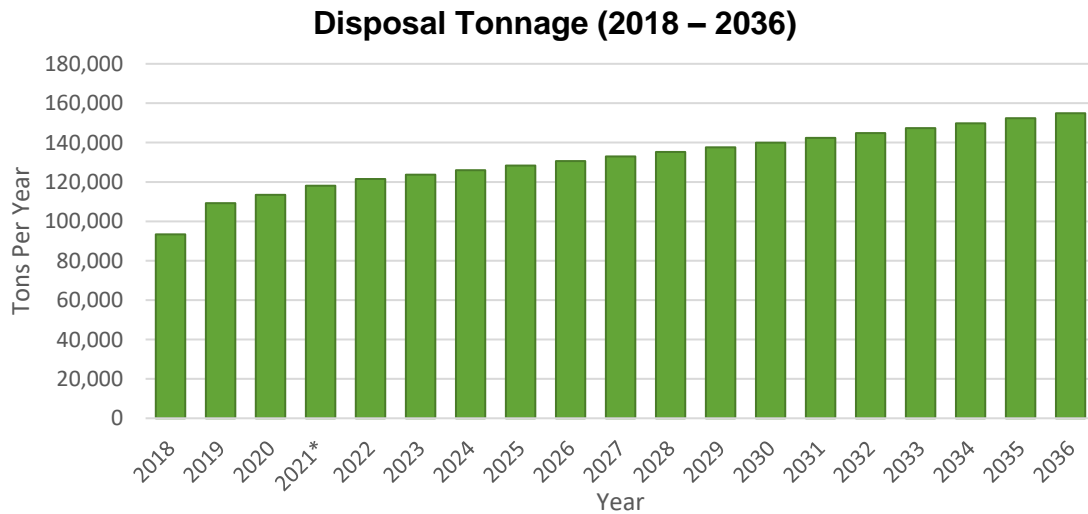
*Includes \$3.50/ton Ohio EPA Fee

**Includes \$4.75/ton Ohio EPA Fee

Since 1994, the tipping fees have only increased \$6.80/ton. Of the \$6.80, \$4.75/ton was OEPA fees. Since 1998, when the current transfer facility opened, the tipping fees have increased \$3.80/ton. Of the \$3.80/ton, this still included the

\$4.75/ton OEPA fees. New facility operations show the tipping fees have overall decreased with the Miami County Transfer Station.

The in-district tonnage plus out-of-district tonnage is projected off 2021 estimated tonnage by the rate of change in landfilling tons in Table VI-1. Tonnage for 2021 is anticipated 8,800 tons more than 2019 due to a received waste increase from Champaign County due to a change in hauler operations in third quarter of 2019. These 8,800 tons are projected to flat throughout the planning period. The following graph depicts the actual and projected disposal tonnage that qualifies for tipping fee collection for this *Plan Update*:

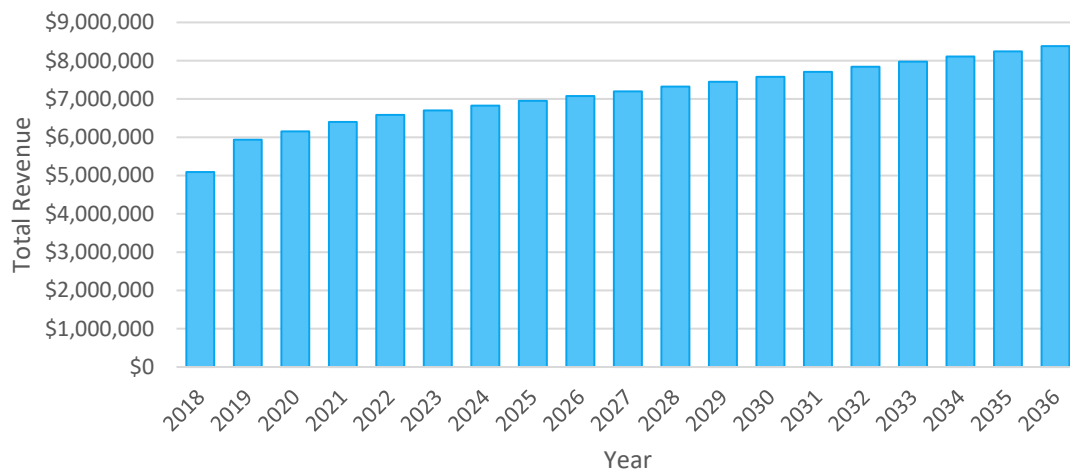


The following graph depicts the actual and projected tipping fee revenue for this *Plan Update*:



The following graph depicts the District’s total actual and projected revenue from 2018 – 2036 and includes all anticipated revenue sources identified above.

District Revenue (2018 – 2036)



Total revenues are anticipated to increase from \$6,583,429 in 2022, the first year of the planning period, to \$8,382,155 in 2036, the final year of the planning period.

4. Other Funding Mechanisms

The District reserves the right to consider other funding mechanisms, including but not limited to, generation fees, rates and charges including user fees, disposal fees and other mechanisms as identified to complement or add to the contract fees resulting from the designation if needed. These alternate fee mechanisms would allow the District to collect fees on all solid waste generated within the District or charge for services.

The District’s Board of County Commissioners may choose to use the mechanisms listed above to supplement the District gate fee.

B. Cost of Plan Implementation

Table VIII-4A and VIII-4B, “Anticipated Loans Secured by the District”, indicates the District does have outstanding loans. The loans assist to finance the operation and maintenance of the Miami County Transfer Station facilities.

The District reserves the right to assume additional debt for any purpose that is in the best interest of the District. Any new loans that may be incurred during the planning period will be evaluated to determine if a significant change in the projected expenses as it relates to projected revenues would require an amendment to the budget tables, which would require ratification, by the political subdivision of the District. An amendment to the budget tables would not be

required if the changes are not significant and are consistent with this *Plan Update*.

Table VIII-5, "Estimated Cost for Plan Implementation," includes a detailed breakdown of administration, residential/commercial/industrial recycling and collection programs, residential/commercial education and awareness programs, market development support, health department funding and other programs.

Table VIII-5 presents projected budgets for the above listed categories for the entire planning period. The District understands that changes in revenues as well as expenses throughout the planning period may occur that have not been anticipated in these budgets.

The District will evaluate the funding priorities and may adjust the amount of funding that will be allocated to the various initiatives, strategies and programs of the District. If the District concludes that a change in funding is warranted for a District initiative, strategy or program, the District shall evaluate whether the affected initiative, strategy or program constitutes a material change in circumstances that requires an update of the District Plan. If the District concludes that the change in an essential program is not material, the District may adjust funding. The District Coordinator will explain the proposed changes in expenditures to the Board. Thereafter, the adjusted funding shall be in accordance with the District Plan and shall not constitute a basis to update the District Plan.

If the District concludes that adjusted funding for one or more initiatives, strategies or programs constitutes a material change in circumstances, the changes in funding shall be implemented and the Board shall request the Policy Committee to prepare a revised or updated Plan incorporating the changes in funding.

The District Coordinator will allocate these funds with the approval of the Board of County Commissioners.

Administration

Administration costs include the payroll, payroll taxes and benefits, office expenses, equipment, professional services (includes plan preparation, attorney fees and other consulting), travel and other administrative expenses.

For 2022, the first year of the planning period, the following funding levels are projected for each administrative line item and include a brief description of each expense line item:

Program	Program #	2022 Budget	Annual Escalator
Personnel and Benefits	Admin-1	\$15,912	3%
Payroll includes the cost of employing District staff, health care costs, workers compensation, unemployment, Medicare and PERS retirement for the employees of the District. Expenditures are projected to increase 3.0 percent annually. This category accounts for 40% of the District Coordinator's salary.			
Plan Monitoring	Admin-2	\$2,009	Varies
Plan monitoring accounts for 5% the District coordinator's salary and contracted services.			
Office Overhead	Admin-3	\$5,620	2%
Office overhead costs include expenses such as insurance, rent, utilities, taxes, repairs, and office supplies. Office overhead expenditures are projected to increase 2.0% annually.			
Plan Preparation & Professional Services	Admin-4	\$38,909	2%
Plan preparation and professional services accounts for 40% the District coordinator's salary and contracted services. The costs to contract with a qualified consulting firm to assist the District with plan implementation management, annual district reporting, annual surveying of business, future plan development, special studies and other tasks as assigned by the District Director and/or Board. This line item also includes legal assistance. Future expense projections are escalated during plan preparation years.			

For 2022, the first year of the planning period, the District is projecting to spend \$62,451 in administrative expenses.

Residential/Commercial/Industrial Programs

Residential/commercial/industrial programs include all of the programs and services needed to implement this *Plan Update*. For 2022, the first year of the planning period, the following funding levels are projected for each program and include a brief description of each expense line item:

Program	Program #	2022 Budget	Annual Escalator
Curbside Recycling	MC-01	\$0	N/A
Expenses related to supporting curbside recycling in the District.			
Drop-Off Recycling	MC-02	\$27,722	2%
Expenditures for the drop-off program cover collection and processing costs. Drop-off recycling expenditures are projected to increase 2.0% annually.			
Yard Waste Management	MC-03	\$0	N/A
Expenses related to supporting yard waste management in the District.			
Household Hazardous Waste Management	MC-04	\$8,639	2%

Program	Program #	2022 Budget	Annual Escalator
Expenditures for household hazardous waste (HHW) management cover the cost of operating seasonal monthly HHW drop-off events, which includes the cost of contracting a company to properly manage the HHW. HHW management expenditures are projected to increase 2.0% annually.			
Scrap Tire Recycling	MC-05	\$15,606	2%
Expenses related to supporting Scrap Tire Recycling in the District and are projected to increase 2.0% annually.			
Automobile Batteries and Used Oil Collection	MC-06	\$0	N/A
The cost of this program is included in MC-04.			
Special Event Recycling	MC-07	\$11,066	2%
Expenditures for Special Event Recycling are projected to increase 2.0% annually.			
Electronics Recycling	MC-08	\$3,973	2%
Expenditures for Electronic Recycling and are projected to increase 2.0% annually.			
Appliance Recycling	MC-09	\$0	N/A
The cost of this program is included in MC-08.			
Recycling Market Development Grant	MC-10	\$0	N/A
Expenses related to supporting applications for the Recycling Market Development Grants in the District.			
“Buy Recycled” Promotion	MC-11	\$0	N/A
Included in Admin-3. Funding for any materials would be through the District’s unencumbered fund balance if available or grant money received.			
Internal Grant	MC-12	\$54,000	Flat
Expenditures for the Internal Grant program cover the cost of providing materials for litter collection, including bags to source separate litter that is recyclable. This program has been expanded to assist with the clean-up of I-75 which will involve a deputy for traffic control and be in partnership with ODOT. A flat \$54,000 is allocated annually for this program.			
Community Recycling Grant	MC-13	\$0	N/A
This program is dependent on the District applying for grant money. Funding for any grant match money would be through the District’s unencumbered fund balance if available or grant money received.			
Litter Collection Grant	MC-14	\$2,200	Flat
Expenditures for the Litter Collection Grant. A flat \$2,200 is allocated annually for this program.			
School Waste Reduction Grant	MC-15	\$10,200	2%
Expenditures for the School Waste Reduction Grant cover the cost of providing up to \$1,500 per grant that complete a successful grant application for schools. A flat \$10,000 is allocated annually for this program.			
Education and Awareness	MC-16	\$32,552	2%
Expenditures cover the cost of materials and supplies. Labor and administrative costs are excluded, as these costs are accounted for in the administrative budget line items. The District does not have a dedicated education specialist on staff; the District Coordinator assumes all responsibilities of managing the education and awareness			

Program	Program #	2022 Budget	Annual Escalator
program. Education and Awareness expenditures are projected to increase 2.0% annually.			
Miami County Transfer Facility Pay-Per-Bag	MC-17	\$2,142	2%
Expenditures for the Miami County Transfer Facility Pay-Per-Bag program cover the cost of purchasing materials (bags). Expenditures are projected to increase 2.0% annually.			
Volume-Based Technical Assistance	MC-18	\$0	N/A
Included in Admin #1.			
Miami County Debris Management Guide	MC-19	\$0	N/A
Included in Admin #1. Should the Miami County Debris Management Guide need to be used for a disaster the District may use unencumbered fund balance fund balance if a healthy cash balance is available in lieu of assigning a dollar amount to this category.			
Miami County Transfer Station	MC-20	\$6,175,022	Varies
MC-20 - Miami County Transfer Station			
Expenditures for transfer station activities for the District are estimated at 10% of Admin and Personnel Costs. Expenditures are projected to increase 2.0% annually.			
MC-20a - Transfer Station Bond (a)			
Expenditures for Transfer Station Bond (a) cover the cost of paying on the principal and interest of a bond taken out by the District for transfer station modifications. Transfer Station Bond (a) will be retired in 2017. Annual expenses vary according to the debt retirement schedule between the District and lender.			
MC-20b – Transfer Station Bond (b)			
Expenditures for Transfer Station Bond (b) cover the cost of paying on the principal and interest of a bond taken out by the District for transfer station modifications. Transfer Station Bond (b) will be retired in 2028. Annual expenses vary according to the debt retirement schedule between the District and lender.			
MC-20c – Transfer Station Admin and Personnel			
Expenditures for operating the transfer station include payroll/benefits for transfer station employees, overhead, rent, insurance, taxes, fees, utilities, equipment, and supplies, and other operating expenses. This line accounts for 90% for costs not related to the District programming. Expenditures are projected to increase 3.0% annually.			
MC-20d - Transfer Station Operation Costs			
Expenditures for transfer station materials, supplies, equipment, etc. This line item includes the payment of the Ohio EPA \$4.75 per ton fee. Expenditures are projected to increase 2.0% annually.			
Annual Program Performance Assessment	MC-21	\$0	N/A
The cost of this program is included in MC-20.			
Organic Waste Management	MC-22	\$0	N/A
Included in Admin-1.			

For 2022, the first year of the planning period, the District is projecting to spend \$6,351,371 in programmatic expenses.

Expense Summary

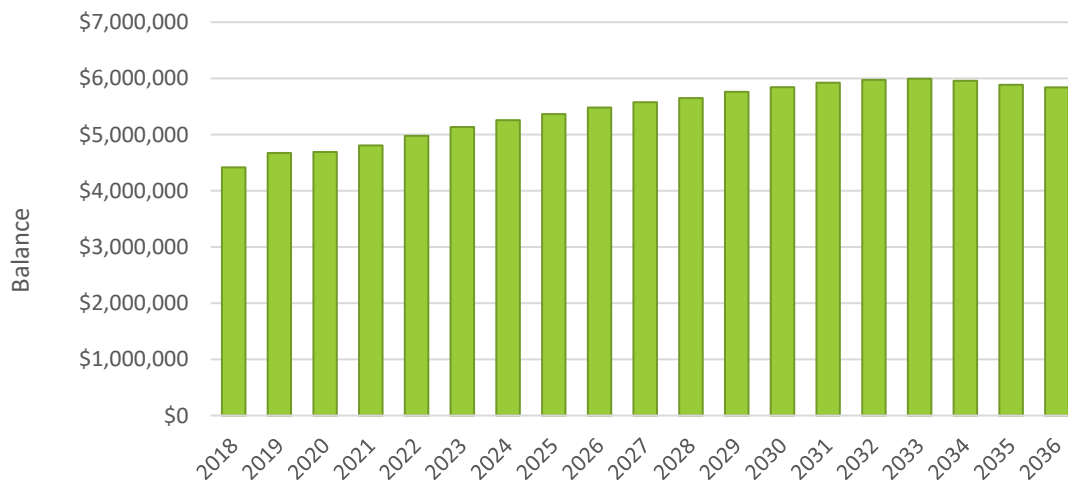
The District is projecting to spend \$6,413,822 in 2022, the first year of the planning period and \$8,430,547 in 2036, the final year of the planning period. The following chart summarizes the District’s actual and projected expenses throughout the planning period.

District Expenses (2018 – 2036)



Based on the projected revenue and expenses detailed in Table VIII-8, the District’s excess fund balance is expected to remain at or above \$5 million each year which provides a 12-month reserve for the transfer station and District operations. The following graph depicts the projected annual fund balance throughout the planning period:

District Fund Balance (2018 – 2036)



The District has designed a plan that meets the goals of the state of Ohio and is building a fund balance that can be utilized to develop potential new programming, not identified at this time, and/or to ensure available money for the operations of the transfer station and District. The District would like to evaluate the needs of the District during the next planning cycle for available funds expansion of the education program such as a position for presentations and outreach.

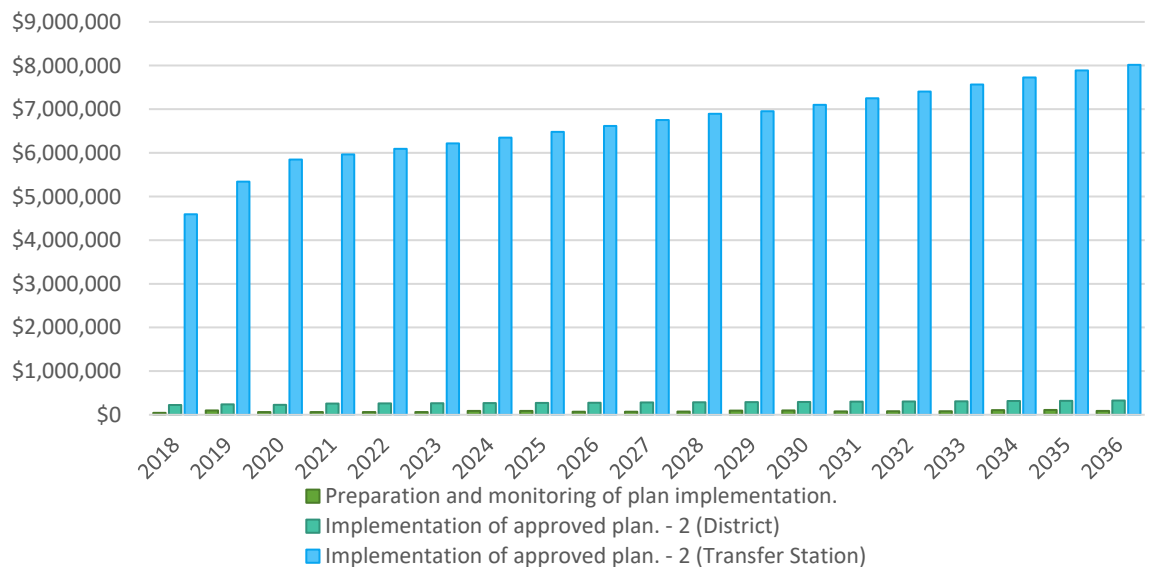
The District reserves the right at any time in the planning period to take money from the unencumbered fund balanced from the District to implement any planned program or facility in this Plan Update.

C. Funds Allocated from ORC 3734.57(B), ORC 3734.572 and ORC 3734.573

Table VIII-6, “Revenues and Allocations in Accordance with ORC 3734.57, ORC 3734.572 and ORC 3734.573,” presents the District’s projected costs for the ten allowed uses. The District’s budget falls into three categories: preparation and monitoring of plan implementation, implementation of the approved plan, and solid waste enforcement.

The following graph depicts the District’s annual expense to implement this *Plan Update* based on the expense distribution:

District Expense Distribution (2018 – 2036)



D. Contingent Funding

The District and Board do not consider funding to be an issue of concern during this planning period. However, the Board would consider increasing the Miami County Transfer Station tipping fee or other funding options if the District's revenues and/or expenses were creating budgetary shortfalls.

The District does not have a disposal or generation fee. If there were an unforeseen catastrophic event, the District would reevaluate the need for a generation fee. The District does not anticipate there will be any need to change funding mechanisms during the planning period.

Before this contingency would be implemented, the District would re-evaluate the estimated expenditures in Table VIII-5 to determine the minimum annual budget to sustain the District core operations.

In general, the District has confidence that it can adjust to somewhat significant changes in waste flow. District revenues may vary from year-to-year or season-to-season depending on the waste flow through the transfer facility. However, the majority of District expenses are for the operation of the transfer facility and these are variable expenses (i.e., expenses decrease when the waste flow is lower and increase when the waste flow is high). The District Board of Directors has the responsibility for monitoring revenue and expenses and adjusting the fees at the transfer facility if necessary to meet District expenses. Transfer fees will be adjusted accordingly if the cost of hauling and disposal increases or decreases when new contracts are negotiated, or if the cost of programs required in this Plan Update change.

The tipping fees charged at the transfer facility may not be adequate to fund District services and programs if operations at the transfer facility are interrupted (for any reason) for a significant period, or the amount of waste received at the facility is significantly reduced over an extended period. The District has not determined it is necessary or appropriate to set a specific number of days or a percentage of decrease in waste flow that will trigger the need to enact the generation fee. The District constantly monitors revenue, expenses, and the fund balance to assist with this determination.

The District will begin the process to set and ratify a generation fee when District projections indicate that it will be required to spend down the reserve funds projected in this Plan and that tipping fees will not be sufficient to fund the required programs in the future. The District will be cognizant of the fact that the time required to enact and begin collecting a generation fee will be at least four months and may be as much as seven months. If the generation fee exceeds \$5.00 per ton, the fee must be ratified by a combination of municipal corporations and townships with a combined population within the borders of the district comprising at least seventy-five percent. Approval by political jurisdictions

representing sixty percent of the total population of the District is required if the generation fee is set at \$5.00 or less.

Once the District has decided that generation fees are needed, the District will set the amount of the generation fee and will immediately begin the process to ratify the generation fee in accordance with Section 3734.573 of the Ohio Revised Code. Table VIII-7 does not show a specific amount to be generated by a hypothetical generation fee increase.

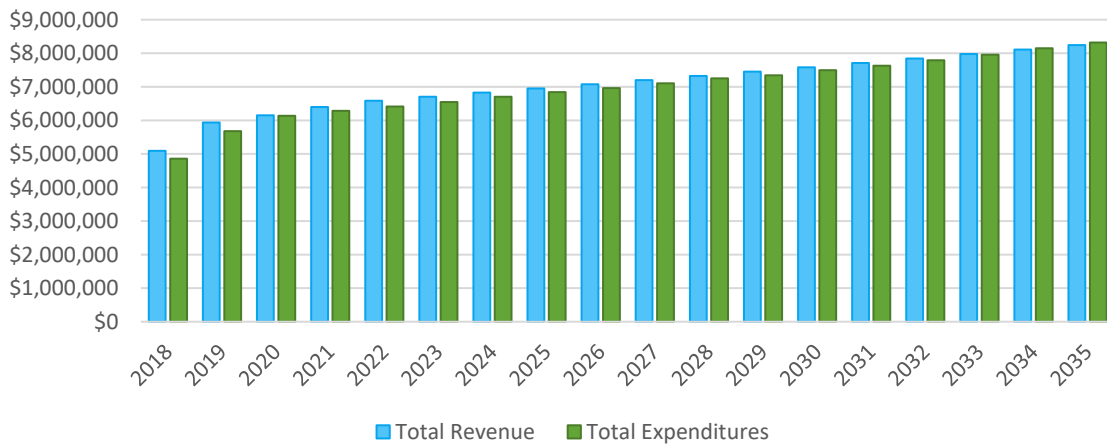
E. Summary of Costs and Revenues

Table VIII-8, “Summary of District Revenues and Expenditures,” includes the annual costs for each program and activity for the reference year and each year of the planning period. Total expenditures for the first year of the planning period are projected to be \$6,405,574 and will rise slowly over the planning period ending at \$8,419,664 in 2036. The District is projected to begin the planning period with a carryover balance of \$4,815,598 and will have an ending balance of approximately \$5,969,578 in 2036.

Each year of the planning period has sufficient funding for each of the programs.

The following graph depicts the actual and projected revenues vs. expenses of the District throughout the planning period:

District Revenue and Expenses (2018 – 2036)



The District may move funds between programs and activities as costs and revenues may increase or decrease during the planning period.

**Table VIII-1
District Disposal Fee Schedule and Revenues Generated**

Year	Fee Schedule (\$/ton)			Tons Disposed in the District			Total District Fee Revenue
	In-District	Out-of-District	Out-of-State	In-District	Out-of-District	Out-of-State	
2018	\$0.00	\$0.00	\$0.00	Not applicable as there are no landfills currently in the District			\$0
2019	\$0.00	\$0.00	\$0.00				\$0
2020	\$0.00	\$0.00	\$0.00				\$0
2021	\$0.00	\$0.00	\$0.00				\$0
2022	\$0.00	\$0.00	\$0.00				\$0
2023	\$0.00	\$0.00	\$0.00				\$0
2024	\$0.00	\$0.00	\$0.00				\$0
2025	\$0.00	\$0.00	\$0.00				\$0
2026	\$0.00	\$0.00	\$0.00				\$0
2027	\$0.00	\$0.00	\$0.00				\$0
2028	\$0.00	\$0.00	\$0.00				\$0
2029	\$0.00	\$0.00	\$0.00				\$0
2030	\$0.00	\$0.00	\$0.00				\$0
2031	\$0.00	\$0.00	\$0.00				\$0
2032	\$0.00	\$0.00	\$0.00				\$0
2033	\$0.00	\$0.00	\$0.00				\$0
2034	\$0.00	\$0.00	\$0.00				\$0
2035	\$0.00	\$0.00	\$0.00			\$0	
2036	\$0.00	\$0.00	\$0.00			\$0	

**Table VIII-2
Generation Fee Schedule and Revenues**

Year	Base Generation Fee	Tons of District Waste to be Disposed	Total Generation Fee Revenue
2018	\$0.00	100,521	\$0
2019	\$0.00	102,641	\$0
2020	\$0.00	98,317	\$0
2021	\$0.00	100,234	\$0
2022	\$0.00	103,364	\$0
2023	\$0.00	105,401	\$0
2024	\$0.00	107,489	\$0
2025	\$0.00	109,630	\$0
2026	\$0.00	111,764	\$0
2027	\$0.00	113,870	\$0
2028	\$0.00	115,999	\$0
2029	\$0.00	118,151	\$0
2030	\$0.00	120,325	\$0
2031	\$0.00	122,547	\$0
2032	\$0.00	124,792	\$0
2033	\$0.00	127,062	\$0
2034	\$0.00	129,356	\$0
2035	\$0.00	131,674	\$0
2036	\$0.00	134,031	\$0

Source(s) of information: Tons to be disposed (2018-2036) - Tables VII-2 and VII-3

**Table VIII-2a
Tipping Fee Schedule and Revenues**

Year	Tipping Fee	Tons of Waste Accepted at Transfer Station	Total Tipping Fee Revenue
2018	\$53.80	93,372	\$5,023,425
2019	\$53.80	109,276	\$5,879,049
2020	\$53.80	113,474	\$6,104,897
2021*	\$53.80	118,076	\$6,352,489
2022	\$53.80	121,491	\$6,536,198
2023	\$53.80	123,714	\$6,655,821
2024	\$53.80	125,994	\$6,778,454
2025	\$53.80	128,330	\$6,904,169
2026	\$53.80	130,659	\$7,029,462
2027	\$53.80	132,960	\$7,153,222
2028	\$53.80	135,284	\$7,278,293
2029	\$53.80	137,634	\$7,404,691
2030	\$53.80	140,008	\$7,532,431
2031	\$53.80	142,434	\$7,662,936
2032	\$53.80	144,886	\$7,794,846
2033	\$53.80	147,364	\$7,928,177
2034	\$53.80	149,869	\$8,062,945
2035	\$53.80	152,401	\$8,199,167
2036	\$53.80	154,974	\$8,337,595

Source(s) of information: Tons to be disposed (2018-2036) -
Tipping Fee Revenue divided by Base Tipping Fee

*2021 Projected tons from 2019 and anticipated 8,800 tons is projected due to received waste increase from Champaign County due to a change in hauler operations in third quarter of 2019.

**Table VIII-3
Summary of Revenue Generated and Mechanisms Used**

Year	Type of Revenue Mechanism and Amount Used					Total Revenue Generated
	Disposal Fees	Generation Fees	Tipping Fees	Recycling Revenues	Other Revenues	
2018	\$0	\$0	\$5,023,425	\$40,484	\$28,235	\$5,092,144
2019	\$0	\$0	\$5,879,049	\$36,765	\$18,671	\$5,934,485
2020	\$0	\$0	\$6,104,897	\$23,121	\$24,260	\$6,152,278
2021	\$0	\$0	\$6,352,489	\$23,121	\$24,260	\$6,399,870
2022	\$0	\$0	\$6,536,198	\$23,121	\$24,260	\$6,583,579
2023	\$0	\$0	\$6,655,821	\$23,121	\$24,260	\$6,703,202
2024	\$0	\$0	\$6,778,454	\$23,121	\$24,260	\$6,825,835
2025	\$0	\$0	\$6,904,169	\$23,121	\$24,260	\$6,951,551
2026	\$0	\$0	\$7,029,462	\$23,121	\$24,260	\$7,076,843
2027	\$0	\$0	\$7,153,222	\$23,121	\$24,260	\$7,200,603
2028	\$0	\$0	\$7,278,293	\$23,121	\$24,260	\$7,325,674
2029	\$0	\$0	\$7,404,691	\$23,121	\$24,260	\$7,452,072
2030	\$0	\$0	\$7,532,431	\$23,121	\$24,260	\$7,579,812
2031	\$0	\$0	\$7,662,936	\$23,121	\$24,260	\$7,710,317
2032	\$0	\$0	\$7,794,846	\$23,121	\$24,260	\$7,842,227
2033	\$0	\$0	\$7,928,177	\$23,121	\$24,260	\$7,975,558
2034	\$0	\$0	\$8,062,945	\$23,121	\$24,260	\$8,110,326
2035	\$0	\$0	\$8,199,167	\$23,121	\$24,260	\$8,246,548
2036	\$0	\$0	\$8,337,595	\$23,121	\$24,260	\$8,384,977

Source(s) of information:

2018, 2019 - Quarterly Fee Reports

2018-2035 Tipping Fees - Calculated from tonnage in Table VIII-2a

2018-2036 Recycling Revenue and User Fee - Conservative estimate based on 2018-2019

**Table VIII-4a
Anticipated Loans Secured by the District**

Year	Loans Obtained by the District		Interest Rate	Years Remaining on Loan	Annual Debt Service
	Lending Institution	Remaining Principal			
2018	Fifth Third Securities, Inc.	\$736,059.00	1.5%	10	\$25,921.72
2019	Fifth Third Securities, Inc.	\$729,337.00	1.5%	9	\$84,638.38
2020	Fifth Third Securities, Inc.	\$663,797.50	1.5%	8	\$87,016.30
2021	Fifth Third Securities, Inc.	\$594,897.00	1.5%	7	\$85,982.78
2022	Fifth Third Securities, Inc.	\$525,996.50	1.5%	6	\$86,629.78
2023	Fifth Third Securities, Inc.	\$455,415.50	1.5%	5	\$85,571.06
2024	Fifth Third Securities, Inc.	\$384,834.50	3.0%	4	\$86,192.84
2025	Fifth Third Securities, Inc.	\$312,573.00	3.0%	3	\$85,705.50
2026	Fifth Third Securities, Inc.	\$238,631.00	4.0%	2	\$86,848.24
2027	Fifth Third Securities, Inc.	\$161,328.00	4.0%	1	\$85,436.62
2028	Fifth Third Securities, Inc.	\$82,344.50	4.0%	0	\$85,638.28
2029	N/A	\$0.00	N/A	0	\$0.00
2030	N/A	\$0.00	N/A	0	\$0.00
2031	N/A	\$0.00	N/A	0	\$0.00
2032	N/A	\$0.00	N/A	0	\$0.00
2033	N/A	\$0.00	N/A	0	\$0.00
2034	N/A	\$0.00	N/A	0	\$0.00
2035	N/A	\$0.00	N/A	0	\$0.00
2036	N/A	\$0.00	N/A	0	\$0.00

**Table VIII-4b
Anticipated Loans Secured by the District**

Year	Loans Obtained by the District		Interest Rate	Years Remaining on Loan	Annual Debt Service
	Lending Institution	Remaining Principal			
2018	Fifth Third Securities, Inc.	\$541,073	3.25%	17	\$42,056
2019	Fifth Third Securities, Inc.	\$516,615	3.34%	16	\$41,689
2020	Fifth Third Securities, Inc.	\$492,158	3.43%	15	\$41,322
2021	Fifth Third Securities, Inc.	\$467,700	3.53%	14	\$40,955
2022	Fifth Third Securities, Inc.	\$443,243	3.64%	13	\$41,676
2023	Fifth Third Securities, Inc.	\$417,698	3.74%	12	\$42,795
2024	Fifth Third Securities, Inc.	\$390,523	3.86%	11	\$41,708
2025	Fifth Third Securities, Inc.	\$363,892	4.00%	10	\$41,719
2026	Fifth Third Securities, Inc.	\$336,717	4.00%	9	\$41,176
2027	Fifth Third Securities, Inc.	\$308,998	3.90%	8	\$41,697
2028	Fifth Third Securities, Inc.	\$279,349	4.00%	7	\$41,610
2029	Fifth Third Securities, Inc.	\$248,923	4.00%	6	\$41,480
2030	Fifth Third Securities, Inc.	\$217,400	4.00%	5	\$41,306
2031	Fifth Third Securities, Inc.	\$184,790	4.00%	4	\$41,632
2032	Fifth Third Securities, Inc.	\$150,550	4.00%	3	\$41,349
2033	Fifth Third Securities, Inc.	\$115,222	4.00%	2	\$41,567
2034	Fifth Third Securities, Inc.	\$78,264	3.99%	1	\$41,709
2035	Fifth Third Securities, Inc.	\$39,676	4.00%	0	\$41,263
2036	N/A	\$0.00	N/A	N/A	N/A

Table VIII-5
Estimated Costs for Plan Implementation

Program #	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
District Administration Budget																				
Personnel and Benefits	\$17,414	\$41,662	\$15,449	\$15,449	\$15,912	\$16,390	\$16,881	\$17,388	\$17,909	\$18,447	\$19,000	\$19,570	\$20,157	\$20,762	\$21,385	\$22,026	\$22,687	\$23,368	\$24,069	
Plan Monitoring	\$2,721	\$5,233	\$1,970	\$1,970	\$2,009	\$2,049	\$2,090	\$2,132	\$2,175	\$2,218	\$2,262	\$2,308	\$2,354	\$2,401	\$2,449	\$2,498	\$2,549	\$2,601	\$2,657	
Office Overhead	\$5,510	\$5,510	\$5,510	\$5,510	\$5,620	\$5,733	\$5,847	\$5,964	\$6,083	\$6,205	\$6,329	\$6,456	\$6,585	\$6,717	\$6,851	\$6,988	\$7,128	\$7,270	\$7,416	
Plan Preparation & Professional Services	\$17,414	\$45,657	\$38,146	\$38,146	\$39,909	\$39,688	\$42,981	\$46,241	\$43,026	\$43,886	\$44,764	\$46,609	\$48,981	\$48,431	\$49,400	\$50,388	\$51,395	\$52,423	\$53,472	
Subtotal	\$43,058	\$98,262	\$61,075	\$61,075	\$62,451	\$63,859	\$67,800	\$69,725	\$69,193	\$70,756	\$72,356	\$76,943	\$79,077	\$78,311	\$80,084	\$81,900	\$83,767	\$85,687	\$87,653	
Residential/Commercial/Industrial Programs																				
Curbside Recycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Drop-Off Recycling	\$35,783	\$20,654	\$26,646	\$27,179	\$27,722	\$28,277	\$28,842	\$29,419	\$30,007	\$30,607	\$31,220	\$31,844	\$32,481	\$33,130	\$33,793	\$34,469	\$35,158	\$35,861	\$36,579	
Yard Waste Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Household Hazardous Waste Management	\$5,580	\$17,112	\$8,303	\$8,469	\$8,639	\$8,811	\$8,988	\$9,167	\$9,351	\$9,538	\$9,729	\$9,923	\$10,122	\$10,324	\$10,530	\$10,741	\$10,956	\$11,175	\$11,399	
Scrap Tire Recycling	\$14,300	\$13,229	\$15,000	\$15,300	\$15,606	\$15,918	\$16,236	\$16,561	\$16,892	\$17,230	\$17,575	\$17,926	\$18,285	\$18,651	\$19,024	\$19,404	\$19,792	\$20,188	\$20,592	
Automobile Batteries and Used Oil Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Special Event Recycling	\$9,331	\$8,680	\$1,159	\$10,850	\$11,066	\$11,288	\$11,514	\$11,744	\$11,979	\$12,218	\$12,463	\$12,712	\$12,966	\$13,225	\$13,490	\$13,760	\$14,035	\$14,316	\$14,602	
Electronics Recycling	\$1,920	\$2,905	\$3,819	\$3,895	\$3,973	\$4,053	\$4,134	\$4,217	\$4,301	\$4,387	\$4,475	\$4,564	\$4,655	\$4,749	\$4,844	\$4,940	\$5,038	\$5,140	\$5,243	
Appliance Recycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Recycling Market Development Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
"Buy Recycled" Promotion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Internal Grant	\$22,150	\$46,450	\$53,911	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	
Community Recycling Grant	\$2,150	\$0	\$0	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	
Litter Collection Grant	\$2,351	\$5,493	\$5,667	\$10,000	\$10,200	\$10,404	\$10,612	\$10,824	\$11,041	\$11,262	\$11,487	\$11,717	\$11,951	\$12,190	\$12,434	\$12,682	\$12,936	\$13,195	\$13,459	
School Waste Reduction Grant	\$48,735	\$43,473	\$31,288	\$40,000	\$40,800	\$41,616	\$42,448	\$43,297	\$44,163	\$45,046	\$45,947	\$46,866	\$47,804	\$48,760	\$49,735	\$50,730	\$51,744	\$52,779	\$53,835	
Education and Awareness	\$2,275	\$2,176	\$2,067	\$2,100	\$2,142	\$2,185	\$2,229	\$2,273	\$2,319	\$2,365	\$2,412	\$2,460	\$2,509	\$2,559	\$2,611	\$2,663	\$2,717	\$2,771	\$2,826	
Volume-Based Technical Assistance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Miami County Debris Management Guide	\$78,735	\$77,602	\$80,672	\$82,285	\$83,931	\$85,610	\$87,322	\$89,068	\$90,850	\$92,667	\$94,520	\$96,410	\$98,339	\$100,305	\$102,311	\$104,358	\$106,445	\$108,574	\$110,745	
Transfer Station Bond (a)	\$25,922	\$84,638	\$97,016	\$85,983	\$86,630	\$85,571	\$86,193	\$85,706	\$85,848	\$85,437	\$85,638	\$85,900	\$86,232	\$86,635	\$87,109	\$87,654	\$88,271	\$88,960	\$89,723	
Transfer Station Bond (b)	\$42,056	\$41,689	\$41,322	\$40,955	\$41,676	\$42,795	\$44,708	\$47,179	\$41,176	\$41,697	\$41,610	\$41,480	\$41,306	\$41,632	\$41,349	\$41,567	\$41,709	\$41,263	N/A	
Transfer Station Admin and Personnel	\$710,631	\$698,420	\$726,047	\$747,828	\$770,263	\$793,371	\$817,172	\$841,687	\$866,938	\$892,946	\$919,734	\$947,326	\$975,746	\$1,005,018	\$1,035,169	\$1,066,224	\$1,098,211	\$1,131,157	\$1,165,092	
Transfer Station Operation Costs	\$3,814,202	\$4,517,689	\$4,990,891	\$5,090,709	\$5,192,523	\$5,296,373	\$5,402,301	\$5,510,347	\$5,620,554	\$5,732,965	\$5,847,624	\$5,964,577	\$6,083,868	\$6,205,546	\$6,329,657	\$6,456,250	\$6,585,375	\$6,717,062	\$6,851,424	
Annual Program Performance Assessment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Organic Waste Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal	\$4,816,119	\$5,580,210	\$6,073,807	\$6,221,753	\$6,351,371	\$6,482,472	\$6,615,898	\$6,752,229	\$6,892,618	\$7,034,565	\$7,180,634	\$7,344,006	\$7,509,232	\$7,683,290	\$7,863,601	\$8,049,988	\$8,242,484	\$8,441,128	\$8,645,947	
Totals	\$4,859,178	\$5,678,472	\$6,134,882	\$6,282,226	\$6,419,822	\$6,546,330	\$6,670,898	\$6,841,954	\$6,961,811	\$7,105,321	\$7,252,988	\$7,409,949	\$7,569,309	\$7,733,601	\$7,903,201	\$8,078,388	\$8,258,168	\$8,442,696	\$8,632,375	\$8,827,424

**Table VIII-6
Revenues and Allocations in Accordance with ORC 343.08**

Year	Total Annual Revenue (\$)	Allocation of ORC 343.08 Funds for Purposes Listed in ORC 3734.57(G)(1) to (10):										Total Budget Allocation (\$)	Year-End Balance (\$)	
		1	2 (District)	2 (Transfer Station)	3	4	5	6	7	8	9			10
Beginning Balance													\$4,184,094	
2018	\$5,092,144	\$43,058	\$223,308	\$4,592,811	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,859,178	\$4,417,060
2019	\$5,934,485	\$98,262	\$237,773	\$5,342,436	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,678,472	\$4,673,074
2020	\$6,152,278	\$61,075	\$228,531	\$5,845,276	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,134,882	\$4,690,470
2021	\$6,399,870	\$61,075	\$256,278	\$5,965,475	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,282,828	\$4,807,512
2022	\$6,583,579	\$62,451	\$260,280	\$6,091,091	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,413,822	\$4,977,269
2023	\$6,703,202	\$63,859	\$264,361	\$6,218,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,546,330	\$5,134,141
2024	\$6,825,835	\$87,800	\$268,524	\$6,347,374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,703,698	\$5,256,278
2025	\$6,951,551	\$89,725	\$272,771	\$6,479,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,841,954	\$5,365,874
2026	\$7,076,843	\$69,193	\$277,102	\$6,615,515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,961,811	\$5,480,907
2027	\$7,200,603	\$70,756	\$281,520	\$6,753,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,105,321	\$5,576,189
2028	\$7,325,674	\$72,356	\$286,027	\$6,894,607	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,252,989	\$5,648,873
2029	\$7,452,072	\$96,943	\$290,623	\$6,953,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,340,949	\$5,759,997
2030	\$7,579,812	\$99,077	\$295,312	\$7,100,920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,495,309	\$5,844,499
2031	\$7,710,317	\$78,311	\$300,094	\$7,252,196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,630,601	\$5,924,216
2032	\$7,842,227	\$80,084	\$304,972	\$7,406,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,791,231	\$5,975,213
2033	\$7,975,558	\$81,900	\$309,947	\$7,564,040	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,955,888	\$5,994,883
2034	\$8,110,326	\$107,167	\$315,022	\$7,725,294	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,147,484	\$5,957,726
2035	\$8,246,548	\$109,537	\$320,199	\$7,889,502	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,319,238	\$5,885,035
2036	\$8,384,977	\$88,553	\$325,479	\$8,016,515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,430,547	\$5,839,465

Notes:

- 1 - Preparation and monitoring of plan implementation.
- 2 - Implementation of approved plan.
- 3 - Financial assistance to boards of health for solid waste enforcement.
- 4 - Financial assistance to defray the costs of maintaining roads and other public services related to the location or operation of solid waste facilities.
- 5 - Contracts with boards of health for collecting and analyzing samples from water wells adjacent to solid waste facilities.
- 6 - Out-of-state waste inspection program.
- 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.
- 8 - Financial assistance to local boards of health for employees to participate in Ohio EPA's training and certification program for solid waste operators and facility inspectors.
- 9 - Financial assistance to local municipalities and townships to defray the added cost of roads and services related to the operation of solid waste facilities.
- 10 - Payment of any expenses that are agreed to awarded or ordered to be paid under section 3734.35 of the Revised Code and any administrative costs incurred pursuant

**Table VIII-7
Contingent Funding Sources**

Year	Amount of Contingent Funding for Each Source		Total
	Generation Fee Revenue	Total Tons	
2018			
2019			
2020			
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028			
2029			
2030			
2031			
2032			
2033			
2034			
2035			
2036			

See Narrative in Section VIII

Note: The generation fee can be adjusted up or down to meet contingent needs.

Table VIII-8
Summary of District Revenues and Expenditures

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Description																				
Beginning Balance	\$4,184,094	\$4,417,060	\$4,673,074	\$4,680,470	\$4,807,512	\$4,977,269	\$5,134,141	\$5,266,278	\$5,385,874	\$5,480,907	\$5,576,189	\$5,648,873	\$5,759,997	\$5,844,499	\$5,924,216	\$5,994,883	\$5,975,726	\$5,975,726	\$5,975,726	\$5,975,726
Revenues																				
Disposal Fees	\$ 9,023,425	\$ 6,599,049	\$ 6,104,897	\$ 6,352,489	\$ 6,655,821	\$ 6,778,354	\$ 6,904,169	\$ 7,029,462	\$ 7,153,222	\$ 7,276,293	\$ 7,400,891	\$ 7,522,431	\$ 7,663,936	\$ 7,794,846	\$ 7,928,177	\$ 8,062,945	\$ 8,198,167	\$ 8,337,595	\$ 8,481,943	\$ 8,631,943
Tipping Fees	\$ 40,494	\$ 36,165	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121	\$ 23,121
Recycling Revenues	\$ 28,235	\$ 18,871	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260	\$ 24,260
Other Revenues	\$ 51,092,144	\$ 53,934,485	\$ 61,152,278	\$ 65,399,870	\$ 67,703,202	\$ 68,825,835	\$ 69,951,551	\$ 71,076,843	\$ 72,201,603	\$ 73,325,874	\$ 74,452,072	\$ 75,579,812	\$ 76,710,317	\$ 77,842,227	\$ 78,975,558	\$ 80,110,326	\$ 81,246,548	\$ 82,384,977	\$ 83,524,977	\$ 84,671,977
Total Revenue	\$44,058	\$98,262	\$61,075	\$61,075	\$62,451	\$63,859	\$65,359	\$66,943	\$68,619	\$70,397	\$72,279	\$74,266	\$76,364	\$78,584	\$80,935	\$83,420	\$85,950	\$88,535	\$91,175	\$93,870
Expenditures																				
District Administration Budget																				
Program #	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Personnel and Benefits	\$ 17,414	\$ 41,862	\$ 15,449	\$ 15,449	\$ 15,912	\$ 16,380	\$ 16,851	\$ 17,328	\$ 17,809	\$ 18,447	\$ 19,000	\$ 19,570	\$ 20,157	\$ 20,762	\$ 21,385	\$ 22,026	\$ 22,687	\$ 23,368	\$ 24,069	
Plan Monitoring	\$ 2,721	\$ 5,233	\$ 1,970	\$ 1,970	\$ 2,009	\$ 2,049	\$ 2,132	\$ 2,132	\$ 2,175	\$ 2,218	\$ 2,262	\$ 2,308	\$ 2,354	\$ 2,401	\$ 2,449	\$ 2,498	\$ 2,547	\$ 2,597	\$ 2,647	
Office Overhead	\$ 5,510	\$ 5,510	\$ 5,510	\$ 5,510	\$ 5,520	\$ 5,733	\$ 5,964	\$ 6,205	\$ 6,456	\$ 6,707	\$ 6,958	\$ 7,209	\$ 7,460	\$ 7,711	\$ 7,962	\$ 8,213	\$ 8,464	\$ 8,715	\$ 8,966	
Plan Preparation & Professional Services	\$ 17,414	\$ 45,857	\$ 38,146	\$ 38,146	\$ 39,909	\$ 39,688	\$ 42,241	\$ 43,026	\$ 43,811	\$ 44,606	\$ 45,401	\$ 46,209	\$ 47,026	\$ 47,851	\$ 48,684	\$ 49,526	\$ 50,377	\$ 51,236	\$ 52,103	
Subtotal	\$43,058	\$98,262	\$61,075	\$61,075	\$62,451	\$63,859	\$65,359	\$66,943	\$68,619	\$70,397	\$72,279	\$74,266	\$76,364	\$78,584	\$80,935	\$83,420	\$85,950	\$88,535	\$91,175	\$93,870
Residual/Commercial/Industrial Programs																				
Program #	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Outside Recycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Drop-Off Recycling	\$3,783	\$20,664	\$26,846	\$27,179	\$27,722	\$28,277	\$28,842	\$29,419	\$30,007	\$30,607	\$31,220	\$31,844	\$32,481	\$33,130	\$33,793	\$34,469	\$35,158	\$35,851	\$36,549	
Yard Waste Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Household Hazardous Waste Management	\$5,980	\$17,112	\$8,303	\$8,469	\$8,639	\$8,811	\$8,988	\$9,167	\$9,351	\$9,538	\$9,729	\$9,923	\$10,122	\$10,324	\$10,530	\$10,741	\$10,956	\$11,175	\$11,399	
Scrap Tire Recycling	\$14,300	\$13,229	\$15,000	\$15,000	\$15,606	\$15,918	\$16,238	\$16,561	\$16,892	\$17,230	\$17,575	\$17,928	\$18,285	\$18,651	\$19,024	\$19,404	\$19,792	\$20,188	\$20,592	
Automobile Batteries and Used Oil Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Special Event Recycling	\$8,331	\$8,680	\$1,199	\$10,850	\$11,066	\$11,288	\$11,514	\$11,744	\$11,979	\$12,218	\$12,463	\$12,712	\$12,966	\$13,225	\$13,490	\$13,760	\$14,035	\$14,316	\$14,602	
Electronics Recycling	\$1,920	\$2,905	\$3,819	\$3,895	\$3,973	\$4,053	\$4,134	\$4,217	\$4,301	\$4,387	\$4,475	\$4,564	\$4,655	\$4,749	\$4,844	\$4,940	\$5,039	\$5,140	\$5,243	
Appliance Recycling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Recycling Market Development Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
"Buy Recycled" Promotion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Internal Grant	\$21,150	\$46,450	\$53,911	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	\$54,000	
Community Recycling Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Liter Collection Grant	\$2,150	\$0	\$0	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	
School Waste Reduction Grant	\$2,351	\$5,993	\$5,867	\$10,000	\$10,404	\$10,824	\$11,041	\$11,262	\$11,487	\$11,717	\$11,951	\$12,190	\$12,434	\$12,684	\$12,938	\$13,196	\$13,458	\$13,725	\$13,997	
Education and Awareness	\$48,735	\$43,773	\$31,288	\$40,000	\$40,800	\$41,616	\$42,448	\$43,297	\$44,163	\$45,046	\$45,947	\$46,866	\$47,804	\$48,760	\$49,735	\$50,730	\$51,744	\$52,779	\$53,835	
Volume-Based Technical Assistance	\$2,275	\$2,716	\$2,067	\$2,100	\$2,142	\$2,185	\$2,229	\$2,273	\$2,319	\$2,365	\$2,412	\$2,460	\$2,510	\$2,560	\$2,611	\$2,663	\$2,717	\$2,771	\$2,826	
Miami County Debris Management Guide	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Miami County Transfer Station	\$78,735	\$77,602	\$80,672	\$82,285	\$83,931	\$85,610	\$87,322	\$89,068	\$90,850	\$92,667	\$94,520	\$96,410	\$98,339	\$100,305	\$102,311	\$104,358	\$106,445	\$108,574	\$110,745	
Transfer Station Bond (a)	\$25,922	\$4,638	\$8,706	\$8,993	\$9,630	\$9,571	\$9,619	\$9,676	\$9,734	\$9,792	\$9,850	\$9,909	\$9,968	\$10,028	\$10,088	\$10,148	\$10,209	\$10,270	\$10,331	
Transfer Station Bond (b)	\$42,056	\$41,889	\$41,322	\$40,955	\$41,676	\$42,795	\$44,108	\$45,719	\$47,534	\$49,556	\$51,794	\$54,260	\$56,964	\$59,908	\$63,101	\$66,554	\$70,277	\$74,290	\$78,603	
Transfer Station Admin and Personnel	\$71,631	\$68,420	\$76,828	\$74,828	\$77,203	\$79,337	\$81,172	\$82,807	\$84,242	\$85,487	\$86,543	\$87,510	\$88,388	\$89,177	\$89,877	\$90,490	\$91,017	\$91,558	\$92,104	
Transfer Station Operation Costs	\$381,420	\$4,517,889	\$4,990,891	\$5,060,709	\$5,102,523	\$5,298,373	\$5,402,301	\$5,510,347	\$5,620,554	\$5,732,985	\$5,847,824	\$5,964,577	\$6,083,888	\$6,205,546	\$6,329,657	\$6,456,290	\$6,585,635	\$6,717,082	\$6,851,424	
Annual Program Performance Assessment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Organic Waste Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal	\$4,816,119	\$5,990,210	\$6,073,807	\$6,221,753	\$6,351,371	\$6,482,472	\$6,615,988	\$6,752,229	\$6,892,618	\$7,034,565	\$7,180,834	\$7,331,006	\$7,485,632	\$7,644,250	\$7,806,422	\$7,972,600	\$8,142,834	\$8,317,684	\$8,496,700	
Total Expenditures	\$4,834,178	\$5,978,472	\$6,047,882	\$6,202,828	\$6,415,822	\$6,546,300	\$6,703,368	\$6,864,954	\$7,031,611	\$7,198,321	\$7,369,889	\$7,546,949	\$7,729,309	\$7,916,601	\$8,108,422	\$8,305,388	\$8,507,484	\$8,714,238	\$8,926,147	
Difference	\$29,906	\$236,613	\$17,397	\$117,942	\$169,737	\$156,872	\$122,871	\$109,596	\$115,033	\$95,262	\$72,866	\$51,123	\$34,303	\$19,717	\$9,996	\$9,671	\$-87,158	\$-72,690	\$-45,570	
Ending Balance	\$4,417,060	\$4,673,074	\$4,680,470	\$4,807,512	\$4,977,269	\$5,134,141	\$5,266,278	\$5,400,907	\$5,536,189	\$5,671,699	\$5,807,873	\$5,944,697	\$6,082,697	\$6,221,917	\$6,362,453	\$6,503,524	\$6,645,272	\$6,787,642	\$6,930,612	\$7,074,182

IX. District Rules [ORC Section 3734.53(C)]

A. Existing Rules

According to Ohio Revised Code Section 3734.53(C), “the solid waste management plan of a county or joint district may provide for the adoption of rules under division (G) of section 343.01 of the Revised Code after approval of the plan under section 3734.521 or 3734.55 of the Revised Code.” The District reserves the [Authority for the Board](#) to adopt rules under the provision of Ohio Revised Code.

The District plan reserved for the Board of Directors the power to make and enforce rules to the fullest extent authorized by Ohio law. Therefore, under the existing plan, the District is authorized to adopt, publish, and enforce rules doing any of the following:

1. Prohibiting or limiting the receipt of solid waste generated outside the district or outside a service area prescribed in the solid waste management plan or amended plan, at facilities covered by the plan.
2. Governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located within the district.
3. Governing the development and implementation of a program for the inspection of solid waste generated outside the boundaries of this state that are disposed of at solid waste facilities included in the district’s solid waste management plan or amended plan.
4. Exempting the owner or operator of any existing or proposed solid waste facility provided for the plan or amended plan from compliance with any amendments to a township zoning resolution.

The current effective rules are for the purpose of governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located in the district. As required by the District Solid Waste Management Plan Format, a brief description of how these rules compliment the District’s strategies and programs is included following the rules contained below:

Rule Number 1-01 – Definitions

The purpose of this rule is to establish the definitions to be used in the District rules that follow.

Rule Number 2-01 – Requirement for Submission and Approval of Plans for Construction of Solid Waste Facilities

The Miami County Solid Waste Management District Policy Committee and Board of Directors carefully evaluated the present and future facility needs of the Miami County Solid Waste Management District and included all of the facilities that the District needs to effectively and efficiently manage the transfer, disposal, recycling and recovery of solid waste in the District’s Solid Waste Management Plan. In order to assure that the District can meet the obligations to which it is committed in the District Plan, the District must determine if any new facility or facility expansion is consistent with the Plan and will not adversely affect the District’s ability to finance Plan implementation.

In order to make such a determination, the Board must have the plans and specifications for the facility to review. The Board also has an interest in assuring that any facility that is constructed or enlarged is appropriately designed and sited to meet its intended purpose without creating excessive burdens upon the county’s facilities and services or the neighboring properties. The rules clearly state that the Board will exclude any criteria that would establish design standards that are addressed by the rules of the Ohio Environmental Protection Agency for the issuing of a Solid Waste facility permit.

Rule Number 3-01 – Prohibition on Disposal of Recyclable Material

In order to meet the recycling goals that are set forth in the District plan, it is important that all recyclable materials that are source separated by residential, business or industrial generators, are appropriately recycled and are not reintroduced into the waste stream for disposal unless there is a compelling reason why the materials cannot be recycled.

Rule Number 4-01 – Prohibition of Combining Recyclable Material with Solid Waste

In order to meet the recycling goals that are set forth in the District plan, it is important that all recyclable materials that are source separated by residential, business or industrial generators, are appropriately recycled and are not reintroduced into the waste stream for disposal unless there is a compelling reason why the materials cannot be recycled.

Rule Number 5-01 – Delivery of Solid Waste to Designated Facilities

Facility designation is essential to the implementation of this plan. Waste is directed to the county-owned transfer facility so that the District can effectively monitor and supervise the solid waste collection system and the processing of waste for disposal. Maximum feasible utilization of the Miami County Solid Waste

and Recycling Facility is necessary to assure that the District can pay outstanding debt obligations and the expenses of operating the facility.

Rule Number 6-01 – Waiver of Designation

The Ohio Revised Code requires that if a District designates a facility or facilities there be a process for waiving designation. The District has included a waiver process in the District rules.

Rule Number 7-01 – Prohibition of Scavenging

When residents, commercial businesses, and industries separate material for recycling, it is with the expectation that the material will be collected and recycled by the entity that they have selected. No other person may remove the material that has been placed for recycling. This rule protects the privacy of the recycler, reduces the chances that recyclable material will be scattered and become litter, and assures that any monetary value of the recyclable material will go to the intended recipient.

Rule Number 8-01 – Annual Reports to be Submitted by Facility Owners of Operators and Commercial Haulers

The District must prepare an annual report for the Ohio Environmental Protection Agency which demonstrates the District's progress toward meeting the goals set out in the District's plan. The District must have accurate information regarding waste disposal and recycling in order to provide the required demonstrations. In addition, the District must have complete and accurate information regarding the amount of waste collected, disposed and recycled in order to gage whether the District's facilities were properly utilized and on which to base future planning decisions. This rule provides a comprehensive and orderly mechanism by which the necessary information will be submitted to the District.

Rule Number 9-01 – Disposal of Separated Unacceptable Yard Waste

This rule makes it clear that yard waste that is separated from solid waste may not be reintroduced into solid waste for disposal. The prohibition protects the District yard waste management system and helps the District meet waste reduction goals.

Rule Number 10-01 – Prohibition Against Tampering or Damaging Facilities

The purpose of this rule is obvious: to protect public and private investment in solid waste facilities and to help ensure that these facilities are available for the intended use.

Rule Number 11-01 – Penalties for Violation of Rules

Provides a clear deterrent for violation of the rules.

The complete text of the District rules is contained in Appendix I.

There are no current plans to adopt new rules at the time of the development of this *Plan Update*.

B. Proposed Rules

The District reserves the right to adopt rules under division (G) of section 343.01 and under division (c) of section 3734.53 of the Revised Code. Such rules shall comply with the legislative grant of authority to the District to promulgate such rules and to regulate solid waste services, facilities and operation of the District in accordance with the Plan or amended Plan of the District and/or as authorized by applicable statutes, governmental regulations, local ordinances and rules of the District as now existing or hereafter enacted or amended.

The District may adopt rules in the future that pertain to the following provisions:

- Siting procedures and criteria contained in Section VI.
- Other areas of the plan update that are in the best interest of the District.

Any rule promulgated by the District shall be designed to promote the health, safety and welfare of the residents of the District, effective and efficient administration and operation of the District, to comply with state requirements and/or to implement the Solid Waste Management Plan and amended Plan of the District. The District may conduct all reviews, investigations, evaluations, studies and hearings as the District deems necessary and appropriate to determine the character, degree and scope of any proposed rule.

Rule adoption shall follow the procedures listed in Section C before becoming final.

Rule Making Authority - ORC 343.01

The solid waste management plan provides authority to the Board of County Commissioners (Board) to adopt, publish, and enforce all rule-making powers authorized by Ohio Revised Code 343.01, Divisions (G)(1), (G)(2), (G)(3) and (G)(4) including the following:

ORC 343.01(G)(1)

To the extent authorized by the solid waste management plan of the district approved under section 3734.521 or 3734.55 of the Revised Code or subsequent amended plans of the district approved under section 3734.521 or 3734.56 of the Revised Code, the board of county commissioners of a county district or board of

directors of a joint district may adopt, publish, and enforce rules doing any of the following:

- (1) Prohibiting or limiting the receipt of solid wastes generated outside the district or outside a service area prescribed in the solid waste management plan or amended plan, at facilities located within the solid waste management district, consistent with the projections contained in the plan or amended plan under divisions (A)(6) and (7) of section 3734.53 of the Revised Code. However, rules adopted by a board under division (G)(1) of this section may be adopted and enforced with respect to solid waste disposal facilities in the solid waste management district that are not owned by a county or the solid waste management district only if the board submits an application to the director of environmental protection that demonstrates that there is insufficient capacity to dispose of all solid wastes that are generated within the district at the solid waste disposal facilities located within the district and the director approves the application. The demonstration in the application shall be based on projections contained in the plan or amended plan of the district. The director shall establish the form of the application. The approval or disapproval of such an application by the director is an action that is appealable under section 3745.04 of the Revised Code.

In addition, the director of environmental protection may issue an order modifying a rule adopted under division (G)(1) of this section to allow the disposal in the district of solid wastes from another county or joint solid waste management district if all of the following apply:

- (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the director's order;
- (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;
- (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
- (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the receiving district;
- (e) The district in which the wastes were generated has demonstrated to the

director that the conditions specified in divisions (G)(1)(a) to (d) of this section have been met;

- (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of the out-of-district wastes will not limit the capacity of the receiving district to dispose of its in-district wastes to less than eight years.

Any order issued under division (G)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the county or joint solid waste management district that will receive the out-of-district wastes.

ORC 343.01(G)(2)

Governing the maintenance, protection, and use of solid waste collection or other solid waste facilities located within its district. The rules adopted under division (G)(2) of this section shall not establish design standards for solid waste facilities and shall be consistent with the solid waste provisions of Chapter 3734. of the Revised Code and the rules adopted under those provisions. The rules adopted under division (G)(2) of this section may prohibit any person, municipal corporation, township, or other political subdivision from constructing, enlarging, or modifying any solid waste facility until general plans and specifications for the proposed improvement have been submitted to and approved by the board of county commissioners or board of directors as complying with the solid waste management plan or amended plan of the district. The construction of such a facility shall be done under the supervision of the county sanitary engineer or, in the case of a joint district, a county sanitary engineer designated by the board of directors, and any person, municipal corporation, township, or other political subdivision proposing or constructing such improvements shall pay to the county or joint district all expenses incurred by the board in connection therewith. The sanitary engineer may enter upon any public or private property for the purpose of making surveys or examinations necessary for designing solid waste facilities or for supervising the construction, enlargement, modification, or operation of any such facilities. No person, municipal corporation, township, or other political subdivision shall forbid or interfere with the sanitary engineer or his authorized assistants entering upon such property for that purpose. If actual damage is done to property by the making of the surveys and examinations, a board shall pay the reasonable value of that damage to the owner of the property damaged, and the cost shall be included in the financing of the improvement for which the surveys and examinations are made.

ORC 343.01(G)(3)

Governing the development and implementation of a program for the inspection of solid wastes generated outside the boundaries of this state that are disposed of at solid waste facilities included in the district's solid waste management plan or

amended plan. A board of county commissioners or board of directors or its authorized representative may enter upon the premises of any solid waste facility included in the district's solid waste management plan or amended plan for the purpose of conducting the inspections required or authorized by the rules adopted under division (G)(3) of this section. No person, municipal corporation, township, or other political subdivision shall forbid or interfere with a board of county commissioners or directors or its authorized representative entering upon the premises of any such solid waste facility for that purpose.

ORC 343.01(G)(4)

Exempting the owner or operator of any existing or proposed solid waste facility provided for in the plan or amended plan from compliance with any amendment to a township zoning resolution adopted under section 519.12 of the Revised Code or to a county rural zoning resolution adopted under section 303.12 of the Revised Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised Code to open a new or modify an existing solid waste facility.

Rule Making Authority - ORC 3734.53

The solid waste management plan provides the authority to the Board of Directors to adopt, publish, and enforce all of the rule-making powers authorized by Ohio Revised Code 3734.53, Division (C) including the following:

- (1) Prohibiting or limiting the receipt at facilities covered by the plan of solid wastes generated outside the district or outside a prescribed service area consistent with the projections under divisions (A)(6) and (7) of this section, except that the director of environmental protection may issue an order modifying a rule authorized to be adopted under division (C)(1) of this section to allow the disposal in the district of wastes from another county or joint solid waste management district if all of the following apply:
 - (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the director's order;
 - (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;

- (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
 - (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the receiving district;
 - (e) The district in which the wastes were generated has demonstrated to the director that the conditions specified in divisions (C)(1)(a) to (d) of this section have been met;
 - (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of the out-of-district wastes will not limit the capacity of the receiving district to dispose of its in-district wastes to less than eight years. Any order issued under division (C)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the county or joint solid waste management district that will receive the out-of-district wastes.
- (2) Governing the maintenance, protection, and use of solid waste collection, storage, disposal, transfer, recycling, processing, and resource recovery facilities within the district and requiring the submission of general plans and specifications for the construction, enlargement, or modification of any such facility to the board of county commissioners or board of directors of the district for review and approval as complying with the plan or amended plan of the district;
 - (3) Governing development and implementation of a program for the inspection of solid wastes generated outside the boundaries of the state that are being disposed of at solid waste facilities included in the district's plan;
 - (4) Exempting the owner or operator of any existing or proposed solid waste facility provided for in the plan from compliance with any amendment to a township zoning resolution adopted under section 519.12 of the Revised Code or to a county rural zoning resolution adopted under section 303.12 of the Revised Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised Code to open a new or modify an existing solid waste facility.

C. Rule Approval Process

Proposed rules shall be adopted and enforced by the Board of County Commissioners as provided in Section 343.01(G).



APPENDIX A

RESOLUTION FOR DISTRICT FORMATION



RESOLUTION NO. 89-3-277

FORM SOLID WASTE MANAGEMENT DISTRICT

Mr. Clawson introduced the following Resolution and moved it be adopted

Be it resolved the Board of County Commissioners of Miami County, having been granted an exemption from the 120,000 population requirement for a solid waste management district of Ohio, revised H.B. 592, Section 3734.52, by Ohio EPA's letter date February 15, 1989, do hereby form a solid waste management district comprising all municipalities and townships within the said county and further be it resolved also that a solid waste management policy committee consisting of the following members will be created to oversee the preparation of a district-wide comprehensive solid waste management plan:

- Don Hart, President, Miami County Commissioner
- Frank Patrizio, City Manager, Piqua
- A representative of all the townships in Miami County.
- Dr. Richard Breece, Commissioner, Miami County Health Dept.
- A representative of the General Public selected by the above four members

Mr. Westfall seconded the motion and the Board voted as follows upon roll call:

Mr. Hart, yea; Mr. Westfall, yea, Mr. Clawson, yea

Date March 17, 1989



APPENDIX B

**PUBLIC NOTICES FOR PUBLIC HEARINGS AND
PUBLIC COMMENT**



Order Confirmation

<u>Ad Order Number</u> 0000697073	<u>Customer</u> Miami County Sanitary	<u>Payor Customer</u> Miami County Sanitary	<u>PO Number</u> Public Comment Period for Draft Solid Waste Man
<u>Sales Rep.</u> amy.kirby	<u>Customer Account</u> 15435	<u>Payor Account</u> 15435	<u>Ordered By</u> BRAD PETRY
<u>Order Taker</u> andrea.feltner	<u>Customer Address</u> 2200 County Road 25A Troy OH 45373 USA	<u>Payor Address</u> 2200 County Road 25A Troy OH 45373 USA	<u>Customer Fax</u>
<u>Order Source</u> Non Web	<u>Customer Phone</u> 9374405653	<u>Payor Phone</u> 9374405653	<u>Customer EMail</u>
			<u>Special Pricing</u>

Invoice Text

Ad Order Notes

<u>Net Amount</u>	<u>Tax Amount</u>	<u>Total Amount</u>	<u>Payment Amount</u>	<u>Amount Due</u>
\$576.00	\$0.00	\$576.00	\$0.00	\$576.00

<u>Ad Number</u>	<u>Ad Type</u>	<u>Production Method</u>	<u>Production Notes</u>
0000697073-01	Legal	AdBooker	

<u>External Ad Number</u>	<u>Ad Attributes</u>	<u>Ad Released</u>	<u>Pick Up</u>
		No	

<u>Ad Size</u>	<u>Color</u>
1 X 100 li	

<u>Run Date</u>	<u>Product</u>	<u>Placement</u>	<u>Sched Cst</u>	<u>Disc/Prem</u>	<u>Color</u>	<u>Pickup</u>	<u>Tax</u>	<u>Subtotal</u>
07/09/2021	O-Dayton Daily News	Legals	\$576.00	\$0.00	\$0.00	\$0.00	\$0.00	\$576.00
07/09/2021 -	O-Web	Legals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
08/13/2021								

Ad Content

**PUBLIC NOTICE
MIAMI COUNTY SOLID WASTE
MANAGEMENT DISTRICT**

*Public Comment Period for Draft Solid
Waste Management Plan Update*

The Miami County Solid Waste Management District (District) is establishing a 30-day written comment period (July 12 – August 10, 2021) on the draft Solid Waste Management Plan Update (Plan Update) (Ohio Revised Code Section 3734.54). The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

This draft plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling programs and drop-off recycling programs, yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen years of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will hold a public hearing to obtain oral comments regarding the draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy, Ohio 45373.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Petry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for review on the District's website at www.miamicountyrecycles.org, and at the following locations during normal business hours:

Miami County Solid Waste Management District: 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners Office:

201 West Main Street, Troy, Ohio 45373

Please contact the District at (937) 440-5653 with any questions about the Plan Update.

7-9/2021

0000697073-01

GENERAL ACCEPTANCE POLICY AND TERMS AND CONDITIONS

1. Advertising Guidelines

The newspapers, websites, digital and broadcast platforms and their related services of Ohio Newspapers (hereinafter “the Publisher”), or its successors or assigns, reserve the right to revise or reject any advertisement deemed objectionable by the Publisher, in its sole discretion, in subject matter, phraseology or composition, or any advertisement that Publisher deems illegal under federal or state law. Fraudulent, dishonest or misleading advertising will not knowingly be accepted, and if recognized may be rejected by the Publisher in its sole discretion. Advertising placed to resemble news content matter must carry the word “Advertisement” clearly alerting the Publisher audience to the purpose of its content to the satisfaction of the Publisher. Political advertising must carry a clear identifier of political advertising and all subsequent notifications required by the laws governing political advertising in the Ohio Revised Code. # 3517.105

2. Remedies and Limitations in Liability

In consideration for publication of the Advertiser’s advertisement by the Publisher, Advertiser agrees as follows:

Advertiser assumes all liability for content of advertising provided by it, and agrees to defend, hold harmless, and indemnify Publisher for any and all damages arising therefrom. Liability for typographical errors, wrong insertions, omissions, late publications, or non-publication, as well as all other matters Advertisers might raise relevant to this contract, is limited to no more than the charges payable, or paid, to Publisher for the specific advertisement in which the error occurred. Publisher will not be liable for lost profit, unachieved business opportunities, consequential damages or any other monetary damages beyond the advertising charges payable, or paid, to Publisher hereunder, and Advertiser hereby waives any and all such claims. Claims for an allowance for such matters must be made within seven (7) days of the matter’s first occurrence, or are deemed waived. Advertiser agrees that it is expressly required to check the first insertion of any advertisement for accuracy and to bring any issues to Publisher’s attention immediately and that the failure to do so constitutes a waiver of any further claims. Publisher is not responsible for more than one incorrect insertion, or more than one publication, per advertisement.

3. Advertising Rates and Terms

Publisher has the right to revise advertising rates at any time and will provide 30-day notice to advertisers under contracted rate agreements. Absent a written agreement to the contrary, signed by an officer of the Publisher, such rates and all terms of this agreement shall be binding. No verbal agreements, representations or promises shall be enforceable.

4. Application; No Jury or Class Action Claims

The foregoing General Acceptance Policy and Terms and Conditions shall apply to all current and subsequent advertisements placed by Advertiser with the Publisher, or its successors and/or assigns, unless otherwise modified in writing by both parties. The parties hereby waive any right to trial by jury and any right to assert against the other any claim as a member or representative of any class or representative action.

Order Confirmation

Ad Order Number

0000697076

Customer

Miami County Sanitary

Payor Customer

Miami County Sanitary

PO Number

PUBLIC HEARING AUG 13 2021

Sales Rep.

amy.kirby

Customer Account

15435

Payor Account

15435

Ordered By

BRAD PETRY

Order Taker

andrea.feltner

Customer Address

2200 County Road 25A
Troy OH 45373 USA

Payor Address

2200 County Road 25A
Troy OH 45373 USA

Customer Fax

Customer EMail

Order Source

Non Web

Customer Phone

9374405653

Payor Phone

9374405653

Special Pricing

Invoice Text

Ad Order Notes

Net Amount

\$512.64

Tax Amount

\$0.00

Total Amount

\$512.64

Payment Amount

\$0.00

Amount Due

\$512.64

Ad Number

0000697076-01

Ad Type

Legal

Production Method

AdBooker

Production Notes

External Ad Number

Ad Attributes

Ad Released

No

Pick Up

Ad Size

1 X 89 li

Color

<u>Run Date</u>	<u>Product</u>	<u>Placement</u>	<u>Sched Cst</u>	<u>Disc/Prem</u>	<u>Color</u>	<u>Pickup</u>	<u>Tax</u>	<u>Subtotal</u>
07/09/2021	O-Dayton Daily News	Legals	\$512.64	\$0.00	\$0.00	\$0.00	\$0.00	\$512.64
07/09/2021 -	O-Web	Legals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
08/13/2021								

Ad Content

Public Hearing Notice

The Miami County Solid Waste Management District will hold a public hearing to obtain oral comments regarding the District draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy, Ohio 45373.

The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

This draft plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling programs and drop-off recycling programs, yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen years of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Petry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for review on the District's website at www.miamicountyrecycles.org, and at the following locations during normal business hours:

Miami County Solid Waste Management District: 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners Office: 201 West Main Street, Troy, Ohio 45373

Please contact the District at (937) 440-5653 with any questions about the Plan Update.
7-9/2021

0000697076-01

GENERAL ACCEPTANCE POLICY AND TERMS AND CONDITIONS

1. Advertising Guidelines

The newspapers, websites, digital and broadcast platforms and their related services of Ohio Newspapers (hereinafter “the Publisher”), or its successors or assigns, reserve the right to revise or reject any advertisement deemed objectionable by the Publisher, in its sole discretion, in subject matter, phraseology or composition, or any advertisement that Publisher deems illegal under federal or state law. Fraudulent, dishonest or misleading advertising will not knowingly be accepted, and if recognized may be rejected by the Publisher in its sole discretion. Advertising placed to resemble news content matter must carry the word “Advertisement” clearly alerting the Publisher audience to the purpose of its content to the satisfaction of the Publisher. Political advertising must carry a clear identifier of political advertising and all subsequent notifications required by the laws governing political advertising in the Ohio Revised Code. # 3517.105

2. Remedies and Limitations in Liability

In consideration for publication of the Advertiser’s advertisement by the Publisher, Advertiser agrees as follows:

Advertiser assumes all liability for content of advertising provided by it, and agrees to defend, hold harmless, and indemnify Publisher for any and all damages arising therefrom. Liability for typographical errors, wrong insertions, omissions, late publications, or non-publication, as well as all other matters Advertisers might raise relevant to this contract, is limited to no more than the charges payable, or paid, to Publisher for the specific advertisement in which the error occurred. Publisher will not be liable for lost profit, unachieved business opportunities, consequential damages or any other monetary damages beyond the advertising charges payable, or paid, to Publisher hereunder, and Advertiser hereby waives any and all such claims. Claims for an allowance for such matters must be made within seven (7) days of the matter’s first occurrence, or are deemed waived.

Advertiser agrees that it is expressly required to check the first insertion of any advertisement for accuracy and to bring any issues to Publisher’s attention immediately and that the failure to do so constitutes a waiver of any further claims. Publisher is not responsible for more than one incorrect insertion, or more than one publication, per advertisement.

3. Advertising Rates and Terms

Publisher has the right to revise advertising rates at any time and will provide 30-day notice to advertisers under contracted rate agreements. Absent a written agreement to the contrary, signed by an officer of the Publisher, such rates and all terms of this agreement shall be binding. No verbal agreements, representations or promises shall be enforceable.

4. Application; No Jury or Class Action Claims

The foregoing General Acceptance Policy and Terms and Conditions shall apply to all current and subsequent advertisements placed by Advertiser with the Publisher, or its successors and/or assigns, unless otherwise modified in writing by both parties. The parties hereby waive any right to trial by jury and any right to assert against the other any claim as a member or representative of any class or representative action.

Order Confirmation

<u>Ad Order Number</u> 0000697073	<u>Customer</u> Miami County Sanitary	<u>Payor Customer</u> Miami County Sanitary	<u>PO Number</u> Public Comment Period for Draft Solid Waste Man
<u>Sales Rep.</u> amy.kirby	<u>Customer Account</u> 15435	<u>Payor Account</u> 15435	<u>Ordered By</u> BRAD PETRY
<u>Order Taker</u> andrea.feltner	<u>Customer Address</u> 2200 County Road 25A Troy OH 45373 USA	<u>Payor Address</u> 2200 County Road 25A Troy OH 45373 USA	<u>Customer Fax</u>
<u>Order Source</u> Non Web	<u>Customer Phone</u> 9374405653	<u>Payor Phone</u> 9374405653	<u>Customer EMail</u>
			<u>Special Pricing</u>

Invoice Text

Ad Order Notes

<u>Net Amount</u>	<u>Tax Amount</u>	<u>Total Amount</u>	<u>Payment Amount</u>	<u>Amount Due</u>
\$576.00	\$0.00	\$576.00	\$0.00	\$576.00

<u>Ad Number</u>	<u>Ad Type</u>	<u>Production Method</u>	<u>Production Notes</u>
0000697073-01	Legal	AdBooker	

<u>External Ad Number</u>	<u>Ad Attributes</u>	<u>Ad Released</u>	<u>Pick Up</u>
		No	

<u>Ad Size</u>	<u>Color</u>
1 X 100 li	

<u>Run Date</u>	<u>Product</u>	<u>Placement</u>	<u>Sched Cst</u>	<u>Disc/Prem</u>	<u>Color</u>	<u>Pickup</u>	<u>Tax</u>	<u>Subtotal</u>
07/09/2021	O-Dayton Daily News	Legals	\$576.00	\$0.00	\$0.00	\$0.00	\$0.00	\$576.00
07/09/2021 -	O-Web	Legals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
08/13/2021								

Ad Content

**PUBLIC NOTICE
MIAMI COUNTY SOLID WASTE
MANAGEMENT DISTRICT**

*Public Comment Period for Draft Solid
Waste Management Plan Update*

The Miami County Solid Waste Management District (District) is establishing a 30-day written comment period (July 12 – August 10, 2021) on the draft Solid Waste Management Plan Update (Plan Update) (Ohio Revised Code Section 3734.54). The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

This draft plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling programs and drop-off recycling programs, yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen years of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will hold a public hearing to obtain oral comments regarding the draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy, Ohio 45373.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Petry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for review on the District's website at www.miamicountyrecycles.org, and at the following locations during normal business hours:

Miami County Solid Waste Management District: 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners Office:

201 West Main Street, Troy, Ohio 45373

Please contact the District at (937) 440-5653 with any questions about the Plan Update.

7-9/2021

0000697073-01

GENERAL ACCEPTANCE POLICY AND TERMS AND CONDITIONS

1. Advertising Guidelines

The newspapers, websites, digital and broadcast platforms and their related services of Ohio Newspapers (hereinafter “the Publisher”), or its successors or assigns, reserve the right to revise or reject any advertisement deemed objectionable by the Publisher, in its sole discretion, in subject matter, phraseology or composition, or any advertisement that Publisher deems illegal under federal or state law. Fraudulent, dishonest or misleading advertising will not knowingly be accepted, and if recognized may be rejected by the Publisher in its sole discretion. Advertising placed to resemble news content matter must carry the word “Advertisement” clearly alerting the Publisher audience to the purpose of its content to the satisfaction of the Publisher. Political advertising must carry a clear identifier of political advertising and all subsequent notifications required by the laws governing political advertising in the Ohio Revised Code. # 3517.105

2. Remedies and Limitations in Liability

In consideration for publication of the Advertiser’s advertisement by the Publisher, Advertiser agrees as follows:

Advertiser assumes all liability for content of advertising provided by it, and agrees to defend, hold harmless, and indemnify Publisher for any and all damages arising therefrom. Liability for typographical errors, wrong insertions, omissions, late publications, or non-publication, as well as all other matters Advertisers might raise relevant to this contract, is limited to no more than the charges payable, or paid, to Publisher for the specific advertisement in which the error occurred. Publisher will not be liable for lost profit, unachieved business opportunities, consequential damages or any other monetary damages beyond the advertising charges payable, or paid, to Publisher hereunder, and Advertiser hereby waives any and all such claims. Claims for an allowance for such matters must be made within seven (7) days of the matter’s first occurrence, or are deemed waived. Advertiser agrees that it is expressly required to check the first insertion of any advertisement for accuracy and to bring any issues to Publisher’s attention immediately and that the failure to do so constitutes a waiver of any further claims. Publisher is not responsible for more than one incorrect insertion, or more than one publication, per advertisement.

3. Advertising Rates and Terms

Publisher has the right to revise advertising rates at any time and will provide 30-day notice to advertisers under contracted rate agreements. Absent a written agreement to the contrary, signed by an officer of the Publisher, such rates and all terms of this agreement shall be binding. No verbal agreements, representations or promises shall be enforceable.

4. Application; No Jury or Class Action Claims

The foregoing General Acceptance Policy and Terms and Conditions shall apply to all current and subsequent advertisements placed by Advertiser with the Publisher, or its successors and/or assigns, unless otherwise modified in writing by both parties. The parties hereby waive any right to trial by jury and any right to assert against the other any claim as a member or representative of any class or representative action.

Order Confirmation

Ad Order Number

0000697076

Customer

Miami County Sanitary

Payor Customer

Miami County Sanitary

PO Number

PUBLIC HEARING AUG 13 2021

Sales Rep.

amy.kirby

Customer Account

15435

Payor Account

15435

Ordered By

BRAD PETRY

Order Taker

andrea.feltner

Customer Address

2200 County Road 25A
Troy OH 45373 USA

Payor Address

2200 County Road 25A
Troy OH 45373 USA

Customer Fax

Customer EMail

Order Source

Non Web

Customer Phone

9374405653

Payor Phone

9374405653

Special Pricing

Invoice Text

Ad Order Notes

Net Amount
\$512.64

Tax Amount
\$0.00

Total Amount
\$512.64

Payment Amount
\$0.00

Amount Due
\$512.64

Ad Number **Ad Type**
0000697076-01 Legal

Production Method **Production Notes**
AdBooker

External Ad Number **Ad Attributes** **Ad Released** **Pick Up**
No

Ad Size **Color**
1 X 89 li

<u>Run Date</u>	<u>Product</u>	<u>Placement</u>	<u>Sched Cst</u>	<u>Disc/Prem</u>	<u>Color</u>	<u>Pickup</u>	<u>Tax</u>	<u>Subtotal</u>
07/09/2021	O-Dayton Daily News	Legals	\$512.64	\$0.00	\$0.00	\$0.00	\$0.00	\$512.64
07/09/2021 -	O-Web	Legals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
08/13/2021								

Ad Content

Public Hearing Notice

The Miami County Solid Waste Management District will hold a public hearing to obtain oral comments regarding the District draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy, Ohio 45373.

The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

This draft plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling programs and drop-off recycling programs, yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen years of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Petry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for review on the District's website at www.miamicountyrecycles.org, and at the following locations during normal business hours:

Miami County Solid Waste Management District: 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners Office: 201 West Main Street, Troy, Ohio 45373

Please contact the District at (937) 440-5653 with any questions about the Plan Update.
7-9/2021

0000697076-01

GENERAL ACCEPTANCE POLICY AND TERMS AND CONDITIONS

1. Advertising Guidelines

The newspapers, websites, digital and broadcast platforms and their related services of Ohio Newspapers (hereinafter “the Publisher”), or its successors or assigns, reserve the right to revise or reject any advertisement deemed objectionable by the Publisher, in its sole discretion, in subject matter, phraseology or composition, or any advertisement that Publisher deems illegal under federal or state law. Fraudulent, dishonest or misleading advertising will not knowingly be accepted, and if recognized may be rejected by the Publisher in its sole discretion. Advertising placed to resemble news content matter must carry the word “Advertisement” clearly alerting the Publisher audience to the purpose of its content to the satisfaction of the Publisher. Political advertising must carry a clear identifier of political advertising and all subsequent notifications required by the laws governing political advertising in the Ohio Revised Code. # 3517.105

2. Remedies and Limitations in Liability

In consideration for publication of the Advertiser’s advertisement by the Publisher, Advertiser agrees as follows:

Advertiser assumes all liability for content of advertising provided by it, and agrees to defend, hold harmless, and indemnify Publisher for any and all damages arising therefrom. Liability for typographical errors, wrong insertions, omissions, late publications, or non-publication, as well as all other matters Advertisers might raise relevant to this contract, is limited to no more than the charges payable, or paid, to Publisher for the specific advertisement in which the error occurred. Publisher will not be liable for lost profit, unachieved business opportunities, consequential damages or any other monetary damages beyond the advertising charges payable, or paid, to Publisher hereunder, and Advertiser hereby waives any and all such claims. Claims for an allowance for such matters must be made within seven (7) days of the matter’s first occurrence, or are deemed waived.

Advertiser agrees that it is expressly required to check the first insertion of any advertisement for accuracy and to bring any issues to Publisher’s attention immediately and that the failure to do so constitutes a waiver of any further claims. Publisher is not responsible for more than one incorrect insertion, or more than one publication, per advertisement.

3. Advertising Rates and Terms

Publisher has the right to revise advertising rates at any time and will provide 30-day notice to advertisers under contracted rate agreements. Absent a written agreement to the contrary, signed by an officer of the Publisher, such rates and all terms of this agreement shall be binding. No verbal agreements, representations or promises shall be enforceable.

4. Application; No Jury or Class Action Claims

The foregoing General Acceptance Policy and Terms and Conditions shall apply to all current and subsequent advertisements placed by Advertiser with the Publisher, or its successors and/or assigns, unless otherwise modified in writing by both parties. The parties hereby waive any right to trial by jury and any right to assert against the other any claim as a member or representative of any class or representative action.

DAILY LAW JOURNAL

legal court docket	legal court docket	legal court docket	legal court docket	legal notices
-----------------------	-----------------------	-----------------------	-----------------------	------------------

DAYTON MUNICIPAL COURT
301 W. Third Street
Dayton, Ohio 45402
www.daytonmunicipalcourt.org
WUJFFC
JUDGES:
Hon. Carl S. Henderson
(Presiding Judge)
Hon. Deirdre E. Logan
(Administrative Judge)
Hon. Daniel G. Gehres
Hon. Christopher D. Roberts
Hon. Mia Wortham Spells

MAGISTRATES:
Mag. Colette E. Moorman

MARK E. OWENS
Clerk of Court
Telephone 937-333-4300

ASSIGNMENTS
FILE DATE: 07/12/2021
20CVF03074 LUCRETIA J ELAM V RICHARD A BOUCHER MIA WORTHAM SPELLS; DAVID D BRANNON OF BRANNON & ASSOCIATES; 130 W SECOND ST SUITE 900 DAYTON, OH 45402; PRE TRIAL/TELEPHONE CONFERENCE; 11:00AM
21CVF00487 CAPITAL ONE BANK (USA) V ELMIRA KAYTZOVA DEIRDRE E LOGAN; ROBERT D CASTRONE JR OF LYONS, DOUGHTY & VELDHIUS P C 471 EAST BROAD STREET, 12TH FLOOR COLUMBUS, OH 43215; PHONE PRETRIAL; 1:30PM
21CVG01343 LIVING LIFE CASUALLY, LLC V ERICA L HILL AND ALL OTHERS RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVG02065 ODIS SCALES, III, ET AL V DYLAN ARMSTRONG AND ALL OTHER OCCUPANTS, ET AL STEVEN C. KATCHMAN; 130 W SECOND STREET SUITE 950 DAYTON, OH 45402; EVICTION HEARING - KATCHMAN; 2:00PM
21CVG02329 ATHENA INVESTMENTS PROPERTIES, LLC V BRENT GREENE, ET AL RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVG02031 ATHENA INVESTMENTS PROPERTIES, LLC V THOMAS COLEMAN AND ALL OTHERS RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVG02405 LIVING LIFE CASUALLY, LLC V JOSEPH V. LONG AND ALL OTHERS RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVF02486 LVWV FUNDING L L C V HAZEL SPEARS MIA WORTHAM SPELLS; ANTHONY J HUSPASKA OF STENGER & STENGER; 2618 EAST PARIS AVE SE GRAND RAPIDS, MI 49546; PRE TRIAL/TELEPHONE CONFERENCE; 11:15AM
21CVG02501 ATHENA INVESTMENT PROPERTIES, LLC V JASMINE CHAMBERS AND ALL OTHER OCCUPANTS RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVG02502 ATHENA INVESTMENT PROPERTIES, LLC V DA'NIKA JONES AND ALL OTHER OCCUPANTS RICHARD G KNOSTMAN; 1240 STANLEY AVE. DAYTON, OH 45404; EVICTION HEARING - KNOSTMAN; 1:30PM
21CVG02555 KENNETH BURKS V CHRISTINA WHITE AND ALL OTHERS STEVEN C. KATCHMAN; 130 W SECOND

1:45PM
21CVF01519 DISCOVER BANK V VETLIA J DAVIS MIA WORTHAM SPELLS; DOUGLAS M DAHMER OF WELTMAN, WEINBERG & REIS; 3705 MARLANE DR. GROVE CITY, OH 43213-8895; PRE TRIAL/TELEPHONE CONFERENCE; 11:15AM
21CVF01858 TD BANK USA, NA AS SUCCESSOR IN INTEREST TO TARGET NATIONAL BANK V RICHARD G CUTRIGHT DEIRDRE E LOGAN; VIKTORIYA DYRDA OF JAVITCH BLOCK LLC; 1100 SUPERIOR AVENUE, 19TH FLOOR CLEVELAND, OH 44114-251; PHONE PRETRIAL; 1:30PM
21CVH03042 CITY OF DAYTON POLICE DEPARTMENT V LISA FORTSYTHE; IMPOUNDMENT HEARING; 8:30AM
FILE DATE: 07/14/2021
20CVI04698 TRENT J COLE, SR V RICHARD UNDERWOOD, ET AL; SMALL CLAIMS HEARING; 9:30AM
20CVF04726 CITIBANK V SHARON HAWKINS MIA WORTHAM SPELLS; DOUGLAS M DAHMER OF WELTMAN, WEINBERG & REIS; 3705 MARLANE DR. GROVE CITY, OH 43213-8895; PRE TRIAL/TELEPHONE CONFERENCE; 11:00AM
21CVI00140 GLENN M. STANTON V JERRY VENTERS; SMALL CLAIMS HEARING; 8:30AM
21CVF02080 ABBEY CREDIT UNION, INC V CHARLES W. HOLCOMB STEPHEN D MILES; 18 W MONUMENT AVENUE DAYTON, OH 45402; PRE TRIAL/TELEPHONE CONFERENCE; 11:15AM
21CVI02099 RICHARD ZIGMAN V VERIAN WALLACE; SMALL CLAIMS HEARING; 8:30AM
21CVI02203 JEREMY BROWN V JAMIE BURNS, ET AL; SMALL CLAIMS HEARING; 9:30AM
21CVI02233 CHERYL A ANDREWS V MIKE ALLEN; SMALL CLAIMS HEARING; 9:00AM
21CVI02626 VIKKI AYRES V ROYCE TRAMMELL DBA TENF OF OHIO, LLC; SMALL CLAIMS HEARING; 8:30AM
21CVI02631 JORDAN R. SNYDER V ANDRE L. BARKER, ET AL; SMALL CLAIMS HEARING; 8:30AM
21CVI02676 WHITE ALLEN CHEVROLET V SHEREECE CULBRETH; SMALL CLAIMS HEARING; 9:00AM
21CVI02678 DIANCIA PAYNE PURCHESER V CREDIT ACCEPTANCE LIEN HOLDER, ET AL; SMALL CLAIMS HEARING; 9:00AM
21CVI02680 DIANCIA PAYNE V GREATER DAYTON PREMIER MANAGEMENT; SMALL CLAIMS HEARING; 9:00AM
21CVI02702 ELIZABETH DIAMOND COMPANY V ERICA MONBECK RICHARD TALDA OF COOLIDGE WALL CO. LPA; SMALL CLAIMS HEARING; 9:30AM
21CVI02704 BERNITHA KENDRICK V LYL A AMER , ET AL; SMALL CLAIMS HEARING; 9:30AM

0000697975-01

MIAMISBURG MUNICIPAL COURT
MIAMISBURG, GERMANTOWN, WEST CARROLLTON, AND TWPS OF MIAMI AND GERMAN
www.miamisburgcourts.com
WUJFFC
JUDGE:
Hon. Robert W. Rettich, III

MAGISTRATE:
Mag. Jeffery D. Slyman

Amanda Zennie
Clerk of Courts
Telephone 937-866-2203

NEW SUITS
FILE DATE: 06/28/2021
21CVG00861 KEN WALLACE VS KATHRYNE R. SMITH; 140 1/2 S ELM ST. WEST CARROLLTON, OH

JUDGMENTS
FILE DATE: 06/29/2021
20CVF00548 CITIBANK, N.A. VS RONALD A. PARSEL; 6243 CARNATION RD., PKWY #100, DAYTON, OH 45449; JUDGEMENT TO: CITIBANK, N.A.; \$3892.26
20CVF01496 CBCS VS KEVIN ALBRINCK; 10841 JANDOR PLACE, MIAMISBURG, OH, 45342; JUDGEMENT TO: CBCS; \$1287
20CVF01553 PORTFOLIO RECOVERY ASSOC., LLC VS COREY SAPORITO; 2697 DAYTON GERMANTWN PK, GERMANTOWN, OH 45327; JUDGEMENT TO: PORTFOLIO RECOVERY ASSOC., LLC; \$1737.53
20CVF01577 REVCO SOLUTIONS, INC. VS ASHLEY BROOKSHIRE; 680 N ALEX RD, WEST CARROLLTON, OH 45449; JUDGEMENT TO: REVCO SOLUTIONS, INC.; \$1289.28
21CVF00112 PORTFOLIO RECOVERY ASSOC., LLC VS GEORGE BILLINGSLEY; 4022 CORDELL DR. DAYTON, OH 45439; JUDGEMENT TO: PORTFOLIO RECOVERY ASSOC., LLC; \$4833.29
21CVF00303 PORTFOLIO RECOVERY ASSOC., LLC VS BENJAMIN KIRK; 1021 EARL CT., MIAMISBURG, OH 45342; JUDGEMENT TO: PORTFOLIO RECOVERY ASSOC., LLC; \$1888.22
21CVF00453 TD BANK USA, N.A. C/O TARGET ENTERPRISE, INC. VS DANIEL BRIDGES; 5901 CLEMATIS DR., WEST CARROLLTON CITY, OH 45449; JUDGEMENT TO: TD BANK USA, N.A. C/O TARGET ENTERPRISE, INC.; \$2622.98
FILE DATE: 07/01/2021
21CVI00624 DALE CASSETT VS CHARMAIGNE GOBAL; 417 BENDING BRANCH LANE, MIAMISBURG, OH 45342; JUDGEMENT TO: CASSETT, DALE; \$300

0000697969-01

MONTGOMERY COUNTY COMMON PLEAS COURT CIVIL DIVISION
DAYTON-MONTGOMERY County Courts Building
41 N. Perry Street
Dayton, Ohio 45422-2155
<http://montcocourt.org>
WUJFFC
JUDGES:
Hon. Dennis J. Adkins
Hon. Steven K. Dankof
Hon. Mary Katherine Huffman
Hon. Michael W. Krumholz
Hon. Mary E. Montgomery
Hon. Timothy N. O'Connell
Hon. Gerald Parker
Hon. Gregory F. Singer (Admin. Judge-General Division)
Hon. Richard S. Skelton
Hon. Susan D. Solle
Hon. Mary Wiseman

Mike Foley
Clerk of Courts
Telephone 937-225-6118

NEW SUITS
FILE DATE: 07/02/2021
HON. DENNIS J. ADKINS
2021CV02709 ONEMAIN FINANCIAL GROUP LLC : MICHAEL R BITTORF; 129 COPPERFIELD DR, DAYTON, OH; CIVIL ALL OTHER; MATTHEW SALTER
2021CV02720 DAVID JEWETT : MONTGOMERY COUNTY CLERK OF COURTS; 41 N PERRY ST, DAYTON, OH; PETITION FOR COURT ORDERED CERTIFICATE OF TITLE; PRO SE
2021CV02721 JOSE QUINONES : LOWELL SPENCER; 4448 DARWIN COURT, DAYTON, OH; PERSONAL INJURY; DENNIS LIEBERMAN
2021CV02725 CHRISTOPHER FAULKNER

STREET, HUBER HEIGHTS, OH; DISSOLUTION WITHOUT CHILDREN; JERRY MEADOWS
2021DR00510 KACIE N POLLET : JASON W POLLET; 30 MORTON AVE, DAYTON, OH; DIVORCE WITHOUT CHILDREN; JILL SINK
2021DR00515 JESSICA LORIMER : CHARLES E LORIMER; 70 SAMUEL ST, DAYTON, OH; DIVORCE WITH CHILDREN; TIMOTHY D WOOD
2021DR00302 TIMOTHY D WILLIAM LYONS; 29 MARK TWAIN CT, DAYTON, OH; DISSOLUTION WITHOUT CHILDREN; KEITH KEARNEY
2021DR00511 LAURA N ZINDORF : BRIAN T ZINDORF; 2812 VALE DRIVE, KETTERING, OH; DIVORCE WITH CHILDREN; JAMIE ANDERSON
2021DR00512 TAMEKA OGLESBY : DARRYL OGLESBY SR; 4239 OAKRIDGE DR, DAYTON, OH; DIVORCE WITHOUT CHILDREN
2021DR00513 WESLEY FRYSSINGER : LAURA FRYSSINGER; 608 ANNA AVE, MACHESNEY PARK, IL; DIVORCE WITH CHILDREN; ADAM MESAROS
2021DR00514 HARLAN LAYNE KNOX : MOLLY MARIE KNOX; 218 HICKORY STREET, DAYTON, OH; DIVORCE WITHOUT CHILDREN; RICHARD ARTHUR

CURRENT BUSINESS
FILE DATE: 07/02/2021
HON. JUDGE TBD
2021DR00510 KACIE N POLLET : JASON W POLLET; 30 MORTON AVE, DAYTON, OH; COMPLAINT FOR DIVORCE WITHOUT CHILDREN FILED RECEIPT: 399745 DATE: 07/02/2021; JILL SINK
2021DR00514 HARLAN LAYNE KNOX : MOLLY MARIE KNOX; 218 HICKORY STREET, DAYTON, OH; COMPLAINT FOR DIVORCE WITHOUT CHILDREN FILED RECEIPT: 399766 DATE: 07/02/2021; RICHARD ARTHUR
2021DR00512 TAMEKA OGLESBY : DARRYL OGLESBY SR; 4239 OAKRIDGE DR, DAYTON, OH; COMPLAINT FOR DIVORCE WITHOUT CHILDREN FILED RECEIPT: 399761 DATE: 07/02/2021
2021DR00511 LAURA N ZINDORF : BRIAN T ZINDORF; 2812 VALE DRIVE, KETTERING, OH; COMPLAINT FOR DIVORCE WITH CHILDREN FILED RECEIPT: 399765 DATE: 07/02/2021; JAMIE ANDERSON
2021DR00513 WESLEY FRYSSINGER : LAURA FRYSSINGER; 608 ANNA AVE, MACHESNEY PARK, IL; COMPLAINT FOR DIVORCE WITH CHILDREN FILED RECEIPT: 399765 DATE: 07/02/2021; ADAM MESAROS
2021DR00515 JESSICA LORIMER : CHARLES E LORIMER; 70 SAMUEL ST, DAYTON, OH; COMPLAINT FOR DIVORCE WITH CHILDREN FILED

0000697966-01

MONTGOMERY COUNTY COMMON PLEAS COURT PROBATE DIVISION
DAYTON-MONTGOMERY County Courts Building
41 N. Perry Street
Dayton, Ohio 45422-2155
<http://mcoohio.org/probate/>
WUJFFC
JUDGE:
Hon. David D. Brannon

Court Administrator
Common Pleas Court
Phone 937-225-4560

ESTATES OF DECEASED PERSONS
File date: 07/02/2021
2021EST01473 THE ESTATE OF BETH COX; RELEASE OF ADMIN; WJO WILL
0000697968-01

MONTGOMERY

PUBLIC NOTICE
MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
Public Comment Period for Draft Solid Waste Management Plan Update

The Miami County Solid Waste Management District (District) is establishing a 30-day written comment period July 12, August 10, 2021 on the draft Solid Waste Management Plan Update (Plan Update) (Ohio Revised Code Section 3734.54). The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

The draft Plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling program and drop-off recycling programs, yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen year of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will hold a public hearing to obtain oral comments regarding the draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy Ohio 45373.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Perry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for review on the District's website at www.miamicountyrecycles.org, and at the following locations during normal business hours:

Miami County Solid Waste Management District; 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners Office; 201 West Main Street, Troy, Ohio 45373

Please contact the District at (937) 440-5653 with any questions about the Plan Update.
7/9/2021

0000697073-01

foreclosure

Montgomery Co. Foreclosure Auction, Case# 2020CV03655 Third World Missions, Inc vs. Sound Words, et al. The address is 4388, 4380 and 4421 Salem Ave. Dayton, Oh 45416. See

DAILY LAW JOURNAL

legal public auction

45005
 • Jessica Baird, 3105 Keays Ave, Middletown, OH 45044; Unit M077; Household Property • Molly Williams, 404 S Sutphon St, Middletown, OH 45044; Unit M075; Household Property • Caperton Reed, 321 Hill Ave, Franklin OH 45005 Unit M079; Household Property

All sales are subject to prior cancellation. Sale rules and regulations are available at the time of sale.
 7-9, 7-16/2021

0000697755-01

public hearing

Public Notice
 City of Kettering Public Hearing and Notice of Report Availability and Public Comment Period
 2021-2025 Consolidated Plan and 2021 Annual Action Plan

The City of Kettering will submit its 2021-2025 Consolidated Plan and 2021 Annual Action Plan to the Department of Housing and Urban Development (HUD) on or before August 13, 2021.

Every five years Kettering prepares a Consolidated Plan as a condition of receiving federal Community Development Block Grant (CDBG) funding from HUD. The Consolidated Plan is carried out via five one-year Annual Action Plans which serve as the City's annual funding applications to HUD for the allocation of federal funds to meet community housing and development needs.

This notice is to inform the public that the following actions and activities will take place on the proposed allocation of \$576,194 in new 2021 CDBG funds, approximately \$21,000 in CDBG program income, and approximately \$495,563 in prior year unspent CDBG funds.

July 9, 2021 through August 9, 2021: 30-day Public Comment Period: During the 30-day public comment period, the 2021-2025 Consolidated Plan and the 2021 Annual Action Plan will be available for public review and comment from the Kettering-Moraine Branch Library, 3496 Far Hills Avenue and at the Kettering Government Center, Planning & Development Department, 3600 Shroyer Rd, Kettering

July 23, 2021 at 11:00am at Deeds Conference Room, Kettering Government Center, 3600 Shroyer Rd: A public meeting on the proposal will be held to discuss the documents

public hearing

August 10, 2021 at 7:00pm at 3600 Shroyer Road Final Approval: The City Council will take final action on the proposal during the City Council meeting.

It is the policy of the City of Kettering to make all public meetings accessible. If you have a disability that requires accommodation in order for you to attend and/or participate in this meeting, please contact Angela Brown, Community Development Manager at (937) 296-2524 at least 48 hours in advance and reasonable efforts shall be made to provide assistance.

The City of Kettering does not discriminate on the basis of race, color, national origin, sex, religion, age and handicapped status in employment or the provision of services.

Additional information is available from the Planning and Development Department, or by contacting Angela Brown at 296-2524 or via email at angela.brown@ketteringoh.org.
 7-9, 7-23/2021

0000698003-01

- PUBLIC HEARING NOTICE - BEAVERCREEK TOWNSHIP BOARD OF ZONING APPEALS CASE #849

The Beaver Creek Township Board of Zoning Appeals (BZA) will hold a public hearing in the Community Room on the lower level of the Beaver Creek Township Fire Station #61, located at 2195 Dayton - Xenia Rd., on Wednesday, July 21, 2021, scheduled to begin at 7:30 p.m.

The purpose of the hearing is so the BZA may review and act on a variance request (Case #849) made by property owner Joshua Keeton. The nature of the request is to seek a variance from the requirement that no fence shall exceed a height of three (3) feet when located in a required front yard setback. The applicant is seeking a variance from the requirements of Article 18.06(2). The applicant has erected a nonconforming fence and is requesting a variance in lieu of demolishing the fence.

The property is located at 156 Ridgebrook Trail in the unincorporated area of Beaver Creek Township and is zoned R-PUD (Residential Planned Unit Development). The Greene County Parcel I.D. # is B03000100220009800.

This notice was processed for publication by Associate Zoning Administrator Max McConnell in accordance with state requirements. The BZA action is the final determination on the request,

public hearing

unless otherwise appealed to the Court of Common Pleas.

Anyone wishing to view the application may contact the Community Development & Risk Department at 937-306-0065, Monday through Friday, 8:00 a.m. to 4:30 p.m., to make arrangements.
 7-9/2021

0000697909-01

- PUBLIC HEARING NOTICE - BEAVERCREEK TOWNSHIP BOARD OF ZONING APPEALS CASE #850

The Beaver Creek Township Board of Zoning Appeals (BZA) will hold a public hearing in the Community Room on the lower level of the Beaver Creek Township Fire Station #61, located at 2195 Dayton - Xenia Rd., on Wednesday, July 21, 2021, scheduled to begin at 7:30 p.m.

The purpose of the hearing is so the BZA may review and act on a variance request (Case #850) made by property owner Kamaljit Singh. The nature of the request is to seek a variance from the requirement that the combined allowable maximum size of all accessory structures on a lot not exceed 900 square feet. Additionally, the applicant is seeking a variance from the maximum allowable height of accessory structures. The applicant is seeking a variance from the requirements of Article 18.05(4) and Article 18.05(5). The applicant desires to erect a detached garage that exceeds the allowable size and height limits.

The property is located at 1455 Stone Ridge Ct. in the unincorporated area of Beaver Creek Township and is zoned A-1 Agricultural. The Greene County Parcel I.D. # is B03000200410007200.

This notice was processed for publication by Associate Zoning Administrator Max McConnell in accordance with state requirements. The BZA action is the final determination on the request, unless otherwise appealed to the Court of Common Pleas.

Anyone wishing to view the application may contact the Community Development & Risk Department at 937-306-0065, Monday through Friday, 8:00 a.m. to 4:30 p.m., to make arrangements.
 7-9/2021

0000697912-01

More local jobs!
 We are the most powerful, easy-to-use print and online source for local jobs.

public hearing

Public Hearing Notice

The Miami County Solid Waste Management District will hold a public hearing to obtain oral comments regarding the District draft Plan Update on Friday, August 13, 2021 from 9:00 AM to 9:30 AM at the Miami County Commissioner's Hearing Room, 201 West Main Street, Troy, Ohio 45373.

The District has prepared the draft Plan Update as required by Section 3734.54 of the Ohio Revised Code. The draft Plan Update includes a budget and fees to finance the Plan, a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of the progress made toward achieving state solid waste reduction goals, and District rules.

This draft plan is an update to a previously approved solid waste plan. This plan includes existing programs including the curbside recycling programs and drop-off recycling programs; yard waste management, household hazardous waste management, scrap tire management, automobile batteries and used oil management and electronic waste management. The District also has an extensive public outreach, advertising and education program.

The draft plan includes a demonstration of access to capacity that determines there is more than fifteen years of landfill capacity available to the District.

Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code. The Miami County Transfer Station and Recycling Facility is the only designated solid waste facility that can accept solid waste generated within the District.

The District achieves the State of Ohio 25% waste reduction rate for the residential/commercial sector and 50% for the industrial sector. The District currently funds plan programs and current operations through a portion of the tipping fees collected at the Miami County Transfer Station. Currently, the tipping fee is \$53.80 per ton (includes Ohio EPA fee of \$4.75 per ton) of solid waste delivered.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft Plan Update from July 12, 2021 until August 10, 2021. Written comments should be sent to Mr. Brad Petry, District Coordinator, Miami County Solid Waste Management District, 2200 North County Road 25-A, Troy, Ohio 45373.

The draft Plan Update is available for

public hearing

review on the District's web www.miamicountyrecycles.org, the following locations during business hours:

Miami County Solid Waste Management District: 2200 North County Road 25-A, Troy, Ohio 45373.

Miami County Commissioners: 201 West Main Street, Troy, Ohio

Please contact the District at (937) 5653 with any questions about the Plan Update.
 7-9/2021

00000

adoption

BRITTANY MYLON BARTEE (FI) whose last known address was Barnard, Huber Heights, OH 454 whose current place of residence whereabouts are unknown and with reasonable diligence by Britany Mylon BarTEE, the natural mother, and JOHN DANIELS I whose last known address was Barnard, Huber Heights, OH 454 whose current place of residence whereabouts are unknown and with reasonable diligence by Britany Mylon BarTEE, the natural mother, and JOHN DANIELS I, legal custodian, filed her Petition for Adoption of NEVAEH ANN I Case No. 2021ADP00084 in the Court, Montgomery County, praying that she be permitted to adopt the child, the child NEVAEH ANN I a minor born at Dayton, Ohio, the name of the child be changed to CAISLEE NEVAEH ROBERTS, among other things in said petition, the natural mother, an DANIELS BARTEE, the natural father, have both failed without justification to provide more than minimal contact with the minor or to provide for the maintenance and support of the minor as required by law civil decree for a period of at least (1) year preceding the filing of the Adoption Petition.

"A final decree of adoption, if will relieve you of all parental duties and responsibilities, including to contact the minor, and except respect to a spouse of the a petitioner and relatives of that terminate all legal relationships between the minor and you and nor's other relatives, so that thereafter is a stranger to you minor's former relatives for all es. If you wish to contest the ac



APPENDIX C

**RESOLUTIONS AND CERTIFICATION
STATEMENTS**



CERTIFICATION STATEMENT FOR THE DRAFT PLAN

We, as representatives of the Solid Waste Management Policy Committee (SWMPC) of the Miami County Solid Waste Management District (District), do hereby certify that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the draft District Solid Waste Management Plan Update, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the fifteen year period covered by the Plan Update are accurate and are in compliance with the requirements in the *District Solid Waste Management Plan Format*, revision 3.0.

This Resolution shall go into effect immediately upon its adoption.

The SWMPC finds that this Resolution was adopted in a meeting open to the public and pursuant to publication of notice in compliance with the Open Meetings provisions enacted in Substitute House Bill 404 which went into effect on November 23, 2020.

Thomas Funderburg made the motion to accept the draft plan.

Aurthur Haddad seconded the motion.

Vote was taken and resulted as follows:

Policy Committee Members: YES NO

Certified by the Miami County Solid Waste Management Policy Committee President:



Ted Mercer, Commissioner, Miami County Ohio

Resolution Adopting the Solid Waste Management Plan

Resolution # 2021 - 02

A RESOLUTION DECLARING THAT THE AMENDED SOLID WASTE MANAGEMENT PLAN FOR THE MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT HAS BEEN ADOPTED.

Whereas, the Miami County Solid Waste Management District (District) completed the draft amended Solid Waste Management Plan ("Plan") and submitted it to the Ohio Environmental Protection Agency for review and comment on December 29, 2020 and the Ohio Environmental Protection Agency provided comments in a non-binding advisory opinion on February 12, 2020.

Whereas, the District's Policy Committee has reviewed the non-binding advisory opinion received from the Ohio Environmental Protection Agency and taken their comments into consideration and incorporated changes into the amended Plan as appropriate;

Whereas the District has conducted a 30-day comment period from July 12, 2021 until August 10, 2021 and a public hearing held on August 13, 2021 to provide the public an opportunity to have comment on the Plan;

NOW, THEREFORE, BE IT RESOLVED that the District's Policy Committee:

1. Adopts the amended Plan as the District Plan, as amended after public comment and the public hearing.
2. Certifies that, to the best of its knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the District's Plan, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the fifteen year period covered by the Plan, are accurate and are in compliance with the requirements of the Ohio Environmental Protection Agency's Solid Waste Management Plan Format Revision 3.0.
3. Directs that copies of the adopted Plan be delivered to the Board of County Commissioners and to the legislative District of each municipal corporation and township under the jurisdiction of the District for ratification.

This resolution shall be in effect immediately upon its adoption

Motion Made by: Mr. Meyer

Second: Ann's Proves

Total Votes for the resolution: 5

Total Votes against the resolution:

Resolution Passes or Fails: ✓

Policy Committee Chairperson: Ted S. Meyer

Date: 8/24/2021



APPENDIX D

IDENTIFICATION OF CONSULTANTS RETAINED FOR PLAN PREPARATION



Identification of Consultants for Plan Preparation

Consulting Firm: GT Environmental, Inc.
2400 Corporate Exchange Drive
Suite 150
Columbus, Ohio 43231

Project Manager: James A. Skora
Materials Management and Sustainability
Business Unit Manager
(330) 603-0138

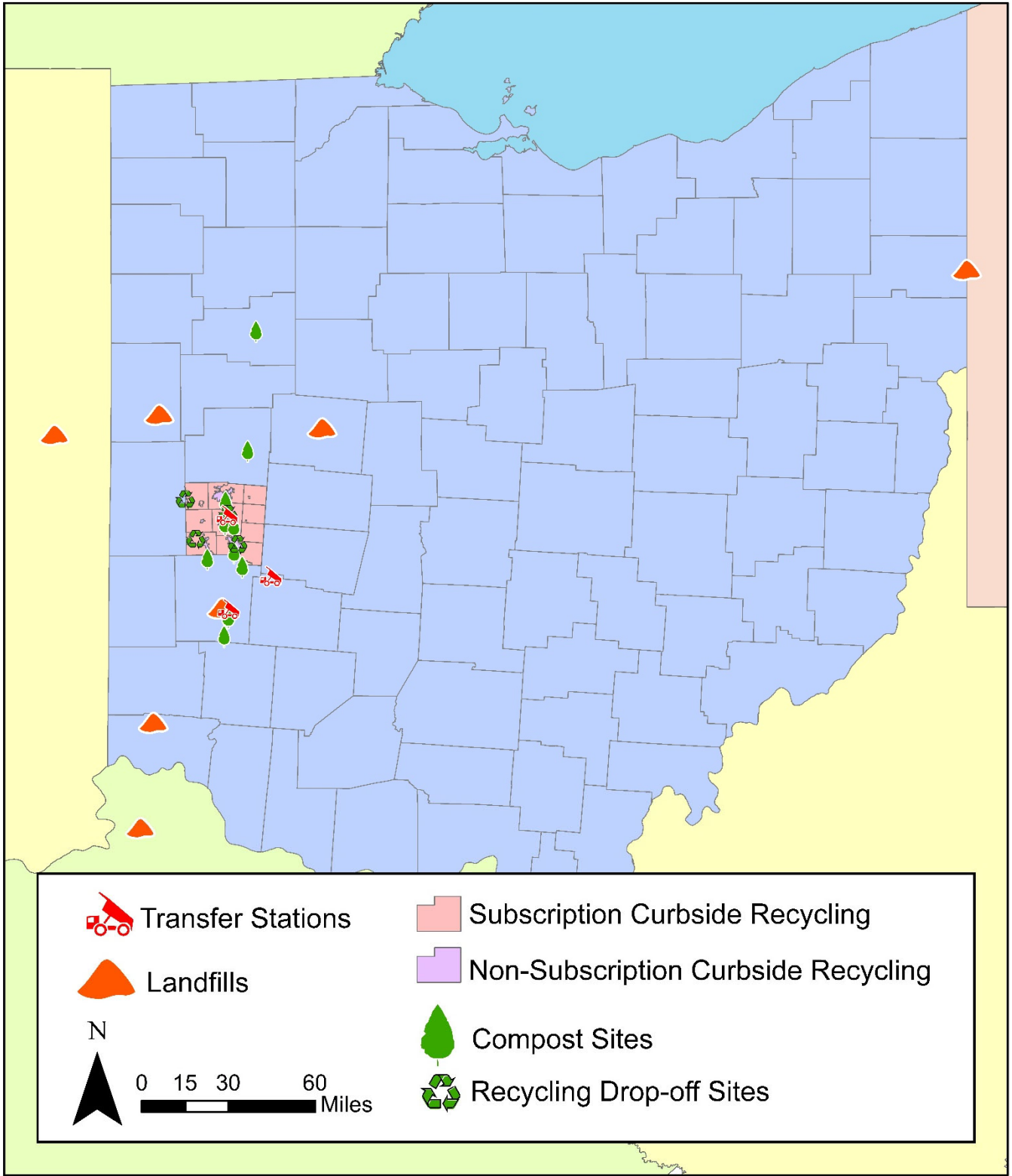




APPENDIX E
DISTRICT MAP



District Map





APPENDIX F

INDUSTRIAL SURVEY RESULTS



Appendix F
Miami County Solid Waste Management District
Amount of Industrial Waste Recycled by Standard Industrial Classification (SIC) Category (Tons) as Reported on Industrial Surveys

Type of Waste	20	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Industrial Recyclables Reported from Brokers and Processors Surveyed	Total
Ferrous	4	-	-	20	26	82	8	18	-	-	-	-	18	5	1,770	-	#####	-	-	25	39,628
Plastics	118	-	-	-	247	30	-	660	-	-	-	-	-	-	580	-	10	-	-	35,778	37,424
Wood	174	-	-	3,300	-	43	5	435	-	5	-	-	-	32	26	-	380	-	-	3,481	7,882
Food	3,654	-	-	-	-	-	-	-	-	-	-	-	-	-	859	-	-	-	-	3,357	7,870
OCC	1,242	-	-	18	-	23	6	89	-	-	-	-	-	-	18	-	25	-	192	2,543	4,155
Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Ferrous	31	-	-	-	-	2	0	9	-	-	-	-	-	2	25	-	972	-	-	21	1,064
Other	342	-	-	-	2	122	-	0	-	-	-	-	-	-	2	-	141	-	-	3,000	3,608
Textiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	267	-	135	-	-	-	402
Mixed Paper	4	-	-	-	-	13	-	8	-	-	-	-	-	-	8	-	18	-	5	19	75
Comingled	-	-	-	-	-	-	-	-	-	1	-	-	-	-	80	-	-	-	-	-	81
Rubber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	9
Lead-Acid Batteries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electronics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Total	5,569	-	-	3,338	276	314	19	1,219	-	6	-	-	18	39	3,636	-	#####	-	197	48,225	102,197

Source(s) of information:
 CY 2018 Industrial Survey Responses

Appendix F
Miami County Solid Waste Management District
Amount of Industrial Waste Generated by Standard Industrial Classification (SIC) Category (Tons) as Reported on Industrial Surveys

Type of Waste	20	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Industrial Generation Reported from Brokers and Processors Surveyed	Total
Ferrous	4	-	-	20	26	82	8	18	-	-	-	-	18	5	1,770	-	37,652	-	-	25	39,628
Plastics	118	-	-	-	247	30	-	660	-	-	-	-	-	-	580	-	10	-	-	35,778	37,424
Wood	174	-	-	3,300	-	43	5	435	-	5	-	-	-	32	26	-	380	-	-	3,481	7,882
Food	3,654	-	-	-	-	-	-	-	-	-	-	-	-	-	859	-	-	-	-	3,357	7,870
OCC	1,242	-	-	18	-	23	6	89	-	-	-	-	-	-	18	-	25	-	192	2,543	4,155
Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Ferrous	31	-	-	-	-	2	0	9	-	-	-	-	-	2	25	-	972	-	-	21	1,064
Other	342	-	-	-	2	122	-	0	-	-	-	-	-	-	2	-	141	-	-	3,000	3,608
Textiles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	267	-	135	-	-	-	402
Mixed Paper	4	-	-	-	-	13	-	8	-	-	-	-	-	-	8	-	18	-	5	19	75
Comingled	-	-	-	-	-	-	-	-	-	1	-	-	-	-	80	-	-	-	-	-	81
Rubber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	9
Lead-Acid Batteries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electronics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
General Solid Waste	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	5,569	-	-	3,338	276	314	19	1,219	-	6	-	-	18	39	3,636	-	39,342	-	197	48,225	102,197

Source(s) of information:
 CY 2018 Industrial Survey Responses



APPENDIX G

SURVEY INSTRUMENTS



Dear Industrial Facility,

Thank you for completing this survey. The information you provide for your company is crucial to monitoring the Miami County Solid Waste Management District's progress towards achieving Ohio's recycling goals. Your information will be combined with information submitted by other businesses and used to calculate the amount of material industrial businesses recycled in the Miami County Solid Waste Management District and Ohio, in 2018. Your company's survey response **will not** be reported individually; all data will be summarized by each North American Industry Classification System (NAICS) category.

For assistance completing this form or any questions related to the survey, please contact Lauren Karch, the Miami County Solid Waste Management District's Coordinator, at lkarch@miamicountyohio.gov or (937) 440-3488.

Please complete and submit this survey no later than 3/24/2019.

Options for Returning the Completed Survey

- Email directly to Lauren Karch at lkarch@miamicountyohio.gov, Subject Line: 2018 Industrial Survey
- Fax to (937) 335-4208, Attention: Lauren Karch
- Mail to Lauren Karch at 2200 N. Co. Road 25 A, Troy, Ohio 45373

Instructions for Table A:

Please provide all information requested in **Table A** below. Even if your business does not currently recycle or is unable to report quantities of materials recycled, please complete **Table A**. Doing so will allow the Miami County Solid Waste Management District to contact you in the future to discuss your recycling needs.

Table A: Company Information		
Name:	County:	
Address:	City:	Zip:
Contact Person:	Title:	
Email:	Telephone Number (include area code): () —	
Primary NAICS:	Secondary NAICS:	Number of full-time employees:
Would you like to be contacted by your local solid waste management district for recycling assistance? <input type="checkbox"/> Yes <input type="checkbox"/> No		

Instructions for completing Table B:

Table B provides a list of common materials that are recycled by industrial facilities in Ohio. Please indicate the unit of each quantity of material that is reported (pounds, tons or cubic yards). Provide any comments related to each material as necessary. Please do not report any liquid waste, hazardous waste or construction & demolition debris.

The list in **Table B** is not all-inclusive. If your facility recycles a material that is not listed in **Table B**, please enter the name and quantity of that material on a line labeled "**Other.**" Some materials may not apply to your operation; simply enter "0" for those materials. Some of the materials are listed in broad categories. For example, "Plastics" include plastics #1-7, plastic films, etc. Please refer to the "**Materials Cheat Sheet**" attached to the end of this document for examples of materials and definitions.

If you do not currently track this information internally, your solid waste hauler or recycling processor may be able to provide it upon request. The Miami County Solid Waste Management District may also be able to provide you with assistance.

Table B: Quantities of Recycled Materials			
Recyclable Material Category	Amount Recycled in 2018	Units	Name of hauler or processor that takes the material/other comments
Food		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Glass		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Ferrous Metals		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Non-Ferrous Metals		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Corrugated Cardboard		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
All Other Paper		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Plastics		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Textiles		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Wood		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Rubber		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Commingled Recyclables		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Ash (recycled ash only)		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Non-Excluded Foundry		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Flue Gas Desulfurization		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	

Table C: Please provide any additional information, comments, suggestions, questions etc.

Thank you again for taking the time to complete this survey. Please contact me with any questions.

Lauren Karch, Coordinator
 Miami County Solid Waste Management District
 Phone: (937) 440-3488
 Email: lkarch@miamicountyohio.gov

Materials Cheat Sheet

Food

- Compostable food waste
- Food donations

Glass

- Bottles (any color)
- Jars

Ferrous Metals

- Mild Steel
- Carbon Steel
- Stainless Steel
- Cast Iron
- Wrought Iron

Non-Ferrous Metals

- Aluminum
- Copper
- Brass
- Silver
- Lead
- Misc. Scrap Metals

All Other Paper

- Office paper
- Paperboard
- Newspapers
- Folders
- Telephone Books
- Magazines
- Catalogs
- Junk Mail

Plastics

- Plastics #1-7
- Plastic Bottles
- Plastic Jugs
- Shrink Wrap
- Plastic Films
- Coat Hangers

Textiles

- Fabrics
- Clothes
- Carpet

Wood

- Bark
- Woodchips
- Sawdust
- Scrap Wood
- Shipping Pallets
- Boards

Commingled Recyclables

- This is a mix of several different materials that are placed into one container and hauled for recycling. It can include all or a combination of the materials listed above.
-

Examples of materials that fall under "Other"

- Appliances
 - Electronics
 - Non-hazardous chemicals (solids only)
 - Stone/Clay/Sand
 - Yard Waste
 - Sludge
 - Tires
 - Any other solid waste that is recycled at your facility
-

Estimating recycling tonnages – if you are not able to obtain exact tonnages of materials recycled, there are numerous ways to estimate the amount of material recycled in any given year. Below are some common conversion factors that may assist you with your estimations:

Material Type	Density (lb/cu yd)
Mixed Paper Recycling	484
Bottles and Cans	200
Single Stream Recycling	139
Cardboard	100

- (size of container (in cubic yards) X number of collections per month X 12) X density (see table above) = Total Pounds per Year
- 2,000 pounds = 1 ton

For more assistance, contact your solid waste management district.



Dear Commercial Business,

Thank you for completing this survey. The information you provide for your company is crucial to monitoring Miami County Solid Waste Management District's progress towards achieving Ohio's recycling goals. Your information will be combined with information submitted by other businesses and used to calculate the amount of material commercial businesses recycled in the Miami County Solid Waste Management District and Ohio, in 2014. Your company's survey response **will not** be reported individually; all data will be summarized by the North American Industry Classification System (NAICS) category.

For assistance completing this form or any questions related to the survey, please contact Cindy Bach, the Miami County Solid Waste Management District's Coordinator, at lkarch@miamicountysed.com or 937-440-5653.

Please complete and submit this survey no later than March 24, 2019.

Options for Returning the Completed Survey

- Email directly to Lauren Karch at lkarch@miamicountysed.com Subject Line: 2018 Commercial Survey
- Fax to 937-335-4208, Attention: Lauren Karch

Instructions for Table A:

Please provide all information requested in **Table A** below. Even if your business does not currently recycle or is unable to report quantities of materials recycled, please complete **Table A**. Doing so will allow the Miami County Solid Waste Management District to contact you in the future to discuss your recycling needs.

Table A: Company Information		
Name: Avenue DC	County: Miami	Store I.D.
Address: 1501 Experiment Farm Road	City: Troy	Zip: 45373
Contact Person: Jon Hall	Title: Facilities Manager	
Email: JHall @avenue.com	Telephone Number (include area code): (937) 332 — 1500	
Primary NAICS:	Secondary NAICS:	Number of full-time employees: 39
Provide the name(s) of your recycling hauler, processor and/or broker:		
Would you like to be contacted by your local solid waste management district for recycling assistance? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Instructions for completing Table B:

Table B provides a list of common materials that are recycled by commercial facilities in Ohio. Please indicate the unit of each quantity of material that is reported (pounds, tons or cubic yards). Provide any comments related to each material as necessary. Please do not report any liquid waste, hazardous waste or construction & demolition debris.

The list in **Table B** is not all-inclusive. If your facility recycles a material that is not listed in **Table B**, please enter the name and quantity of that material on a line labeled **"Other."** Some materials may not apply to your operation; simply

enter "0" for those materials. Some of the materials are listed in broad categories. For example, "Plastics" include plastics #1-7, plastic films, etc. Please refer to the attached "Materials Cheat Sheet" for examples of materials and definitions.

If you do not currently track this information internally, your solid waste hauler or recycling processor may be able to provide it upon request. The Miami County Solid Waste Management District may also be able to provide you with assistance.

Table B: Quantities of Recycled Materials			
Recyclable Material Category	Amount Recycled in 2018	Units	Comments
Lead-Acid Batteries		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Food	20	<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	Donated to Miami County Troy Abuse Center
Glass		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Ferrous Metals		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Non-Ferrous Metals		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Corrugated Cardboard	149	<input type="checkbox"/> lbs. <input checked="" type="checkbox"/> tons <input type="checkbox"/> yd ³	Montgomery Paper Company, Dayton Ohio
All Other Paper	14	<input type="checkbox"/> lbs. <input checked="" type="checkbox"/> tons <input type="checkbox"/> yd ³	Montgomery Paper Company, Dayton Ohio
Plastics		<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Textiles	2400	<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	Clothes That Work, Dayton Ohio
Wood	119	<input type="checkbox"/> lbs. <input checked="" type="checkbox"/> tons <input type="checkbox"/> yd ³	Spring Hill Skid Company, Covington, Ohio
Rubber		<input checked="" type="checkbox"/> lbs. <input checked="" type="checkbox"/> tons <input type="checkbox"/> yd ³	
Commingled Recyclables	106	<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	Donated to American Legion, Troy Ohio
Yard Waste		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:4ft. Fluorescent		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:8ft. Fluorescents		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:U-Bent Lamps		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:Compact Lamps		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:HID-Lamps		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:Light Fixtures		<input type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:Non PCB Ballast		<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	
Other:Misc. Components		<input checked="" type="checkbox"/> lbs. <input type="checkbox"/> tons <input type="checkbox"/> yd ³	

Table C: Please provide any additional information, comments, suggestions, questions etc.

Thank you again for taking the time to complete this survey. Please contact Cindy Bach with any questions.

Lauren Karch, Coordinator
 Miami Solid Waste Management District
 Phone: (937) 440-3488
 cbach@miamicountysed.com



APPENDIX H

**MIAMI COUNTY DEBRIS MANAGEMENT GUIDE
PROGRAM**



MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 1 TO ESF #3
DEBRIS MANAGEMENT FACT SHEET/CONTACTS

The information contained within this document is intended to assist local officials responsible for all or a portion of the issues relating to managing debris resulting from a disaster or significant emergency. Removal, reduction, recycling, temporary sites, contracting and disposal data as well as point of contact are included in the following pages.

The Ohio Environmental Protection Agency (EPA) and Ohio Emergency Management Agency (EMA) are two state agencies that have primary response to disasters. Disasters can generate a significant amount of debris and can disrupt local government operations in general. Their roles and day-to-day points of contact are detailed below.

LOCAL GOVERNMENTS

Local Health Departments may be able to provide technical assistance regarding debris management and public health issues. Local health departments may also have primary responsibility during a disaster, in the regulatory oversight for proper management of debris. Of particular concern for public health and safety is the management and proper disposal of debris created by a disaster or by demolition, yard waste, household hazardous waste, food stuffs and spoiled food.

Local Solid Waste Management Districts can help with recycling options and may have resources that could support cleanup efforts. For more information on recycling contact the Ohio Environmental Protection Agency at <http://www.epa.ohio.gov/ocapp/recycling.aspx>.

OHIO ENVIRONMENTAL PROTECTION AGENCY

Primary responsibility during a disaster is regulatory oversight for proper management of debris. This is accomplished by providing rule interpretations (regulatory requirements), technical assistance/coordination, and resource lists. It also provides guidelines regarding collection, temporary staging, removal, and disposal of debris. <http://www.epa.ohio.gov/dmwm/Home.aspx>

Division of Materials and Waste Management

Phone (614) 644-2621 Fax (614) 728-5315

OHIO EMERGENCY MANAGEMENT AGENCY

Primary responsibility is coordination of state assistance, through County Emergency Management Agency offices, to support the efforts of local officials following disasters and a Governor's Proclamation. The Disaster Recovery Branch administers reimbursement programs for costs associated with local response/recovery actions, including debris operations.

Disaster Recovery Branch

2855 West Dublin-Granville Road, Columbus, Ohio 43235

Phone (614) 889-7171 Fax (614) 791-0018

Type of Waste	Description of Waste	Management Options
General Solid Waste (aka Municipal Solid Waste)	<p>food, packaging, clothing, appliances, furniture, machinery, electronic equipment, garbage, plastic, paper, bottles, cans, loose carpeting, paper products, scrap tires, street dirt, dead animals</p> <p>note regarding sand bags used for controlling flood water: the sand may be emptied from the bags and reused only the bags (if not reused) are considered solid waste and should be disposed of appropriately</p>	<ul style="list-style-type: none"> • MSW Landfills • MSW Transfer Facilities <p>preferred option for general solid wastes: segregate and recycle materials as much as possible to reduce disposal costs</p> <p>scrap tires: take to tire recovery/recycling facility or tire monofill</p> <p>dead animals: bury, burn, or render per Dept. of Agriculture guidelines or take to MSW Landfill</p>
Agricultural Waste/ Vegetative Waste (aka solid waste)	vegetative or woody waste, tree limbs, brush, shrubs (does not include buildings, dead animals, or vehicles)	<ul style="list-style-type: none"> • MSW Landfills • MSW Transfer Facilities • composting Facilities • controlled burning (for individuals in declared disaster areas only: local governments must contact local Ohio EPA District Office to receive approval to use air curtain destructors) <p>preferred options: drying, chipping, grinding, mulching for reuse</p>
Construction & Demolition Debris (C&DD)	brick, stone, mortar, asphalt, lumber, wallboard, glass, roofing, metal, piping, fixtures, electrical wiring, heating equipment, insulation, carpeting attached to structures, railroad ties, utility poles, mobile homes clean, hard fill: C&DD which consists only of reinforced or non-reinforced concrete, asphalt concrete, brick, block, tile, and/or stone which can be reused as construction or fill material	<ul style="list-style-type: none"> • C&DD Landfills • MSW Landfills • MSW Transfer Facilities <p>preferred option: segregate and reuse clean, hard fill as much as possible to reduce disposal costs</p> <p>mobile homes: can take to a salvage company or C&DD Landfill</p>
Infectious Waste	sharps (needles, medical related glass, etc.), syringes, blood-containing items such as tubing, clothing, bandages, etc.	Contact local Health Department or Ohio EPA District Offices for guidance.
Hazardous Waste	flammable materials (fuels, gasoline, kerosene, propane tanks, oxygen bottles, etc), explosives, batteries, common household chemicals, industrial and agricultural chemicals, cleaners, solvents, fertilizers, etc)	Segregate (where practical) and dispose at an approved Hazardous Waste Facility. Contact Ohio EPA District Offices for guidance.

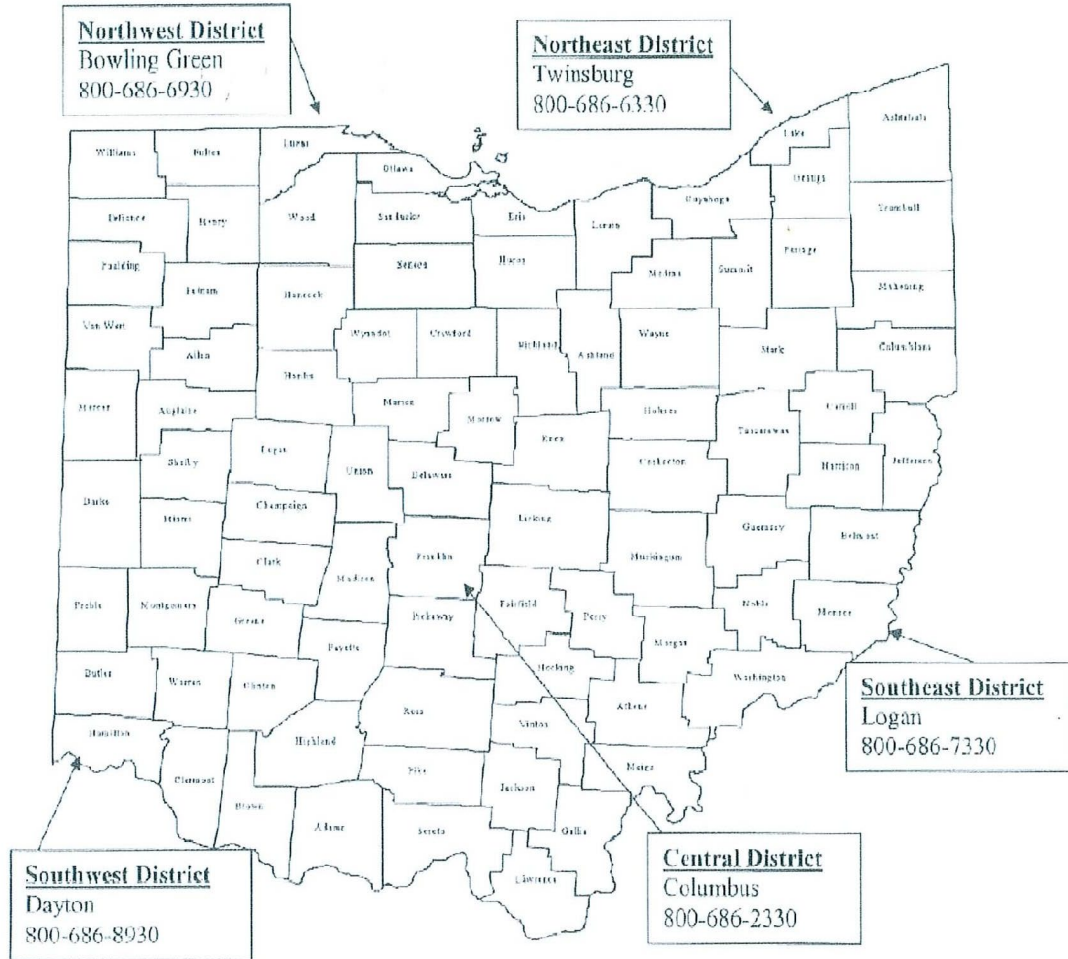
Variations/Exemptions: All regulated disposal facilities in Ohio have operational requirements/restrictions regarding the types and volume of waste that can be accepted for disposal. During emergency events, a facility may seek authorization from the Director of the Ohio EPA to temporarily accept different waste streams or an increased volume of waste. Before taking disaster-related debris to a disposal facility, please make sure that the facility may accept the material.

Stream Cleanup Activities: Prior to removing debris from streams/waterways, please make sure you have the appropriate authorization, if necessary (e.g., permits from GOE and/or Ohio EPA, permission from private property owners, etc.) Once debris is removed from the streams/waterways, segregate the debris as much as practical, and manage according in the options outlined above.

DEBRIS MANAGEMENT CONTACTS

OHIO ENVIRONMENTAL PROTECTION AGENCY

Div. of Solid/Infectious Waste	(614) 644-2621	Hazardous Waste	(614) 644-2917
Public Drinking Water	(614) 644-2752	Burn Permits	(614) 644-2270
Waste Water Treatment	(614) 644-2001	Chemical Spills	(614) 282-9378



ADDITIONAL CONTACTS

Local Solid Waste Mgmt District - See Local Listing	Ohio EMA	(877) 644-6362
(Recycling)		(Response and Recovery)
Local Department of Health - See Local Listing	Ohio Historic Preservation	(614) 298-2000
Ohio Department of Health (614) 466-1390		(Environmental/Historic)
(Private Drinking Water)	Attorney General	(800) 282-0515
Ohio Department of Agriculture (614) 728-6200		(Consumer Protection)
(Dead Animals)	ODNR	(614) 265-6565
U.S. Corp of Engineer (513) 684-3002		(Recycling, Floodplain Mgmt.)
(Regulatory-Great Lakes Division)		

MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 2 TO ESF #3
SAMPLE RIGHT-OF-ENTRY AGREEMENT

I/We _____, the owner(s) of the property commonly identified as _____, _____, _____, _____, State of Ohio
(Street) (City/Town)
(Township) (County)

do hereby grant and give freely and without coercion, the right of access and entry to said property in the County/City of _____, its agencies, contractors, and subcontractors thereof, for the purpose of removing and clearing any or all storm-generated debris of whatever nature from the above described property.

It is fully understood that this permit is not an obligation to perform debris clearance. The undersigned agrees and warrants to hold-harmless the City/County of _____, State of Ohio, its agencies, contractors, and subcontractors, for damage of any type, whatsoever, either to the above described property or persons situated thereon and hereby release, discharge, and waive any action, either legal or equitable that might arise out of any activities on the above described property. The property owner(s) will mark any storm damaged sewer lines, water lines, and other utility lines located on the described.

I/We (have _____, have not _____,) (will _____, will not _____) receive any compensation for debris removal from any other sources including Small Business Administration, National Resource conservation Service, private insurance, individual and family grant program or any other public assistance program. I will report for this property any insurance settlements to me or my family for debris removal that has been performed at government expense. For the considerations and purposes set forth herein, I set my hand this _____ day of _____, 20__.

Witness

Owner

Owner Telephone Number and Address

**MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 3 TO ESF #3
DEBRIS TICKET FORMAT FOR LANDFILL DISPOSAL**

LOAD TICKET

No.

INVOICE DATE
PO# 12198

SOLD TO: MIAMI COUNTY EMA
c/o MIAMI CO. SOLID WASTE DISTRICT
TROY, OHIO

SHIP TO:
STONY HOLLOW LANDFILL
DAYTON, OHIO

DRIVER:	TRUCK NO.	CAPACITY: <i>5 CY</i>	ZONE/SECTOR:
----------------	------------------	---------------------------------	---------------------

LOADING TIME:	DUMP TIME:	DESCRIPTION:	UNIT:	LOAD SIZE:	
		<i>MIXED WASTE</i>	<i>CY</i>		
		SIGNATURES:			
		LOADING SITE MONITOR			
		DUMP SITE MONITOR			
		<table border="1"> <tr> <td><i>ATTENTION- DRIVER RETAINS ORIGINAL AND PINK COPY THE YELLOW COPY MUST BE TORN OUT AND SUBMITTED TO THE LANDFILL FOR PROCESSING!</i></td> </tr> </table>	<i>ATTENTION- DRIVER RETAINS ORIGINAL AND PINK COPY THE YELLOW COPY MUST BE TORN OUT AND SUBMITTED TO THE LANDFILL FOR PROCESSING!</i>		
<i>ATTENTION- DRIVER RETAINS ORIGINAL AND PINK COPY THE YELLOW COPY MUST BE TORN OUT AND SUBMITTED TO THE LANDFILL FOR PROCESSING!</i>					

MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 4 TO ESF #3
DEMOLITION CHECKLIST

I. LOCAL RESPONSIBILITIES CHECKLIST

The following checklist identifies key tasks that local officials should address before a structure is approved for demolition. To expedite the overall effort, many of the tasks can be conducted concurrently.

- _____ Provide copies of all ordinances that authorize the local officials to condemn privately owned structures. The authority to condemn privately owned structures would probably have to be accomplished by an ordinance other than one designed or enacted for the demolition of publicly owned structures.
- _____ The local officials should coordinate all lands, easements, and rights-of-way necessary for accomplishing the approved work.
- _____ Implement laws that reduce the time it takes to go from condemnation to demolition.
- _____ Provide copies of all applicable permits required for demolition of subject structure(s).
- _____ Provide copies of pertinent temporary well capping standards.
- _____ Coordinate all pertinent site inspections with local, State, and Federal inspection teams(s).
- _____ Identify household hazardous waste materials prior to demolition.
- _____ Notify the owner/and or renter of any and all site inspections.
- _____ Verify that all personal property has been removed from public and/or private structure(s).
- _____ Immediately prior to demolition, verify that the building is unoccupied.
- _____ Ensure that the property is properly posted.
- _____ Provide a clear, concise and accurate property description and demolition verification.
- _____ Include a Public Health official on the demolition inspection team.
- _____ The inspection not only should evaluate the structural integrity of the building, but also must demonstrate “imminent and impending peril” to public health and safety.
- _____ Segregate all household hazardous waste materials to a permitted facility prior to building demolition.
- _____ Provide photographs of the property and verify the address. Provide additional photographs of the property taken immediately prior to and following demolition.

II. PRIVATE PROPERTY UTILITIES CHECKLIST

The following checklist identifies key tasks that local officials should address before the structure is approved for demolition. To expedite the overall effort, many of the tasks can be conducted concurrently.

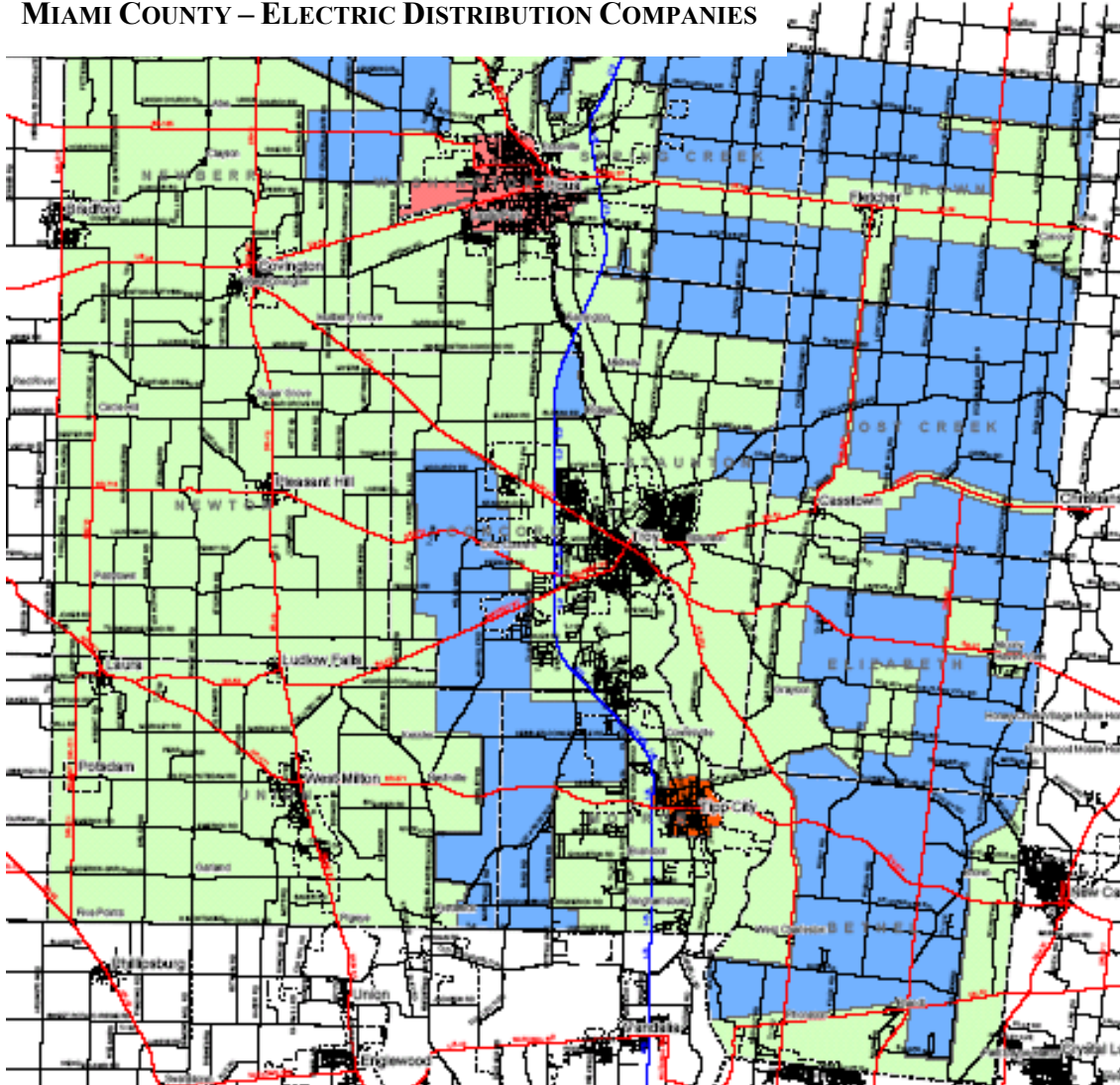
- _____ Locate, mark, turn off, and disconnect all water and sewer lines.
- _____ Locate, mark, turnoff, and disconnect electrical, telephone, and cable television services.
- _____ Provide executed right of entry agreements that have been signed by the owner and by renter, if rented. Right of entry should indicate any known owner intent to rebuild to ensure foundation and utilizes are not damaged.
- _____ Use radio, public meetings, and newspaper ads to give notice to property owners and their renters to remove personal property in advance of demolition.
- _____ Document the name of the owner on the title, the complete address, and legal description of the property, and the source of this information. Document name of renter, if available.
- _____ Ensure property will be vacated by demolition date.
- _____ Provide written notice to property owners that clearly and completely describe the structures designated for demolition. Additionally, provide a list that also identifies related structures, trees, shrubs, fences, and other items to remain on the respective property.
- _____ Notify mortgagor of record.
- _____ Provide the property owner the opportunity to participate in decision on whether the property can be repaired.
- _____ Determine the existence and amount of insurance on the property prior to demolition.
- _____ Specify procedures to determine when cleanup of the property is completed.

III. TEMPORARY DEBRIS STORAGE & REDUCTION SITE CLOSEOUT CHECKLIST

- _____ Site number and location.
- _____ Date closure complete.
- _____ Household Hazardous Waste removed.
- _____ Contractor equipment removed.
- _____ Contractor petroleum and other toxic spills cleaned up.
- _____ Ash piles removed.
- _____ Compare baseline information of the temporary site conditions after the contractor vacates the site.

MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 5 TO ESF #3
MAP OF ELECTRIC DISTRIBUTION COMPANIES

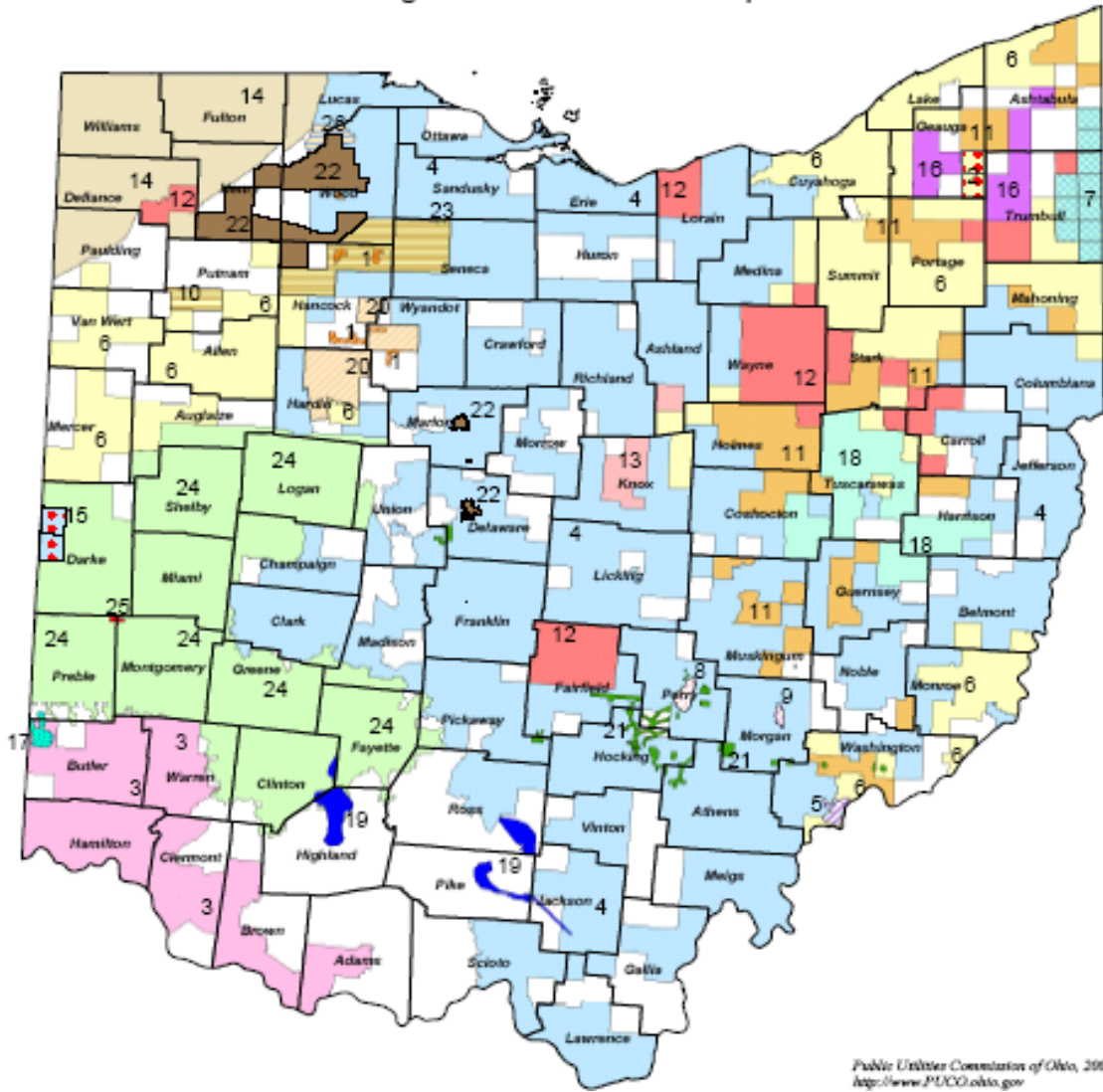
MIAMI COUNTY – ELECTRIC DISTRIBUTION COMPANIES



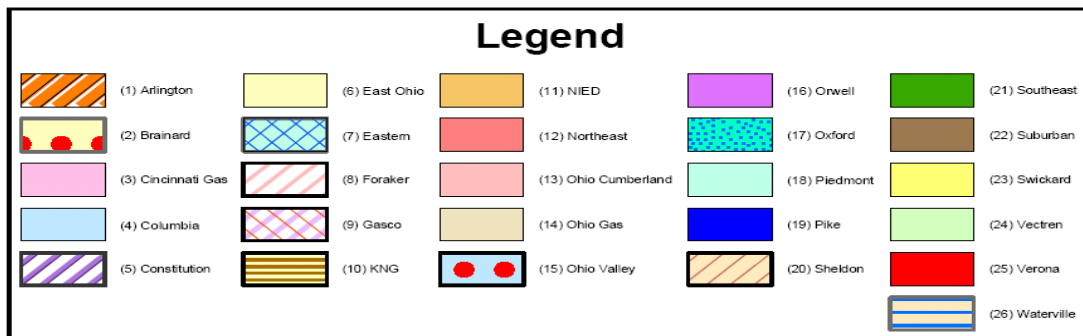
- | | |
|---------------|----------------------|
| Interstate | Dayton Power & Light |
| Highway | Ohio Edison |
| Other Roads | Pioneer REA |
| City Boundary | Piqua muni |
| Places | Tipp City muni |
| Townships | |

**MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 6 TO ESF #3**

MAP OF PUCO REGULATED NATURAL GAS COMPANIES

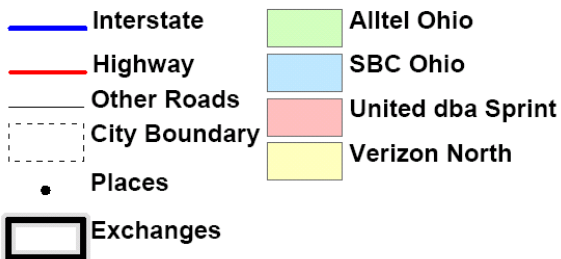
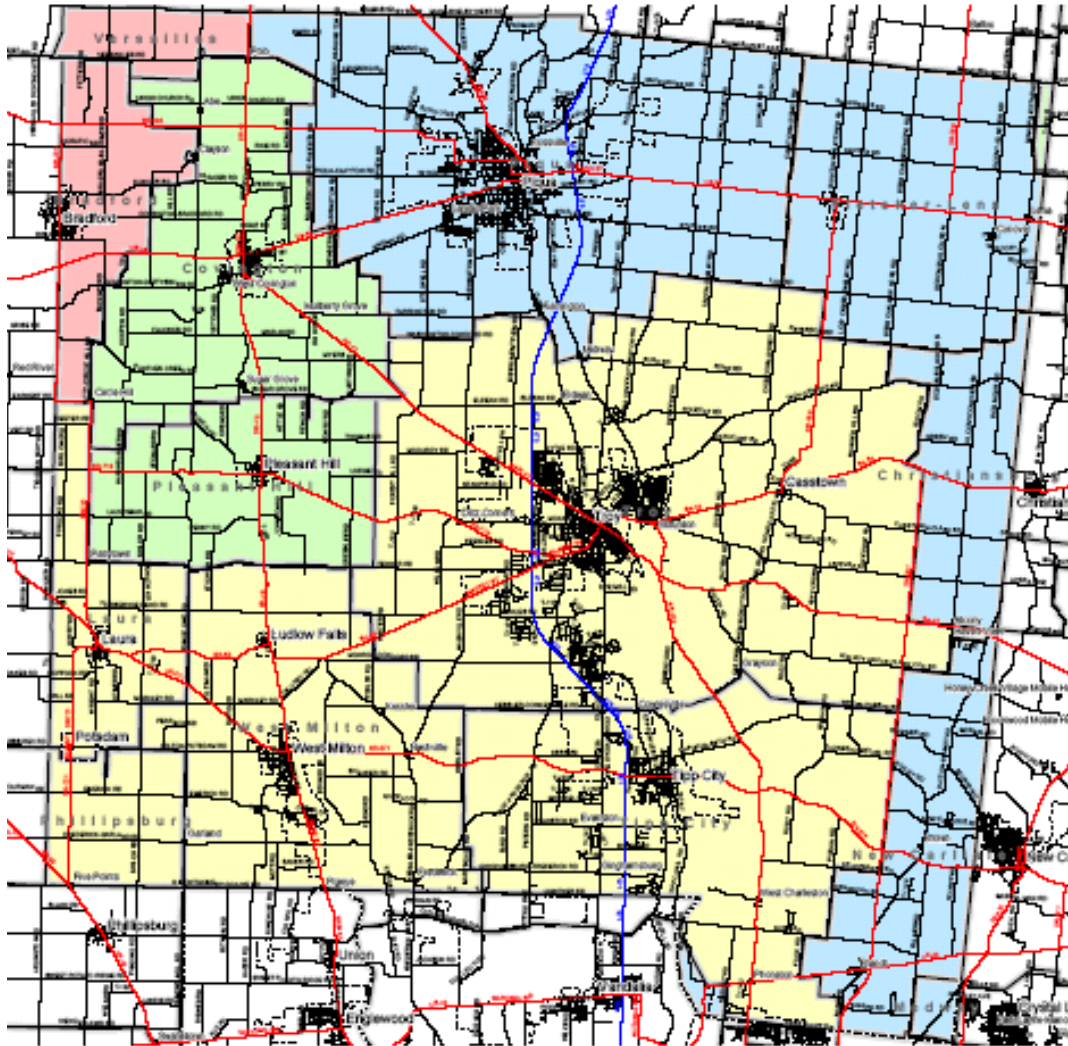


Public Utilities Commission of Ohio, 2002
<http://www.PUCO.ohio.gov>



MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 7 TO ESF #3
MAP OF LOCAL EXCHANGE TELEPHONE COMPANIES

MIAMI COUNTY – LOCAL EXCHANGE TELEPHONE COMPANIES



MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 8 TO ESF #3
MIAMI COUNTY DEBRIS MANAGEMENT PLAN

Table of Contents		Page
	ACKNOWLEDGEMENTS	3-24
I	INTRODUCTION	3-25
II	SITUATION AND ASSUMPTIONS	3-25
III	ORGANIZATION	3-26
IV	CONCEPT OF OPERATIONS	3-26
V	ORGANIZATION AND ASSIGNMENTS OF RESPONSIBILITIES	3-33
	NORMAL OPERATIONS	3-33
	INCREASED READINESS	3-35
	RESPONSE	3-35
	RECOVERY	3-37
Attachment A1	Types of Contracts	3-39
Attachment A2	List of Contracts and Agreements	3-40
Attachment A3	Mutual Aid Agreement	3-41
Attachment A4	Authorization to Enter Property and to Remove Debris	3-43
Attachment A5	Time and Materials Contract	3-44
Attachment A6	Lump Sum Contract for Debris Removal	3-47
Attachment A7	Unit Price Contract for Debris Removal	3-51
Attachment A7A	Debris Fact Sheet for Local Officials	3-55
Attachment A8	List of Qualified Contractors	3-65
Attachment A9	List of Standing Contracts	3-68
Attachment B1	List of Pre-selected DMS Site Locations	3-69
Attachment B2	DMS Site Location Criteria	3-70
Attachment B3	DMS Site Questions	3-71
Attachment B4	DMS Site Baseline Data Collection	3-72
Attachment B5	Debris Estimating Techniques	3-73
Attachment B6	Debris Reduction Information	3-75
Attachment B7	Debris Management Site Closeout Issues	3-78
Attachment B8	Debris Management Site Closeout Checklist	3-79
Attachment B9	Sample Layout of DMS Site	3-80
Attachment C1	Debris Classifications	3-81
Attachment D1	Landfills and Related Facilities	3-82
Attachment D2	Hazardous Waste Vendors List	3-84
Attachment D3	Registered Infectious Waste Transporters	3-85
Attachment E1	Ohio New Hire Reporting Form	3-86
Attachment E2	Certification Of Compliance	3-87

Miami County Debris Management Guide

ACKNOWLEDGEMENTS

The *Miami County Debris Management Guide* was developed with the cooperation of numerous agencies from throughout Miami County. This includes the Miami County Solid Waste District, the Miami County Emergency Management Agency, the Miami County Health District and the OEPA Southwest District Office.

This response guide incorporates best practices from debris management plans produced by local, state and Federal agencies. We wish to thank all of the professionals whose invaluable contributions made this response guide possible.

The committee that worked on this plan includes:

Joel Smith, Miami County Emergency Management Director
Scott Pence, Miami County Transfer Station Manager
Scott Doseck, Miami County Assistant Transfer Station Manager
Doug Evans, Miami County Assistant Sanitary Engineer

UPDATING THE PLAN

It is the recommendation of the committee that this plan be updated and reviewed each year as it pertains to Miami County.

I. INTRODUCTION

Purpose

The Miami County Debris Management Guide is intended to serve as a guidance document for use by Miami County personnel. All jurisdictions within the County are part of this plan should a disaster occur and would use this also as a guidance document.

The purpose of this Guide is to:

- provide guidance to the communities of Miami County regarding the development of plans for the removal and disposition of debris caused by a major disaster.
- facilitate and coordinate the management of debris following a disaster in order to mitigate against any potential threat to the lives, health, safety, and welfare of the impacted citizens, expedite recovery efforts in the impacted area, and address any threat of significant damage to improved public or private property.

II. SITUATION AND ASSUMPTIONS

A. SITUATION

1. Natural and manmade disasters precipitate a variety of debris that include, but are not limited to, such things as trees, sand, gravel, building construction material, vehicles, personal property, and hazardous materials.
2. The quantity and type of debris generated from any particular disaster will be a function of the location and kind of event experienced, as well as its magnitude, duration and intensity.
3. The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of collection and disposal methods utilized to address the debris problem, associated costs incurred and how quickly the problem can be addressed.
4. In a major or catastrophic disaster, many state agencies and local governments will have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short-term as well as long term.

B. ASSUMPTIONS

1. A natural disaster that requires the removal of debris from public or private lands and waters could occur at any time.
2. The amount of debris resulting from an event or disaster could exceed the local government's ability to dispose of it.
3. If the natural disaster requires, the Governor would declare a state of emergency that authorizes the use of State resources to assist in the removal and disposal of debris. In the event Federal resources are required, the Governor would request through FEMA a Presidential Disaster Declaration.
4. Private contractors will play a significant role in the debris removal, collection, reduction and disposal process.

5. The debris management program implemented by the local government will be based on the waste management approach of reduction, reuse, reclamation, resource recovery, incineration and landfilling.
6. Asbestos Containing Materials (ACM) and Hazardous Materials will be segregated and handled in accordance with federal, state and local regulations.

**Events and Assumptions
Composition of Disaster Debris**

Typical Debris Streams

Types of Disasters		Vegetative	Construction Demolition	Personal Property	Hazardous Waste	Soil, Mud, Sand	Vehicles, Vessels	White Goods
	Hurricanes		X	X	X	X	X	X
Tornadoes		X	X	X	X		X	X
Floods		X	X	X	X	X	X	X
Earthquakes			X	X	X	X		
Ice Storms		X		X	X			
Wild Fires		X		X		X	X	

Different handling and disposal methods are required for particular debris types and this impacts the scope of work for the debris management plan. Managing debris containing hazardous, household hazardous, medical and infectious materials require the various specialized handling and disposal methods.

Jurisdictional representatives should familiarize themselves with what hazards are located within their districts including hazardous chemical storage and amounts, and all other potential hazards.

Evaluating the accessibility and terrain of various locations within a jurisdiction is critical to determining the types of debris collection programs that should be undertaken should a disaster occur.

III. ORGANIZATION

Prior to an emergency/disaster the county, townships, cities, and villages will each designate a debris manager (DM). Each debris manager will be responsible for reviewing and updating his or her jurisdiction’s debris management plan as needed.

After a debris-generating disaster, the DM will oversee and coordinate debris management operations in his or her jurisdiction along with assistance from Miami County Solid Waste District (DM). The DM’S will coordinate jurisdictional assets; volunteers; County, State, and Federal assistance; and private contractors.

IV. CONCEPT OF OPERATIONS

The following information details the means by which the Jurisdiction and Miami County DM’S will manage and coordinate the debris clearance, removal, and disposal operations.

Debris Management Cycle

The model for debris management operations is a four-phase cycle. The four phases of the debris management cycle are:

- ◆ normal operations — Routine actions necessary to develop or update the debris management plan.
- ◆ increased readiness — Pre-disaster actions taken if a disaster is threatening the local area.
- ◆ response — Procedures that focus on support of life safety operations in the immediate aftermath of a debris-generating disaster.
- ◆ recovery — Actions necessary to complete the debris removal, reduction, and disposal activities, based on damage assessment of the disaster.

Emergency Operations Center (EOC) – (Miami County Emergency Management Agency)

An EOC is a protected facility established by a political entity to coordinate efforts to support disaster response and recovery. In support of debris management operations, the EOC coordinates the acquisition and delivery of resources and technical expertise as requested by the Debris Manager.

The typical organizational structure of an EOC is organized around five main components:

- Executive Cell (Elected officials, EOC Director, and EOC Manager; support personnel includes PIO, Liaison, and Safety Officer)
- Planning and Intelligence Section
- Operations Section
- Logistics Section
- Finance Section

EOCs exist on the local, County, State and Federal levels. If one echelon of government’s resources is overwhelmed by a disaster, a “state of emergency” is declared by the appropriate chief elected official. Then, the EOC at the next echelon of government is activated.

The EOC provides operational, logistical, planning, and financial support for debris management operations. Organizationally, the Debris Manager is placed under the Operations Section. The DM coordinates debris management operations taking place in the field. In support of those operations the:

- Logistics Section - provides and tracks resources.
- Finance Section - provides and records funding.
- Planning and Intelligence Section - develops strategic plans and achieves documentation.
- Public Information Officer (PIO) - communicates information and instructions to the public regarding debris disposal and debris operations. The PIO would do this through any means possible depending upon the infrastructure that is available after a disaster event.

For more information regarding a specific jurisdiction’s EOC, see that jurisdiction’s Emergency Operations Plan (EOP). For more information regarding the Miami County EOC see the *Miami County Emergency Operations Plan* under separate cover.

Debris Management Team and Debris Management Working Group (Miami County Solid Waste District and Miami County EMA)

The Miami County Sanitary Engineering Office will be utilized as the centralized Command Post for all Debris Managers in case of a large scale debris gathering event occurs within the boundaries of Miami County. This facility is equipped with an emergency backup generator in case of a large power outage throughout Miami County.

The Debris Manager in each jurisdiction should organize a *Debris Management Team* consisting of key personnel in each jurisdictional department responsible for aspects of the debris management mission. Ensure that each department is fully prepared to fulfill its duties under the Debris Management Plan. The team should meet periodically to review and update procedures.

The County-level *Debris Management Working Group* is made up of State and County officials who deal with debris management issues. The Working Group meets periodically to review debris management policies and procedures. Members of the Working Group assist jurisdictions by reviewing debris management plans and providing technical assistance. The Group is made up of representatives from Ohio EPA, RAPCA, Miami County Engineer's Office, Miami County Solid Waste District, Miami County Public Health, and Miami County Office of Emergency Management.

In the immediate aftermath of a debris-generating disaster, members of the Working Group along with the jurisdiction's Debris Manager and Debris Management Team will act as an Assessment Team. The Assessment Team will review the jurisdiction's debris management plan, offer technical advice if needed, and monitor debris management procedures.

By reviewing plans and procedures at the outset of a debris management operation, the Team can address any questions or issues before they become problematic.

Debris Estimating

The determination of quantity and type of debris is critical to debris management. Debris contracting, the management of Temporary Debris Management sites, (DMS) and the possible need for State and Federal resources will require reasonably accurate estimates of debris quantities.

For reimbursement of funds, contractor **must** submit quantities of materials handled. For information on debris estimating formulas and techniques, see Attachment B5.

Contracts

§ 307.86 of the Ohio Revised Code requires, with a limited exception, that anything that is purchased, leased, leased with an option or agreement to purchase, or constructed by or on behalf of the public authority must be obtained through competitive bidding. R.C. 307.86. H.B. 509 raises the threshold from \$25,000 to \$50,000 above which amount competitive bidding procedures must be used.

Ohio House Bill 509 also raises the dollar thresholds for the exception to competitive bidding in emergency situations. Competitive bidding is not required if there is an emergency situation and the estimated cost is less than \$50,000. This amount is raised to \$100,000.

Ohio House Bill 509 also raises the minimum threshold for soliciting at least three informal estimates for emergency procurement of services from \$25,000 to \$50,000.

Ohio House Bill 509 raises the minimum threshold from \$25,000 to \$50,000 when notice of competitive bidding is required.

Following a major debris-generating event, contracting for services, equipment and labor may be necessary. The magnitude of the debris clearance, removal, and disposal operation could easily overwhelm jurisdictional, mutual aid, volunteer, county and state resources. The Jurisdictional Debris Manager should be prepared to contract with private entities for services as needed or even before a disaster event, if possible.

Examples of private contracts for services

- Wood waste grinding contracts
- Debris hauling contracts
- Tree removal contracts
- Equipment rental contracts
- Temporary labor contracts
- Hazardous waste removal contracts

Each jurisdiction will be responsible to contract and fund these services, individually through their own financial means.

- Types of Contracts, see Attachment A1.
- List of Contracts and Agreements, see Attachment A2.
- List of Qualified Contractors, see Attachment A8.
- List of Standing Contracts, see Attachment A9.

Standing contracts are contracts with companies that make the company available for assistance in the event of a debris-generating event. The standing contracts are in place before a disaster occurs. Develop a list of standing contracts that are reached between the community or county and contractors.

Contract Monitoring: In the event contracts are in place for debris removal, monitoring of contractors is a very important issue. Designate a person or persons for contract monitoring. Contract monitoring verifies that the following actions are taking place:

- Debris being picked up is a direct result of the disaster.
- Trucks hauling debris are fully loaded.
- Debris pick-up areas are being managed properly.
- Trucks are sticking to debris routes.
- Inspection of temporary DMS storage sites to ensure operations are being carried out according to contract.
- Verification of security and control for temporary DMS storage and reduction sites.

General

Monitoring:

Debris Management Sites (DMS) Jurisdiction Debris Manager will appoint selected members to monitor operations of sorting and loading of material. All loads will be issued load tickets before leaving the load out area. All trucks must be filled to capacity. Woody type waste will be chipped up as mulch on site.

Temporary Debris Management Sites (DMS) Jurisdiction Debris Manager will appoint selected members to monitor ongoing operations of these sites. All loads of material that enter site must have in possession an issued load ticket from the Debris Management Site inspector before being permitted to unload.

Temporary Debris Management Sites.

Each jurisdiction Debris Manager will be responsible to locate, operate and staff their Temporary Debris Management Site (DMS). All loads that enter a site must have in possession an issued load ticket from the Debris Management Site inspector before being permitted to unload. Any citizen that hauls their own waste into the site will be required to show proof of residence.

Temporary Debris Management Sites must be secured at the end of each day of operation, to eliminate illegal dumping. This can be accomplished by posting a guard at the entrance of the site or a secured fence and gate will need to be installed. There are multiple security companies that would service Miami County if the need arose.

(DMS) sites are essential to major debris clearance, removal and disposal operations. The DM should work closely with local and State officials to develop and maintain current listings of potential DMS sites.

Pre-disaster Site Selection Teams should be formed. These teams should include local officials who are familiar with the area. Also, the teams should consult and coordinate with local residents and environmental groups to identify in advance any potential problems with a site.

For more information on DMS sites see the following attachments:

- List of Pre-selected DMS Site Locations Attachment B1
- DMS Site Location Criteria Attachment B2
- DMS Site Questions Attachment B3
- DMS Site Baseline Data Collection Attachment B4
- Debris Estimating Techniques Attachment B5
- Debris Reduction Information Attachment B6
- DMS Site Closeout Issues Attachment B7
- DMS Site Closeout Checklist Attachment B8
- Sample Layout of DMS Site Attachment B9

Landfills and Related Facilities

It is important to maintain and update a list of facilities that accept various types of debris. This list might include landfills, transfer facilities, infectious waste treatment facilities, scrap tire storage and recovery facilities, composting facilities, and recycling facilities. Also, list companies authorized to transport scrap tires and infectious waste. Identify alternative facilities if those used during normal operations have been impacted by the disaster. Listing of facilities can be found at www.epa.state.oh.us/dsiwm/pages/general on Ohio EPA’s website. See Attachments D1–D3.

Debris Removal Priorities and Operations

When a debris-generating event occurs there is an immediate need for prioritization of actions. Debris will include fallen trees, limbs, trash, furniture, food waste, scrap tires, utility poles and wires, vehicles, building materials, hazardous materials, infectious materials, animal carcasses, silt and mud, etc. Develop and implement a priority system for debris removal.

Major debris removal operations are divided into two phases:

HEALTH AND SAFETY

All debris removal activities shall comply with all health and safety requirements. Each jurisdiction will be responsible to appoint their own safety officer to oversee all debris removal operations within their effected area.

Debris operations involve the use of heavy equipment to move and process various types of debris. Many of these actions can pose safety hazards. In addition to those safety hazards, exposure to certain types of debris, such as building materials that contain asbestos and mixed debris that contain hazardous materials, can pose potential health risks.

Miami County Public Health will work with all jurisdiction safety officers to address all health related issues.

The Miami County Engineer along with the Department of Development will work with local jurisdiction personnel to inspect all damaged structures affected from the event to make the decision if a building is declared a total loss and will need to be demolished.

All structures with historical preservation must be identified and evaluated before demolition can be considered. The jurisdiction will work with the state historic preservation office initially to determine if there are regulations that need to be followed. The Ohio State Preservation phone number is 614-297-2300. Per the Preservation office, under the National Preservation Act of 1966, if there is a Federal Undertaking, there is a Project for 106 Review. The Ohio EPA will do a review in 30 days after notification in an emergency situation.

PERMITTING

Debris removal and processing must comply with all federal, state, and local regulations. Several agencies may be involved in issuing permits. Please see Appendix for contact information

◆ **Phase I - Clearance of debris that hinders immediate lifesaving actions** in the disaster area and clearance of debris that poses an immediate threat to public health and safety. The first priority is given to removal of debris from roadways and locations that block access and egress to critical facilities or essential operations.

Critical facilities include: fire stations, police stations and hospitals. Essential, but not critical, facilities include: schools, municipal buildings, water treatment plants, wastewater treatment plants, power generation units, airports, and temporary shelters for disaster victims. The jurisdiction will need to prioritize debris removal from roadways that allow access to these facilities.

During Phase I, debris is usually not removed but pushed to the side of the road to provide at least one clear lane to allow for:

- Movement of emergency vehicles.
- Resumption of critical services.
- Damage assessment of critical public facilities and utilities.

◆ **Phase II - Removal and disposal of debris to ensure the orderly recovery of the community** and to eliminate less immediate threats to public health and safety.

The use of Force Account Labor for work with companies that trim trees, grind wood waste or the clearing of debris would be dependent on each jurisdiction along with mutual aid from other parties.

The initial roadside piles of debris created during Phase I will become the dumping locations for additional yard waste and other disaster-generated debris such as construction material; personal property; trash; white metals (washers, dryers, hot water heaters, etc.); roofing material; and household, commercial and agricultural chemicals.

In general, debris that is on **public property** must be removed to allow continued safe operations of governmental functions. Therefore, most debris-removal from public property is eligible for FEMA Public Assistance (PA) funds.

Debris removal from **private property** is the responsibility of the individual property owner, aided by insurance settlements and assistance from volunteer agencies. FEMA reimbursement is not available for the cost of removing debris from private property. Government departments or their contractors *may* pick up and dispose of disaster-related debris placed at the curb by private individuals. The extent and duration

of this type of work is carefully controlled. FEMA, State, County, and local officials will agree on a time period during which curbside pick-up will be eligible for PA funding.

For more information on PA eligibility, see *Public Assistance Guide (FEMA 322)* and *Debris Management Guide (FEMA 325)* at www.fema.gov.

Hazardous Materials

The Debris Manager will work with the Ohio Environmental Protection Agency Emergency Response Group, Solid Waste District and hazardous waste vendors to coordinate the removal of hazardous waste from commercial operations as well as from private property. Household Hazardous Waste (HHW) and Asbestos Containing Materials (ACM) should be segregated at curbside or brought to designated drop-off sites.

The Dayton Regional Hazardous Materials Response Team is available to identify/classify and mitigate hazardous-materials exposures that present acute life safety and public health threats.

The county, township, city, or village will work closely with Federal and State environmental protection agencies to ensure proper removal and disposal of hazardous waste.

IMPORTANT NOTE: Temporary storage areas for hazardous waste must include a *lining with an impermeable material* so chemicals do not leak into the groundwater and soil.

Terrorism

Terrorist acts may require that some debris be treated as potential evidence in a criminal investigation. Law enforcement officials may seek to control the handling and removal of debris pending criminal investigation. Some debris may be marked and temporarily stored in a secure area pending the completion of judicial actions including civil lawsuits.

Debris Classifications

For debris classifications, see Attachment C1.

Documentation and Forms

Documentation of debris management activities is important for potential reimbursement of costs. In addition, documentation is important to record activities performed and authorizations granted, and to develop a historical record for updating plans. Documentation of activities is the responsibility of those performing work as well as those who provide oversight and direction. At a minimum, documentation procedures and the *forms to support them* need to be created to address the following:

- ◆ Labor, equipment, rental fees and material costs
- ◆ Mutual-aid agreement expenses
- ◆ Use of volunteered resources, including labor
- ◆ Administrative expenses
- ◆ Disposal costs
- ◆ Types of debris collected and amounts of each type

V. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

The purpose of this section is to give an overview of the roles and responsibilities for operations before, during, and after a debris-generating event.

Because of differences in each jurisdiction, development of exact roles and responsibilities should be dealt with at the local level. Therefore, duties of specific departments and an organization’s involvement in the debris removal process are not discussed.

Normal Operations

During normal operations (before a disaster), the jurisdiction must be aware that the following issues must be addressed to ensure preparedness for debris generating events. The Solid Waste District will do all it can to aid in the disposal of materials, but normal operations do need to be first and foremost during a tragedy. The responsibilities for normal operations include but are not limited to:

The Jurisdiction’s **Debris Manager (DM)** will:

- Create a Debris Management Plan for the jurisdiction. The DM will coordinate the creation of the Plan with each jurisdictional department responsible for aspects of the debris management mission.
- Identify forms to support documentation of debris management activities. See **IV. Concept of Operations, Documentation and Forms**.
- In coordination with the Solid Waste District DM, compile and keep current a list of facilities that accept various types of debris. Identify alternative facilities in case those used during normal operations have been impacted by the disaster. See Attachments D1–D3.
- Develop agreements with landfills and recycling facilities to accept disaster-related debris.
- Coordinate with Solid Waste District DM to review, evaluate, and designate locations or potential DMS sites. See Attachments B1–B9 for more information on DMS sites.
- Develop and update maps indicating potential: routes for debris pickup/hauling, temporary debris storage and reduction (DMS) sites, equipment staging areas, and drop-off sites.
- Review, evaluate, and designate locations as potential equipment staging areas. Each Debris Manager will have the responsibility to monitor their sites along with other designees especially for contaminated material. This activity should be coordinated with the jurisdictional departments responsible for clearing and disposal of debris from streets.
- It is better to have several staging areas evenly distributed throughout the impacted area as opposed to a single large area. This approach allows for a quicker response and prevents the trucks from wasting time as they drive from one end of the damage area to the other.
- Organize a Debris Management Team consisting of key personnel in each jurisdictional department responsible for aspects of the debris management mission. The Solid Waste District will attempt to head up this team. Ensure that each department is fully prepared to fulfill its duties under the Debris Management Plan. The team should meet periodically to review and update procedures.
- Participate in County-level Debris Management Working Group when appropriate.
- Attempts will be made to have a yearly exercise to refresh all key players in their roles.
- Coordinate hazardous materials awareness training for public employees who will be involved in debris management operations. Employees should learn:
 - ◆ to spot possible hazardous materials/waste and ACM among post-disaster debris.
 - ◆ the procedures for reporting possible hazardous materials/waste and ACM to proper authorities.
- Coordinate, with the appropriate jurisdictional departments, the development of **standing contracts for:**
 - ◆ disaster-related debris hauling.
 - ◆ dumpsters to accept:

- ◇ spoiled food. NOTE—This need can arise from a debris-generating disaster that results in an extended power outage (in excess of 12 hours), or from an extended power outage without an associated disaster.
- ◇ household hazardous waste (HHW).
- ◇ tires.
 - ◆ tire repair
 - ◆ asbestos containing materials (ACM)
 - ◆ chipping and grinding operations. Contract with companies to turn vegetative matter into mulch and haul it away. NOTE—It is important to consult with the contractor to pre-identify sites large enough for chipping and grinding operations.
- Develop volunteer assets to assist in debris management operations, including monitoring drop-off sites. NOTE—Consider Citizen Corps/Community Emergency Response Team (CERT) volunteers.
- Coordinate with appropriate County, State, and Federal agencies to insure compliance with applicable environmental protection and historic preservation laws and regulations.
- Develop Right-of-Entry/Hold Harmless Agreements. Disaster response operations will require entering private property to remove debris that is a threat to health and safety of occupants, see Attachment A-4.

Purchasing (County Auditor’s office or equivalent) will:

- Develop a list of contractors to include current information on name, address, phone numbers (office, home, cell, fax) and email address. For more information on contractors, see Attachments D1–D3.

Legal (County Prosecutor’s office or equivalent) will:

- Review Right-of-Entry/Hold Harmless Agreements.
- Review contracts developed by Debris Manager and jurisdictional departments.

Solid Waste (Miami County Transfer Station) will:

- Coordinate with the Debris Manager to establish a process for debris removal from public and private properties to be incorporated into the Debris Management Plan.
- Evaluate options for recycling/reducing/disposing of debris. Each debris-reduction method must comply with local ordinances and State and Federal environmental regulations. See Attachment B6—Debris Reduction Information.
- In coordination with Debris Manager, compile and keep current a list of facilities that accept various types of debris. Identify alternative facilities in case those used during normal operations have been impacted by the disaster. See Attachments D1–D3.
- In coordination with Debris Manager, select locations for DMS sites. Procedures should be developed to address the following DMS site issues:
 - ◆ Location: Care should be taken in selection of DMS sites. Land use, proximity to housing, and other factors should be taken into account. Preference should be given to public property rather than private. Included in the attachments to this document are criteria for suitable DMS site locations.
 - ◆ Operations: Monitoring receipt of debris and verifying types of debris received are critical functions for successful DMS site operations. Included in the attachments to this document is a sample DMS site layout map.
 - ◆ Closeout: In closing out a DMS site, care should be taken to restore the site to its original condition in an environmentally sound and timely manner. Included in the attachments to this document is a DMS site closeout checklist.

IMPORTANT NOTE: Temporary storage areas for hazardous waste must include a *lining with an impermeable material* so chemicals do not leak into the groundwater and soil.

See Attachments B1–B9 for more information on DMS sites.

Public Works Department (County Engineer’s office or equivalent) will:

- Coordinate with the Debris Manager to establish a process for debris removal from roads to allow access to emergency responders. This process will be incorporated into the Debris Management Plan

Finance (County Auditor’s office or equivalent) will:

- Develop documentation process for potential reimbursement.

Increased Readiness

In some instances there is a warning that a disaster may occur. This section covers actions to be taken by the jurisdiction’s Debris Manager (DM) in the event of a potential debris-generating event.

The Jurisdiction’s Debris Manager (DM) will:

- Alert personnel. The DM should implement established procedures for alerting the Debris Management Team.
- Review and update Debris Management Plan. Ensure personnel understand roles and responsibilities for plan implementation. Review right of entry/hold-harmless agreements, existing contracts, list of qualified contractors, sample contracts, and other contracts necessary to conduct debris management activities.
- Review waste management options.
 - ◆ The DM should ensure pre-selected temporary DMS storage and reduction sites are currently available for use. Identify alternative locations if necessary. See Attachment B1.
 - ◆ Ensure authorized waste transfer or disposal facilities are currently operational. Identify alternative facilities if those used during normal operations have been impacted by the disaster. See Attachments D1–D3.
- Consider establishing communications with the Miami County Emergency Operations Center Assessment Room.
- Appoint a Safety officer to oversee all collection operations for their own Jurisdiction to assure personnel health and safety and to assess and to anticipate hazardous and unsafe situations.

The Jurisdiction’s Debris Management Team will:

- Alert personnel. Team Members should implement established procedures for alerting personnel in their respective departments that have debris management responsibilities.
- Review and update departmental Debris Management procedures. Ensure personnel understand their department’s roles and responsibilities in debris management plan implementation.

Response

The Response phase focuses on support of life safety operations in the immediate aftermath of a debris-generating disaster.

The Jurisdiction’s Debris Manager (DM) will:

- Activate Debris Management Plan to coordinate and manage debris removal operations.
- Meet with jurisdictional Debris Management Team to implement the Debris Management Plan.
- Meet with Debris Management Working Group to review policies and procedures.
- Make debris removal assignments based on debris removal priorities.
- Activate standing contracts.
- Coordinate with jurisdictional Emergency Operations Center Logistics Branch to deploy and track resources.
- Participate in EOC meetings and provide briefings as necessary to EOC staff on current and future debris management activities.
- Based on assessments and strategic plans, estimate resource needs. Communicate this information to the EOC Logistics Branch, Debris Management Team, and other appropriate parties.
- Work with EOC Planning Section to develop 12-hour debris management strategic plan.
- Evaluate Damage Assessment reports in terms of debris-management-relevant information.
- Coordinate the removal of debris from “Priority One” areas. NOTE: This is a Phase One debris removal operation. Debris is pushed to the curbside to clear the roadway and allow emergency responders access to impacted areas.
- Work with Debris Management Team to develop cost estimates and scopes of work for public employees and contractors.
- Authorize pre-designated DMS sites to be activated or new sites to be established.

Jurisdiction and County Safety Officers Will:

- The Debris Manager will assign a Safety Manager to oversee the safety and health operations of all debris removal and collection sites.
- Will make sure all personnel are equipped with proper safety hats, gloves and footwear.
- Conducts daily safety briefings at the start of each day.
- Advises Incident Commander on issues regarding incident safety.
- Will conduct risk analyses and implement safety measures.
- To minimize other employee risks by promoting safe driving habits, eliminating tripping hazards, ensuring safe food handling, etc. in the field.

Public Works Department (County Engineer’s office or equivalent) will:

- Consult with Debris Manager and emergency response officials to designate “Priority One” routes and areas for immediate debris removal.
- Remove debris from “Priority One” routes and areas. NOTE: This is a Phase One debris removal operation. Debris is pushed to the curbside to clear the roadway and allow emergency responders access to impacted areas.

Public Information Officer (PIO) (County Commissioner’s office or County EMA office) will:

- Give the public information about:
 - ◆ Segregating hazardous waste
 - ◆ Placing debris at the curbside
 - ◆ Keeping debris piles away from fire hydrants and valves
 - ◆ Reporting illegal dumping
 - ◆ Segregating recyclable materials
 - ◆ Debris pick-up schedules
 - ◆ Location of DMS sites
 - ◆ Disposal methods and compliance with Environmental Protection Agency regulations
 - ◆ Restrictions and penalties for illegal dumping

- Address questions such as:
 - ◆ What if I cannot pay for debris removal from my property?
 - ◆ What if I am unable to bring the debris to the curb for pickup?

Solid Waste (Miami County Transfer station) will:

- Based on damage assessments, review map of potential DMS site(s). Determine which sites should be activated. Determine if new sites need to be established.
- Evaluate options for recycling/reducing/disposing of debris. Each debris- reduction method must comply with local ordinances and State and Federal environmental regulations. See Attachment B6— Debris Reduction Information.
- Prepare to activate DMS sites.
- Notify landfills and recycling facilities of need to increase volume of debris.
- Contact Ohio EPA and request variances for landfills to accept increased volume of debris.

Purchasing (Miami County Auditor’s office or equivalent) will:

- Develop new contracts as needed.
- Track and record expenditures for possible reimbursement.

Legal (Prosecutor’s office or equivalent) will:

- Review all standing and new contracts.
- Secure all authorities necessary for debris removal operations.
- Review any actions that EPA or Ohio Historic Preservation Office indicates might be in violation of historic preservation or environmental laws/regulations/policies.
- Maintain environmental compliance records for submission to EOC Documentation Branch.
- Review right-of-entry and hold harmless agreements to ensure they are current.

Finance (County Auditor’s office or equivalent) will:

- Keep records of financial transactions for possible reimbursement of debris removal operations.
- Coordinate funding of debris removal operations.

Recovery

This phase of the debris management cycle covers actions necessary to complete the debris removal, reduction, and disposal activities, based on damage assessment of the disaster.

The Jurisdiction’s Debris Manager (DM) will:

- Supervise implementation of Debris Management Plan.
- Coordinate with Ohio EPA and Ohio Historic Preservation Office on compliance issues.
- Coordinate Hazardous Waste removal operations with Miami County Solid Waste District **DM**
- Coordinate the closeout of DMS sites. See Attachments B7 & B8.
- At the conclusion of Debris Management Operations, conduct an After Action Review. Evaluate when and why decisions were made to perform certain actions. Examples: TDSR site selections, debris removal priorities, and demolition of public/private structures. Document lessons learned from review.

Miami County Solid Waste DM (Transfer Station) will:

- Designate best options for recycling/reducing/disposing of debris. Each debris-reduction method must comply with local ordinances and State and Federal environmental regulations. See Attachment B6— Debris Reduction Information.
- Establish drop-off sites to accept: spoiled food, household hazardous waste (HHW), ACM and tires.
- Activate DMS sites as needed.
- Assist Jurisdiction’s DM to manage and monitor operations at DMS site(s).
- Ensure DMS sites are environmentally compliant.
- Maintain environmental compliance records for submission to EOC Documentation Branch.
- Supervise removal of Hazardous Waste.
- Coordinate and monitor transportation of debris to appropriate DMS site or regulated waste facility.
- Coordinate and monitor transportation of debris from DMS sites to appropriate landfill, transfer station, or recycling facility.
- Monitor debris removal contracts with private contractors. Verify that the following actions are taking place:
 - ◆ Debris being picked up is a direct result of the disaster
 - ◆ Trucks hauling debris are fully loaded
 - ◆ Debris pick-up areas are being managed properly
 - ◆ Trucks are sticking to debris routes
 - ◆ Inspection of DMS sites to ensure operations are being carried out according to contract
 - ◆ Verification of security and control for temporary DMS sites

Legal (County Prosecutor’s office or equivalent) will:

- Review private property insurance information and other assets to ensure benefits and resources are fully utilized.

Purchasing (Miami County Commissioner’s office or equivalent) will:

- Set bidding requirements.
- Advertise for bids.
- Instruct bidders.
- Develop contracts.
- Document all costs for debris removal activities.

Finance (Miami County Auditor’s office or equivalent) will:

- Keep records of financial transactions for reimbursement of debris removal operations.
- Coordinate funding of debris removal operations.

Public Information Officer (PIO) (Miami County Commissioner’s office or County EMA office) will:

- Give the public information about:
 - ◆ Segregating hazardous waste
 - ◆ Placing debris at the curbside
 - ◆ Keeping debris piles away from fire hydrants and valves
 - ◆ Reporting illegal dumping
 - ◆ Segregating recyclable materials
 - ◆ Debris pick-up schedules
 - ◆ Location of DMS sites
 - ◆ Disposal methods and compliance with Environmental Protection Agency regulations
 - ◆ Restrictions and penalties for illegal dumping

Attachment A1—Types of Contracts

Types of Contracts: The following types of contracts may be used when conducting debris management operations.

- ◆ Time and Material: Under a time and material contract, the contractor is paid on the basis of time spent and resources utilized in accomplishing debris management tasks. The Federal Emergency Management Agency recommends, for reimbursement purposes, that the use of time and material contracts be *limited to the first 70 work hours* following a disaster event.
- ◆ Unit Price: A unit price contract is based on weight (tons) or volume (cubic yards) of debris hauled, and should be used when the scope of work is not well defined. It requires close monitoring of collection, transportation, and disposal to ensure that quantities are accurate. A unit price contract may be complicated by the need to segregate debris for disposal.
- ◆ Lump Sum: A lump sum contract establishes a total price using a one item bid from a contractor. It should be used only when a scope of work is clearly defined, with areas of work and quantities of material clearly identified. Lump sum contracts can be defined in one of two ways:

Area Method— the scope of work is based on a one time clearance of a specified area.

Pass Method— the scope of work is based on a certain number of passes through a specified area, such as a given distance along a right of way.

Attachment A2—List of Contracts and Agreements

The attached documents are samples only and may not address all issues affecting an individual jurisdiction’s situation. All official documents should be reviewed and approved by the appropriate legal authority prior to use.

Sample Mutual Aid Agreement —Attachment A3

Sample Right of Entry Agreement— Attachment A4

Sample Time and Materials Contract— Attachment A5

Sample Lump Sum Contract for Debris Removal— Attachment A6

Sample Unit Price Contract for Debris Removal— Attachment A7

Debris Fact Sheet for Local Officials – Attachment A-7A

Attachment A3- Mutual Aid Agreement

THIS AGREEMENT, entered into this day of by the participating parties hereto:

WHEREAS, each of the parties hereto desires to furnish mutual aid to each other in the event of a disaster, for which neither party might have sufficient equipment or personnel to cope, and,

WHEREAS, such a mutual aid agreements are authorized by (Site Statutory Agency).

NOW THEREFORE, the parties do mutually agree as follows:

ARTICLE I TERM

This agreement shall commence at 12:01 a.m. on _____, and continue through _____, subject to the right of each party to terminate sooner as provided herein.

ARTICLE II SERVICES

A. In the event of a disaster that requires aid of equipment and personnel beyond that which each party is able to provide for itself, all parties hereto agree that at the request of any party Hereto the others will loan such equipment and personnel as the respective officials of the lending jurisdiction, in their discretion, shall determine can be reasonably spared at the time without placing their own community in jeopardy.

B. Since time is of the essence during emergencies as herein referred to, the authority to dispatch equipment and personnel or call for in accordance with the terms and conditions of this agreement shall be delegated specifically to the chief official or acting chief official of the parties hereto.

C. The lending party shall be responsible for the delivery of said equipment and personnel to the location specified by requesting party.

D. Upon arrival at said location, the officer in charge of the said equipment and personnel shall report to the officer in charge at the location of the disaster, who shall assume full charge of all operations at a disaster or emergency location.

E. All equipment and personnel loaned hereunder shall be returned upon demand of the lending party or when released by the requesting party upon the cessation of the emergency.

ARTICLE III PAYMENT

No charge shall be assessed for services rendered by any party hereto.

ARTICLE IV WAIVER OF CLAIMS

Each party hereto hereby waives all claims against the other for compensation for any loss, damage, personal injury, or death occurring in consequence of the performance of either party, their agents, or employees hereunder.

ARTICLE V TERMINATION

This Agreement may be terminated by either party upon at least thirty days prior written notice to the other.

ARTICLE VI INTEGRATION

This Agreement contains the entire understanding between the parties, and there are no understandings or representations not set fourth or incorporated by reference herein. No subsequent modifications of this Agreement shall be of any force or effect unless in writing signed by the parties.

ARTICLE VII COMPLIANCE WITH LAWS

In the performance of this Agreement, each party shall comply with all applicable Federal, State, and Local laws, rules, and regulations.

SIGNATURES OF AGREEING OFFICIALS

Agreement No. _____

ATTACHMENT A4
Authorization To Enter Property and To Remove Debris

I, the undersigned, am an owner/lessee of the real property located at:

Miami County, Ohio, (the “Property”); and I hereby freely give and grant the right of access and entry onto said property for the purpose of removing and clearing storm-generated debris from the Property to any Federal, state, or local governmental agency, contractor, subcontractor, or employee.

I understand that this authorization does not obligate any governmental agency, employee, contractor, or subcontractor to perform any removal of debris from the Property.

In the event that any governmental agency, employee, contractor, or subcontractor does perform debris removal on the Property, I shall not apply for, or accept any compensation for debris removal from any private entity or any other third party source, or any form of public assistance. If I am compensated from any source for the cost of the removal of debris from the Property, I will report said compensation or settlement to the Miami County Emergency Management Agency.

I hereby release, discharge, and agree to hold harmless the United States of America, the State of Ohio, Miami County and its Board of Commissioners, the County Risk Sharing Authority, and all of their current and former agencies, employees, officers, agents, successors, assigns, contractors, and subcontractors from any claimed injury, damage, harm, or loss to any person or property that may arise from the activities conducted by any or all of the same in removing debris from the property.

Signed this _____ day of _____, 2_____.

Owner/Lessee

Telephone Number

Owner/Lessee

Telephone Number

Witnessed By: _____

APPROVED AS TO FORM ONLY



Miami County Prosecutor’s Office

Page 26 of 80

**Attachment A5
Time and Materials Contract**

*Note: Please see contract attachments E1, E2, E3

**ARTICLE 1:
Agreement Between Parties**

This contract is entered into on this _____ day of _____, 20____, by and between the city/county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

**ARTICLE 2:
Scope of Work**

This contract is issued pursuant to the Solicitation and Procurement on _____, 20____, for the removal of debris caused by the sudden natural or man-made disaster of _____ to _____, 20____. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

**ARTICLE 3:
Schedule of Work**

Time is of the essence for this debris removal contract.

Notice to proceed with Work: The work under this contact will commence on _____, 20____ and end on _____, 20____. The equipment shall be used for (recommended not to exceed 70) hours, unless the ENTITY initiates additions or deletions by written change order. Based upon unit prices of equipment and labor, no minimum or maximum number of hours is guaranteed.

**ARTICLE 4:
Contract Price**

The hourly rates for performing the work stipulated in the contract, documents, which have been transposed from the low bidder's bid schedule, are as follows:

Equipment/Machine/Operator	Mobilization/ Demobilization Cost	Hourly Rate
Manufacturer, Model		Total unit rate shall be given which includes maintenance, fuel, overhead, profit, and other associated cost with the equipment.
		Estimated Cost per unit of material. Only actual invoice amounts will be paid.
Labor Man-hours		Protective clothing, fringe benefits, hand tools, supervision,

		transportation and any other costs.
--	--	-------------------------------------

ARTICLE 5:
Payment

The ENTITY shall pay the Contractor for mobilization and demobilization if the Notice to Proceed is issued and will pay for only the Time that the equipment and manpower is actually being used in accomplishing the work. The Contractor shall be paid within _____ days of the receipt of a pay estimate and verification of work by the inspector.

ARTICLE 6:
Claims

Not Applicable

ARTICLE 7:
Contractor’s Obligations

The Contractor shall supervise accomplishment of the work effort directed by labor and proper equipment for all tasks. Safety of the Contractor’s personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, liability insurance, taxes, and fees necessary to perform under the terms of the contract. Caution and care must be exercised by the Contractor not to cause any additional damage to sidewalks, roads, buildings, and other permanent fixtures.

ARTICLE 8:
Insurance and Indemnification

The successful BIDDER shall provide, as part of its BID package and proposal, evidence of the maintenance of insurance, as set forth herein below, and as part of the contract awarded pursuant hereto, and as condition of said contract, continually shall maintain such coverage’s, and, upon request of the OWNER provide evidence of the existence and viability of the same.

Limits shall be not less than:

- a) For liability for bodily injury, including accidental deaths, \$1,000,000.00 for any one person and, subject to the same limit for each person, \$5,000,000.00 on account of one occurrence.
- b) For liability for property damage other than that caused by operation of motor vehicles, \$1,000,000.00 on account of one occurrence and \$5,000,000.00 on account of all occurrences.
- c) For property covering the operation of motor vehicles, not less than \$5,000,000.00.
- d) For contractual liability, the amounts required under a and b above.
- e) For the Worker’s Compensation, as required by the State of Ohio.

The BIDDER shall furnish evidence with its bid that the bidder can obtain and maintain the insurance specified in this Bid Manual.

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless COUNTY and their general fund, agents, employees, and consultants from and against all claims, damages, losses and expenses including, but not limited to attorney’s fees arising out of or resulting from the performance of

the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and (2) is caused in whole or in part by any negligent act of omission of CONTRACTOR, its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable regardless of whether it is caused in part by a party indemnified hereunder.

The CONTRACTOR shall indemnify the COUNTY, its general fund, employees, agents and consultants from any environmental liabilities or claims that result from the supply of any services resulting from this specification and bid.

In any and all claims against the COUNTY or any of its agents, employees or consultants, by any employee of CONTRACTOR or its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the paragraph above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any Subcontractor under Worker's or Workmen's compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 9:
Contractor Qualifications

The Contractor must be duly licensed in the State per statutory requirements.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity (City, County, Town, Etc)

By _____ Seal

by _____ Seal
Principal of the firm

Contractor (Include address, City, State)

Attachment A6
Lump Sum Contract for Debris Removal

*Note: Please see contract attachments E1, E2, E3

ARTICLE 1:
Agreement Between Parties

This contract is made and entered into on this _____ day of, 20____, by and between the city/county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

ARTICLE 2: Scope of Work

This contract is issued pursuant to the Solicitation and Procurement on _____, 20____, for the removal of debris caused by the sudden natural or manmade disaster of _____ to _____, 20____. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

ARTICLE 3: Schedule of Work

Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The Work under this contract will commence on _____, 20____ and end on _____, 20____. Maximum allowable time for completion will be _____ Calendar days, unless the Entity initiates additions or deletions by written change order. If the Contractor does not complete Work within the allotted time, liquidated damages will be assessed in the amount of _____ per day.

ARTICLE 4:
Contract Price

The lump sum price for performing the work stipulated in the contract document is.
\$ _____.

ARTICLE 5:
Payment

The Contractor shall submit certified pay requests for completed work. The Entity shall have 10 calendar days to approve or disapprove the pay request. The Entity shall pay the Contractor for his/her performance under the contract within _____ days of approval of the pay estimate. On contracts over 30 days in duration, the Entity shall pay the Contractor a pro-rata percentage of the contract amount on a monthly basis, based on the amount of work completed and approved in that month. The Entity will remunerate the Contractor within 30 days of the approved application for payment, after which interest will be added at a rate of _____ on each payment. Retainer shall be released upon substantial completion of the work.

Funding for this contract is authorized pursuant to Public Law of the State of Ohio _____, And _____ . Local Statute or ordinance

ARTICLE 6: Change Orders

If the scope of work is changed by the Entity, the change in price and contract time will be promptly negotiated by the parties, prior to commencement of work.

ARTICLE 7: Contractor’s Obligations

The Contractor shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the Contractor’s personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the Entity. The Contractor shall be responsible for the protection of existing utilities, sidewalks, roads, building, and other permanent fixtures. Any unnecessary damage will be repaired at the Contractor’s expense.

ARTICLE 8: Entity’s Obligations

The Entity’s representative(s) shall furnish all information, documents, and utility locations, necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the Entity. A representative will be designated by the Entity for inspecting the work and answering on-site questions.

The Entity shall designate the public and private property areas where the disaster mitigation work is to be performed. Copies of complete “Right of Entry” forms, where they are required by the State and local law for private property, shall be furnished to the Contractor by the Entity. The Entity shall hold harmless and indemnify the Contractor judgments and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are caused by the gross negligence of the Contractor, his subcontractors or his employees.

ARTICLE 9: Claims

If the Contractor wishes to make a claim for additional compensation, for work or materials is not clearly covered in the contract, or not ordered by the Entity as a modification to the contract, he/she shall notify the Entity in writing. The Contractor and the Entity will negotiate the amount of adjustment promptly; however, if no agreement is reached, a binding settlement will be determined by a third party acceptable to both Entity and Contractor under the sections of applicable State law.

ARTICLE 10: Insurance and Indemnification

The successful BIDDER shall provide, as part of its BID package and proposal, evidence of the maintenance of insurance, as set forth herein below, and as part of the contract awarded pursuant hereto, and as condition of said contract, continually shall maintain such coverage’s, and, upon request of the OWNER provide evidence of the existence and viability of the same.

Limits shall be not less than:

1. For liability for bodily injury, including accidental deaths, \$1,000,000.00 for any one person and, subject to the same limit for each person, \$5,000,000.00 on account of one occurrence.

2. For liability for property damage other than that caused by operation of motor vehicles, \$1,000,000.00 on account of one occurrence and \$5,000,000.00 on account of all occurrences.
3. For property covering the operation of motor vehicles, not less than \$5,000,000.00.
4. For contractual liability, the amounts required under **a** and **b** above.
5. For the Worker’s Compensation, as required by the State of Ohio.

The BIDDER shall furnish evidence with its bid that the bidder can obtain and maintain the insurance specified in this Bid Manual.

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless COUNTY and their general fund, agents, employees, and consultants from and against all claims, damages, losses and expenses including, but not limited to attorney’s fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and (2) is caused in whole or in part by any negligent act or omission of CONTRACTOR, its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable regardless of whether it is caused in part by a party indemnified hereunder.

The CONTRACTOR shall indemnify the COUNTY, its general fund, employees, agents and consultants from any environmental liabilities or claims that result from the supply of any services resulting from this specification and bid.

In any and all claims against the COUNTY or any of its agents, employees or consultants, by any employee of CONTRACTOR or its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the paragraph above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any Subcontractor under Worker’s or Workmen’s compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 11:
Contractor Qualifications

The Contractor must be duly licensed in the State per statutory requirements.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity (City, County, Town, Etc.)

By _____ Seal

Contractor (Include Address, City, State)

By _____ Seal
Principal of the Firm

Attachment A7— Unit Price Contract for Debris Removal

*Note: Please see contract attachments E1, E2, E3

ARTICLE 1:
Agreement Between Parties

This contract is made and entered into on this the _____, 20____, by and between the city/county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

ARTICLE 2:
Scope of Work

This contract is issued pursuant to the Solicitation and Procurement on _____, 20____, for the removal of debris caused by the sudden natural or man-made-disaster of _____ to _____, 20____. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

ARTICLE 3:
Schedule of Work

Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The work under this contract will commence on _____, 20____ and end on _____, 20____. Maximum allowable time for the completion will be _____ Calendar days unless the Entity initiates additions or deletions by written charge order. Subsequent changes in cost and completion time will be equitably negotiated by both pursuant to applicable State law. Liquidated damages shall be assessed at \$ _____/calendar day for any days over the approved contract amount.

ARTICLE 4:
Contract Price

The unit prices for performing the work stipulated in the contract documents, which have been transposed from the low bidder's bid schedule are as follows:

Quantity	Unit of Measure	Description	Unit Cost	Total
Subtotal	_____			
Cost of Bond	_____			
Grand Total	_____			

*Debris shall be classified as one of the following units: cubic yards, each, square foot, linear foot, gallon, or an approved unit measure applicable to the specific material to be removed.

ARTICLE 5:
Payment

The Contractor shall submit a certified pay request for completed work. The Entity shall have 10 calendar days to approve or disapprove the pay request. The Entity shall pay the Contractor for his performance

under the contract within 20 days of approval of the pay estimate. On contracts over 30 days in duration, the Entity shall pay the Contractor a pro-rata percentage of the contract amount on a monthly basis based on the amount of work completed and approved in the month. The Entity will remunerate the Contractor within 30 days of the approved application for payment. After which interest will be added at a rate of _____ per annum. Payments shall be subject to a retainage of _____ on each payment. Retainage shall be released upon substantial completion of the work.

Funding for this contract is authorized pursuant to Public Law of the State of Ohio _____, and _____ (Local statute or ordinance)

ARTICLE 6:
Claims

If the Contractor wishes to make a claim for additional compensation, for work or materials not clearly covered in the contract, or not ordered by the Entity as a modification to the contract, he/she shall notify the Entity in writing. The Contractor and the Entity will negotiate the amount of adjustment promptly; however, if no agreement is reached a binding settlement will be determined by a third party acceptable for both Entity and Contractor under the auspices of applicable State law.

ARTICLE 7:
Contractors Obligations

The Contractor shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the Contractor’s personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the Entity. The Contractor shall be responsible for the protection of existing utilities, sidewalks, roads, buildings, and other permanent fixtures. Any unnecessary damage will be repaired at the Contractor’s expense.

ARTICLE 8:

Hauling Contractors must be registered with the Miami County Health Department.

ARTICLE 9:
Entity’s Obligations

The Entity’s representative(s) shall furnish all information, documents, and utility locations for necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the Entity. A representative will be designated by the Entity for inspecting the work and answering any on-site questions.

The Entity shall designate the public and private property areas where the disaster mitigation work is to be performed. Copies of “Right of Entry” forms, as required by State laws for private property, shall be furnished to the Contractor by the Entity. The Entity shall hold harmless and indemnify the Contractor judgments and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are caused by the gross negligence of the Contractor, his/her subcontractors, or his/her employees.

The Entity will terminate this contract for failure to perform as specified, or for default by the Contractor.

ARTICLE 10:
Insurance and Indemnification

The successful BIDDER shall provide, as part of its BID package and proposal, evidence of the maintenance of insurance, as set forth herein below, and as part of the contract awarded pursuant hereto, and as condition of said contract, continually shall maintain such coverage's, and, upon request of the OWNER provide evidence of the existence and viability of the same.

Limits shall be not less than:

1. For liability for bodily injury, including accidental deaths, \$1,000,000.00 for any one person and, subject to the same limit for each person, \$5,000,000.00 on account of one occurrence.
2. For liability for property damage other than that caused by operation of motor vehicles, \$1,000,000.00 on account of one occurrence and \$5,000,000.00 on account of all occurrences.
3. For property covering the operation of motor vehicles, not less than \$5,000,000.00.
4. For contractual liability, the amounts required under 1 and 2 above.
5. For the Worker's Compensation, as required by the State of Ohio.

The BIDDER shall furnish evidence with its bid that the bidder can obtain and maintain the insurance specified in this Bid Manual.

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless COUNTY and their general fund, agents, employees, and consultants from and against all claims, damages, losses and expenses including, but not limited to attorney's fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (2) is caused in whole or in part by any negligent act of omission of CONTRACTOR, its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable regardless of whether it is caused in part by a party indemnified hereunder.

The CONTRACTOR shall indemnify the COUNTY, its general fund, employees, agents and consultants from any environmental liabilities or claims that result from the supply of any services resulting from this specification and bid.

In any and all claims against the COUNTY or any of its agents, employees or consultants, by any employee of CONTRACTOR or its Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the paragraph above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any Subcontractor under Worker's or Workmen's compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 11:
Contractor Qualifications

The contractor must be fully licensed in the State of Ohio.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity (City, County, Township, Village, etc.)

By _____ Seal
Contractor, Address, City, State

By _____ Seal
Principal of the firm

Attachment A-7A

DEBRIS FACT SHEET FOR LOCAL OFFICIALS



The information contained within this document is intended to assist local officials responsible for all or a portion of the issues relating to managing all types of waste (“debris”) resulting from a disaster or significant emergency. Removal, reduction, recycling, temporary sites, contracting and disposal data as well as points of contact are included in the following pages.

The Ohio Environmental Protection Agency (EPA) and Ohio Emergency Management Agency (EMA) are two state agencies that have primary responsibilities to respond to disasters. Disasters can generate a significant amount of debris and can disrupt local government operations in general. Their roles and day-to-day points of contact are detailed below.

Local Governments

Local health departments may be able to provide technical assistance regarding debris management and public health issues. Local health departments may also have primary responsibility during a disaster in the regulatory oversight for proper management of debris. Of particular concern for public health and safety is the management and proper disposal of debris created by a disaster or by demolition, yard waste, household hazardous waste, food stuffs, and spoiled food.

Ohio Environmental Protection Agency (www.epa.state.oh.us/dmwm)

Division of Materials and Waste Management, Central Office
50 West Town Street, Suite 700, Columbus, OH 43215
Phone (614) 644-2621 Fax (614) 728-5315

Primary responsibility during a disaster is regulatory oversight for proper management of debris. This is accomplished by providing rule interpretations (regulatory requirements), technical assistance/coordination regarding temporary staging, collection, removal and disposal of debris, and resource lists.

Ohio Emergency Management Agency (www.ema.ohio.gov)

Disaster Recovery Branch
2855 West Dublin Granville Road, Columbus, OH 43235
Phone (614) 799-3665 Fax (614) 791-0018

Primary responsibility is coordination of state assistance, through County Emergency Management Agency offices, to support the efforts of local officials following disasters. The Disaster Recovery Branch administers reimbursement programs for costs associated with local response/recovery actions, including debris operations.

Page 2 Contact List

Page 3 Management Options Chart

Page 4 Temporary Debris Sites

Page 5 Ohio EPA Resources

Page 6 Contracting and FEMA Eligibility

ADDITIONAL CONTACTS

Local Solid Waste Mgmt District	See Local Listing	(Recycling)
Ohio EMA	(877) 644-6362	(Response and Recovery)
Local Department of Health	See Local Listing	
Ohio Historic Preservation Off	(614) 298-2000	
Ohio Department of Health	(614) 466-1390	(Environmental/Historic), (Private Drinking Water)
Attorney General	(800) 282-0515	
Ohio Department of Agriculture	(614) 728-6200	(Consumer Protection), (Dead Animals)
Ohio Dept. Natural Resources	(614) 265-6565	
U.S. Corp of Engineer Lakes Division)	(513) 684-3002	(Recycling, Floodplain Mgmt.), (Regulatory-Great

Ohio Environmental Protection Agency – Management Options for Disaster Related Wastes

Type of Waste	Description of Waste	Management Options
<p>General Solid Waste (aka Municipal Solid Waste)</p>	<p>Food, packaging, clothing, appliances, furniture, machinery, electronic equipment, garbage, plastic, paper, bottles, cans, loose carpeting, paper products, scrap tires, street dirt, dead animals, vehicles</p> <p>Sand Bag Note: Sand from sand bags used to control flooding may be emptied from the bags and reused. The empty bags, if not reused, are considered solid waste. Sand contaminated with other materials (hazardous, etc.) should be handled appropriately.</p>	<ul style="list-style-type: none"> ● Recycling: segregate / recycle as much as possible (preferred) ● MSW Landfill Disposal ● MSW Transfer Facility Disposal ● Scrap Tires: licensed tire recovery / recycling facility ● Appliances: remove refrigerants prior to disposal ● Vehicles: auto salvage yards ● Dead Animals: landfill, compost, burn / bury / render (per Ohio Dept. of Ag. Guidelines)
<p>Agricultural Waste & Vegetative Waste (aka Solid Waste)</p>	<p>Vegetative or woody waste, tree limbs, brush, shrubs (does not include buildings, other structures, dead animals, or vehicles)</p>	<ul style="list-style-type: none"> ● Recycling: drying, chipping, grinding for use in landscaping, mulching, and as a fuel supplement (preferred) ● MSW Landfills Disposal ● MSW Transfer Facility Disposal ● Appropriate Composting Facilities ● Controlled Burning – for use in declared disaster areas only; air curtain destructor use and Ohio EPA approval required
<p>Construction & Demolition Debris (CDD)</p>	<p>Brick, stone, mortar, asphalt, lumber, wallboard, glass, roofing, metal, piping, fixtures, electrical wiring, heating equipment, insulation, carpeting attached to structures, railroad ties, utility poles, mobile homes</p>	<ul style="list-style-type: none"> ● Recycling: segregate and reuse as much materials as possible ● CDD Landfill Disposal ● MSW Landfill Disposal ● MSW Transfer Facility Disposal ● Mobile Homes: take to salvage company or CDD landfill
<p>Clean Hard Fill (a subset of CDD)</p>	<p>CDD which consists only of reinforced or non-reinforced concrete, asphalt concrete, brick, block, tile, and stone which can be reused as construction or fill material</p>	<ul style="list-style-type: none"> ● Segregate and reuse materials as appropriate. Notify local health district of intent to use clean hard fill in filling operations
<p>Infectious Waste</p>	<p>Needles and medical related glass (“sharps”), syringes, blood containing or saturated items including tubing, clothing, bandages, etc.</p>	<ul style="list-style-type: none"> ● Contact local health district or Ohio EPA District Office for guidance

Type of Waste	Description of Waste	Management Options
Hazardous Wastes & Household Hazardous Wastes	Flammable materials (fuels, gasoline, kerosene, propane tanks, oxygen bottles, etc.), explosives, batteries, common household chemicals, industrial and agricultural chemicals, cleaners, solvents, fertilizers, etc.	<ul style="list-style-type: none"> • Segregate materials as practical and dispose of at an approved hazardous waste facility. Contact appropriate Ohio EPA District Office for guidance. • Household hazardous waste disposal is permitted at MSW facilities. However, strongly consider segregation from waste stream, where practical, and dispose of with other hazardous materials.
Radiological Wastes	Nuclear medicine materials and associated patient wastes, certain monitoring equipment	<ul style="list-style-type: none"> • Contact Ohio Department of Health for regulatory requirements and management options. Not regulated by Ohio EPA.

Variations / Exemptions: All regulated disposal facilities in Ohio have operational requirements / restrictions regarding the types and volume of waste that can be accepted for disposal. During emergency events, a facility may seek authorization from the Director of Ohio EPA to temporarily accept different waste streams or an increased volume of waste. Before taking disaster-related debris to a disposal facility, please make sure that the facility is willing and properly authorized to accept the material.

Stream Cleanup Activities: Prior to removing debris from streams and waterways, please make sure you have the appropriate authorizations, if necessary (permits from COE and/or Ohio EPA, property owner permission, etc.). Once debris is removed from the streams / waterways segregate the debris as much as possible and manage according to the above outlined options.

Temporary Debris Sites

Things to Consider

- Site Ownership – Use public lands whenever possible to avoid potentially costly and complicated leasing arrangements, and to lessen potential trespassing allegations. Use privately owned land only if no public sites are available. If using private lands, be sure to obtain proper, detailed usage agreements with all parties having an ownership interest.
- Site Location
 - Consider impact of noise, dust, traffic
 - Consider pre-existing site conditions
 - Look for good ingress/egress at site
 - Consider paved versus unpaved areas
 - Consider potential impact on ground water
 - Determine whether any existing drains need to be sealed
 - Consider site size based on:
 - Expected volume of debris to be collected
 - Planned volume reduction and debris processing activities
 - Avoid environmentally sensitive areas, such as:
 - Wetlands
 - Rare and critical animals or plant species
 - Well fields and surface water supplies
 - Historical / archaeological sites
 - Sites near residential areas, schools, churches, hospitals, and other sensitive areas
 - Record detailed conditions of chosen site (pictures, video, etc.)
- Site Operations
 - Use portable containers
 - Ensure portable containers are emptied/replaced when necessary
 - Separate types of waste as operations continue
 - Monitor site at all times
 - Perform on-going volume reduction (on site or removal for disposal / reduction)
 - Provide nuisance management (dust, noise, etc.)
 - Provide vector controls (rats, insects, etc.)
 - Provide special handling for regulated hazardous materials
 - If household hazardous waste is segregated, ensure disposal options exist
 - Provide security (limit access to site)
 - Ensure appropriate equipment is available for site operations
- Site Closeout
 - Remove all remaining debris to authorized locations
 - Restore site to pre-use conditions
 - Record detailed conditions of site after closeout is complete (pictures, video, etc.)

Ohio Environmental Protection Agency Resources

The following documents are available for download from the Ohio EPA Website or by contacting the appropriate Ohio EPA division.

- Ohio EPA Registered and/or Licensed Debris Disposal Facility and Company Listings - DMWM
 - Composting Facilities
 - Construction and Demolition Debris Landfills
 - Infectious Waste Transporters
 - Municipal Solid Waste Landfills
 - Municipal Solid Waste Transfer Facilities
 - Scrap Tire Storage and Disposal Facilities
 - Scrap Tire Transporters
 - Solid Waste Management District Contacts
- Emergency Response Contractors - DERR
- Orphan Drum Program – DERR
- Open Burning Regulations – DAPC
- Ohio EPA District Office Map and Contact Numbers (included with this fact sheet)

Ohio EPA Division of Materials & Waste Management (DMWM)

www.epa.state.oh.us/dmwm

(614) 644-2621

Ohio EPA Division of Emergency & Remedial Response (DERR)

www.epa.state.oh.us/derr

(614) 644-2924

Ohio EPA Division of Air Pollution Control

www.epa.state.oh.us/dapc

(614) 644-2270

CONTRACTING AND FEMA ELIGIBILITY

GENERAL WORK ELIGIBILITY

Under a presidential disaster declaration for the state of Ohio, the Federal Emergency Management Agency (FEMA) may provide assistance to state and local governments for costs associated with debris removal operations. Debris removal operations include collection; pick up, hauling, and storage at a temporary site, segregation, reduction, and final disposal. This document provides information on the eligibility of debris removal operations for Public Assistance (PA) funding.

Determination of eligibility is a FEMA responsibility. Removal and disposal of debris that is a result of the disaster, is within a declared county and is on public property, is eligible for federal assistance. Public property includes roads and publicly-owned facilities. Removal of debris from parks and recreation areas is eligible when it affects improved facilities (i.e. trails), affects public health and safety or limits the use of those facilities.

Debris Removal from Private Property: Costs incurred by local governments to remove debris from private property may be reimbursed by FEMA if it is pre-approved by the Federal Disaster Recovery Manager, is a public health and safety hazard, and if the work is performed by an eligible PA applicant, such as a municipal or county government. The cost of debris removal by private individuals is not eligible under the Public Assistance Program; however, during a specific time period, a private property owner may move disaster-related debris to the curbside for pick up by an eligible PA applicant. Applicants should set the specific period of time to ensure curbside debris does not include non-event related or reconstruction debris (ineligible).

Eligible Costs: If an applicant uses force account (their own) personnel and equipment, the cost of the equipment and overtime costs for personnel are eligible for federal funding. If an applicant chooses to award a contract(s) for debris operations, the costs of the contracts are also eligible for federal funding, as long as the contract is reasonable.

Documentation: To ensure that processing of federal funding is done as quickly as possible, applicants should maintain the following information: debris estimates, procurement information (bid requests, bid tabulations, etc.), contracts, invoices, and monitoring information (load tickets, scale records, etc). If an applicant performs debris removal, the payroll and equipment hours must be kept. All records should be maintained in the manner prescribed by the local government with consideration of state and federal record retention guidelines.

CONTRACTING FOR DEBRIS REMOVAL

Procurement

- Determine the type of contracting needed to satisfy specific debris clearance, removal and disposal requirements of an unusual and compelling urgency;
- Ensure adherence to state and local procurement guidance;
- Determine if any purchasing and contracting requirements are waived as a result of the disaster and subsequent declarations of emergency (see Ohio Revised Code 125.023 and/or 44 CFR 13.36(d)(4));
- To ensure federal reimbursement, applicants should follow FEMA requirements for procurement, 44 CFR Part 13.36. FEMA requires that the procurement process allow for competition and reasonable cost. To show competition, applicants should at a minimum solicit three quotes (projects under \$100,000) or formally bid (advertise) the work. Reasonable costs are those that are fair and equitable for the type of work performed in the affected area. To show reasonable cost, the applicants should be able to document a base amount to which they compared the awarded bid;
- Solicit bids, evaluate offers, award contracts, and issue notices to proceed with all contract assignments. (See pg 8 of this document for debarred/suspended contractor information);
- Supervise the full acquisition process for service and supply contracts and the oversight of contract actions to ensure conformance to regulatory requirements;

- Coordinate with the local Department of Public Works and Department of Solid Waste Management staffs and consult with legal counsel. The contracting office must take care to avoid the solicitation of assistance from the general public and giving the impression that compensation will be provided for such assistance. In general, this would be considered as volunteer actions. In addition, there are a number of other issues involved with such a solicitation, including licensing, bonding, insurance, the potential for the communities to incur liability in the event of injury or fatality, supervision and certification of work done;
- Please see the Ohio Revised Code, Sections 125.023, 307.86.92, 153.54, 153.57, 2921.01, and 2921.42 and supplementary rules and local ordinances for additional information pertaining to competitive bidding.
- FEMA recommends use of pre-drafted contracts or pre-event contracts so long as they follow procurements requirements as outlined in 44 CFR Part 13.36 and also recommends pre-qualifying contractors to expedite the bid process.

Unit Price Contracts

- Based on weights (tons) or volume (cubic yards) of debris hauled, and should be used when the scope of work is not well defined;
- They require close monitoring of pick up, hauling and dumping to ensure that quantities are accurate;
- Unit price contracts may be complicated by the need to segregate debris for disposal.

Lump Sum Contracts

- Establishes the total contract price using a one-item bid from the contractor;
- Should only be used when the scope of work is clearly defined, with areas of work and quantities of material clearly identified;
- These contracts can be defined in one of two ways: Area Method where the scope of work is based on a one-time clearance of a specified area and Pass Method where the scope of work is based on a certain number of passes through a specified area, such as a given distance along a right-of-way.

Time and Materials Contracts (T/M)

- This is a administratively labor intensive type of contract and should only be used if the applicant has the administrative resources to successfully accomplish and document the monitoring aspect;
- May be used for short periods of time immediately after the disaster to mobilize contractors for emergency removal efforts (generally FEMA accepts these contracts for the first 70 hours). Applicants should move towards either Unit Price or Lump Sum contract as soon as possible after the beginning of debris removal operations;
- If T/M contracts are determined by the applicant to be the most cost-effective and well-suited to the type of work, they may be continued beyond the initial 70 hour period if the following applies:
 - A determination was made and documented that no other contract was suitable and a ceiling price was included;
 - The applicant can document monitoring of contractor activities. This includes but is not limited to monitoring load tickets or completion of daily reporting forms and requesting backup to contractor invoices (i.e. time cards, etc.).
- T/M contracts must have a dollar ceiling or a not-to-exceed limit for hours (or both), and should be terminated immediately when this limit is reached;
- The contract should (a) detail labor costs to include job classification, skill level and hourly rate, (b) the price for labor and equipment applies only when in operation, (c) cost for equipment includes fuel and maintenance, (d) the community reserves the right to terminate the contract at its convenience, and (e) the community does not guarantee a minimum number of hours.

Contract Monitoring

An employee or contractor should monitor the contractor's activities to ensure satisfactory performance. Monitoring includes: verification that all debris picked up is a direct result of the disaster; measurement and inspection of trucks to ensure they are fully loaded; on-site inspection of pick up areas, debris traffic routes, temporary storage sites, and

disposal areas; verification that the contractor is working in its assigned contract areas; verification that all debris reduction and disposal sites have access control and security.

Contracting Do-Nots: FEMA does not recommend, pre-approve, or certify any debris contractor. FEMA does not certify or credential personnel other than official employees and Technical Assistance Contract personnel assigned to the disaster by FEMA. Additionally, only FEMA has the authority to make eligibility determinations, not contractors. Finally, do not accept contractor-provided contracts without close review. FEMA /Ohio EMA can provide technical assistance on contracts and contract procedures, if requested to do so by local officials.

Ineligible Contracts: FEMA will not provide funding for cost-plus-percentage of cost contracts (including markups), contracts contingent upon receipt of state or federal disaster assistance funding, or contracts awarded to debarred or suspended contractors.

See www.epls.gov (federal-list) and <http://www.sos.state.oh.us/SOS/recordsindexes.aspx> (state-list) for debarred contractor information. A second site for suspended contractors is <http://www.auditor.state.oh.us/resources/findings/default.htm>.

ENVIRONMENTAL CONSIDERATIONS

Federal, State and local regulations, laws and ordinances need to be addressed and followed for all environmental and historic preservation issues. Examples of how these considerations could affect reimbursement for debris removal operations:

- Executive Order 11988, Floodplain Management: Temporary storage sites should not be in the floodplain;
- Executive Order 12898, Environmental Justice: Do not purposefully choose routes to disposal sites that avoid more affluent neighborhoods over minority or low-income neighborhoods;
- Clean Water Act: Temporary storage sites not located within ¼ mile from ground or surface water supply.
- Ohio EPA: There was no burning of debris unless expressly authorized by the Director of Ohio EPA.

OTHER FEDERAL AGENCIES

Debris removal on federal highways is not eligible under the FEMA Public Assistance Program except in very limited circumstances.

DEBRIS REMOVAL FROM WATERWAYS

If an applicant has debris (obstructions to include sunken vessels) generated by an event within waterways, FEMA has very specific eligibility criteria. Please see FEMA policy http://www.fema.gov/government/grant/pa/9523_5.shtm for additional information or contact Ohio EMA directly.

Attachment A8—List of Qualified Contractors

Develop a list of contractors eligible to conduct business with government entities. Include type of work each contractor can perform with availability of equipment; type of collection, removal, and reduction of debris.

Waste Hauling Company’s must be registered with the Miami County Public Health Department (*)

Dempsey Waste (Allied Waste)	1577 W. River Rd	Dayton	Ohio	268-8110
Hemelgarn Roll-Off	624 Knoop Johnston Rd.	Sidney	Ohio	498-1553
Roberts Hauling	406 E. Peterson	Troy	Ohio	773-3237
Rumpke	5474 Jaysville-St. Johns Rd.	Greenville	Ohio	548-1939
Smith’s	2855 Oletha	Springfield	Ohio	325-9646
Waste Management	3795 Wagoner Ford Rd.	Dayton	Ohio	604-0354
Winston Roberts	655 W. Loy Rd.	Piqua	Ohio	778-0006
HighTec Services	15 Industry Park Court	Tipp City	Ohio	667-1772

(*) List obtained from Miami County Public Health. These companies are used for obtaining a container for debris and hauling of solid waste to the Transfer Station.

Attachment A8

Wood Waste Grinding Contractors (*)	Waste Tire Contractors (**)
Kurtz Bros. Inc 6415 Granger Rd Independence, Ohio 44131 (216) 986-9000	Rumpke 10795 Hughes Rd. Cincinnati, Ohio (513) 851-0122
R.B. Jergens 11418 N Dixie Dr. Vandalia, Ohio 45337 (937) 669-9799	Liberty Tire Services of Ohio 3041 Jackson Pike Grove City, OH 43123 (614) 871-8097
Rumpke 10795 Hughes Rd. Cincinnati, Ohio (513) 851-0122	Kelbley Transportation Inc. 2876 W. Twp Rd 18 Tiffin, Ohio 44883 (419) 937-0786
C&S Tree Recycling 2551 Dayton Rd. Springfield, Ohio 45506 (937) 323-4273	
Champion Landscape Equipment and Supply 3600 Valley St. Dayton, Ohio 45424 (937) 228-2730	

(*) Wood Waste Contractors for jurisdictions to call for chipping limbs, etc. for events such as tornadoes, wind events, etc.

(**) Tire Disposal company information found on Ohio EPA website.

Attachment A8– Area Scrap Metal Dealers

Franklin Iron and Metal	1939 East First Street	Dayton, Ohio	(937) 253-8184
Omni Source	4575 County Rd. 33 A	St. Mary's Ohio	(419) 394-3351
Polings Auto Parts	2226 N County Road 25A	Troy, Ohio	(937) 335-7855
River Metals Recycling	840 Jasper Rd.	Xenia, Ohio	(937) 372-3533
Urban Elsass & Son	600 East Statler Rd.	Piqua, Ohio	(937) 773-3337

These companies can be contacted if there is a disaster and metal can be recycled. List obtained from the internet.

Attachment A9—List of Standing Contracts

The DM, working with other officials, should develop standing contracts with private companies for equipment and labor. A schedule should be created for the periodic review of each contract’s terms by the parties involved.

Attachment B1—List of Pre-selected DMS Site Locations

DMS sites are essential to major debris clearance, removal, and disposal operations. The DM should work closely with local and State officials to develop and maintain a *current listings of potential DMS sites*.

Pre-disaster site selection teams should be formed. These teams should include local officials who are familiar with the area. Also, the teams should consult and coordinate with local residents and environmental groups to identify in advance any potential problems with a site.

Locations in Miami County for DMS sites **Tentative**

These sites are would need to be secure and manned.

Miami County Transfer Station – Troy, Ohio

Miami County Fairgrounds – Troy, Ohio

BR Mulch – Tipp City, Ohio

Attachment B2—DMS Site Location Criteria

Criteria for the location of DMS sites:

- ◆ Ownership status: 1st Priority Pre-selected DMS site on public property
 2nd Priority Public property in or near impacted area
 Last Priority Private property

- ◆ Large enough to accommodate storage area, sorting area, and volume reduction operations. Sites should range in size between 50 and 100 acres, depending on anticipated needs.

- ◆ Good road access.

- ◆ As removed as possible from residential areas, schools, churches, or other facilities with high population concentrations.

- ◆ Not in environmentally sensitive areas, such as wetlands or water well fields. Jurisdictions that have dwellings in historic preservation areas will be subject to rules that apply to each location.

IMPORTANT NOTE:

When planning site preparation, take steps to make site closure and restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to the bedrock and stockpiled in the perimeter berms. Upon site closeout, the uncontaminated soil can be respread to preserve the integrity of the tillable soils.

Temporary storage areas for hazardous waste must include a *lining with an impermeable material* so chemicals do not leak into the groundwater and soil. A separate storage area for household hazardous waste (HHW) materials, contaminated soils, and contaminated debris should be established at each site. Lined temporary storage areas should be established for ash, household hazardous waste (HHW), fuels and other materials that may contaminate soils and groundwater. The HHW storage site should be lined with an impermeable material and bermed to prevent contamination of the groundwater and surrounding area. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants.

If the site is also an equipment storage area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids.

Attachment B3—DMS Site Questions

Questions that will assist in identifying and prioritizing suitable sites

Potential Site Ownership

- Are public lands available?
- Are private land lease terms long enough?
- Are private land lease terms automatically renewable?
- Does the private land lease include a landscape restoration agreement?

Potential Site Size

- Is the site large enough to accommodate the planned debris storage and/or reduction methods?
- Will the site configuration allow for an efficient layout?

Potential Site Location

- Does site have good ingress/egress?
- Does site have good transportation arteries?
- Does site have open, flat topography?
- Does site have wetlands? If unavoidable, require the contractor to flag the area and establish buffers and/or sediment barriers.
- Does site have public water supplies, including well fields and surface waters?
- Does site have threatened and endangered animal and plant species?
- Does site have threatened and endangered species' critical habitats?
- Does site have rare ecosystems?
- Does site have historic sites?
- Does site have archaeological sites?
- Does site have sensitive surrounding land use, such as residential, school, and church?

Attachment B4—DMS Site Baseline Data Collection

Private land and public land used as temporary debris storage and reduction sites should be returned to its original condition following site closeout. Baseline data are essential to document the condition of the land before it is used as a DMS site. As soon as a site is selected, the designated debris manager and debris management team should work with local, County, and State officials to develop baseline data.

Document contractor operations that will have a bearing on site closeout, such as petroleum spills at fueling sites, hydraulic fluid spills at equipment breakdowns, contractor installation of water wells for stock pile cooling or dust control, discovery of household hazardous waste (HHW) in debris. Also, document details on any commercial, agricultural, or industrial hazardous and toxic waste storage and disposal.

Final restoration of the landscape must be acceptable to the landowner. Therefore, plan the landscape restoration as early as possible, preferably incorporating a basic plan in the lease. Come to an agreement with the landowner prior to occupancy to establish reasonable expectations of site conditions upon site closeout.

The following is a suggested **baseline data checklist**:

Before activities begin

- Take ground or aerial video/photographs.
- Note important features, such as structures, fences, culverts, and landscapes.
- Check with the State Historic Preservation Officer to determine if any structures identified are listed on or eligible for the National Register of Historic Places.
- Take random soil samples.
- Take water samples from existing wells.
- Check the site for volatile organic compounds.

After activities begin

- Establish groundwater monitoring wells.
- Take groundwater samples.
- Take spot soil samples at household hazardous waste (HHW), ash, and fuel storage areas.

Progressive updates

- Update videos and photographs.
- Update maps and sketches of site layout.
- Update quality assurance reports and fuel spill reports.

Attachment B5—Debris Estimating and Forecasting Techniques

The following information will assist in determining the amount of debris from destroyed buildings, homes, and debris piles:

⇒ **One-story building** formula:

$$\frac{L' \times W' \times H'}{27} = \text{CY} \times .33 = \text{CY (of debris)}$$

⇒ **One-story house** formula:

$$\frac{L' \times W' \times 8}{27} = \text{CY} \times .33 = \text{CY (of debris)}$$

⇒ **Mobile home** formula:

$$\frac{L' \times W' \times H'}{27} = \text{CY (of debris)}$$

⇒ **Debris pile** formula:

$$\frac{L' \times W' \times H'}{27} = \text{CY (of debris)}$$

NOTE: CY = cubic yards

NOTE: The .33 factor accounts for “air space” in the structure.

NOTE: The .33 factor is not applied to mobile home calculations because of their compact construction.

Reminders to assist in performing debris estimates:

- Look beyond the curb into side and backyards and at condition of the homes. Most debris in these areas will eventually move to the curb.
- Wet storms will produce more personal property debris (household furnishings, clothing, rugs, etc.) if roofs are blown away.
- Look for hanging debris such as broken limbs after an ice storm.
- Flood-deposited sediments may be compacted in place. Volume may increase as debris is picked up and moved.
- Using aerial photographs in combination with ground measurements will help determine if there are any voids in the middle of large debris piles.
- Treat debris piles as cubes, not a cone, when performing estimates.

Forecasting Modeling for Debris Volumes

Vegetative Cover Multiplier (yard waste)

Typical House (square feet)	None	Light	Medium	Heavy
1000 SF.	98 cy	107 cy	127 cy	147 cy
1200 SF.	118 cy	129 cy	153 cy	177 cy
1400SF.	137 cy	150 cy	178 cy	205 cy
1600 SF.	155 cy	170 cy	201 cy	232 cy
1800 SF.	175 cy	192 cy	228 cy	263 cy
2000SF.	195 cy	215 cy	254 cy	293 cy
2200 SF.	215 cy	237 cy	280 cy	323 cy
2400SF.	235 cy	259 cy	306 cy	353 cy
2600SF.	255 cy	280 cy	332 cy	383 cy

- Single wide mobile home = 290 cy of debris
- Double wide mobile home = 415 cy of debris
- Personal property (as debris) from average flooded residence w/o basement 25-30 cy
- Personal property (as debris) from average flooded residence with basement 45-50 cy

Rule of Thumb:

- 15 trees @ 8 inches in diameter = 40 cy average
- To convert cubic yards of Construction & Demolition debris (C&D) debris to tons, divided by 2
- To convert tons of C&D debris to cubic yards, multiply by 2.
- To convert yards of woody debris to tons, divide by 4.
- To convert tons of woody debris to cubic yards, multiply by 4.

Attachment B6—Debris Reduction Information

Reduction by burning

The “Reduction by Burning” section is presented for reference purposes. Burning should *not* be considered a viable debris-reduction option in Miami County. Because of the population density in Miami County, it is **highly unlikely** that the Ohio Environmental Protection Agency (OEPA) or Regional Air Pollution Control Agency (RAPCA) would issue a variance that would allow burning disaster-generated debris. A variance would only be considered under catastrophic conditions that *far exceed* what is expected in the aftermath of a tornado.

Uncontrolled open burning is the least desirable method of debris reduction because of the lack of environmental control. In some cases this method may be used if a Department of Natural Resources gives a permit.

Controlled open burning is a cost-effective way of reducing debris. Controlled open burning is used when there is clean wood tree debris. The controlled burning allows the remaining ash left over to be a soil additive if the Department of Agriculture or applicable local agency determines it can be recycled. However, if there is any treated lumber, poles, nails, bolts, tin, aluminum sheeting, or other building materials that enter the burning material operations must stop because the of the possible hazards associated with the burning of materials.

Air curtain pit burning reduces environmental concerns open burning has by using a system that produces high temperatures and reduces pollutants released into the atmosphere. However, someone who is familiar with the operation of the system should use it. Experience has shown many contractors are not familiar with the operation of it.

Refractor lined pit-burning uses a pre manufactured lined pit. A refractor-lined pit operates under the same principal as the air curtain operating at high temperatures. The system allows for the reduction of debris by 95%. Manufacturers claim that 25 tons per hour of reduction is possible.

Environmental Controls

- Maintain at least 1000 feet between the burn pile and the debris piles. Also, maintain at least 1000 feet between burn piles and buildings.
- Extinguish the fire 2 hours before removal of ashes. Remove the ashes when they reach two inches below the top of the burn pit.
- Establish a burn area of no wider than eight feet and between nine and fourteen feet deep.
- Construct burn-pit with limestone and reinforce them with anchors or wire mesh to support loaders. Seal the bottom of the pit with limestone or clay to keep ash out of aquifers.
- Seal the ends of the pits with dirt or ash to 4 feet tall.
- Construct a twelve-inch dirt seal on the lip of the pit to seal the blower nozzle. Place the nozzle three to six inches from the end of the pit.
- Construct one-foot high, unburnable stops along the edge of the pit to prevent the loaders from damaging the pit.
- Never place any hazardous chemicals or materials within the incineration pit.
- Place the airflow so it hits two feet below the top edge of the pit and don't allow the debris to break airflow except for loading.
- Construct the pit to no longer than the length of the blower system.

Reduction by grinding and chipping

- Strong winds and tornadoes present opportunity for a big grinding and chipping operations as the method of debris reduction. The resulting product of the chipping and grinding operation may be used as a landfill product, used as topsoil, or used for residential applications.
- Chipping operations are suitable in areas where streets are narrow or in groves of trees where it is cheaper to reduce the vegetation to mulch and then return it to affected areas.
- The debris management task force should work with local environmental and agricultural groups to see if there is any market for mulch.
- When contracting a mulching project the most important consideration is the specification of the size of the mulch. The mulch also must remain free of paper and plastic if used for agricultural purposes. The following information is for the use of mulch as a agricultural product:

Size: Average size of wood chips is not to exceed four inches in length and one half inch in diameter. The debris reduction rate for moderately contaminated debris is 100 to 150 cubic yards per hour and when the debris is relatively clean it is 200 to 250 cubic yards per hour.

Contaminants: The contamination rate for material other than wood products should be less than ten percent of the mulch. Eliminate plastics completely. Use rake loaders to pick up debris because normal loaders pick up earth, which is part of the contaminant list and harms the chipper.

- Chippers are best used in residential areas, orchards, or groves. Trees present a problem if they are pushed to the side of the public right-of-way because of cost associated with transportation.
- Grinders are ideal for use at debris staging and reduction sites due to high volume capacity. Due to high capacity of debris a large storage area is needed for a large grinding operation. Sound protection also becomes a very important issue.

Reduction by recycling

- Recycling offers an option to reduce debris before it is hauled to the landfill. Recycling is a publicly supported function that has economic values for the recovered materials. Metals, wood, and soils are commonly recyclable. A drawback is the impact of recycling on the environment. In areas of agriculture there may be a large amount of fertilizer use. Therefore, use of soil may be limited due to contamination.
- Recycling, when chosen, should be by a contractor who specializes in sorting debris. Contract monitoring is a part of a recycling operation because the contractors must comply with local, state and federal environmental regulations.
- Recycling should be given consideration early in a disaster because it may reduce cost of debris removal. The materials capable of being recycled include:

Metals- Most metals are able to be recycled and do not contain iron. However, trailer frames and other iron containing metals may be included in the recyclable materials. The metals are separated by the use of an electromagnet. The resulting materials can be sold to metal recycling firms.

Soil- Soil recycling operations use large pieces of equipment to pick up soil. The soil is transported to a staging area and reduction sites where it is combined with organic material that will decompose. Large amounts of soil can be recovered if the material is put through a screen system. The resulting soil can be given back to the agricultural community. The soil also may be used for local landfills as cover materials.

Wood- Wood debris can be ground or chipped into mulch.

Construction material- Concrete or other building materials can be used for other purposes if there is a need for them. The materials also may be shred to reduce volume then used as a cover for landfills.

Residue material- Residue material that cannot be recycled, such as cloth, rugs, and trash, can be sent to landfills for disposal.

Attachment B7—DMS Site Closeout Issues

Environmental Restoration Stockpiled debris will be a mix of woody vegetation, construction material, household items, and yard waste. Household hazardous waste, ACM and medical wastes should be segregated and removed prior to being stockpiled. Activities done at the temporary debris storage and reduction site will include stockpiling, sorting, recycling, incineration, grinding, and chipping. Incineration operations will occur in air curtain pits and only woody debris will be incinerated. Because of TDSR site operations, contamination from petroleum spills or runoff from incineration and debris piles may occur. Therefore close monitoring of the environmental conditions is a coordinated effort.

IMPORTANT NOTE: Temporary storage areas for hazardous waste must include a *lining with an impermeable material* so chemicals do not leak into the groundwater and soil.

Site Remediation During the debris removal process and after the material is removed from the debris site; environmental monitoring will need to be conducted. This is to ensure no long-term environmental effects occur. Environmental monitoring is needed for the following areas:

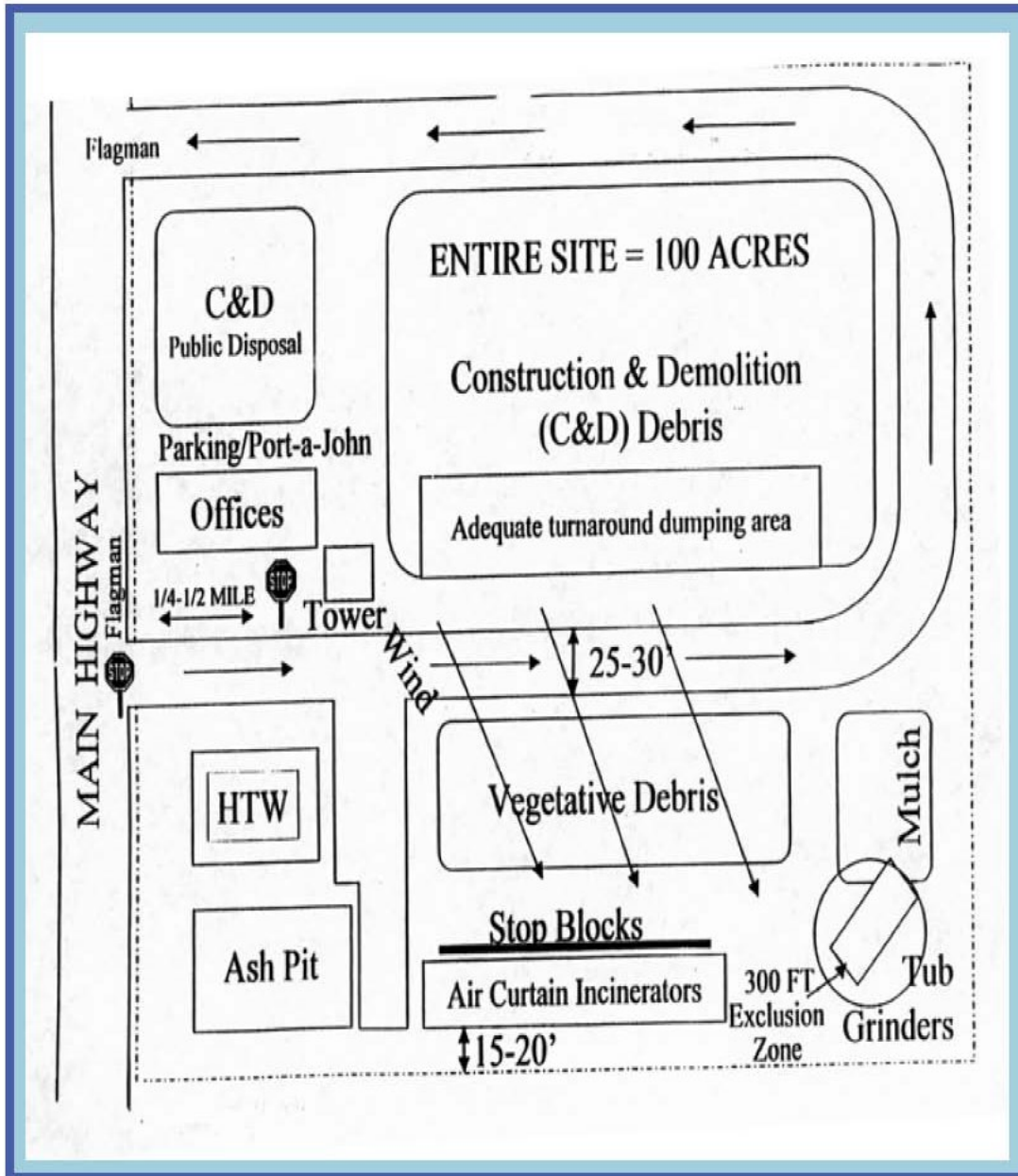
- Ash-Monitoring consists of chemical testing to determine suitability of material for landfill placement.
- Soils-Monitoring consists of using portable meters to determine if soils are contaminated by volatile hydrocarbons. Contractors do monitoring if there has been a determination that chemicals such as oil or diesel has spilled on site.
- Groundwater-Monitoring is done on selected sites to determine effects of rainfall leaching (leaking) through ash areas or stockpile areas.
 - Develop a checklist for site close out procedures. A sample checklist is included in this document.

Attachment B8—DMS Site Closeout Checklist

The following is a recommended TDSR site closeout checklist.

- Site Number and Location
- Date closure complete
- Household Hazardous Waste removed
- Contractor equipment removed
- Contractor petroleum and other toxic spills cleaned up
- Ash piles removed
- Compare baseline information of the temporary site conditions after the contractor vacates the site.

Attachment B9—Sample Layout of DMS Site



Attachment C1—Debris Classifications

Note: Every effort will be made to recycle the materials listed below that would be feasible to recycle.

◆ **General Solid Waste (Municipal Solid Waste)** — appliances (including white metals), food, packaging, clothing, furniture, machinery, electronic equipment, garbage, plastic, paper, bottles, cans, loose carpeting, paper products, scrap tires, street dirt, dead animals

◆ **Agricultural Waste/Vegetative Waste** — vegetative or woody waste, tree limbs, brush, shrubs

NOTE: this category does *not* include buildings, dead animals, or vehicles

◆ **Asbestos Containing Material (ACM)** — is any material(s) containing asbestos. All structures (residential, commercial and industrial) built before 1975 may contain significant amounts of asbestos. In particular large structures built before 1975 typically contain asbestos pipe wrap, siding, ceiling tiles, and other building materials high in asbestos content. Additionally, structures built after 1975 may also contain asbestos.

◆ **Construction and Demolition Debris (C&DD)** — brick, stone, mortar, asphalt, lumber, wallboard, glass, roofing, metal, piping, fixtures, electrical wiring, heating equipment, insulation, carpeting attached to structures, railroad ties, utility poles, mobile homes

◆ **Clean hard-fill:** C&DD which consists only of reinforced or non-reinforced concrete, asphalt concrete, brick, block, tile, and/or stone which can be reused as construction or fill material

◆ **Infectious Waste** — sharps (needles, medical related glass, etc.), syringes, blood-containing items such as tubing, clothing, bandages, etc.

◆ **Hazardous Waste (including Household Hazardous Waste [HHW])** — flammable materials (fuels, gasoline, kerosene, propane tanks, oxygen bottles, etc.), explosives, batteries, common household chemicals, industrial and agricultural chemicals, cleaners, solvents, fertilizers, etc.

◆ **Tires** — any type of tires, including passenger, truck or farm tires.

Attachment D1—Landfills and Related Facilities

Sanitary Landfills

	Phone
Stony Hollow Landfill 2450 South Gettysburg Rd. Dayton, OH 45418 POC: Frank Dockery	937-268-1133
Rumpke Sanitary Landfill Inc 10795 Hughes Rd. Cincinnati, OH 45251 POC: Kyle Aughe (Dayton contact) Mike Bramkamp (Dayton contact) (Cincinnati Contact)	937-461-0004 x 7803 937-461-0004 x 7810 513-851-0122
Rumpke Brown County Landfill 9427 Beyers Rd. Georgetown, Ohio 45121	937-378-4126
Cherokee Run Sanitary Landfill 2946 US Highway 68 N Bellefontaine, OH 43311	937-593-3566
Licensed Transfer Station	
Miami County Solid Waste & Recycling Facility 2200 N County Rd. 25-A Troy, Ohio 45373 POA: Scott Pence	937-440-3488

Hardfill Disposal Locations

(clean dirt, concrete, asphalt, steel reinforced concrete, brick, block & tile ONLY)

AJMS Hardfill	6250 Webster St.	Dayton	890-3061
Broadway Sand & Gravel	2979 Sandridge Rd.	Moraine	299-1166
Henry Jergens	1280 Brandt Pike	Dayton	233-1830
Jergens HF #2	Valley Street	Dayton	233-1830
K West	11230 N. Dixie Dr.	Vandalia	890-9378
McMahan's Dump	~2400 Valley Street	Dayton	233-3750
Montgomery County	Webster Street	Dayton	781-2662
Partin Hardfill	4321 Taylorsville Rd.	Huber Heights	237-6553
Red Oak Construction	6050-6192 Webster St.	Dayton	274-2892
Stark Wrecking	7081 Germantown Pike	Miamisburg	866-5032
Taylorsville Hardfill	4252 Taylorsville	Huber Heights	233-7500
Team Industrial HF	51 S. Elm St.	West Carrollton	270-1251
Team Machinery	4641 Valley St.	Dayton	270-1251
Tipp Stone	8172 Meeker Rd.	Dayton	890-4051

**Licensed Demolition Disposal Sites
Construction and Demolition Debris (C&DD)**

Eckhart Road CDD Facility	9330 Eckhart Road	Germantown	937-855-2227	Scott Weidle
S.R.I Incorporated	1550 Soldiers Home-West Carrollton Rd.	Dayton	937-268-8991	Steve Rauch
Taylorville Road Hardfill	4252 Taylorville Road	Huber Heights	937-233-7500	Jim Hemelgarn
Vance Environmental Limited	2101 Vance Rd.	Dayton	937-263-1011	Jason Willis

Registered Composting Facilities

BR Mulch	620 Ginghamburg Rd	Tipp City	937-667-8288
Broadway Sand and Gravel, Inc.	2000 Sandridge Dr.	Dayton	937-299-1166
Chaney's Nursery	1610 McKaig	Troy	937-339-1193
City of Piqua Facility	6030 N. Piqua-Troy Rd.	Piqua	937-778-2095
Dye Mill Rd. (Troy)	1200 Dye Mill Rd.	Troy	937-339-2641
Greenline Products	4595 Infirmary Rd	West Carrollton	937-866-5370

Scrap Tire Collection Facilities

Miami County Solid Waste & Recycling Facility
 2200 N County Road 25-A
 Troy, Ohio 45373
 POA: Scott Pence 937-440-3488

S.R.I. Incorporated
 1550 Soldiers Home-West Carrollton Rd.
 Dayton, OH 45418
 POC: Roger Cowden 937-268-8991

Licensed Mobile Scrap Tire Recovery Facilities

Liberty Tire Services of Ohio
 3041 Jackson Pk.
 Grove City, OH 43123
 Phone: (614) 871-8097

Rumpke Sanitary Landfill Inc
 10795 Hughes Rd.
 Cincinnati, OH 45251
 Phone: (800) 582-3107

Attachment D2—Hazardous Waste Vendors List

The services provided by these vendors vary from company to company. Contact the vendors directly for more complete information on their specific services and capacities.

Company/Address	Phone	Fax	Contact
American Ecology 300 E. Mallard Dr., Suite 300 Boise, ID 83706 www.americanecology.com	(800) 590-5220	(208) 331-7900	
Clean Harbors Environmental Services 4879 Spring Grove Rd. Cincinnati, OH 45232 www.cleanharbors.com	(800) 805-4582 (X 6304) or (513) 681- 6242	(513) 681-0869	John Stevens
Clean Water Ltd.(formerly Perma-fix) 300 Cherokee Rd Dayton, OH 45417 www.cleanwaterltd.com	(937) 268-6501 or (800) 543-3670	(937) 268-9059	
Environmental Enterprises, Inc. 4650 Spring Grove Rd. Cincinnati, OH 45232 www.eeusa.com	(513) 541-1823 (800) 392-1503	(513) 782-8950	Brad Boyer
E.Q. Environmental Quality 2050 Central Ave., SE Canton, Ohio 44707 www.eqonline.com	(330) 456-6238		
Heritage Crystal Clean 10706 Maintenance Rd. Vandalia, OH 45377 www.crystal-clean.com	(937) 454-1093	(937) 454-1218	Alan Spiller
PSC 1701 E. Matziner Rd. Toledo, OH 43612 www.pscnow.com	(419) 726-1500	(419) 729-8501	
Pollution Control Industries 4343 Kennedy Ave. East Chicago, IN 46312 www.pollutioncontrol.com	(800) 388-7242 (219) 397-3951	(219) 397-6411	: Nick Lakich
Veolia ES Technical Solutions 4301 Infirmary Rd. West Carrollton, OH 45449 www.veoliaes.com	(937) 859-6101	(937) 859-4671	

Attachment D3—Registered Infectious Waste Transporters

This list indicates vendors who operate in Miami County for a complete list of infectious waste transporters registered to operate in the State of Ohio, go to the Ohio EPA website <http://www.epa.state.oh.us>.

SafeWaste, Inc.
140 Wooster Pike
Milford, OH 45150
Phone: (513) 248-0022

Stericycle, Inc.
28161 N. Keith Dr.
Lake Forest, IL 60045
Phone: (330) 393-0385

Special Waste Systems Inc.
Tipp City, OH 45371
(937) 669-9000

Attachment E1—Certification of Compliance

**CERTIFICATION OF COMPLIANCE WITH SECTION 3517.13
OF THE OHIO REVISED CODE**

_____ (the “Subdivision”) has entered into a contract for the provision of goods and/or services with _____ (the “Provider”), an individual, partnership, unincorporated business, an association, a professional association, estate, trust, corporation, or business trust, the situs of the principal office and place of operations of which is located at _____. The undersigned authorized agent of the Provider certifies on behalf of the Provider that all of the following persons, if applicable, are in compliance with Divisions (I) and (J) of Section 3517.13 of the Ohio Revised Code with respect to all public officials who have or had authority to award that contract and all public officials who may authorize or receive goods and/or services under that contract:

- A. Myself;
- B. Each partner or owner of the partnership or association;
- C. Each shareholder of the association;
- D. Each executor or administrator of the estate;
- E. Each trustee of the trust;
- F. Each owner of more than twenty percent (20%) of the corporation or business trust;
- G. Each spouse of any of the above listed persons;
- H. Each child, between seven (7) and seventeen (17) years of age, of any of the above listed persons;
- I. Any political action committee associated with the partnership, the unincorporated business, the estate, the trust, the corporation, or the business trust; and,
- J. Any combination of the persons and entities identified in (A) through (I) above.

The undersigned certifies such compliance on and since _____ (and on the date the Subdivision and the Provider entered into the Contract referenced above if it has not been entered into fully by them). This certification shall be a part of the above-referenced Contract between the Subdivision and the Provider.

By: _____

AUTHORIZED REPRESENTATIVE

Date Signed: _____

WARNING

By signing this Certification of Compliance with Ohio Revised Code Section 3517.13, you are making a representation as to the truth of the statements contained herein. Making a false certification is a felony crime punishable by up to eighteen months in prison, and/or up to \$2,500.00 for an individual or \$7,500.00 for an organization. R.C. § 3517.992(R)(3).

THIS DOCUMENT SHOULD BE RETAINED FOR RECORD PURPOSES

MIAMI COUNTY EMERGENCY OPERATIONS PLAN
APPENDIX 9 TO ESF #3
FEMA ACCEPTANCE LETTER FOR MIAMI COUNTY

On Next Page

U.S. Department of Homeland Security
Region V
536 South Clark Street, Floor 6
Chicago, IL 60605

JUL 28 2014



FEMA

Nancy J. Dragani
Executive Director
Emergency Management Agency
2855 West Dublin- Granville Rd.
Columbus, Ohio 43235-2206

Dear Ms. Dragani:

Re: Miami County Debris Management Acceptance Letter

This letter responds to the Ohio Emergency Management Agency's request dated June 23, 2014 for the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) to accept Miami County's Debris Management Plan for participation in the Public Assistance (PA) Alternative Procedures Pilot Program for Debris Removal. This pilot program allows a one-time two (2) percent Federal cost share increase for debris removal operations performed within 90 days from the start of the incident period of a major disaster or emergency declaration.

FEMA Region V has determined that the Plan contains the basic planning elements of a Debris Management Plan along with at least one prequalified debris and wreckage removal contractor (See enclosed Debris Management Plan Checklist). Therefore, FEMA has determined the Plan is acceptable. Accordingly, Miami County may receive a one-time two (2) percent Federal cost share increase as part of the PA Alternative Procedures Pilot Program for Debris Removal. Your office should notify FEMA when Miami County wishes to apply the incentive to its debris removal work.

Acceptance of this plan does not mean that FEMA is approving any operational component of the plan nor does it mean that the Federal government will fund work conducted under any aspect of the Plan. Eligibility of costs for debris removal and management in a declared major disaster or emergency will be determined based on established PA Program authorities, regulations, policies and guidance. Subgrantees must comply Federal procurement requirements (i.e., competitive bidding) as outlined in 44 CFR § 13.36 in the procurement of debris removal services.

Should Ohio Emergency Management Agency have any questions you may contact Public Assistance Branch Chief, Amanda Ratliff, at 312-408-5440.

Sincerely,

Janet M. Odesho
Acting Regional Administrator

www.fema.gov



- Bureau of Motor Vehicles
- Emergency Management Agency
- Emergency Medical Services
- Office of Criminal Justice Services
- Ohio Homeland Security
- Ohio Investigative Unit
- Ohio State Highway Patrol



John R. Kasich, Governor
John Born, Director
Nancy J. Dragani
Executive Director

Emergency Management Agency
2855 West Dublin-Granville Road
Columbus, Ohio 43235-2206
(614) 889-7150
www.ema.ohio.gov

June 23, 2014

Andrew Velasquez, III, Regional Administrator
FEMA, RV
536 S. Clark Street, 6th Floor
Chicago, Illinois 60605


Through: Amanda Ratliff, PA Branch Chief

Dear Mr. Velasquez:

The Ohio Emergency Management Agency has reviewed the attached Miami County Debris Management Plan. It is being submitted for consideration under the Public Assistance Alternate Procedures Pilot Program for Debris Removal.

If you have any questions, please contact Laura Adcock, State Public Assistance Officer, at 614-799-3667.

Regards,


NANCY J. DRAGANI
Executive Director

NJD:lea

cc: Miami County EMA

Mission Statement

"to save lives, reduce injuries and economic loss, to administer Ohio's motor vehicle laws and to preserve the safety and well being of all citizens with the most cost-effective and service-oriented methods available."



APPENDIX I
DISTRICT RULES



RESOLUTION NO. 08-03-300

**AMEND AND RESTATE RULES AND REGULATIONS OF THE
MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT**

SANITARY ENGINEERING

Mr. O'Brien introduced the following resolution and moved the adoption of the same.

WHEREAS, on February 7, 1968, the Board of Commissioners of Miami County, Ohio (the "Board"), pursuant to O.R.C. §343.01, established the Miami County Garbage and Refuse Disposal District which, pursuant to O.R.C. §343.01 as amended effective June 24, 1988 by Am. Sub. H.B. 592, was reconstituted by the Board on February 15, 1989, as the Miami County Solid Waste Management District (the "District"); and,

WHEREAS, the District is comprised of all incorporated and unincorporated territory within Miami County, Ohio, and includes the entire Village of Bradford, Ohio, in accordance with O.R.C. §3734.52(A); and,

WHEREAS, pursuant to Sections 343.01(G) and 3734.53(C) of the Ohio Revised Code, and the Miami County Solid Waste Management Plan (the "Plan") approved by the Director of the Ohio Environmental Protection Agency on September 5, 1996, the Board is authorized to adopt, amend, repeal, publish and enforce rules to provide for the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the District, and to assure that the Plan is properly implemented; and,

WHEREAS, the Board has determined that the District must diligently supervise the maintenance, protection and use of the solid waste collection system and solid waste facilities within the District in order to assure the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the District and to assure that the Plan is properly implemented; and,

WHEREAS, the Board has determined that the District's supervision of the solid waste collection system and solid waste facilities within the District can be more effectively and satisfactorily exercised when solid waste that is generated and intended for disposal within the District is required to be taken to the publicly-owned Miami County Solid Waste and Recycling Facility; and,

WHEREAS, the Board has determined that in order for the District to effectively maintain, protect, monitor and control the manner of use of solid waste collection, processing and disposal within the District, it is necessary for the District to obtain information regarding the quantity and type of materials being generated, collected, processed and disposed of within the District from persons that conduct solid waste collection, processing and disposal activities within the District; and,

WHEREAS, the Board has determined that to protect the public health and welfare by preventing unsanitary, unsafe, improper, unsupervised or poorly managed collection and disposal of solid waste within the District, it is necessary to require the collection and disposal of solid waste generated within the District to conform to uniform rules and regulations; and,

WHEREAS, the following rules and regulations are authorized by the Revised Code and the Plan, and the Board has determined that such rules and regulations are necessary to provide for the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the District, and to protect the public health and welfare and assure proper implementation of the Plan.

Now, therefore be it

RESOLVED, by the Board of Miami County Commissioners, to amend and restate the rules and regulations of the Miami County Solid Waste Management District in their entirety as attached hereto as Exhibit A.

BE IT FURTHER RESOLVED, by the Board of Miami County Commissioners that the Clerk shall cause the amended rules set forth herein to be published forthwith in the Miami Valley Sunday News, and that said rules become effective upon the date of such publication.

Mr. Widener seconded the motion and the Board voted as follows upon roll call:

Mr. Evans, Yea;

Mr. O'Brien, Yea;

Mr. Widener, Yea;

DATED: March 11, 2008

CERTIFICATION

I, Leigh M. Williams, Clerk to the Board of Miami County Commissioners, do hereby certify that this is a true and correct transcript of action taken by the board under the date of March 11, 2008.

Leigh M. Williams, Clerk

EXHIBIT A TO RESOLUTION NO. 08-03-300

**AMENDED AND RESTATED RULES AND REGULATIONS
OF THE MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT**

**RESOLUTION NO. 08-03-300
DATED: MARCH 11, 2008**

**MIAMI COUNTY SOLID WASTE DISTRICT
RULE NUMBER 1-01**

DEFINITIONS

As used in the rules adopted by the Miami County Solid Waste Management District:

(A) **"Acceptable Waste"** means that portion of Solid Waste that is discarded by any person located within the District, which is appropriate for disposal, transfer, or processing at a designated Solid Waste Facility, but does not include any Separated Recyclable Materials, Separated Yard Waste, Construction and Demolition Debris, or Unacceptable Waste. If a substance or material that is not considered harmful, toxic, or dangerous as of the date of this rule, is subsequently determined to be harmful, toxic, or dangerous to public health or the environment by any governmental agency having appropriate jurisdiction, then any such substance or material shall thereupon constitute Hazardous Waste or Unacceptable Waste for purposes of this rule.

(B) **"Board"** means the Board of County Commissioners of Miami County, Ohio.

(C) **"Collection"** or **"Collect"** means the removal, conveyance or transportation of Solid Waste.

(D) **"Commercial Hauler"** means any Person who engages in Collection as a for-profit business activity, or any Person that regularly and systematically Collects Solid Waste within the District other than Solid Waste generated by that Person.

(E) **"Composting"** means the controlled biological decomposition of organic solid wastes including, but not limited to, Separated Yard Waste, under predominately aerobic conditions, and which stabilizes the organic fraction of a material. Fermentation and/or putrefaction, the decomposition under predominantly anaerobic conditions resulting in the production of leachate and odor, is not composting.

(F) "**Construction and Demolition Debris**" means those materials resulting from the alteration, construction, destruction, rehabilitation, or repair of any manmade physical structure, including, without limitation, houses, buildings, industrial or commercial facilities, or roadways. Construction and Demolition Debris does not include materials identified or listed as solid wastes or hazardous waste pursuant to Chapter 3734. of the Revised Code and rules adopted under it; materials from mining operations, nontoxic fly ash, spent nontoxic foundry sand, and slag; or reinforced or non-reinforced concrete, asphalt, building or paving brick, or building or paving stone that is stored for a period of less than two years for recycling into a usable construction material.

(G) "**Designated Solid Waste Facility**" shall mean any solid waste facility designated in the Plan or hereafter designated pursuant to Sections 343.013, 343.014 or 343.015 of the Ohio Revised Code. The designated solid waste facilities of the District, as of the date of this rule are:

1. The publicly-owned Miami County Solid Waste and Recycling Facility located at 2200 North County Road 25A, Troy, Ohio (Acceptable Solid Waste); and

(H) "**District**" means the Miami County Solid Waste Management District with its principal offices located at 201 West Main Street, Troy, Ohio 45373.

(I) "**Hazardous Waste**" means any waste which, by reason of its listing, composition or characteristics is a hazardous waste, as defined in the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended (including, but not limited to, amendments thereto made by the Solid Waste Disposal Act Amendments of 1980), and related federal, state and local laws and regulations, or in any additional or substitute federal, state or local laws and regulations pertaining to the identification, treatment, storage or disposal of toxic substances or hazardous wastes, as any of the foregoing may from time-to-time be amended or replaced.

(J) "**Person**" includes any natural person; a local, state, or federal government, or any political subdivision, agency, or instrumentality thereof; a corporation, business trust, estate trust, partnership, limited liability corporation, association, or any other legal entity or organization.

(K) "**Plan**" means the Miami County Solid Waste Management Plan initially approved by the Director of the Ohio Environmental Protection Agency on September 5, 1996, and as may from time-to-time be amended.

(L) "**Processing**" or "**Process**" means collection, sorting, cleansing, and treating of Acceptable Waste that would otherwise be disposed in a solid waste disposal facility for the purpose of recovering Recyclable Material and returning Recyclable Material into commerce.

(M) "**Recyclable Material**" means any material generated within the District which is capable of being processed at a recycling or material recovery facility, for which there is

a resale market, and which is identified by the District in writing from time-to-time. Such materials typically include, but are not necessarily limited to, glass bottles and jars, paper, metal products and containers, plastics, fiber material and other similar materials.

(N) **"Rule"** means any rule promulgated, adopted and published by the Board, within its power to adopt rules reserved in the Plan, and authorized by Sections 343.01(G) and 3734.53(C) of the Ohio Revised Code, as now existing or hereafter amended.

(O) **"Separated Recyclable Material"** means a Recyclable Material which has been separated at the point of generation or at the point of collection from other Solid Waste, and includes, but is not limited to, such measures as placing yard waste in portable containers, compartments of portable containers, or vehicles dedicated to Separated Recyclable Material collection.

(P) **"Solid Waste"** means such unwanted residual solid or semisolid material as results from residential, industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining or demolition operations, or other waste materials of the type that would normally be included in demolition debris, nontoxic fly ash, spent nontoxic foundry sand, and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, tires, combustible and non-combustible material, street dirt, and debris. Solid Waste does not include any material that is an infectious waste or a Hazardous Waste.

(Q) **"Unacceptable Waste"** means that portion of Solid Waste which is not permitted by the District or by applicable law to be delivered or disposed of at a Designated Solid Waste Facility as originally designed, medical waste, ashes, foundry sand, asbestos, sealed drums/barrels, white goods, motor vehicles (including such major motor vehicle parts as automobile transmissions, rear ends, springs and fenders), agricultural and farm machinery and equipment, marine vessels and major parts thereof, any other type of machinery or equipment, liquid wastes, non-burnable construction materials, non-burnable non-combustible construction materials and/or demolition debris which in the reasonable judgment of the District (1) may present a substantial endangerment to health or to safety, (2) would cause applicable air quality or water effluent standards to be violated by the normal operation of facilities owned or operated by the District, or (3) has a reasonable possibility of adversely affecting the operation of the District's facilities or Designated Solid Waste Facility, unless such unacceptable waste is delivered in minimal quantities and concentrations as part of normal collections in which case it shall constitute Acceptable Waste. Bulky waste such as trees larger than four (4) feet long and/or six (6) inches in diameter, wood, lumber, whole waste tires, mattresses, furniture and household appliances, in excess of 20 cubic yards per day, or any vehicle which has a load consisting primarily of such bulky waste, shall be considered Unacceptable Waste; any source, special nuclear or by-product material within the meaning of Atomic Energy Act of 1954, as amended, and related regulations; or any other material posing a threat to health or safety, including, without limitation, infectious waste, pathological or biological wastes, septic, cesspool or other human wastes, human and animal remains, cleaning fluids, crankcase oils, cutting oils, paints, acids, caustics, poisons, explosives and drugs.

(R) "**Separated Yard Waste**" means Yard Waste that has been separated at the point of generation or at the point of collection from other Solid Wastes and includes, but is not limited to, such measures as placing Yard Waste in portable containers and compartments or portable containers dedicated to Yard Waste collection, and vehicles dedicated to Yard Waste collection.

(S) "**Yard Waste**" means Solid Waste that includes only leaves, grass clippings, brush, garden waste, tree trunks, holiday trees, and prunings from trees or shrubs. Yard waste does not include industrial or agricultural processing wastes.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 2-01**

**REQUIREMENT FOR SUBMISSION AND APPROVAL OF PLANS
FOR THE CONSTRUCTION OF SOLID WASTE FACILITIES**

No Person shall commence the construction, enlargement, or modification of any Solid Waste transfer, disposal, recycling, or resource recovery facility until general plans and specifications for the proposed construction, enlargement, or modification have been reviewed and approved by the Board as complying with the Plan. General plans and specifications submitted to the Board for review shall include all information necessary for the Board to evaluate whether the proposed construction, enlargement, or modification complies with each of the criteria listed below. For the purpose of this rule, "modification" includes a physical change or change in the method of operation of a Solid Waste facility, or the utilization of a legitimate recycling facility as a Solid Waste transfer facility. The Board may obtain the assistance of the Miami County Sanitary Engineering Department and other technical consultants for purposes of performing the review required by this rule. The Board shall approve the general plans and specifications if, after conducting the review, the Board determines that the proposed construction, enlargement, or modification:

- a. Is consistent with the goals, objectives, projections, and strategies contained in the Plan, and
- b. Will not adversely affect financing for the implementation of the Plan; and
- c. Will not adversely affect achievement of the Board's specific objectives for designating the Miami County Solid Waste and Recycling Facility, including, but not limited to, promoting the maximum feasible utilization of the Miami County Solid Waste and Recycling Facility for the purpose of paying outstanding debt obligations and other expenses of the Miami County Solid Waste and Recycling Facility; and

- d. Will be installed, operated and maintained to be harmonious and appropriate in appearance with the existing or intended character of the area where the proposed Solid Waste disposal, transfer, recycling, or resource recovery facility will be located; and
- e. Will be served adequately by essential public facilities and services; and
- f. Will not create excessive additional requirements at public cost for public facilities or services, and will not be detrimental to the economic welfare of the community; and
- g. Will not involve the excessive production of traffic, noise, smoke, fumes, or odors; and
- h. Will have vehicular approaches to the property that are designed not to create an interference with traffic; and
- i. Will not result in the destruction, loss or damage of a natural, scenic, or historic feature of importance to the community.

To the extent that any of the criteria identified in Rule 2-01(a) through (i), above, establish a design standard that is addressed by rules of the Ohio Environmental Protection Agency for the issuance of a Solid Waste facility construction permit, the Board shall exclude those criteria from the Board's review and determination pursuant to this Rule.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 3-01**

PROHIBITION ON DISPOSAL OF RECYCLABLE MATERIAL

No Person shall incinerate or landfill Separated Recyclable Materials without the prior written consent of the District.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 4-01**

PROHIBITION ON COMBINING RECYCLABLE MATERIAL WITH SOLID WASTE

No Person shall combine Separated Recyclable Materials with Solid Waste that is intended for Processing or landfill disposal without the prior written consent of the District.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 5-01**

DELIVERY OF SOLID WASTE TO DESIGNATED FACILITIES

No Person shall deliver Acceptable Solid Waste to any facility other than a Designated Solid Waste Facility except pursuant to a waiver granted to such Person by the District.

MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT RULE NUMBER 6-01

WAIVER FROM DESIGNATION

Any Person may request, in writing, that the Board grant a waiver permitting the delivery of Solid Waste to a Solid Waste facility other than a Designated Solid Waste Facility. All written waiver requests shall include such information and explanation as are required to demonstrate that the requested waiver, if granted, (1) is not inconsistent with the projections contained in the Plan, and will not adversely affect the implementation and financing of the Plan; or (2) that the Solid Waste that is the subject of the waiver request is exempt from delivery to a Designated Solid Waste Facility pursuant to applicable law or rules of the District. All such waiver requests shall be submitted to the Miami County Solid Waste Management District, attention: Solid Waste Coordinator, 2200 N 25-A, Troy, Ohio 45373. All such waiver requests shall be clearly marked as complying with the requirements of this Rule Number 6-01 and Section 343.01(I)(2) of the Revised Code.

MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT RULE NUMBER 7-01

PROHIBITION OF SCAVENGING

No Person shall remove Solid Waste or Recyclable Material from any Solid Waste Facility, or from any Solid Waste or Recyclable Material collection site, unless that Person is authorized to do so by the District. The following Persons are authorized by the District to remove Solid Waste and Recyclable Material from Solid Waste facilities, and from Solid Waste and Recyclable Material collection sites:

- (A) Persons that are licensed by the Miami County Board of Health to Collect, Process, or dispose of Solid Waste generated within or transported into the District;
- (B) Commercial Haulers that have registered each vehicle that is used within the District for the Collection of Solid Waste, Construction and Demolition Debris, and Recyclable Materials with the Miami County Board of Health;

- (C) Municipal corporations located within the District, and their agents, that have registered each vehicle that is used within the District for the Collection, Processing, or disposal of Solid Waste with the Miami County Board of Health;
- (D) Persons that have been given express written permission by the District; and
- (E) Any person transporting Solid Waste that was generated by that Person to a Designated Solid Waste Facility.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 8-01**

**ANNUAL REPORTS TO BE SUBMITTED BY FACILITY OWNERS
OR OPERATORS, AND COMMERCIAL HAULERS**

Each Commercial Hauler that engages in Collection within the District shall maintain a daily log of its Collection activities that specifies the weight or volume in cubic yards of Solid Waste, Construction and Demolition Debris, and/or Separated Recyclable Material that was Collected. A copy of the log shall be available for inspection and/or copying by authorized representatives of the District during regular business hours. Each Commercial Hauler that engages in Collection within the District shall submit to the District, on or before February 1 of each year, a summary of its daily logs for the 12 months of the preceding calendar year. A Commercial Hauler that maintains a daily log of operations pursuant to a rule promulgated by the Ohio Environmental Protection Agency, the Miami County Health Department, or a municipal health department located within Miami County, shall be deemed to be in compliance with the requirement to maintain a daily log under this Rule.

The owner or operator of each Solid Waste facility located within the District shall maintain a daily log of operations of the facility on forms prepared by the District. All entries required on the log from shall be completed. A copy of the log shall be available for inspection and/or copying by authorized representatives of the District during regular business hours. The owner or operator of each Solid Waste facility located within the District shall submit to the District on or before February 1 of each year, an annual summary of its daily logs for the 12 months of the preceding calendar year. An owner or operator of a Solid Waste facility that maintains a daily log of operations pursuant to a rule promulgated by the Ohio Environmental Protection Agency, the Miami County Health Department, or a municipal health department located within Miami County, shall be deemed to be in compliance with the requirement to maintain a daily log under this rule.

**MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT
RULE NUMBER 9-01**

DISPOSAL OF SEPARATED UNACCEPTABLE YARD WASTE

No Person shall dispose of Separated Yard Waste generated within the District in a Solid Waste facility other than a facility registered by the Ohio Environmental Protection Agency as a Yard Waste composting facility or by other approved methods as in agricultural utilization or "field spreading".

MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT RULE NUMBER 10-01

PROHIBITION AGAINST TAMPERING OR DAMAGING FACILITIES

No Person shall tamper with or damage any Solid Waste facility located within the District or any appliance, appurtenance, accessory, or fixture used in conjunction with such facility.

MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT RULE NUMBER 11-01

PENALTIES FOR VIOLATION OF RULES

Any person, who violates rules 2-01, 5-01, or 7-01, shall be subject to a fine not to exceed \$5,000.00. Each separate act or violation shall constitute a separate offense. Each day of violation shall constitute a separate violation.

Any person who violates rules 3-01, 4-01, 8-01, 9-01, or 10-01, shall be subject to a fine not to exceed \$1,000.00. Each separate act or violation shall constitute a separate offense. Each day of violation shall constitute a separate violation.

MIAMI COUNTY SOLID WASTE MANAGEMENT DISTRICT RULE NUMBER 12-01

SEVERABILITY

If any provision, paragraph, section, or subsection of these Rules is held invalid, the other provisions of these Rules shall not be affected thereby and shall remain in full force and effect. If the application of these rules, or any section or subsection thereof, to any Person or circumstances is held invalid the application of these rules, or any section or subsection thereof, to other Persons or circumstances shall not be affected thereby.