Greene County

Solid Waste Management District

Amended Solid Waste Management Plan

November 2014

APPROVED
OHIO ENVIRONMENTAL PROTECTION AGENCY
JAN 14 2015
AS EVIDENCED BY COPY OF
LETTER OF APPROVAL
HERETO ATTACHED

RECEIVED
DEC 24 2014
OHIO EPA - DMWM

RECEIVED
JAN ~~DEC~~ 16 2015
GREENE COUNTY
ENVIRONMENTAL SERVICES

Prior Plan Approved - July 23, 2008

Reference Year - 2011

Draft Plan Submitted to OEPA - July 23, 2013

Amended Plan Ratified - November 19, 2014

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

RECEIVED
DEC 16 2015
GREENE COUNTY
ENVIRONMENTAL SERVICES

CERTIFIED MAIL

JAN 14 2015

Mr. John Martin
Chairperson, Policy Committee
Greene County Solid Waste
Management District
3851 St. Andrews Drive
Fairborn, Ohio 45324

Re: Greene County SWMD
Long Term Planning for Reg Entity
Solid Waste Management Planning
Greene
SWMD129

Subject: Ohio Revised Code Section 3734.55(C)(1) Greene County Solid Waste Management District Solid Waste Management Plan Approval

Dear Mr. Martin:

The Director of the Ohio Environmental Protection Agency (Director) has reviewed and approved the ratified draft solid waste management plan update (Plan) for the Greene County Solid Waste Management District (District). Director's Final Findings and Orders approving the Plan are enclosed with this letter. Attachment 1 is a summary of the implementation schedule that was derived from the District's Plan.

The District should proceed to implement its approved Plan in accordance with the implementation schedule and timeline contained in the approved Plan and in Attachment 1 to the enclosed Director's Final Findings and Orders. Please be advised that Ohio Revised Code (ORC) Section 3734.55(C)(4) also requires the board of trustees to "...annually review implementation of the approved plan..."

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to ORC Section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall

be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office,

Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street
17th Floor
Columbus, Ohio 43215

If you have any questions regarding implementation of the approved Plan, please contact me at (614) 728-5369.

Sincerely,

Matthew Hittle
Environmental Specialist
Division of Materials and Waste Management

MH/sh

Enclosures (2): Director's Final Findings and Orders
Attachment 1 to the Findings and Orders

cc (with enclosures): Dana Storts, Manager, Greene County Solid Waste Management District
Tracy Buchanan, Environmental Supervisor, DMWM-SWDO

OHIO E.P.A.
JAN 14 2015
JOURNAL

BEFORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

In the matter of:

Greene County Solid Waste Management District 2145 Greene Way Blvd. Xenia, Ohio 45385	: : :	Director's Final Findings and Orders

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are issued to the Greene County Solid Waste Management District (District), pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) Section 3734.55(C).

II. PARTIES

These Orders shall be binding upon the District.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meanings as defined in ORC Chapter 3734 and the rules promulgated thereunder.

IV. FINDINGS

The director of Ohio EPA has determined the following findings:

1. Pursuant to ORC Section 3734.56, the policy committee of a solid waste management district (SWMD) with an approved solid waste management plan that contains a planning period of at least fifteen years is required to submit an amended solid waste management plan that complies with the requirements in Divisions (A), (B), (D), and (E)(1) of ORC Section 3734.53 to the director of Ohio EPA on or before the fifth year anniversary of the date the existing solid waste management plan was approved.

2. The District's existing solid waste management plan was approved on July 23, 2008 and covers a planning period of fifteen years. The District's draft amended solid waste management plan was due to Ohio EPA on July 23, 2013.

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: [signature] Date: 1/14/15

3. On July 23, 2013, Ohio EPA received a draft amended solid waste management plan from the District's Policy Committee.

4. Pursuant to ORC Section 3734.55, the director of Ohio EPA is required to provide the policy committee of a SWMD with a written, nonbinding advisory opinion regarding a draft solid waste management plan and any recommended changes to it that the director considers necessary to effect its approval.

5. On September 6, 2013, Ohio EPA mailed a written, nonbinding advisory opinion concerning the draft amended solid waste management plan received on July 23, 2013 to the District's Policy Committee.

6. Pursuant to ORC Section 3734.55, the policy committee of a SWMD is required to submit a draft solid waste management plan that was ratified in accordance with the criteria established in Division (B) of ORC Section 3734.55 to the director of Ohio EPA to be reviewed for compliance with Divisions (A), (B), (D), and (E)(1) of ORC Section 3734.53.

7. On December 24, 2014, Ohio EPA received a ratified, draft, amended solid waste management plan from the District's Policy Committee.

8. The director has determined that the District's ratified, draft, amended solid waste management plan is in compliance with Divisions (A), (B), (D), and (E)(1) of Section 3734.53 of the ORC.

V. ORDERS

1. The District's ratified, draft, amended plan that was received by Ohio EPA on December 24, 2014 is hereby approved.

2. The District shall proceed to implement its approved solid waste management plan in accordance with the strategies, programs, and activities described in the ratified, draft, amended solid waste management plan and contained in the implementation schedule included as Attachment 1 to these Orders.

VI. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations.

VII. RESERVATION OF RIGHTS

Nothing contained herein shall be construed to prevent Ohio EPA from seeking legal or equitable relief to enforce the terms of these Orders or from taking other administrative, legal, or equitable action as deemed appropriate and necessary, including seeking penalties against the District for noncompliance with these Orders.

Nothing contained herein shall be construed to prevent Ohio EPA from exercising its lawful authority to require the District to perform additional activities pursuant to ORC Chapter 3734 or any other applicable laws in the future. Nothing herein shall restrict the right of the District to raise any administrative, legal, or equitable claim or defense with respect to such further actions which Ohio EPA may seek to require of the District. Nothing in these Orders shall be construed to limit the authority of Ohio EPA to seek relief for violations which may occur.

VIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders were entered into the Ohio EPA Director's Journal.

IT IS SO ORDERED:

Craig W. Butler, Director
Ohio Environmental Protection Agency

ATTACHMENT 1 TO THE FINDINGS AND ORDERS

Summary of the Implementation Schedule for the

Greene County Solid Waste Management District

Several sections of the ratified, draft amended solid waste management plan update (Plan) submitted by the Solid Waste Management District or Authority identified above are considered to be part of the implementation schedule required in accordance with Ohio Revised Code Section 3734.53(A)(13). This attachment lists the elements that Ohio EPA understands to constitute the implementation schedule contained in the District's or Authority's Plan. These elements are listed in the table below.

Implementation Schedule for Facilities, Strategies, Programs and Activities

1. Elements of the Plan	2. According to the Plan, when will implementation of this strategy begin and end?	3. Which Goal will this strategy be used to demonstrate compliance with?
Commercial/Industrial Sector TA and Education		
7001 Commercial/Industrial technical assistance and education	ongoing	Goal 3,4
7011 Materials Interchange	ongoing	Goal 4
7008 Waste Audits	ongoing	Goal 3,4
Curbside Recycling, Non-subscription		
1606 Bellbrook City	ongoing	Goal 1,2
6970 Cedarville Village	ongoing	Goal 1,2
6966 Fairborn City	ongoing	Goal 1,2
6969 Jamestown Village	ongoing	Goal 1,2
7021 Spring Valley Village	ongoing	Goal 1,2
6967 Xenia City	ongoing	Goal 1,2
6968 Yellow Springs Village	ongoing	Goal 1,2
Curbside Recycling, Subscription		
9150 Bath Township	ongoing	Goal 1,2

1. Elements of the Plan	2. According to the Plan, when will implementation of this strategy begin and end?	3. Which Goal will this strategy be used to demonstrate compliance with?
6971 Beavercreek City	ongoing	Goal 1,2
9151 Beavercreek Township	ongoing	Goal 1,2
9152 Sugarcreek Township	ongoing	Goal 1,2
9153 Xenia Township	ongoing	Goal 1,2
Drop-off Recycling, FS, Urban		
6973 Xenia City - Greene County Recycling Center	ongoing	Goal 1,2
Electronics Collection		
6992 Collection events for electronics at Greene County Recycling Center	ongoing	Goal 2,5
Grants/Funding		
9160 District Recycling Grants	2015, ongoing	Goal 1,2
Household Hazardous Waste		
6990 Collection events for household hazardous waste at Greene County Recycling Center	ongoing	Goal 5
Lead-Acid Battery Programs		
6997 Collection of lead-acid batteries at Greene County Recycling Center	ongoing	Goal 2,5
Other Programs		
6991 Collection events for appliances and scrap metals at Greene County Recycling Center	ongoing	Goal 2
9155 Debris Management Program	ongoing	N/A
9158 Environmental Crimes Strategy	ongoing	N/A
9161 Event Recycling	ongoing	Goal 2
6995 Inter-agency recycling for local governmental offices	ongoing	Goal 2
9159 Material Management Initiatives	ongoing	Goal 2
7014 Recycling Surveying (all sectors)	ongoing	Goal 2

1. Elements of the Plan	2. According to the Plan, when will implementation of this strategy begin and end?	3. Which Goal will this strategy be used to demonstrate compliance with?
6996 Roadside Litter Collection Program	ongoing	N/A
Other Residential/Commercial Recycling		
9164 Evaluation of recycling drop-offs	2015	Goal 1,2
Residential Sector Education and Awareness		
7019 District website	ongoing	Goal 3,4,5
9154 Evaulation of formal education program with schools	2015	Goal 3,4
7005 Other outreach/awareness efforts	ongoing	Goal 4
7004 Outreach efforts/presentations for community events, schools and community groups	ongoing	Goal 4
7000 Outreach/Awareness Tools (brochures, flyers and displays)	ongoing	Goal 3,4
9157 Quarterly newspaper advertisements	2015, ongoing	Goal 3,4
9156 Recycling forums	2015, ongoing	Goal 3,4
Scrap Tire Programs		
6993 Scrap tire management outreach and collection efforts	ongoing	Goal 2,5
Yard Waste Programs		
6975 Beavercreek seasonal yard waste drop-off	ongoing	Goal 2,5
6981 Cedarville Village compost facility	ongoing	Goal 2,4
6983 D.Dickinson Construction Services compost facility (Bio Source)	ongoing	Goal 2,5
9120 Eco Green composting facilty	ongoing	Goal 2,5
9162 Evaulation of yard waste collection at the Greene County Recycling Center	2017	Goal 5
6974 Greene County Recycling Center full-time yard waste drop-off	ongoing	Goal 2,5
9119 Horning's Farms compost facility	ongoing	Goal 2,5

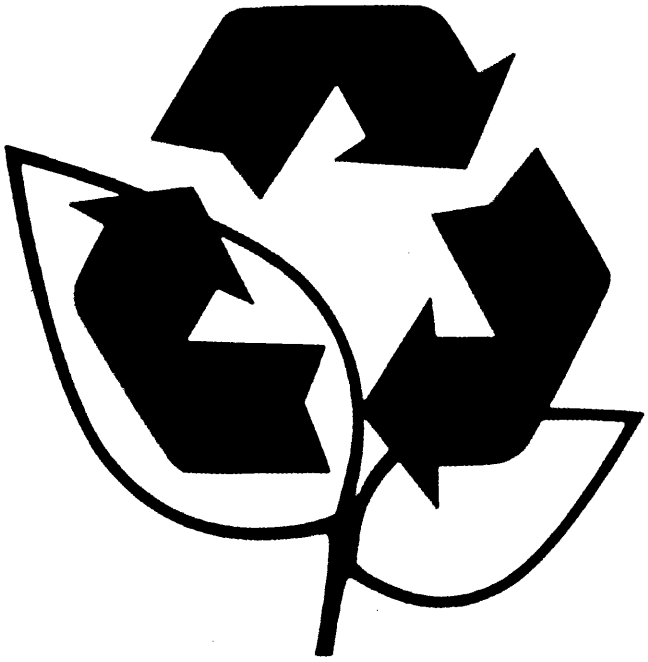
1. Elements of the Plan	2. According to the Plan, when will implementation of this strategy begin and end?	3. Which Goal will this strategy be used to demonstrate compliance with?
9163 Partnership with private compost facilities	2014, ongoing	Goal 2,5
9121 Tom's Mulch and Landscaping compost facility	ongoing	Goal 2,5

Greene County

Solid Waste Management District

Amended Solid Waste Management Plan

November 2014



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SECTION I

I. Introduction

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

1. Under current approved Plan:

Date of Approval	July 23, 2008
Counties within District	Greene
Years in planning period	15

2. Plan to be implemented with approval of this document

Counties within the District	Greene
Years in planning period	15
Year 1 of the planning period	2015

B. Reasons for Plan Submittal

This is the mandatory five year Plan Update for the District.

C. Process to Determine Material Change in Circumstances

The District will monitor the implementation of activities listed in the Plan to determine if and when a material change in circumstances has occurred that would require a formal Plan amendment. In addition, the District continually monitors and evaluates activities that manage or may impact the management of solid waste, recycling, and composting. Circumstances that may result in a material change include, but are not limited to the following:

- District solid waste generation decreases by 25% or more
- Lack of disposal capacity during the planning period
- Waste hauler activities
- Private recycling and composting activities decrease by 25% or more
- Financing for Plan implementation decreases by 25% or more
- Residential/Commercial Recycling rate falls below 25% for two consecutive years
- Industrial Recycling rate falls below 50% for two consecutive years
- Significant changes in strategies for waste reduction and recycling
- Legislative changes

Material changes shall be brought to the attention of the Policy Committee for consideration and possible action. The changes must be submitted to the Policy Committee through the District. The Policy Committee will consider the material change at their normal business meetings. To encourage a comprehensive analysis of the material change, the Policy Committee may refer the matter to a subcommittee or technical advisory committee. As deemed necessary, the Policy Committee may seek guidance from Ohio Environmental Protection Agency (OEPA) to determine if a Plan amendment is necessary or required.

Once the Policy Committee has completed its review of the material change, it will present its recommendation to the Board of County Commissioners. If the Board determines a material change warrants a Plan amendment, it will direct the Policy Committee to develop a formal process to modify and amend the Plan. Also, the Board will notify OEPA that it intends to modify the Plan. This process will closely mirror the Plan ratification procedures. The schedule for the development of the Plan amendment and the approval, ratification, and implementation, will be established by the Policy Committee.

D. District Formation and Certification Statement

The District's configuration has remained the same since the submittal of the District's approved Plan. A copy of the original certification for the District's formation is attached in Appendix A.

Appendix B includes all public notices, as they appeared in local newspapers, public hearing notifications, and comments concerning this Plan Update. Appendix C includes a certification statement signed by the Policy Committee members asserting that the contents of the Plan are true and accurate, a resolution by the Policy Committee adopting the Plan prior to ratification, and a resolution certifying the Plan has been properly ratified. Appendix C also includes a list of all political jurisdictions in the District. This list identifies the population of each jurisdiction and the percent of the population represented by the jurisdiction. Each jurisdiction's action concerning this Plan Update is also listed.

E. Policy Committee Members

Tom Koogler County Commissioner	Board of County Commissioners
Michael Cornell City Manager	City of Beavercreek
John Martin Bath Township Trustee	Township Trustee
Deborah Leopold Director of Environmental Health Services	Greene County Combined Health District
John Banford Wright Patterson Air Force Base, Waste Management Branch	Industrial, Commercial, or Institutional Generator
Daniel Graeter	Citizen Representative
Matthew McNelly	Public Representative

F. Board of Directors

Robert Glaser, President, Board of County Commissioners
Tom Koogler, Vice President Board of County Commissioners
Alan Anderson, Member, Board of County Commissioners

G. District Address and Phone Number (Contact Person)

Greene County Solid Waste Management District
2145 Greene Way Boulevard
Xenia, OH 45385

Contact:	Dana Storts
Telephone:	937-562-5930
Fax:	937-562-5940
Email:	dstorts@co.greene.oh.us

H. Technical Advisory Committee and Other Subcommittee

1. Assisting in the Planning Process

The update to the Plan and the District's activities were developed by the Policy Committee. The Policy Committee meetings are open to the public. Recommendations concerning the Plan Update and District's activities were received by the Policy Committee at these meetings. During the process to update the plan, the following individuals attended these meetings.

Helen Wickline	Wickline's Florist and Garden Center
Ken Middleton	Greene Soil and Water Conservation District
Stephen Anderson	Greene County Regional Planning
Alan Anderson	Greene County Commissioner
Robert Glaser	Greene County Commissioner
Kyle Aughe	Rumpke
Ron Volkerding	Greene County Sanitary Engineer
Brandon Huddleson	Greene County Administrator
Mark Schlagheck	City of Bellbrook
Pete Bales	City of Fairborn
Brent Merriman	City of Xenia

2. Implementing the Plan

During the planning period, the Policy Committee reserves the right to establish subcommittees or a Technical Advisory Committee (TAC). Any subcommittee or TAC will be created by formal action of the Policy Committee. With the formal action, the Policy Committee will determine the scope, goals, and objectives of the subcommittee or TAC.

In 2013, the Policy Committee established a subcommittee to evaluate the Interagency Recycling Program. Members of this subcommittee included Mike Cornell, Deb Leopold, John Banford, and Kyle Aughe.

SECTION II

II. Executive Summary

In Greene County, solid waste management including recycling and composting, is supported by viable infrastructure. This infrastructure includes resources developed and sustained by the District and private sector. As listed in the approved Plan, the District hosts a Recycling Center. Residents and small businesses drop-off recyclable materials at the Recycling Center. Some of the materials collected include paper, cardboard, metal cans, plastic bottles plus glass bottles and jars. These materials are processed through the Material Recovery Facility that is located at the Recycling Center.

Other recycling activities are supported by the District and Recycling Center. These include the interagency office recycling program, recycling at community events, litter collection, and special collection events for materials like household hazardous waste, scrap metal, household appliances, electronic waste, and tires. These activities collect and process materials for recycling.

In addition, the District provides services that support recycling efforts. Waste audits plus technical assistance and education are examples of the activities. The technical assistance and education includes presentations, maintaining a comprehensive web site, developing and updating brochures, and providing current information to local community cable channels and newsletters.

Solid waste collection services for residents and businesses are available through private waste haulers. Most of the solid waste is directly disposed in landfills. Some of the solid waste is managed through transfer facilities prior to landfill disposal. Also, these private waste haulers offer recycling services. For the residential sector, recyclable materials are collected at the curbside using single stream technology. Recycling for the business sector is also available through the waste haulers and private recyclers. Recyclable materials collected by the private waste haulers are processed at Material Recovery Facilities.

The Recycling Center has allowed the District to maintain compliance with the State's percent recycling goal. In addition, the District is financially solvent.

Section III Inventories

The District has established 2011 as the Reference Year for the Plan Update. The first year of the planning period is 2015, extending to 2030 as the last year of the planning period.

In 2011, the District generated waste was taken to four sanitary landfills in Ohio. Two of these, Stony Hollow sanitary landfill in Montgomery County and Rumpke's sanitary landfill in Hamilton County directly accepted and disposed 85% of the solid waste. Prior to the solid waste being landfilled, 40% of it was managed through three transfer facilities. Two of the transfer facilities are located in Montgomery County and one in Fayette County. There are three waste hauling companies that provide waste disposal and recycling services to residents and businesses in the District. In addition, there are several composting facilities that are operated by the private sector. Three of these facilities are located in the District and four are just outside the District's borders. In addition, one Village hosts a composting operation. These operations provide an outlet for leaves, grass, and brush.

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

2011 is the reference year for this plan update. Population projections for the planning period were secured from the Ohio Development Services Agency. Based on the information provided, the District's adjusted population was 162,427 in 2011.

In 2011, the Residential/Commercial sector's generation of solid waste was 159,709 tons, or 5.39 pounds/person/day. Included in this amount are 22,616 tons of recyclable materials and 25,870 tons of yard waste. The District's recycling percentage for 2011 was 30% which exceeds the State's goal of 25% for the Residential/Commercial Sector.

The amount of solid waste generated by the Industrial Sector equaled 19,251 tons for 2011, or .65 pounds/person/day. Of this total waste generated, industries reported recycling 18,146 tons. This results in a recycling rate for the Industrial Sector of 94%, which exceeds the State's goals of 50% for this sector.

Section V Planning Period Projections and Strategies

For this Plan Update the planning period is scheduled to begin in 2015 and continue through 2030. In 2015 the population is calculated to be 163,081 and is expected to increase to 165,361 people in 2030.

Total waste generation for 2015 is projected to be 181,811 tons per year. This total includes waste that is generated from different sectors and one classification of waste. These sectors include the Residential/Commercial and Industrial. The classification of waste is Exempt.

Waste generation through the planning period for the Residential/Commercial Sector is projected to increase from 160,532 tons in 2015 to 162,594 tons in 2030. This change is based on the per capita generation rate of 5.39 pounds/person/day for the Residential/Commercial Sector remaining constant and an increase in population.

The District is projecting the amount of waste generated by the Industrial Sector will also increase over the time of the planning period. This increase is also based on population and results in an estimated generation of industrial solid waste of 19,328 tons in 2015 and 19,598 tons in 2030.

The generation of Exempt waste has been straight lined through the planning period. Total generation for this waste is 2,131 tons per year.

For the Residential/Commercial and Industrial Sectors, the calculations for generation includes wastes that will be landfilled, recycled, and composted. Through the various activities described in the Plan, the District anticipates additional materials will be recycled. Specifically, these activities include the Recycling Center, Special Collections, Composting/Yard Waste Management, and Household Hazardous Waste.

Through administrative activities, the District will monitor the amount of waste managed through disposal, recycling and composting.

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

The District has demonstrated that it has access to sufficient disposal capacity at sanitary landfills to accommodate the solid waste generated by the District. While the District has identified sanitary landfills where the District's waste may be disposed, the District is not designating any facilities as part of this Plan Update for the receipt of District generated solid waste.

Implementation of the District's Plan requires that the District receive adequate annual funding to implement the various programs and activities. For some of these, having access to qualified service providers is necessary. If financial or operation conditions exist that prevent the District from implementing District programs, District staff will prepare a recommendation report which prioritizes which programs the District will provide based on the following criteria:

- The program's impact on reducing the waste stream;
- Long-term impact of the program;
- The program's association with enforcement of solid waste management laws and regulations;
- The program's impact on Greene County's human health and environment; and
- The availability of non-District entities to provide the program.

This report will be provided to the Policy Committee for their review and recommendations regarding modification or elimination of District programs. If, based on this report, it is determined that elimination or modification of the District's program(s) has a substantial impact on the implementation of the District's Plan, the Policy Committee may consider this as a material change and recommend amending the Plan.

Section VII Measurement of Progress Toward Waste Reduction Goals

The State Solid Waste Plan mandates that the District must demonstrate compliance with one or both of the following goals:

Goal #1: Program standards for Solid Waste Management District's; ensure the availability for reduction, recycling, and other waste reduction alternatives for residential/commercial solid waste by the Year 2000.

Goal #2: By the Year 2000, a) 25% waste reduction for the residential/commercial sector, and b) 50% waste reduction for the industrial sector.

The District has demonstrated a recycling rate of 30% for the Residential/Commercial Sector for the Reference Year, 2011, and an Industrial Sector recycling rate of 94%. The District is projecting that these percentages will remain relatively consistent over the planning period. Therefore, the District has met, and will continue to meet, the standards established in Goal #2.

Section VIII Cost and Financing of Plan Implementation

The District relies on its Generation Fee to provide sufficient revenue for the implementation and continuation of programs and activities as listed in the Plan. Currently, the Generation Fee is set at $10.00 per ton. This fee generates about a million dollars in revenue per year to support the implementation of programs and activities listed in the Plan. In 2022, this fee is scheduled to increase to $10.50 per ton.

Section IX District Rules

The Plan authorizes the Board of County Commissioners to adopt rules under every subsection of ORC 343.01 (G) as follows:

- Rules limiting or prohibiting the receipt of waste generated outside the District.
- Rules governing the maintenance, protection and use of solid waste collection, transfer, disposal, recycling, or resource recovery facilities.
- Rules governing a program to inspect out-of-state waste.
- Rules exempting an owner or operator of a solid waste facility from compliance with local zoning requirements.

Table ES-1	General Information
District Name:	Greene County Solid Waste Management District
District ID#:	
Reference Year:	2011
Planning Period:	15
Plan Status:	Draft
Reason for Plan Submittal:	Required 5 year update

Table ES-2	District Coordinator/Office				
Name:	Dana Storts				
Address:	2145 Greene Way Blvd.				
City:	Xenia	State:	OH	Zip:	45385
Phone:	937-562-5925	Fax:	937-562-5940		
Email:	dstorts@co.greene.oh.us				

Table ES-3	Plan Data Summary			
Plan Data				
		Reference Year 2011	Year 5 2016	Year 10 2021
Population		162,427	163,369	164,723
Generation	Industrial	19,251	19,362	19,523
	Residential/Commercial	159,709	160,635	161,967
	Exempt	2,131	2,131	2,131
	Total	181,090	182,128	183,620
Waste Reduction	Industrial Source Reduction	-	-	-
	Industrial Recycling	18,146	18,146	18,146
	Residential/Commercial Source Reduction	-	-	-
	Residential/Commercial Recycling	48,486	48,559	48,776
	Municipal Solid Waste Composting	-	-	-
	Incineration	-	-	-
	Ash Disposal	-	-	-
	Waste Reduction Total	66,632	66,705	66,922
Disposal	Landfill-in District	-	-	-
	Landfill-out of District	114,458	115,424	116,698
	Total Landfill	114,458	115,424	116,698
Waste Reduction Rate		37%	37%	36%

As requred by the plan format, data for this Table is referenced from Sections V and VI .

ES-4	Existing Disposal Facilities		
Existing Disposal Facilities Used in the Reference Year			
Name	County	District Tons Managed	Remaining Years Capacity
Cherokee Run Landfill	Logan	10,926	77.4
American Landfill, Inc	Stark	2	70
Rumpke Waste Inc, Hughes Road Landfill	Hamilton	7,004	11.3
Stoney Hollow Landfill, Inc	Montgomery	51,228	4.7

SECTION III

III. Inventories

The purpose of the inventory section is to identify the existing waste reduction and waste services operating in the District. In addition, the measurements of the amount of waste source reduced, recycled, composted, incinerated, and disposed are critical for establishing the basis for Plan projections.

A. The Reference Year

The District has determined that 2011 is the reference year for the Plan Update. In this section, the tons of materials recycled occurred during 2011 except for the yard waste/composting facilities. Data for this section is taken from calendar year 2012. An ice storm caused damage to trees which generated yard waste and skewed the 2011 data. Therefore, data for the yard waste/composting facilities was captured from 2012 because it was an average year with no major weather events.

B. Existing Solid Waste Landfills

Table III-1 lists the existing solid waste landfills that accepted waste generated by the District. All of the facilities are located in Ohio. Waste was disposed in four different facilities including Cherokee Run, American Landfill, Rumpke's Hughes Road Landfill, and Stony Hollow. According to OEPA's Annual District Review Form 2011 these facilities accepted a total of 69,159.35 tons. Specifically, this total included 65,923.92 tons of residential and commercial waste, 1,104.81 tons of industrial waste and 2,130.62 tons of exempt waste.

C. Existing Incinerators and Resource Recovery Facilities

Table III-2 has been removed from the Plan Update because the District's waste was not managed through incinerators or resource recovery facilities.

D. Existing Transfer Facilities

Transfer facilities that managed District waste are identified in Table III-3. Fayette County, Montgomery County North, and Montgomery County South are the three transfer facilities that accepted the District's waste. All of the facilities are located in Ohio. These facilities received 45,299.09 tons of residential and commercial waste. Waste was not managed through facilities located outside of the State.

E. Existing Recycling and Household Hazardous Waste Collection Activities

Residential Curbside Recycling Activities that are active in the District are listed in Table III-4. Currently the Cities of Bellbrook, Fairborn, and Xenia plus the Villages of Cedarville, Jamestown, Spring Valley and Yellow Springs have non-subscription curbside recycling services included in their contracts for waste removal services. Subscription curbside recycling is available in the City of Beavercreek plus some areas of Bath, Beavercreek, Sugarcreek, and Xenia Townships.

Republic, Rumpke, and Waste Management are the waste haulers that provide the curbside recycling services. All curbside recycling is collected via single stream and delivered to Material Recovery Facilities (MRFs). These MRFs are listed on Table III-4. The MRFs are owned by Rumpke and Waste Management.

As shown on Table III-4, non-subscription curbside is available to 28,843 households and subscription curbside recycling services is available to approximately 28,375 households. As a result of curbside recycling, the MRFs reported 5,970.50 tons of materials were recycled. The materials included glass bottles and jars, plastics, newspaper, cardboard, mixed paper, nonferrous metals like aluminum cans and ferrous metals such as food cans. The source of this data was OEPA's report titled Tons Received at Ohio Materials Resource Recovery Facilities 2011.

This data is also listed on Table III-5 under the Types of Facility or Activity titled Residential Recycling OEPA's MRF Report.

Table III-5 identifies all of the Types of Facilities or Activities that recycle or capture data for materials that are being recycled. This includes the District activities plus private and non-profit organizations.

The recycling activities and services provided by the District are listed at the beginning of Table III-5. The first activity is the District's Recycling Center. This is a drop-off recycling site that collects glass bottles and jars, metal cans, cardboard, mixed paper, newspaper, plastic bottles, cell phones, and lead acid batteries. The total tons of materials recycled equals 315.14. To avoid double counting, the tons of metal cans and plastic bottles that were accepted at the District's Recycling Center and taken to Rumpke's MRF are included in the activity titled Residential Recycling OEPA's MRF Report.

The second District activity listed on Table III-5 includes Household Hazardous Waste (HHW) collections. HHW is collected by the District. Once each month the District conducts a Special Collection Event. At this event residents may drop-off HHW. Other materials are also accepted at this event. Those materials include scrap metal, large household appliances, small electronic appliances, and light bulbs. Table III-5 shows the District recycled 15.55 tons of HHW. Additionally, the District recycled 4.97 tons of appliances and 37.39 tons of ferrous and non-ferrous scrap metal, plus 5.13 tons of small household appliances. All materials collected and processed by the District are measured and recorded. The District is the source of information for the materials listed in this paragraph.

Tables III-5 continues with the Interagency Recycling Program and Community Festivals or events. Data for the tons of materials collected through these activities are listed with the activities titled Recycling Center or Residential Recycling OEPA's MRF Report.

Scrap Tires is the next activity. According to OEPA's data 1,498.16 tons of tires were recycled. Littered tires were collected by the District and private businesses also accepted used tires from the general public.

The next three activities identified on Table III-5 address surveying of the recycling for the residential, commercial and industrial generators.

For the activity titled Residential Recycling OEPA's MRF Report, data is listed for the 5,970.50 tons of materials that were shown to be recycled through Rumpke and Waste Management's MRFs. The identified materials include glass, plastic, newspaper, cardboard, mixed paper, plus nonferrous and ferrous metals.

For the activity title Commercial Recycling, OEPA's MRF Report and the District's Survey are the tools that captured the tons of materials being recycled by this sector. Using 2011 as the baseline year, the District conducted a comprehensive recycling survey of the commercial facilities located in the District. This survey was conducted via telephone. Appendix F identifies the facilities plus types and tons of materials recycled. Information from OEPA's MRF Report is included with this information. Through these survey tools, the District determined 11,426.80 tons were recycled.

Industrial Recycling information was obtained from OEPA's MRF Report and the District's survey. The survey captured recycling data for this sector by utilizing the methodology described for the commercial sector. The volume of materials recycled by the industrial sector equaled 18,145.92 tons. The businesses that were surveyed plus the types and tons of materials recycled is shown in Appendix F.

Non-profit and private companies also provide recycling services in the District. The local non-profit listed on Table III-5 recycled 2,222 tons of textiles and 226.19 tons of electronic waste. These materials were accepted from the residential sector.

Three private companies also provided recycling services to the residential sector. These businesses include Abitibi that recycled 398.63 tons through their paper retriever program. 505.68 tons of batteries were recycled by Battery Warehouse and Batteries Plus. This recycling activity was identified through the survey of the commercial sector. The District determined these materials were generated by the residential sector.

There are two scrap yards located in the District. Recycling data is not listed for these facilities to avoid issues with counting materials that might be classified as construction and demolition debris.

F. Existing Composting/Yard Waste Management Facilities

As indicated in Table III-6, yard waste that was diverted from the landfills equaled 25,870 tons. The majority of the yard waste was processed through the District's yard waste collection sites. One of these sites is permanent and three are open seasonally. The Village of Cedarville operates a Class IV facility and accepts materials generated from the Village. Within the District there are three private companies that accept yard waste and operate compost facilities. As identified on Table III-5 there are four companies located outside of Greene County that accepted material generated from the District.

As discussed previously, information for Table III-6 is based on calendar year 2012.

Table III-7 has been removed from the Plan Update because there is no information to report concerning facilities used by the District that are located outside of Ohio.

G. Existing Open Dumps and Waste Tire Dumps

According to the Greene County Combined Health District, no open dumps currently exist in the District. A waste tire dump was identified in the 2008 Plan Update. With the support of grants from the Ohio Department of Natural Resources, Division of Recycling and Litter Prevention, that dump was cleaned up in 2011. Since there are no existing open dumps or waste tire dumps, Table III-8 has been removed from the Plan Update.

H Ash, Foundry Sand, and Slag Disposal Sites

Table III-9 identifies a site that managed non-toxic foundry sand. This site was also listed in the 2008 Plan Update. This was a captive site used by the business that generates the material.

I. Map of Facilities and Sites

A map that shows the facilities and recycling activities is provided in Appendix E. Specifically identified are the composting and yard waste drop off locations, recycling- subscription and non-subscription services and the drop-off facility, foundry sand disposal site, and the material recovery facilities. The facilities are identified by symbols shown on the map.

J. Existing Collection Systems – Haulers

Solid waste haulers operating in the District are identified in Table III-10. The companies include Republic, Rumpke, and Waste Management. These companies provide solid waste removal and recycling services to the residential, commercial, and industrial generators of waste. Current residential collection routes are described in the Table. These collection routes may change as communities request bids from the waste haulers and enter into contracts to secure waste and recycling services.

Tons of waste delivered to landfills or transfer facilities by the waste haulers is listed in Tables III-1 and III-3. Data for individual communities is not available. On Table III-10, the District has identified the landfills or transfer facilities used by the waste haulers.

Source separated yard waste is managed by the residents or lawn care services. Residents deliver yard waste to the District's central and community sites or local composters. Yard waste managed by the lawn care services is processed through the compost facilities. All facilities that manage and compost yard waste are listed on Table III-6.

Solid waste haulers are required to obtain a registration from the Greene County Combined Health District.

Table III-1		Landfills Used by the District					
Facility Name	**Type of Landfill**	**Location**		**Waste Received from the SWMD (TPY)**			
		County	**State**	**Residential/ Commercial**	**Industrial**	**Exempt**	**Total**
In District Facilities							
none							
Out of District Facilities							
Cherokee Run Landfill	PA, PO	Logan	Ohio	9,046.53		1,879.02	10,925.55
American Landfill, Inc	PA, PO	Stark	Ohio		1.50		1.50
Rumpke Waste Inc, Hughes Road Landfill	PA, PO	Hamilton	Ohio	6,992.22	12.17		7,004.39
Stony Hollow Landfill, Inc	PA, PO	Montgomery	Ohio	49,885.17	1,091.14	251.60	51,227.91
Out of State Facilities							
none							
Totals				65,923.92	1,104.81	2,130.62	69,159.35
PA - Pubicly Available							
PO - Privately Owned							
Rumpke and Stony Hollow Residential/Commercial includes asbestos and general waste							
Cherokee Run Exempt is foundry sand							
Stony Hollow Landfill Exempt is constuction and demolition debris							
Source of Information - OEPA Annual District Review Form for 2011							

Table III-3		Solid Waste Transfer Facilities Used by the District							
Facility Name	**Type of Facility**	**Location**		**Waste Received From the SWMD (TPY)**				**Recyclables Processed (TPY)**	
		County	**State**	**Residential/ Commercial**	**Industrial**	**Exempt**	**Total**	**Recovered from Waste**	**Total**
Fayette County Transfer Facility	PA	Fayette	Ohio	1.29			1.29	0	0
Montgomery County South Transfer Facility	PA	Montgomery	Ohio	41,671.26			41,671.26	0	0
Montgomery County North Transfer Facility	PA	Montgomery	Ohio	3,626.54			3,626.54	0	0
Totals				45,299.09	-	-	45,299.09	-	-
						45,299.09	check		
PA - Publicly Available									
Source of Information - OEPA Annual District Review Form for 2011									

Table III-4		Residential Curbside Recycling Activities Used by the District				
Curbside Recycling Name, Address, Phone	Type of Curbside	Population	Frequency of Collection	Average # of HHs Particpating	Types of Materials Accepted	Recyclables Processed from the SWMD (TPY)
Cities						
Beavercreek	Subscription	45,193	bi-weekly	17,382	Reference MRF Information	
1368 Reasearch Park Drive			weekly		for Rumpke and Waste Management	
Beavercreek, OH 45432						
937-427-5510						
Bellbrook	Non-subscription	6,943	weekly	2,670	Reference MRF Information	
15 E. Franklin Street					for Rumpke	
Bellbrook, OH 45305					Republic delivers materials to Rumpke	
937-848-4321						
Fairborn	Non-subscription	32,352	weekly	12,443	Reference MRF Information	
44 W. Hebble Ave.					for Waste Management	
Fairborn, OH 45324						
937-754-3030						
Xenia	Non-subscription	25,719	weekly	9,892	Reference MRF Information	
101 N. Detroit Street					for Rumpke	
Xenia, OH 45385						
937-376-7232						

Table III-4		Residential Curbside Recycling Activities Used by the District				
Curbside Recycling Name, Address, Phone	Type of Curbside	Population	Frequency of Collection	Average # of HHs Particpating	Types of Materials Accepted	Recyclables Processed from the SWMD (TPY)
Villages						
Cedarville	Non-subscription	4,019	weekly	1,546	Reference MRF Information	
14 E. Xenia Ave.					for Rumpke	
Cedarville, OH 45314						
937-766-2061						
Jamestown	Non-subscription	1,993	weekly	767	Reference MRF Information	
84 Seaman Dr.					for Waste Management	
Jamestown, OH 45335						
937-675-5311						
Spring Valley	Non-subscription	479	weekly	184	Reference MRF Information	
7 W. Main Street					for Waste Management	
Spring Valley, OH 45370						
937-862-4485						
Yellow Springs	Non-subscription	3,487	weekly	1,341	Reference MRF Information	
100 Dayton Street					for Rumpke	
Yellow Springs, OH 45387						
937-767-9126						

Table III-4		Residential Curbside Recycling Activities Used by the District				
Curbside Recycling Name, Address, Phone	Type of Curbside	Population	Frequency of Collection	Average # of HHs Particpating	Types of Materials Accepted	Recyclables Processed from the SWMD (TPY)
Townships						
Bath		8,241	bi-weekly	3,170	Reference MRF Information	
1006 Yellow Springs	Subscription		weekly		for Rumpke and Waste Management	
Fairfield Road						
Fairborn, OH 45324						
937-878-0611						
Beavercreek		5,762	bi-weekly	2,216	Reference MRF Information	
1981 Dayton-Xenia Road	Subscription		weekly		for Rumpke and Waste Management	
Beavercreek, OH 45434						
937-429-4472						
Sugarcreek		8,041	bi-weekly	3,093	Reference MRF Information	
2090 Ferry Road	Subscription		weekly		for Rumpke and Waste Management	
Bellbrook, OH 45305						
937-848-8426						
Xenia		6,537	bi-weekly	2,514	Reference MRF Information	
8 Brush Row Road	Subscription		weekly		for Rumpke and Waste Management	
Xenia, OH 45385						
937-372-0858						

Table III-4		Residential Curbside Recycling Activities Used by the District				
Curbside Recycling Name, Address, Phone	**Type of Curbside**	**Population**	**Frequency of Collection**	**Average # of HHs Particpating**	**Types of Materials Accepted**	**Recyclables Processed from the SWMD (TPY)**
Material Recover Facilities						
Rumpke Recycling					Glass	511.65
1300 E. Monument Street					Plastic	195.52
Dayton, OH 45402					Newspaper	1,099.10
397-461-0004					Cardboard	182.51
					Mixed Paper	344.19
					Nonferrous	45.99
					Ferrous	79.54
					Totals	2,458.50
Waste Management					Glass	657.00
1700 N. Broad Street					Plastic	266.00
Fairborn, OH 45324					Newspaper	2,374.00
937-878-6699					Cardboard	-
					Mixed Paper	95.00
					Nonferrous	25.00
					Ferrous	95.00
					Totals	3,512.00
Totals		148,766		57,218		5,970.50
				28,843	non-subscription	
				28,375	subscription	
Source of Information - OEPA's reports titled Tons Received at Ohio Material Resource Recovery Facilities - 2011						
Average number of persons per household for Greene County is 2.6.						
Service Area for County and Townships has been removed since the information is listed by municipality or township						

Table III-5	Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities, and HHW Collection Used by the District							
Facility/Activity Name Mailing Address Phone Number	Types of Facility or Activity	Service Area County	Service Area Township/Cities	Popluation Served	Hours Available to Public	Types of Materials Accepted	Recyclabes Processed from the SWMD (TPY)	% of Materials from Sector: Residential, Commercial, Industrial Residential - R Commercial - C Industrial -I
Greene County		Greene	City of Beavercreek	162,427	Standard Hours	Glass Bottles & Jars	47.01	100% R
Environmental Services	Recycling Center		Village of Bowersville		Monday - Thursday 7:30 am to 8:00 pm	Metal Cans Ferrous	included Residential Recycling	100% R
2145 Greene Way Blvd.	PA, DO		All Townships		Friday 7:30 am to 4:30 pm	Metal Cans Non-Ferrous	included Residential Recycling	100% R
Xenia, OH 45385					Saturday 9:00 am to 4:00 pm	Cardboard	82.29	90% R 10% C
937-562-5930	368.18					Mixed Paper	124.05	90% R 10% C
					Winter Hours	Newspaper	58.00	100% R
					Monday - Thursday 7:30 am to 6:00 pm	Plastics	included Residential Recycling	100% R
					Friday 7:30 am to 4:30 pm	Cell Phones	-	100% R
					Saturday 9:00 am to 4:00 pm	Lead Acid Batteries	3.79	100% R
	Special Collections	Greene	All	162,427	One Saturday per Month	Household Hazardous Waste	15.55	100% R
	PA, DO				9:00 am to 12:00 pm	Appliances	4.97	100% R
						Scrap Metal Ferrous	26.51	100% R
					37.49	Scrap Metal Non-Ferrous	0.88	100% R
						E-waste	5.13	100% R
						Light Bulbs - CFL tubes		
	Interagency	Greene	City of Beavercreek	2,000	Business operating hours	Cardboard	Listed with Recycling Center, Scrap Tir	100% C
	PA		City of Xenia			Office Paper		100% C
			Beavercreek Township			Metal Cans and Plastic Bottles		100% C
			Cedarville Township			Tires		100% C
			Xenia Township					
	Community Festivals or Events	Greene		162,427	Duration of festival or event	Metal Cans	included with	100% R
	PA, DO					Plastic Bottles	Recycling Center	100% R
	Scrap Tires:	Greene	All	162,427			1,498.16	unknown
	OEPA Data includes Litter and Special Collections							
	PA, DO							
	Residential Recycling	Greene	Reference Table III-4	162,427	Business operating hours	Glass	1,168.65	100% R
	OEPA's MRF Report					Plastic	461.52	100% R
						Newspaper	3,473.10	100% R
	5,970.50					Cardboard	182.51	100% R
						Mixed Paper	439.19	100% R
						Nonferrous	70.99	100% R
						Ferrous	174.54	100% R

Table III-5	Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities, and HHW Collection Used by the District							
Facility/Activity Name Mailing Address Phone Number	Types of Facility or Activity	Service Area County	Service Area Township/Cities	Popluation Served	Hours Available to Public	Types of Materials Accepted	Recyclabes Processed from the SWMD (TPY)	% of Materials from Sector: Residential, Commercial, Industrial Residential - R Commercial - C Industrial -I
	Commercial Recycling	Greene	All	162,427	Business operating hours	Appliances/"White Goods"	70.20	100% C
	OEPA's MRF Report and					Lead-Acid Batteries	-	100% C
	District's Survey					Dry Cell Batteries	0.39	100% C
						Rechargeable Batteries	0.50	100% C
	11,426.80					Food Waste	307.27	100% C
						Glass	32.95	100% C
						Ferrous Metal	780.98	100% C
						Non-Ferrous Metal	190.72	100% C
						OCC	8,390.51	100% C
						All Other Paper (includes newspaper)	653.66	100% C
						Plastics	260.59	100% C
						Wood	717.50	100% C
						Commingled Recyclables	1.53	100% C
						Electronics	-	100% C
						Ash (recycled ash only)	-	100% C
						Hangers	17.90	100% C
						Fluorescent Lights	2.10	100% C
	Industrial Recycling	Greene	All	162,427	Business operating hours	Glass	12.41	100% I
	OEPA's MRF Report and					Ferrous Metal	657.18	100% I
	District's survey					Non-ferrous Metal	642.75	100% I
						OCC	669.26	100% I
	18,145.92					All Other Paper (includes newspaper)	1,019.05	100% I
						Plastics	4.74	100% I
						Slaughterhouse	6,972.00	100% I
						Cement Kiln Dust	8,168.53	100% I

Table III-5	Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities, and HHW Collection Used by the District							
Facility/Activity Name Mailing Address Phone Number	Types of Facility or Activity	Service Area County	Service Area Township/Cities	Popluation Served	Hours Available to Public	Types of Materials Accepted	Recyclabes Processed from the SWMD (TPY)	% of Materials from Sector: Residential, Commercial, Industrial Residential - R Commercial - C Industrial -I
Goodwill	PA, DO	Greene	All	162,427	Business operating hours	Textiles	2,222.00	90% R 10% C
Bellbrook, Xenia,					Monday - Sunday	Electronics	226.19	90% R 10% C
Beavercreek, Kettering								
Abitibi	PA, DO	Greene	All	162,427	All	Mixed Paper	398.63	90% R 10% C
currently 32 sites								
located throughout								
the County								
Battery Warehouse	PA, DO	Greene	All	162,427	Business operating hours	Lead Acid Batteries	32.63	100% R
4100 Industrial Lane								
Beavercreek, OH 45430								
Batteries Plus	PA, DO	Greene	All	162,427	Business operating hours	Lead Acid Batteries	456.25	100% R
4496 State Route 725						Dry Cell Batteries	16.80	100% R
Bellbrook, OH 45305								
JR's Auto Recycling	PA, DO, SY	Greene	All	162,427	Business operating hours	Metal		
1084 Cincinnati Ave.					Monday - Saturday			
Xenia, OH 45385								
937-562-2857								
River Metals	PA, DO, SY	Greene	All	162,427	Business operating hours	Metal		
840 Jasper Road					Monday - Saturday			
Xenia, OH 45385								
937-372-9599								
PA - Publicly Available								
DO - Drop-off								
SY - Scrap Yard								

Table III-6	Composting/Yard Waste Management Activities Used by the District				
Facility Name of Activity	**Facility Type**	**Location**		**Waste Received from the SWMD**	
		County	**Address**	**Type**	**Amount (TPY)**
Greene County	PA, DO, PD	Greene	2145 Greene Way Blvd.	Yard Waste	17,296
Environmental Services			Xenia, OH 45068	Bulk Agent	
Central Collection Site				Food Waste	
Xenia				Animal Agr. & other	
Greene County	PA, DO, PD	Greene	1018 Yellow Springs Fairfield Road	Yard Waste	1,190
Environmental Services			Fairborn, OH 45324	Bulk Agent	
Community Collection Site				Food Waste	
Bath Township				Animal Agr. & other	
Greene County	PA, DO, PD	Greene	2260 Dayton Xenia Road	Yard Waste	912
Environmental Services			Beavercreek, OH 45432	Bulk Agent	
Community Collection Site				Food Waste	
City of Beavercreek				Animal Agr. & other	
Greene County	PA, DO, PD	Greene	2021 Ferry Road	Yard Waste	614
Environmental Services			Bellbrook, OH 45305	Bulk Agent	
Community Collection Site			This site closed in 2012	Food Waste	
Sugarcreek Township			New site to be determined	Animal Agr. & other	
Biosource Landscaping Services, LLC	Class III	Greene	875 US RT. 68 S	Yard Waste	273
Compost Facility	PA, DO, CF		Xenia, OH 45385	Bulk Agent	
aka DDickinson Construction Services				Food Waste	
				Animal Agr. & other	

Table III-6	Composting/Yard Waste Management Activities Used by the District				
Facility Name of Activity	**Facility Type**	**Location**		**Waste Received from the SWMD**	
		County	**Address**	**Type**	**Amount (TPY)**
Cedarville, Village of	Class IV	Greene	152 West Cedar Street	Yard Waste	138
	PA, DO, CF		Cedarville, OH 45314	Bulk Agent	
				Food Waste	
				Animal Agr. & other	
Toms Mulch & Landscaping	Class IV	Greene	2113 Ferry Road	Yard Waste	1,450
	PA, DO, CF		Bellbrook, OH 45305	Bulk Agent	
				Food Waste	
				Animal Agr. & other	158
Eco-Green Recycling Enterprises, LLC	Class IV	Greene	1290 E. Dayton Yellow Springs Road	Yard Waste	2,603
	PA, DO, CF		Fairborn, OH 45324	Bulk Agent	
				Food Waste	
				Animal Agr. & other	
Paygro aka Garrick Corporation	Class II	Clark	11000 Huntington Road	Yard Waste	348
	PA, DO, CF		S. Charleston, OH 45368	Bulk Agent	-
				Food Waste	
				Animal Agr. & other	
Mad River Topsoil	Class IV	Clark	5625 Old Lower Valley Pike	Yard Waste	271
	PA, DO, CF		Springfield, OH 45502	Bulk Agent	
				Food Waste	
				Animal Agr. & other	
The Siebenthaler Company	Class IV	Montgomery	5250 Cobblegate Drive	Yard Waste	198
	PA, DO, CF		Moraine, OH 45449	Bulk Agent	-
				Food Waste	
				Animal Agr. & other	

Table III-6	Composting/Yard Waste Management Activities Used by the District				
Facility Name of Activity	**Facility Type**	**Location**		**Waste Received from the SWMD**	
		County	**Address**	**Type**	**Amount (TPY)**
Brausch Farms	Class II	Warren	1715 Gum Grove Road	Yard Waste	7
	PA, DO, CF		Clarksville, OH 45113	Bulk Agent	
				Food Waste	414
				Animal Agr. & other	
Horning's Farm	Class III	Greene	2138 U.S. Rt 42 South	Yard Waste	
	CF		Spring Valley, OH	Bulk Agent	
				Food Waste	
				Animal Agr. & other	
Beam Farms	LA	Greene	2910 Henville Road	Yard Waste	land application
			Xenia, OH 45385	Bulk Agent	unknown totals
				Food Waste	
				Animal Agr. & other	
				Total	25,870
Source of Information:					
All information is from 2012. 2011 data was atypical due to materials that were generated from an ice storm.					
All other facility data is from OEPA's Compost Facility Report for 2012					
PA - Publicly available					
DO - Drop-off Facility					
CF - Compost Facility					
LA - Land Application					
PD - Public Debt					

Table III-9	Ash, Foundry Sand, and Slag Disposal Sites Used by the District			
Site Location (brief description)	**Land Owner Mailing Address**	**Description of Materials dumped at Site**	**Approximate Size of Site in acres**	**Time Period Site has Existed**
	Name			
	Address			
	City, ST Zip			
	Phone			
.5 mile East of St. Rt. 68	Morris Bean Company	Foundry Sand	6 acres	50 + years
on Hyde Road	777 E. Hyde Road			
	Yellow Springs, OH 45387			
	937-767-7301			

Table III-10	Solid Waste Haulers Operating in the District			
Name of Hauling Company	**Description of Collection Routes where waste is collected**	**Types of Materials Collected**	**Tons Collected from the District (TPY)**	**Name of Facilities Used by Haulers**
Mailing Address				
Street				
City, ST Zip				
Phone				
Republic Waste	Non-Subscription Service:	Asbstoes	For Totals Reference:	Montgomery County South Transfer
1577 West River Road	City of Bellbrook (end 2012)	General	Table III-1	Montgomery County North Transfer
Dayton, OH 45417	Subscription Service:	Industrial	District Waste Landfilled	
937-268-8595	City of Beavercreek	Exempt	Table III-3	
	All Townships	CD/D	District Waste Transfer Facilities	
Rumpke of Dayton	Non-Subscription Service:	Asbestos	For Totals Reference:	Montgomery County South Transfer
1932 E. Monument	City of Bellbrook (began 2013)	General	Table III-1	Montgomery County North Transfer
Dayton, OH 45402	City of Xenia	Industrial	District Waste Landfilled	Rumpke Waste, Hughes Road Landfill
937-461-0004	Village of Cedarville	Exempt	Table III-3	
	Village of Clifton	CD/D	District Waste Transfer Facilities	
	Village of Spring Valley (began 2013)			
	Village of Yellow Springs			
	Subscription Service:			
	City of Beavercreek			
	All Townships			
Waste Management	Non-Subscription Service:	Asbestos	For Totals Reference:	Montgomery County South Transfer
of Ohio	City of Fairborn	General	Table III-1	Montgomery County North Transfer
1700 N. Broad Street	Village of Jamestown	Industrial	District Waste Landfilled	Stony Hollow Landfill
Fairborn, OH 45324	Village of Spring Valley (end 2012)	Exempt	Table III-3	
937-603-9021	Subscription Service:	CD/D	District Waste Transfer Facilities	
	City of Beavercreek			
	All Townships			

SECTION IV

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

This section of the plan must contain population, waste generation, and waste reduction estimates for the reference year. Also, the District must make any necessary adjustments to waste generation estimates based upon historical trends or alternative estimation methodologies in this section. All assumption and sources of information used in developing the analysis must be included.

A. Reference Year Population and Residential/Commercial Waste Generation

The planning period for the District's Plan Update is 15 years, 2015 through 2030. 2011 will serve as the Reference Year. Table IV-1 presents the District's adjusted population and residential/commercial waste generation for 2011.

The 2011 reference year adjusted population of 162,427 was determined by using the Greene County population projections from the Ohio Development Services Agency.

In accordance with the format, the adjustment to the District's population for 2011 must reflect the addition or subtraction of population segments of cities or villages that straddle the County boundary. Since the majority of the population of the Village of Clifton is located in Greene County, the 48 Clifton residents living in Clark County were added to the District' population. Conversely, the 467 residents of the City of Kettering were subtracted from Greene County's population given the majority of Kettering residents are located in Montgomery County. This resulted in a net deduction of 419 residents.

The District completed Table IV-1 using the population of 162,427 and the waste generation rate of 4.42 lbs./person/day. This waste generation rate is listed in the plan format. As shown below, the calculated residential/commercial waste is 131,022 tons.

Per capita waste generation rate x population x 365 days / 2000 pounds

4.42 lbs./person/day x 162,427 x 365 / 2000 = 131,022 tons

An adjusted per capita waste generation rate will be used for this plan update. The information is listed in this Section under item G. It shows the 5.39 as the lbs./person/day generation rate for the residential/commercial waste.

B. Industrial Waste Generation

The Industrial Waste Generation was determined using two sources of information. Waste disposal data was obtained from OEPA's Annual District Review Form 2011. This source listed the tons of waste disposed as 1,105 tons. Data for the tons of materials that were recycled was secured through the District's survey. The survey tool determined the industrial sector recycled 18,146 tons in 2011. By adding the waste disposed and materials recycled the total waste generation for the industrial sector is 19,251 tons.

The calculation listed below shows how the generation rate was determined. This information is also listed on Table IV-3. This is the only methodology that will be used to determine the industrial waste generation because the industrial base in the District is a small component of total waste generation, the District's survey did not yield enough data to be useful, and the information in the format is no longer relevant.

1,105 tons of waste + 18,146 tons recycled = 19,251 tons generated

Generation Rate = industrial waste generated x 2,000 / 162,427 / 365

Generation Rate = 19,251 x 2,000 / 162,427 / 365 = .65 lbs./person/day

C. Exempt Waste

In 2011, OEPA's Annual District Review Form showed 2,131 tons of Exempt waste was disposed in municipal solid waste landfills. Examples of materials include foundry sand, bio remediation soil plus construction and demolition debris. The generation rate as listed in Table IV-4 was determined using the following calculation.

Generation Rate = exempt waste disposed x 2,000 / 162,427 / 365

Generation Rate = 2,131 x 2000 / 162,427 / 365 = .07 lbs./person/day

D. Total Waste Generation

As presented in Table IV-5 the calculated waste generation for the District is 152,403 tons. This total was determined from the methodologies described above for Residential/Commercial, Industrial, and Exempt Wastes.

As discussed in item G in this Section, the total waste generation for the Residential/Commercial, Industrial, and Exempt waste will be adjusted. This adjusted total is 181,090 tons.

E. Reference Year Waste Reduction

During the reference year, the District was not able to document specific source reduction programs or activities being implemented by the residential/commercial or industrial sector. Therefore, no data is reported for source reduction in Tables IV-6 and VI-7.

1. Residential/Commercial Sector

Residential/Commercial recycling tonnage was determined through measurements or surveying. All materials processed through the District's Recycling Center are weighed or measured. As listed in Table III-5 the Recycling Center includes the Recycling drop-off and MRF, Special Collections, Interagency, Community Festivals or Events, and Scrap Tires. Table III-5 also displays the tons of materials being recycled and the information was determined through surveying. The tons recycling listed in Table IV-6 is derived from the data listed in Table III-5. As shown in Table IV-6, the total recycling tonnage for the residential sector is

37,059. It includes 11,189 tons of recyclables and 25,870 tons of yard waste. For the commercial sector 11,427 tons were recycled. Table IV-6 provides details concerning the various types of materials that were recycled and the tons. This information is provided for the residential and commercial sectors. 48,486 tons is the total amount of materials recycled for the residential/commercial sector during the reference year.

The District has endeavored to eliminate double counting the recycled materials. Following are descriptions of those efforts for the residential sector. During the reference year, plastic bottles and metal cans were accepted at the Recycling Center. Those materials were consolidated and delivered to Rumpke's MRF. Since the bottles and cans were processed through Rumpke's MRF, those tons processed should have been included in OEPA Annual Review Form 2011. To avoid double counting for the residential sector, the District used OEPA data and did not include the tons of bottles and cans with the Recycling Center.

Actions were also taken with the commercial survey to eliminate double counting. As described in Section III, the District conducted a survey of the commercial sector to determine the amount of materials being recycled. The survey was conducted via telephone. Data for businesses that recycled with a waste hauler should have been included in OEPA Annual Review Form 2011. During the survey, the District only captured tons of materials that were processed by a broker or processor, not the MRF's. The system eliminated double counting.

Existing waste reduction strategies that were included in the approved plan are described below. The programs have been arranged by the State's Goals and activity titles as described in Table III-5. To comply with the format, some of the programs described in the approved plan have been combined or listed under different activity titles.

Goal #2 Reduce and/or recycle at least 25% of the residential/commercial waste generated

Existing Waste Reduction Strategies

Activity Title - Recycling Center

The District is responsible for maintaining this complex that includes a drop-off recycling area and material recovery facility. The physical address of the facility is 2145 Greene Way Blvd. Xenia, OH. This facility is open six days per week and is available to all residents and businesses. Normal business hours are Monday through Thursday 7:30 am to 8:00 pm, Friday 7:30 am to 4:30 pm and Saturday 9:00 am to 4:00 pm. The facility does have winter hours that begin about the middle of December and continue through the end of February. Winter hours move the closing time to 6:00 pm, Monday through Thursday. The types of materials that are accepted and processed at the facility include Glass Bottles & Jars, Ferrous and Non-Ferrous Cans, Cardboard, Mixed Paper, Newspaper, Plastics, Cell Phones, and Batteries (residents only). This facility processed over 311 tons during the reference year. Data for specific materials processed through the Recycling Center is listed on Tables III-5 and IV-6.

Activity Strengths

- Available to all residents including apartment dwellers and small businesses
- Accepts standard household recyclables
- Convenient hours of operation
- Provides some cost recovery for the District

Activity Challenges

- Difficulties with some markets for recyclables
- Distance from outlying communities
- May inadvertently contribute to some communities not pursuing curbside recycling

Activity Title – Special Collections

Special Collections are conducted at the Recycling Center. In 2011, the collections were held one Saturday per month. The collection began at 9:00 am and concluded at 1:00 pm. During the special collection residents are allowed to drop-off HHW, scrap metal including appliances with Freon, e-waste, and light bulbs. The objective of the Special Collections is to allow a recycling option for materials that require special handling or there are limited recycling resources. Annually, these special collections manage about 38 tons.

Activity Strengths

- Residents have options for difficult to recycle materials
- Removes hazardous waste from the municipal solid waste stream
- Monthly collections are convenient for most residents

Activity Challenges

- Monthly schedule does not accommodate all schedules
- HHW accounts for less than 1% of the residential waste generated

Activity Title – Interagency Recycling

The Interagency Recycling Network is operated by the District and supported by resources of the MRF. A staff person from the District collects materials from government offices. Materials are collected via a cart system and loaded into a pick-up truck equipped with a stake bed and lift gate. Those materials are then delivered and processed through the MRF. Examples of the current participants include all Greene County government offices, City of Beavercreek, City of Xenia, Beavercreek Township Fire Department, Convention and Visitors Bureau, Sugarcreek Park District, Cedarville Fire Department, OSU Extension, Soil and Water Conservation District. Currently, the program provides recycling services to over 2,000 government employees. Materials collected through this program include mixed paper, cardboard, plus bottles and cans. The tons of materials collected through this program are included with the District's Recycling Center data as listed on Table III-5. Calculations determined this program recycles about 175 tons each year.

Activity Strengths

- Employees engaged in the recycling process and educated
- Provides some cost recovery for the District
- Government agencies do not pay for recycling service

Activity Challenges

- Options are available through the private sector
- Maintaining the program if an outside vendor is used

Activity Title – Community Event Recycling Containers

The District provides recycling containers to communities so recycling may be available at local festivals or events. In the reference year, organizers for six different festivals used the containers to collect plastic bottles and metals cans. The containers are a metal frame that supports a plastic bag. The lid is designed to collect drink containers and is labeled "Recycle plastic bottles and metal cans". The activity recycles about two tons of materials each year.

Activity Strengths

- Provides services requested by communities
- Involves local communities in recycling

Activity Challenges

- Contamination of recyclables

Activity Title – Composting/Yard Waste Management

Yard waste is collected at the Recycling Center. Residents may drop-off branches, leaves, and grass throughout the year. The hours of operation are Monday through Thursday from 1:00 pm to 8:00 pm and Saturday from 9:00 am to 4:00 pm. Since the Yard Waste operation is associated with the Recycling Center, winter hours are set at 10:30 am to 6:00 pm. These hours begin about mid-way through December and continue through the end of February. Grass and leaves are hauled off site to local composters or a local farmer that land applies the material. District staff processed brush through a tub grinder to create mulch. The mulch is available to residents at the Recycling Center and Oak Quarry Park in Fairborn. The material is also used by Greene County Parks and Trails to landscape the County buildings.

In 2010, there was an ice storm that damaged many trees. This storm and yard waste that resulted was brought to the Recycling Center in January of 2011. Thus the amount of yard waste managed through the facility in 2011 was skewed high. Storms or other events that would create non-typical yard waste generation did not occur in 2012. Therefore, for this plan update, the District will use 2012 data of 17,296 tons for the amount of yard waste processed through the Recycling Center.

Community yard waste sites are also operated by the District. In the reference year, three sites were available to the residents. The sites normally open the first of April and

remain open until the first week after Thanksgiving. The sites are open for two nights each week. The sites open at 4:00 pm and close at 8:00 pm. The District partners with local communities to establish the site. The City of Beavercreek, Bath Township and Sugarcreek Township owned the property where the sites are operated. These communities allow the District to operate the sites to collect yard waste. The District places roll-off containers on the sites to collect brush, grass, and leaves. Most of the materials are transported to the District and processed. Brush is ground into mulch and the grass and leaves are combined with materials collected at the Recycling Center. As discussed prior, data from 2011 will not be used for this plan update because of the ice storm. To be consistent with the Recycling Center yard waste operation, the District will also use 2012 tonnage of yard waste collected at the community sites. Therefore, for the plan update, the City of Beavercreek site collected 912 tons, the Bath Township site collected 1,190 tons and the Sugarcreek site collected 614 tons.

In total and as listed on Table III-6, the District managed 20,012 tons of yard waste.

Activity Strengths

- Recycling and Community Sites are very popular with residents
- Provides a substantial portion of the tonnage needed to meet recycling goals
- Mulch is made from the brush and provided free of charge to residents

Activity Challenges

- Constant enforcement of acceptable materials necessary
- Eastern Greene County may be underserved
- Hours of operation – Closed Fridays

During the reference year, several compost operations also accepted organic material generated by the District. Table III-6 has a complete list of the facilities. These operations are located within and just outside of the District's boundaries. According to OEPA's records, these operations accepted and processed 5,858 tons of materials. These materials included yard waste and food waste. The farm that accepts yard waste collected by the District and land applies it has been included on this list.

Activity Strengths

- Provides an alternative to landfills
- District program diverts the largest amount of materials from the landfill
- Private composters are available to businesses and residents

Activity Challenges

- Need to publicize options
- Constant enforcement of acceptable materials
- Limited hours

Activity Title – Residential Recycling

The District, along with OEPA is responsible for this activity. The District and OEPA benefit because the survey captures data concerning recycling programs. Through OEPA's MRF survey, data for non-subscription and subscription curbside recycling is collected. This survey indicates 5,971 tons of glass, plastic, newspaper, cardboard, mixed paper, ferrous, and non-ferrous materials were recycled during the reference year.

Activity Strengths
- Consistent data tracking methods established
- Significant data is captured for recycling programs

Activity Challenges
- Per community data not available

In the reference year, **non-subscription curbside recycling** was available in the Cities of Bellbrook, Fairborn, and Xenia; and the Villages of Cedarville, Jamestown, Spring Valley, and Yellow Springs. These communities contract for waste services. Non-subscription curbside is included in these community's contracted services. Republic, Rumpke, and Waste Management provide the waste and recycling services. All non-subscription curbside recycling is collected via single stream using two wheeled carts or 18 gallon bins. Materials collected include glass bottles and jars, plastic bottles, newspaper, cardboard, mixed paper, and metal cans. The frequency of collection is once per week for all communities except Bellbrook, which is scheduled every other week. Recyclables collected by Rumpke are delivered to their MRF located in Dayton. In the reference year, Republic also delivered recyclable materials to Rumpke's MRF for processing. Waste Management operates a MRF located in Fairborn. Recyclables collected by Waste Management were processed through this MRF. The following lists the communities with non-subscription curbside recycling and identifies the company that had the solid waste service contract during the reference year.

- City of Bellbrook – Republic
- City of Fairborn – Waste Management
- City of Xenia – Rumpke
- Village of Cedarville - Rumpke
- Village of Jamestown – Waste Management
- Village of Spring Valley – Waste Management
- Village of Yellow Springs - Rumpke

Activity Strengths
- Residents have convenient access to recycling
- Significant data is captured for recycling programs

Activity Challenges
- Per community data not available

Activity Title – Residential Recycling - Volume Base Collection Rates

The Village of Yellow Springs uses a volume base collection rate. Residents have the choice of 35, 65, or 95 gallon containers to set out for trash service. Recycling data for materials collected in the Village are included with the activity titled Residential Recycling. Additional details concerning the services available through the Village are also described with the activity titled Residential Recycling.

Activity Strengths
- Residents are paying for only what they throw away
- Community directed this program be established

Activity Challenges
- Bulk items are dealt with through a sticker system

Subscription curbside recycling services are available to certain areas of the District. During the reference year the areas included the City of Beavercreek plus Bath, Beavercreek, Sugarcreek and Xenia Townships. The subscription curbside recycling services are provided by Republic, Rumpke, and Waste Management. Recyclable materials collected through subscription curbside recycling were processed at the facilities described for the non-subscription recycling. The total tons of recyclable materials collected and recycled by these companies were captured in OEPA's MRF survey.

Activity Strengths
- Consistent data tracking methods established
- Significant data is captured for recycling programs

Activity Challenges
- Per community data not available
- Lack of awareness about service
- Separate cost for service

Activity Title – Commercial Recycling

Using 2011 as the baseline, the District conducted a comprehensive survey of the commercial sector's recycling. This survey was conducted via telephone. In the reference year, OEPA conducted its recycling survey of the MRFs and large commercial generators. Data from these surveys was combined and resulted in 11,427 tons of material recycled. Details for the materials recycled are listed in Table III-5 and IV-6. Examples of the materials recycled include food waste, ferrous and non-ferrous metals, cardboard, and mixed paper. To coincide with the plan update, the District intends to complete a comprehensive survey about every five years. Annually, the District will evaluate the recycling information reported in the survey. During this evaluation, recycling tonnage may be added or removed based on the businesses activity.

Recycling data for programs operated by Wright Pattern Air Force Base and Wright State University are included in the Commercial Survey. The survey also captures recycling activity of private businesses and non-profit organizations. For example, paper is recycled by Abitibi through their paper retriever program. Batteries are collected from the residents by Battery Warehouse and Batteries Plus. Goodwill, a non-profit organization collects and recycles textiles and computers. Materials recycled through these programs are listed on Table III-5 and included in Table IV-6.

Two scrap yards are located in the District and accept materials from the residential and commercial generators. In this Plan Update, data for the materials recycled by the scrap yards has not been included to avoid counting materials resulting from construction and demolition.

Activity Strengths

- Allows for direct communications with businesses to establish positive relationships
- Consistent data tracking methods established
- Significant data is captured for all recycling programs
- Provides recycling options
- Residents already frequent these businesses

Activity Challenges

- Companies are sometimes reluctant to disclose information
- Difficult to find current contacts
- Programs are dynamic

Activity Title – Commercial Recycling for Wright-Paterson Air Force Base

Wright Paterson Air Force (Base) is located in Greene County and their recycling data is included the Commercial Survey. The Base operates under the authority of the United State Government and has an active and organized recycling program. This program is operated for Base personnel. Materials collected include food waste, glass, ferrous and non-ferrous metals, corrugated cardboard, paper, plastics, and wood. In 2011, the Base recycled 1,807 tons of the identified materials.

Activity Strengths

- Services provided for Base personnel
- Dedicated personnel and funding source
- Program supported by infrastructure that includes a building and vehicles

Activity Challenges

- Program must sustain itself
- Aging Equipment
- Federal government logistics

Goal #3 – provide information and technical assistance on source reduction

Existing Waste Reduction Strategies

Activity Title – Waste Audits

The District is available to conduct Waste Audits with the commercial businesses. Waste Audits include a site visit with the business. During this site visit, District staff will assist the business to evaluate the types of materials generated. The District will provide recommendations for collection systems plus information for recycling options. Additionally, when feasible, the District will provide advice on altering or reducing the materials imputed into the system to reduce waste generation. Recycling generated as a result of the audit will be recorded in the activity titled Commercial Recycling. No on-site waste audits were conducted during the reference year.

Activity Strengths

- Allow direct and personal communication with businesses
- Provides businesses with recycling options and reduces business waste going to landfill
- Encourages proper source reduction, recycling, and yard waste management practices

Activity Challenges

- Activity is reactive to requests
- Tons of materials recycled is difficult to track

Activity Title – Waste Exchanges

Two waste exchanges are available to businesses located in the District. These resources allow businesses to advertise materials that they have generated or want to obtain. The Interchange is hosted by the Hamilton County Solid Waste Management District. The focus of this resource is to divert materials from being landfilled and support reuse or recycling. This publication is published via electronic media. Another waste exchange is hosted by the Association of Ohio Recyclers. Ohio Materials Exchange, which is known as OMEX, also allows businesses to publish information concerning materials they seek or that are available. OMEX is published on line and includes solid and liquid wastes. On the District's web site, links to "The Interchange" and OMEX are published. Recycling resulting from the waste exchanges would be included in the activity titled Survey – Commercial.

Activity Strengths

- Reduces business waste going to landfill
- Provides businesses with recycling options
- Information published on web site and via electronic media to avoid printing

Activity Challenges

- Contacts at businesses are dynamic

Goal #4 – Provide information and technical assistance on recycling, reuse, and composting opportunities

Existing Waste Reduction Strategies

Activity Title – Technical Assistance and Education

Annually, the District produces a brochure that describes the Services available through the Recycling Center. Included in the publication is information about materials accepted and hours of operations. This publication is sent to all communities and provided at the libraries. About 3,000 publications are printed and distributed each year. A sample is included in Appendix G.

As needed, the District will create brochures that lists recycling information for specific materials like "e-waste" or "how to" guides for drying out paint. During the reference year, these tools were created and made available at the Recycling Center. Samples are also included in Appendix G.

In addition, the District partners with the local community's cable channels and newsletters to share recycling information. Specifically, this information addresses the Special Collections and the information details the dates, hours, and acceptable materials. Each year, the current information is sent to the Cities of Beavercreek, Bellbrook, Fairborn, and Xenia plus the Villages of Jamestown and Yellow Springs.

A publication called Pipelines was identified in the 2008 approved plan. During the reference year, recycling information was not included in this newsletter. The target audience for this publication is the Greene County Sanitary Engineering Department's water and sewer customers. The focus of this newsletter is to educate a target audience about billing and invoicing procedures plus water conservation and protection. Therefore, it is not expected that recycling information will be included in this publication on a regular schedule so it will not be specifically identified for future educational activities.

Electronic media including the web and internet are utilized to educate residents and businesses about recycling. Recycling resources are listed on the District's web page. In the reference year 14,173 hits on the web site were recorded. The District staff also responds and provides recycling information via e-mail and the telephone. Through these described media, recycling information was provided to the residents plus commercial businesses. During the reference year, the District recorded responding to requests from 9 different organizations representing small businesses, churches, and schools. Data for the tons recycled would be included with the Survey for Residential or Commercial Sector.

Presentations educating local groups about recycling are available through the District. In the reference year, the District made three presentations that included 32 adults and

children. The District also partnered with Greene County Parks and Trails. The District provided printed resources and Park's staff included that information in their activities. Through this effort recycling information was included in 25 activities that hosted 565 adults and children.

Tours of the District Recycling Center are conducted by staff. In the reference year, 11 groups toured the facility. These groups normally include Scouts, day care operations, and home schooled groups.

In the reference year, Greene Soil and Water Conservation District allowed the District to set up a display at the County Fair. The focus of the display was scrap tire management. This display is not staffed so information concerning the number of visitors is not known.

Activity Strengths

- Encourages proper source reduction, recycling, and yard waste management practices
- Publications are clear and informative
- Provides information about District programs
- Many local jurisdictions have District information on their website and in community newsletters

Activity Challenges

- Generally attracts persons already interested in recycling
- More traditional media like newspaper coverage is needed

Activity Title – Waste Audits

The District is available to conduct Waste Audits with the commercial businesses. Waste Audits include a site visit with the business. During this site visit, District staff will assist the business to evaluate the types of materials generated. The District will provide recommendations for collection systems plus information for recycling options. Recycling generated as a result of the audit will be recorded in the activity titled Commercial Recycling. No on-site waste audits were conducted during the reference year.

Activity Strengths

- Allow direct and personal communication with businesses
- Provides businesses with recycling options and reduces business waste going to landfill
- Encourages proper source reduction, recycling, and yard waste management practices

Activity Challenges

- Activity is reactive to requests
- Tons of materials recycled is difficult to track

Activity Title – Waste Exchanges

Two waste exchanges are available to businesses located in the District. These resources allow business to advertise materials that they have generated or want to obtain. The Interchange is hosted by the Hamilton County Solid Waste Management District. The focus of this resource is to divert materials from being landfilled and support reuse or recycling. This publication is published via electronic media. Another waste exchange is hosted by the Association of Ohio Recyclers. Ohio Materials Exchange, which is known as OMEX, also allows businesses to publish information concerning materials they seek or that are available. OMEX is published on line and includes solid and liquid wastes. On the District's web site, links to "The Interchange" and OMEX are published. Recycling resulting from the waste exchanges would be included in the activity titled Commercial Recycling.

Activity Strengths

- Reduces business waste going to landfill
- Provides businesses with recycling options
- Information published on web site and via electronic media to avoid printing

Activity Challenges

- Contacts at business are dynamic

Goal #5 – Develop strategies managing scrap tires and household hazardous waste (HHW)

Existing Waste Reduction Strategies

Activity Title – Scrap Tires

The District currently accepts scrap tires that were littered or illegally dumped. These tires are collected by the local jurisdictions, government agencies, or groups who conduct clean-ups. The District secures tire recycling services through registered and licensed vendors. As part of the Interagency Recycling, the District recycles tires generated from the County.

In 2011, the District along with Greene Soil and Water Conservation District applied for and was awarded a Tire Amnesty Grant from OEPA. Collections did not occur until 2012. The target for these collections is the agricultural community.

Scrap tires are also processed through local businesses. Recycling data from activities should be reported to OEPA through the Scrap Tire Unit. According to OEPA's records 1,498 tons of scrap tire were recycled in the reference year.

Activity Strengths

- Collects and recycles litter tires
- Reduces fire hazard potential and pest breeding grounds
- Through the grant, recycles tires that would not be recycled

Activity Challenges
- Cost of disposal may be prohibitive without grants
- Difficultly in enforcing the litter laws

Activity Title – HHW
As described in the activity titled – Special Collections, the District accepts HHW from residents. In the reference year, about 16 tons of HHW was collected from residents. Materials accepted included herbicides, fertilizers, pesticides, fuel, antifreeze, acids and cleaners, stains, varnishes and paint thinner.

Activity Strengths
- Monthly collection means residents have options
- Removes hazardous waste from the municipal solid waste stream
- Provides an environmentally sound option for disposal

Activity Challenges
- Monthly schedule does not accommodate all schedules
- Proper disposal is costly
- Manages a small percentage of total waste generated

Activity Title – Lead Acid Batteries

As described in the activities titled – Recycling Center, residents may drop-off lead acid batteries at the Recycling Center and local businesses. As discussed in the Commercial Recycling activity, local businesses also accept and recycle batteries from the residents.

Activity Strengths
- Residents have several options
- Provides some cost recovery for the District

Activity Challenges
- Batteries are sometimes removed from premises without authorization by the District
- More education and media coverage needed to promote proper management

Goal #7 – prepare a market development strategy (optional)

Existing Waste Reduction Strategies

None identified in current plan

Non-Goal Activities

Activity Title – Litter Collection

Through the District, roadside litter is managed by an Adopt-A-Spot program. The District provides safety equipment and supplies to volunteer organizations. The District

partners with the local communities to determine which roads may be adopted. During the reference year there were 26 roadsides adopted and 111 volunteers collected 184 bags of trash. During the reference year, labor was not available from the Adult Detention Center to pick-up litter.

Activity Strengths

- Utilizes citizen involvement in communities to target problem areas
- Provides for illegal dumping clean-ups
- Cost to District is minor for the Adopt-A-Spot

Activity Challenges

- Citizen safety concerns – traffic and handling of potentially dangerous materials
- Program is reactive, does not stop littering
- Enforcement of littering and dumping laws compete with higher priority concerns

2. *Industrial Sector*

Industrial Waste Reduction Strategies

Goal #2 – Reduce/recycle at least 50% of the industrial waste generated

Existing Waste Reduction Strategies

Activity Title – Industrial Recycling

Using 2011 as the baseline, the District conducted a comprehensive survey of the industrial sector's recycling. This survey was conducted via telephone. Annually, OEPA has conducted its recycling survey of the MRFs which includes industry. Data from these surveys was combined which identified 18,146 tons of material recycled. Details for the materials recycled are listed in Table III-5 and IV-7. Examples of the materials recycled include glass, ferrous and non-ferrous metals, cardboard, and mixed paper. To coincide with the Plan Update, the District intends to complete a comprehensive survey about every five years. Annually, the District will evaluate the recycling information contained in the survey. During this evaluation, recycling tonnage may be added or removed based on the manufacturer's activity.

Actions were taken with the industrial survey to eliminate double counting. As described in Section III, the District conducted a survey of the industrial sector to determine the amount of materials being recycled. The survey was conducted via telephone. Data for manufacturers that recycled with a waste hauler should have been included in OEPA Annual Review Form 2011. With the survey, the District only captured tons of materials that were processed by a broker or processor, not the MRF's. Thus, double counting was eliminated.

Data for the tons of materials generated and recycled by CEMEX and Bob Evans are included in the Industrial Survey. A copy of this survey can be found in Appendix F.

Activity Strengths

- Allows for direct communications with manufacturers that establish positive relationships
- Consistent data tracking methods established
- Significant data is captured for all recycling programs

Activity Challenges

- Companies are sometimes reluctant to disclose information
- Contacts are dynamic

Goal #3 – provide information and technical assistance on source reduction

Existing Waste Reduction Strategies

Source reduction is driven by the product producers. To date, the District has not been able to document activity associated with this goal.

Activity Title – Waste Audits

The District is available to conduct Waste Audits with the industries. In the reference year the District conducted a waste audit with one manufacturing business. During the waste audits, the District will provide recommendations for collection systems plus information for recycling options. Additionally, when feasible, the District will provide advice on altering or reducing the materials inputted into the system to reduce waste generation. Recycling generated as a result of the audit would be recorded in the activity titled Industrial Recycling.

Activity Strengths

- Allow direct and personal communication with manufacturers
- Provides manufacturers with recycling options and reduces industrial waste going to landfills
- Encourages proper source reduction, recycling, and yard waste management practices

Activity Challenges

- Activity is reactive to requests
- Tons of materials recycled is difficult to track

Activity Title – Waste Exchanges

Two waste exchanges are available to manufacturers located in the District. These resources allow the industrial sector to advertise materials that they have generated or want to obtain. The Interchange is hosted by the Hamilton County Solid Waste Management District. The focus of this resource is to divert materials from being landfilled and support reuse or recycling. This publication is published via electronic media. Another waste exchange is hosted by the Association of Ohio Recyclers. Ohio Materials Exchange, which is also known as OMEX, allows businesses to publish

information concerning materials they seek or that are available. OMEX is published on line and includes solid and liquid wastes. On the District's web site, links to "The Interchange" and OMEX are published. Recycling resulting from the waste exchanges would be included in the activity titled Industrial Recycling.

Activity Strengths

- Reduces industrial waste going to landfill
- Provides information for recycling options
- Encourages proper source reduction
- Information only published on web site and via electronic media

Activity Challenges

- Contacts at businesses are dynamic

Goal #4 – provide information and technical assistance on recycling, reuse, and composting

Existing Waste Reduction Strategies

Activity Title – Technical Assistance and Education

Technical assistance is available through the District's staff. During the reference year the District provided technical assistance to one industry via the telephone. Industrial manufacturers may access recycling information through the web site. There is not a mechanism available to determine how many manufacturers used the information listed on the web site. Recycling generated through Technical Assistance and Education is included in the recycling data for Industrial Recycling.

Activity Strengths

- Allows for direct communications with manufacturers that establish positive relationships
- Offers manufacturers a way to reduce costs of waste disposal
- Redirects waste that previously was going to a landfill

Activity Challenges

- Companies reluctant to share processes that create waste
- Limited penetration of information within companies

Activity Title – Waste Audits

The District is available to conduct Waste Audits with the industries. During the reference year the District conducted a waste audit with one manufacturing business. Recycling generated as a result of the audit would be recorded in the activity titled Industrial Recycling.

Activity Strengths

- Allow direct and personal communication with manufacturers
- Provides manufacturers with recycling options and reduces industrial waste going to landfills
- Encourages proper source reduction, recycling, and yard waste management practices

Activity Challenges

- Activity is reactive to requests
- Tons of materials recycled is difficult to track

Activity Title – Waste Exchanges

Two waste exchanges are available to manufacturers located in the District. These resources allow the industrial sector to advertise materials that they have generated or want to obtain. The Interchange is hosted by the Hamilton County Solid Waste Management District. The focus of this resource is to divert materials from being landfilled and support reuse or recycling. This publication is published via electronic media. Another waste exchange is hosted by the Association of Ohio Recyclers. Ohio Materials Exchange, which is also known as OMEX, allows businesses to publish information concerning materials they seek or that are available. OMEX is published on line and includes solid and liquid wastes. On the District's web site, links to "The Interchange" and OMEX are published. Recycling resulting from the waste exchanges would be included in the activity titled Industrial Recycling.

Activity Strengths

- Reduces industrial waste going to landfill
- Provides information for recycling options
- Encourages proper source reduction
- Information only published on web site and via electronic media

Activity Challenges

- Contacts at businesses are dynamic

F. Total Waste Generation: Historical Trends of Disposal plus Waste Reduction

Table IV-8 displays the information for waste disposal and reduction for the last five years. The District obtained this information from OEPA's Annual District Review Forms. The only information that is consistent and useful is the tons of waste managed through landfill disposal.

The industrial recycling data for 2007 through 2010 resulted from a prior survey that shows significantly higher recycling data than the volumes captured through the District's 2011 survey. Since, information for the methodology used to conduct the prior survey is not available and the volumes are significantly higher, the District will use the most recent survey.

Yard waste and composting data shows significant changes during the previous five years because of storms, like the hurricane of 2008. As demonstrated in the data, storms can have a dramatic impact on the volume of material generated and processed.

G. Reconciliation of Waste Generation

Table IV-9 shows the reconciliation of waste generation for the District. Data for the industrial and exempt as discussed previously, will be used for this table. The total waste generation for the residential/commercial sector will be adjusted.

For the residential/commercial waste, Table III-1 lists the tons landfilled and Table III-3 is the tons managed through transfer facilities. Respectively, these tons are 65,924 and 45,299. Adding these equals 111,223 tons of waste disposed for the residential/commercial sector. The amount of material recycled is listed on Table IV-6 and that tonnage is 48,486. When the waste disposed is added to the materials recycled the total waste generations equals 159,709 tons. As shown in the calculation below, the generation rate for the residential/commercial is 5.39 pounds per person per day.

Since 5.39 pounds per person per day is based on current, local weights of materials landfilled and recycled, the District will use this calculation for the plan update. The District will not use the 4.42 pounds per person per day that is listed in the format because it was extrapolated from a 1994 analysis of solid waste and it is based on national data.

To determine the generation rate, the following formula was used.

Generation Rate =residential/commercial waste generated x 2,000 / 162,427 / 365

Generation Rate = 159,709 x 2000 / 162,427 / 365 = 5.39 ppd

H. Waste Composition

1. Residential/Commercial Sectors

Waste composition for the residential/commercial sector was estimated using data from the landfill composition study conducted by the Ohio Department of Natural Resources, Division of Recycling and Litter Prevention. The percentages of each type of the materials identified from this study were applied to the 2011 residential/commercial waste that was disposed. This tonnage equaled 159,709. Using this study the quantities for each waste stream is shown on Table IV-10.

2. Industrial Waste Sector

Table IV-11 will not be included in the plan update. The table was removed because the industrial survey demonstrated that 85% of the recycling was generated from two businesses. This indicates the waste and recycling have a unique composition and that traditional waste composition studies would not create meaningful information. Also, the waste disposed from the industrial sector accounts for only one percent of the total waste landfilled.

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

Greene County	Population		Generation Rate lbs./person/day	Total District Residential/Commercial Generation (TPY)
	Before Adjustment	After Adjustment		
2011 estimated	162,846	162,427	4.42	131,022
Totals				

Source of Information - Ohio Department of Development, Office of Policy, Research and Strategic Planning

Sample Calculations: 162,846 - 467 + 48 = 162,427 162,427 x 4.42 x 365 / 2,000 = 131,021.74

For 2011 Estimated:
City of Kettering - subtract 467
Village of Clifton - add 48

Table IV-3 **Industrial Waste Generation**

Types of Waste Stream	Generation Rate lbs./person/day	Total Industrial Waste Generation (TPY)
Industrial	0.65	19,251
Totals	0.65	19,251

Source of Information - OEPA's Annual District Review Form for 2011

Sample Calculation: 19,250.73 x 2,000 / 162,427 / 365 = .65

Table IV-4 **Exempt Waste Generated in the District and Disposed in Publicly Available Landfills**

Types of Waste Stream	Generation Rate lbs./person/day	Total Exempt Waste Generation (TPY)
Foundry Sand	0.06	1,855
Bio Remediation Soil	0.00	24
Construction and Demolition Debris	0.01	252
Totals	0.07	2,131

Source of Information - OEPA's Annual District Review Form for 2011

Sample Calculation: 1,854.54 x 2,000 / 162,427 / 365 = .06

Table IV-5 **Reference Year Total Waste Generation for the District**

Type of Waste	Generation Rate lbs./person/year	Tons/Year
Residential/Commercial	4.42	131,022
Industrial	0.65	19,251
Exempt	0.07	2,131
Total Waste Generation		152,403

Source of Information - OEPA's Annual District Review Form for 2011

Sample Calculation: 19,250.73 x 2,000 / 162,427 / 365 = .65

Table IV-6 **Reference Year Residential/Commercial Waste Reduction in the District**

		Residential	Residential	Commercial	Total
Type of Waste Source Reduced	**TPY**	**Type of Waste Recycled**	**TPY**	**TPY**	**TPY**
none to report		Appliances/"White Goods"	5	70	75
		Lead-Acid Batteries	460		460
		Dry Cell Batteries	49	0	50
		Rechargeable Batteries		1	1
		Food Waste		307	307
		Glass	1,216	33	1,249
		HHW	16		16
		Ferrous Metal	201	781	982
		Non-Ferrous Metal	72	191	263
		OCC	265	8,391	8,655
		All Other Paper (includes newspaper)	4,493	654	5,147
		Plastics	462	261	722
		Tires	1,498		1,498
		Textiles	2,222		2,222
		Wood		718	718
		Yard Waste Composting	25,870		25,870
		Commingled Recyclables		2	2
		Electronics	231		231
		Ash (recycled ash only)			-
		Hangers		18	18
		Fluorescent Lights		2	2
		Totals	37,059	11,427	48,486

Table IV-7 **Reference Year Industrial Waste Reduction in the District**

Types of Waste Source Reduced	TPY	Types of Waste Recycled	TPY
none to report		Glass	12
		Ferrous Metal	657
		Non-ferrous Metal	643
		OCC	669
		All Other Paper (includes newspaper)	1,019
		Plastics	5
		Slaughter House	6,972
		Cement Kiln Dust	8,169
		Total	18,146

Table IV-8 **Total Waste Generation Based Upon Disposal Plus Waste Reduction**

	Management Method Used in TPY						
Year	Source Reduction & Recycling	Yard Waste Composting	YW Land Application	Incineration	MSW Composting	Landfill Disposal	Total Waste
2007	49,188	19,277				114,965	183,430
2008	50,879	70,567				117,873	239,319
2009	56,195	38,733				110,814	205,742
2010	52,844	32,276				110,069	195,189
2011	40,762	25,870				114,458	181,090

Source of Information : OEPA's Annual District Review Forms for 2007 - 2010
Source of Information: Plan Update for 2011

Table IV-9 **Adjusted Reference Year Total Waste Generation for the District**

Landfill, Recycling, and Composting

Type of Waste	Generation Rate lbs./person/day	Tons/Year
Residential/Commercial	5.39	159,709
Industrial	0.65	19,251
Exempt	0.07	2,131
Total Waste Generations	6.16	181,090

Source of Information - OEPA's Annual District Review for 2011 and recycling data

Sample Calculation: 159,709 x 2,000 / 162,427 / 365 = 5.39

Table IV-10 **Estimated Residential/Commercial Waste Stream Composition for the Reference Year**

Waste Stream Type	Percent of Waste Stream	Residential/Commercial Waste Generation	Tons Disposed
Corrugated Paper	8.75%	159,709	13,975
Office Paper	8.47%	159,709	13,527
Mixed Paper	8.30%	159,709	13,256
Newspaper	8.88%	159,709	14,182
Magazines	3.66%	159,709	5,845
Paperboard	3.29%	159,709	5,254
LDPE #4	2.27%	159,709	3,625
PET #1	2.40%	159,709	3,833
HDPE #2	5.76%	159,709	9,199
PVC #3	0.49%	159,709	783
PP #5	0.61%	159,709	974
PS #6	1.63%	159,709	2,603
Other Plastics	2.41%	159,709	3,849
Aluminum Beverage Cans	1.34%	159,709	2,140
Aluminum Foil/Food Trays	0.45%	159,709	719
Other Aluminum	0.25%	159,709	399
Tin Food Cans	1.56%	159,709	2,491
Other Tin Cans	0.28%	159,709	447
Yard Waste	10.50%	159,709	16,769
Textiles	6.66%	159,709	10,637
Diapers	3.28%	159,709	5,238
Food	13.03%	159,709	20,810
Glass	4.77%	159,709	7,618
Empty Aerosol Cans	0.28%	159,709	447
Medical Waste	0.45%	159,709	719
Fines and Super Fines	0.23%	159,709	367
	100%		159,709

Source of Information: Ohio Department of Natural Resources, Division of Recycling and Litter Prevention

SECTION V

V. Planning Period Projections and Strategies

This section contains projections for each year of the planning period for population and waste generation. All assumptions and sources of information used are included. In addition, this section provides waste reduction strategies to be implemented by the District. Using these strategies, the District projected the amount of solid waste which will be recycled, source reduced or recycled, and composted for each year of the planning period. The District also estimated the amount of yard waste, scrap tires, lead-acid batteries, and household hazardous waste generated in the District. The District then determined if existing programs are sufficient to manage these waste streams. Waste reduction as used in this section may mean source reduction, recycling, composting, documented land application of yard waste, resource recovery, and incineration. Also, for the activities that generated tons of recyclable materials as shown in Table V-5, the text has been italicized.

A. Planning Period

The planning period is 2015 through 2030.

B. Population Projections

The District's adjusted population for the planning period is shown in Table V-1. The 2011 reference year adjusted population of 162,427 was determined by using the Greene County population projections from the Ohio Development Services Agency (ODSA). The ODSA published the results of the 2010 census and made projections regarding the future population of each of Ohio's Counties. Those projections produced by ODSA show an annual increase of 1% or less for the District's population until 2025. Between 2025 and 2030 the population is projected to decrease slightly.

As explained in Section IV, the adjusted population resulted in a net loss of 419 residents. This adjustment is straight lined through the planning period.

C. Waste Generation Projections

1. Residential/Commercial Sector

The Residential/Commercial waste generation estimates for the 15 year planning period are displayed in Table V-2. The adjusted per capita waste generation rate listed in Table IV-9 is 5.39 pounds per person per day. Section IV describes the calculation that was used to determine this per capita generation rate. This rate was straight lined through the planning period. This rate includes waste disposed and recycled.

At this time, projections for waste generation rates are not available from OEPA or another accepted resource. As discussed in Section IV for the historical trends, there are variances shown in the recycling data so that information could not be used to project waste generation. However, the historical trend for waste disposal as listed in Table IV-8 shows no significant changes. Therefore, using the straight line projections for the planning period will closely reflect the current trend of waste disposal.

2. *Industrial Sector*

Industrial waste generation estimates for the planning period are listed in Table V-3. This total includes waste that will be disposed and recycled. Based on OEPA's Annual District Review Form, the amount of waste disposed was 1,105 tons. OEPA's MRF survey and the District's Industrial Survey revealed 18,146 tons of materials were recycled. The amount of industrial waste disposed accounts for only 1% of the total waste disposed. According to the 2018 Ohio Job Outlook for Southwest Central Ohio Economic Development Region 4, the jobs associated with manufacturing are projected to decrease 18.5%. Ordinarily, the District would use this report and project decreases in industrial generation from 2015, the first year of the planning period, to 2018, and then potentially increase or decrease projections and/or hold industrial generation projections constant for the remainder of the planning period. However, the District does not believe that the manufacturing projections are reflective of trends in Greene County. As a result, the District decided to analyze historical District data and make conservative projections. When evaluating the last five years of available data, 2007-2011, the industrial generation for the reference year is the lowest and most conservative. Additionally, Ohio Department Services Agency is projecting minor fluctuations in the District population. As a result, the District has elected to straight line the projections for the per capita generation rate. This per capita rate is .65 and was described in Section IV. When the industrial recycling values are held constant throughout the planning period, the resulting industrial disposal projections correlate to the historical trends of waste disposed.

3. *Total Waste Generation*

Table V-4 displays the total waste generation for the 15-year planning period. The District has inserted an "Exempt Waste" column in the table. This information was taken from Section IV and reflects the amount of exempt waste that was disposed in landfills and reported to OEPA. The amount of exempt waste expected to be generated and disposed in landfills is expected to remain constant. Therefore, the amount of exempt waste has been straight lined through the planning period.

The projection for the per capita rate for the residential/commercial, industrial, and exempt waste generation has been straight lined through the planning period. The only variance is the population projections as previously described.

D. Projections for Waste Stream Composition

The District does not anticipate any measurable changes in the composition of the waste stream during the 15-year planning period.

E. Waste Reduction Strategies through the Planning Period

For all waste reduction strategies, the District may continue to fund and support the activities by employing staff, but also reserves the right to secure services through non-profit, private, or other public organizations. Throughout the planning period, the Policy Committee will conduct various evaluations to determine how the activities are funded and implemented. Evaluations

may include, but not be limited to, cost/unit, tons managed, service accessibility, plus overall benefit to the District and Greene County.

1. ***Residential/Commercial Waste Reduction Strategies***

Goal #1 – ensure the availability of reduction and recycling opportunities/programs for the residential/commercial waste

The District has elected to comply with Goal #2 so waste reduction strategies for this goal will not be listed.

Goal #2 – Reduce and/or recycle at least 25% percent of the residential/commercial waste generation

New Waste Reduction Strategies – Recycling Center drop-off evaluation, possible expansion

With this activity, the District intends to evaluate options to provide drop-off recycling services. The evaluation will begin in 2015. Currently the District hosts a site where residents or businesses can drop-off household materials. Section III lists areas where curbside recycling services are available through the waste haulers. There are areas in the District where recycling services are not available.

For this plan update the District will conduct an evaluation of these areas to determine if drop-off recycling should be established. The evaluation will include locating areas where curbside recycling is not available, areas that have high concentrations of apartments that do not have recycling, and the rural areas that have sparse populations. Based on the evaluation, one to four sites may be established and the sites may be full or part time. It is anticipated that materials collected at the sites would include cardboard, paper, newspaper, plastic bottles, metal cans, plus glass bottles and jars.

If the evaluation warrants the establishment of drop-off site(s), the District will conduct an advertising campaign. This advertising campaign will promote the location and materials that may be recycled. Media that will be used as part of the campaign will include brochures, local newsletters, websites, and the newspaper.

During the next plan cycle, the District may modify the locations of the sites and materials collected. In addition, the District reserves the right to discontinue these drop-off sites. Factors that would cause this change would include, but not be limited to, illegal dumping, contamination of materials, lack of funds, or private or public entities expansion of recycling services. This drop-off program expansion will be supported by current staff and equipment so the cost for the program will be included in the Recycling Center.

New Waste Reduction Strategies – Optional

Activities or programs listed below will be considered optional activities for this plan update. The intent of the optional activities is to allow the District to be responsive to changes in the recycling services and markets. The District reserves the right to implement the activities or programs with the approval of the Policy Committee. Since these activities and programs

are optional and not fully developed at this time, the District is only able to provide a brief description. Materials recycled as a result of these activities and programs would be included with data from the District's Recycling Center, Residential or Commercial Recycling.

Activity Title – Materials Management

Description – Beginning in 2014, the District may secure grants or fund activities to implement new recycling programs. The District intends to use this optional activity for programs that are initiated by the State or the District determines there is a need. This will allow the District to respond to unforeseen opportunities or other initiatives to increase recycling and decrease landfilling of materials.

Since this activity may result from State initiatives, the District intends to work with the State's grant resources. These would include the Community Recycling, Market Development, or Special Assistance grants. The District may also seek grants from other State agencies plus the Federal Government and private organizations. Grant funds would be utilized before the District designated funds for this activity. This activity would be managed by current staff and that would be the significant financial investment. To implement this activity, the District may partner with entities representing the public, private, or non-profit sectors.

Funds may be spent on, but not be limited to, options such as procuring containers, paying for recycling services, developing and procuring education materials, plus investment in recycling or waste reduction technologies. Food waste or rigid plastics are examples of materials that may be targeted with this activity. The District may also implement programs by partnering with generators, like bars and restaurants, to collect glass. Examples of programs the District may create include Green Dot or Hamilton County's apartment recycling program.

This activity will continue through the planning period. Materials that are recycled as a result of this activity will be reported in the activities titled Recycling Center, Residential, Commercial, or Industrial Recycling.

Activity Title – Grants (Optional)

Description – With this optional activity, the District has the authority to establish a grant program. For this Plan Update, the District would like to provide programs that will increase recycling, especially in the residential sector. In the reference year, there were seven non-subscription curbside programs and five subscription curbside programs in the District, covering a significant percentage of the population. Therefore, the District already has the benefit of a significant amount of residential recycling infrastructure.

With this plan, the District will focus on promoting these existing programs and supporting upgrades to these programs that will result in the diversion of more material. The District may provide a one-time grant award to the community for either a targeted awareness campaign or program improvement. The District will work with each community to determine their specific hurdles to increasing diversion. Typical

issues include lack of awareness and understanding of the program, and inadequate recycling container size. The grant will not exceed $25,000 per community.

Based on the number of communities that had recycling programs at the time of plan development, the District will target two to three communities annually until the District has cycled through all communities. Presently, there are twelve communities that have either subscription or non-subscription recycling programs. Starting in 2015, the proposed schedule for targeting communities:

2015 – City of Xenia, Xenia Township

2016 – City of Fairborn, Bath Township

2017 – Village of Cedarville, Village of Jamestown, Village of Yellow Springs

2018 – City of Bellbrook, Village of Spring Valley, Sugarcreek Township

2019 – City of Beavercreek, Beavercreek Township

This schedule was determined based on current infrastructure, solid waste contract terms, and regionalism. The District reserves the right to modify the schedule as it deems necessary during the planning period.

To increase recycling, communities will be allowed to spend funds on public relations and marketing plus infrastructure improvements. Allowable expenditures for the public relations and marketing shall include a variety of media including print, electronic, and personal presentations. In addition, communities may expend funds to provide incentives or awards for efforts that increase recycling. Examples of improvements may include upgrading the types or size of the recycling containers used or transitioning from subscription to non-subscription service. As the grant program develops and evolves, the District may modify or additionally define the allowable expenditures.

Communities that receive funding will be required to submit a status report. This status report will include a detailed list of expenditures and describe actions implemented to increase recycling. Communities shall have one year from the award of the grant to complete the grant activity. Extensions to the grant period may be considered based on specific community needs.

If funds are available, the District may consider awarding grants to non-profits, private entities, or other government agencies. These grants shall not exceed $5,000 and the funds must be used to increase recycling. Entities must demonstrate that the funds will increase recycling and report the results including expenditures and recycling amounts.

Existing Waste Reduction Strategies

- *Recycling Center*
- *Special Collections*
- *Interagency Recycling*
- *Community Event Recycling Containers*

- *Composting/Yard Waste Management**
- *Residential Recycling*
  Includes non-subscription, subscription recycling and volume based collection rates
- *Commercial Recycling*
  Includes Wright Patterson Air Force Base
- *Private and Non-profit*
- Scrap Yards

***Activity Title – Composting/Yard Waste Management**

As indicated in Section IV, in the reference year, yard waste was collected at the Recycling Center in Xenia and several community locations. Hours of operation at the Xenia site were Monday through Thursday from 1:00 pm to 8:00 pm and Saturday from 9:00 am to 4:00 pm. Winter hours were 10:30 to 6:00, Monday through Thursday. In the reference year, three community yard waste sites were also available in the City of Beavercreek, Bath Township, and Sugarcreek Township. Each site was open two evenings per week.

While yard waste collection at the Recycling Center and the community sites is popular, there is considerable cost associated with the activity. In addition, the community sites do not collect a large amount of material relative to the overall amount of material diverted within the District. As a result, with this plan update, certain changes will be made in order to reduce some of the expenses associated with this program.

Reduction in Community Sites
Under this plan, the Sugarcreek and Bath Township sites will be closed. Residents will be encouraged to use the yard waste sites in Xenia and Beavercreek or privately operated composting sites that are available in those areas. The Policy Committee will also evaluate the Beavercreek site to see if some reduction in hours or other changes could be implemented to reduce the expense of operating that site.

Evaluation of Recycling Center Yard Waste Operations
Yard waste collection will continue as is at the Xenia site under this plan during the first two years of implementation of the Plan. The Policy Committee may conduct a feasibility study of the operation of the Xenia site to determine if cost savings can be achieved. If the Policy Committee determines that changes to the operation are advisable, the Committee will submit the changes to OEPA and the Board of County Commissioners. This will allow OEPA the opportunity to determine if the changes can be made in accordance with the approved plan. If OEPA determines the recommendation complies with the approved plan, the recommendation will be published and made available for public comment for at least 30 days. The public comment period will be publicized by the District to the residents, communities, and the media through the District web site, a press release, and other methods.

To accommodate comments received by the public and maintain compliance with the approved plan, the Policy Committee may repeat or extend the notifications of operational changes and public comment period.

If, after receiving public comments and approval from OEPA, the Policy Committee believes that it is advisable to move forward with changes to the operations, it will make a formal recommendation to the Board of County Commissioners to do so. Upon passage of a resolution by the County Commissioners supporting the recommendation, the District will implement the recommended changes to the Xenia location.

Under this Plan, small operational changes, such as minor changes to hours of operation, can be made at the discretion of the District and will not need to go through the process described above. If changes to operation of the facility are desired by the Policy Committee that would result in a significant reduction in waste diversion through the facility or significant changes to the budget, the Plan will need to be amended, ratified, and approved prior to implementing those changes.

Partnering with Privately Operated Compost Facilities
The District may implement a formal partnership program with privately operated compost sites in an effort to encourage the investment of the private sector into locations that can be used by residents. A set of basic criteria will be established by the District that must be met by a private facility in order to qualify for a formal partnership. These criteria will include requirements such as acceptance of yard waste at no cost to residents, hours of operation that provide convenient access to residents, facility standards to readily and safely accept yard waste, compliance with OEPA composting rules, and reporting to the District of residential material accepted. These criteria may be modified by the District at any time during the planning period. To become formal partners with the District, an agreement will be entered into between the District and the facility to memorialize the partnership. Partner facilities will be formally recognized and promoted by the District through signage, the District's web page, advertisements, and community education efforts (among other things).

Goal #3 – provide information and technical assistance on source reduction

New Waste Reduction Strategies

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Existing Waste Reduction Strategies

- Waste Audits
- Waste Exchanges

Goal #4 – Provide information and technical assistance on recycle, reuse, and composting opportunities

New Waste Reduction Strategies

Activity Title – Recycling Forums

The District will schedule Recycling Forums. Local government employees are the target audience. The intent of the Recycling Forums is to educate public employees concerning solid waste management and recycling resources that are available to their residents. It is planned to conduct the Recycling Forums in conjunction with the local government's staff meetings. This activity will begin in 2015. Public employees and residents of the District will benefit from this activity because they will be directly informed about current recycling opportunities. The District plans to conduct two Recycling Forums per year. The District may invite experts to assist with and participate in the Forums. These experts could include OEPA, other Solid Waste Districts, consultants, or attorneys that specialize in solid waste management. Materials recycled or properly managed through this activity will be counted in other activities like the District's Recycling Center or Residential Recycling.

Activity Title – Advertising Media

The District will place paid advertising in the local newspapers. The ads will focus on the District's drop-off recycling services available to residents. The activity is scheduled to begin in 2015 and will target activities listed on Table V-5. Included in this list of activities are the recycling center, special collections, and composting/yard waste management. Materials targeted through this advertising will include yard waste, cardboard, mixed paper, newspaper, plastic bottles, metal cans plus glass bottles and jars. As long as funds are available, the District intends to place ads in the local newspaper once per quarter. Through this activity, the District expects the tons of recycling to increase for the identified materials. These tons would be collected and processed through the District's recycling center and reported with that activity.

New Waste Reduction Strategies - optional

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Activity Title - Debris Management

The District is allowed to provide staff to serve as the Debris Manager for the County as defined in the Greene County Emergency Operations Plan. With this plan update, the District is authorized to support and assist with development of Debris Management plans for the County and local jurisdictions. Debris generating events cannot be predicted. If a debris generating event occurs, the District is allowed to respond and expend funds relating to solid waste management and recycling.

Activity Title – Environmental Crimes

The District may establish an environmental crimes strategy. Ultimately, the Policy Committee would determine if this activity is deemed necessary and establish the scope

of the activity. The Policy Committee's evaluation would include, but not be limited to, financial analysis, staff resources, and severity of criminal activity. In Ohio, environmental crimes develop in the larger municipalities and tend to migrate to the suburban and rural areas. The District is located just east of the City of Dayton and could be subject to environmental crimes during the planning period. Examples of current environmental crimes include tire theft and illegal dumping, scrap metal theft, and meth labs. Fortunately, illegal dumping associated with criminal activities has not created an undue burden on local law enforcement at this time. If this strategy is developed, the District may provide technical assistance or financial support. The District may partner with others such as local law enforcement, courts, and the health district to develop and initiate the strategy.

Existing Waste Reduction Strategies

- Technical Assistance and Education*
- Waste Audits
- Waste Exchanges
- *Composting/Yard Waste Management – listed with Goal #2*

***Activity Title – Technical Assistance and Education**

As described in Section III, the District provides technical assistance and education. In 2015, the District plans to evaluate resources for a more formal education program with the schools. The evaluation will include contacting schools to determine current lessons or activities that focus on recycling plus determine requirements for a formal education program. The formal program will provide recycling lessons to children that comply with the State's standards. The evaluation will also determine the cost to provide the formal program.

As listed in the approved plan, the District may also conduct educational activities that include the formal education program plus public relations and marketing activities. The activities may include, but are not limited to:

- Press releases
- Paid advertising for print, radio, or TV
- Recycling Contests or Recognitions
- Development of additional brochures, flyers, or fact sheets
- Educational lessons to school children
- Presentations to adults focusing on professional organizations
- Web site development
- Distribution of information via electronic technology

Materials recycled as a result of these activities would be included in the activities titled District's Recycling Center plus Residential, Commercial, or Industrial Recycling.

Goal #5 – develop strategies managing scrap tires and household hazardous waste (HHW)

New Waste Reduction Strategies

Activity Title – Advertising Media

The District will place paid advertising in the local newspapers. The ads will focus on the District's special collections that are available to residents. Materials targeted through this advertising will include HHW. As long as funds are available, the District intends to place ads in the local newspaper once per quarter. As a result of this activity, the District expects additional participation in the HHW collection and increased tons recycled. This tonnage will be reported with HHW activity and is shown on Table V-5.

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Reference Goal #4 for Debris Management
Reference Goal #4 for Environmental Crimes

Existing Waste Reduction Strategies

- *Scrap Tires*
- *HHW*
- *Lead Acid Batteries*

As part of the plan update and with the approval of the Policy Committee, the District is authorized to participate in activities to manage scrap tires. This activity may include, but not be limited to, collections, clean-ups, or market development. In addition, these activities may include partnerships with public, private, or non-profit organizations

Goal #7 – prepare a market development strategy (optional)

New Waste Reduction Strategies

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Existing Waste Reduction Strategies

None listed in approved plan

Non-Goal Activities

New Waste Reduction Strategies

New Waste Reduction Strategies for non-goal activities are not currently identified.

Existing Waste Reduction Strategies

Litter - With the plan update, the Policy Committee reserves the right to expand the scope of litter collection. This expansion may include, but not be limited to, establishment of a litter collection crew.

2. *Industrial Waste Reduction Strategies*

Goal #2 – Reduce/recycle at least 50% of the industrial waste generated

New Waste Reduction Strategies – Optional

Activities or programs listed here will be considered optional activities for this plan update. The District reserves the right to implement a program with the approval of the Policy Committee. Since these activities and programs are optional and not fully developed at this time, the District is only able to provide a brief description. Materials recycled as a result of these activities and programs would be included with data from the District's Recycling Center or surveys.

Activity Title – Materials Management

Description – The District will fund new activities to implement targeted recycling programs. This activity will mirror the description found on page 2 for the Residential/Commercial Activity Title – Materials Management but will target the Industrial sector.

Activity Title – Grants (Optional)

Description – With this optional activity, the District has the authority to establish a grant program for the Industrial Section. A description of the activity can be found on pages 4 and 5 for the Residential/Commercial Waste Reduction Strategies Activity Title – Grants (Optional). The activity will be tailored to the Industrial Sector.

Existing Waste Reduction Strategies

Industrial Recycling

Goal #3 – provide information and technical assistance on source reduction

New Waste Reduction Strategies

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Existing Waste Reduction Strategies

- Waste Audits
- Waste Exchanges

Goal #4 – provide information and technical assistance on recycling, reuse and composting

New Waste Reduction Strategies

Reference Goal #2 for New Waste Reduction Strategies – Optional

- Materials Management
- Grants

Existing Waste Reduction Strategies

- Technical Assistance and Education
- Waste Audits
- Waste Exchanges

Table V-1 **District Population**

Year	County Population with Adjustments		
2011	162,846	-419	162,427
2012	163,010	-419	162,591
2013	163,173	-419	162,754
2014	163,337	-419	162,918
2015	163,500	-419	163,081
2016	163,788	-419	163,369
2017	164,076	-419	163,657
2018	164,364	-419	163,945
2019	164,652	-419	164,233
2020	164,940	-419	164,521
2021	165,142	-419	164,723
2022	165,344	-419	164,925
2023	165,546	-419	165,127
2024	165,748	-419	165,329
2025	165,950	-419	165,531
2026	165,916	-419	165,497
2027	165,882	-419	165,463
2028	165,848	-419	165,429
2029	165,814	-419	165,395
2030	165,780	-419	165,361

Sample Calculation: 163,500 -419 = 163,081

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

Year	District Population	Per Capita Generation Rate	Total Residential/Commercial Generation (TPY)
2011	162,427	5.39	159,709
2012	162,591	5.39	159,870
2013	162,754	5.39	160,031
2014	162,918	5.39	160,191
2015	163,081	5.39	160,352
2016	163,369	5.39	160,635
2017	163,657	5.39	160,918
2018	163,945	5.39	161,202
2019	164,233	5.39	161,485
2020	164,521	5.39	161,768
2021	164,723	5.39	161,967
2022	164,925	5.39	162,165
2023	165,127	5.39	162,364
2024	165,329	5.39	162,562
2025	165,531	5.39	162,761
2026	165,497	5.39	162,728
2027	165,463	5.39	162,694
2028	165,429	5.39	162,661
2029	165,395	5.39	162,627
2030	165,361	5.39	162,594

Sample Calculation: 163,081 x 5.39 x 365/2000 = 160,352

Note: Due to rounding of the Per Capita Generation Rate totals cannot be recreated on an adding machine.

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

Year	District Population	Per Capita Generation Rate	Total Industrial Generation (TPY)
2011	162,427	0.65	19,251
2012	162,591	0.65	19,270
2013	162,754	0.65	19,289
2014	162,918	0.65	19,309
2015	163,081	0.65	19,328
2016	163,369	0.65	19,362
2017	163,657	0.65	19,397
2018	163,945	0.65	19,431
2019	164,233	0.65	19,465
2020	164,521	0.65	19,499
2021	164,723	0.65	19,523
2022	164,925	0.65	19,547
2023	165,127	0.65	19,571
2024	165,329	0.65	19,595
2025	165,531	0.65	19,619
2026	165,497	0.65	19,615
2027	165,463	0.65	19,611
2028	165,429	0.65	19,607
2029	165,395	0.65	19,602
2030	165,361	0.65	19,598

Sample Calculation: 163,081 x .65 x 365/2000= 19,328

Note: Due to rounding of the Per Capita Generation Rate totals cannot be recreated on an adding machine.

Source of Information: Ohio Department of Job and Family Services
2018 Ohio Job Outlook
Southwest Central Ohio
Economic Development Region 4

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

Year	Residential/ Commercial	Industrial	Exempt	Total Waste Generation	Generation Rate lbs./person/day
2011	159,709	19,251	2,131	181,090	6.11
2012	159,870	19,270	2,131	181,271	6.11
2013	160,031	19,289	2,131	181,451	6.11
2014	160,191	19,309	2,131	181,631	6.11
2015	160,352	19,328	2,131	181,811	6.11
2016	160,635	19,362	2,131	182,128	6.11
2017	160,918	19,397	2,131	182,446	6.11
2018	161,202	19,431	2,131	182,763	6.11
2019	161,485	19,465	2,131	183,080	6.11
2020	161,768	19,499	2,131	183,398	6.11
2021	161,967	19,523	2,131	183,620	6.11
2022	162,165	19,547	2,131	183,843	6.11
2023	162,364	19,571	2,131	184,065	6.11
2024	162,562	19,595	2,131	184,288	6.11
2025	162,761	19,619	2,131	184,510	6.11
2026	162,728	19,615	2,131	184,473	6.11
2027	162,694	19,611	2,131	184,435	6.11
2028	162,661	19,607	2,131	184,398	6.11
2029	162,627	19,602	2,131	184,360	6.11
2030	162,594	19,598	2,131	184,323	6.11

Sample Calculation: 160,352 + 19,328 + 2,131 = 181,811
Sample Calculation: 181,811 x 2,000 / 163,081 / 365 = 6.11

Table V-5 **Residential/Commercial Waste Reduction Strategies**

	Recycling Center	Special Collections	Residential Recycling	Commercial Recycling	Private and Non-Profit	Scrap Yards	Composting/ Yard Waste Management	Scrap Tires	HHW	Lead Acid Batteries	Totals
2011	311	37	5,971	11,427	2,896		25,870	1,498	16	460	48,486
2012	311	37	5,971	11,427	2,896		25,870	1,498	16	460	48,486
2013	311	37	5,971	11,427	2,896		25,870	1,498	16	460	48,486
2014	311	37	5,971	11,427	2,896		25,870	1,498	16	460	48,486
2015	312	38	5,971	11,427	2,896		25,896	1,498	16	460	48,512
2016	312	38	5,971	11,427	2,896		25,942	1,498	16	460	48,559
2017	313	38	5,971	11,427	2,896		25,987	1,498	16	460	48,605
2018	313	38	5,971	11,427	2,896		26,033	1,498	16	460	48,651
2019	314	38	5,971	11,427	2,896		26,078	1,498	16	460	48,697
2020	314	38	5,971	11,427	2,896		26,124	1,498	16	460	48,744
2021	315	38	5,971	11,427	2,896		26,156	1,498	16	460	48,776
2022	315	38	5,971	11,427	2,896		26,188	1,498	16	460	48,809
2023	316	38	5,971	11,427	2,896		26,220	1,498	16	460	48,841
2024	316	38	5,971	11,427	2,896		26,252	1,498	16	460	48,873
2025	316	38	5,971	11,427	2,896		26,284	1,498	16	460	48,906
2026	316	38	5,971	11,427	2,896		26,279	1,498	16	460	48,900
2027	316	38	5,971	11,427	2,896		26,273	1,498	16	460	48,895
2028	316	38	5,971	11,427	2,896		26,268	1,498	16	460	48,890
2029	316	38	5,971	11,427	2,896		26,262	1,498	16	460	48,884
2030	316	38	5,971	11,427	2,896		26,257	1,498	16	460	48,879

Sample Calculation: 311.66 + 37.53 + 5,970.5 + 11,426.80 + 2,896.25 + 25,896.9 + 1,498.16 + 15.57 + 460.04 = 48,512.41

Table V-6 Industrial Waste Reduction Strategies

	Industrial Recycling	Totals
2011	18,146	18,146
2012	18,146	18,146
2013	18,146	18,146
2014	18,146	18,146
2015	18,146	18,146
2016	18,146	18,146
2017	18,146	18,146
2018	18,146	18,146
2019	18,146	18,146
2020	18,146	18,146
2021	18,146	18,146
2022	18,146	18,146
2023	18,146	18,146
2024	18,146	18,146
2025	18,146	18,146
2026	18,146	18,146
2027	18,146	18,146
2028	18,146	18,146
2029	18,146	18,146
2030	18,146	18,146

SECTION VI

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

A. District Methods for Management of Solid Waste

The District plans to use transfer facilities and landfills for the disposal of solid waste. In addition, the District will use recycling and composting operations to process materials. These facilities and operations will manage all solid waste generated from the residential/commercial and industrial sectors. Furthermore, the District will also investigate and consider new and alternative methods to manage the solid waste stream generated.

1. Calculation of Capacity Needs

Table VI-1 displays the waste management methods used in the reference year. This shows 112,944 tons of waste was landfilled in the reference year. Projections to manage waste through recycling, composting, and landfilling are also listed on the table. Table VI-2 and Table VI-3 present data and projections for the wastes recycled, composted, and landfilled for the residential/commercial and industrial generators.

According to OEPA's Annual District Review Form for the reference year, 45,299 tons of waste was delivered to transfer facilities prior to being landfilled. Since the District does not have control to direct where waste is delivered, the projections for the tons of waste transferred was straight lined through the planning period.

B. Demonstration of Access to Capacity

In Table VI-4, the District has included a number of solid waste disposal facilities where waste may be taken for disposal. As presented, the District has access to sufficient capacity for each year of the planning period. The District is not able to project the specific volume of waste that will be delivered to the identified facilities because the District does not direct or contract for disposal of the waste. Projections for the tons of waste that will be landfilled at each facility were based on the population projections listed in Section V.

The District recognizes that Stony Hollow and Rumpke's landfill in Hamilton County are both due to close during the planning period. Without an expansion, Stony Hollow is due to close within 5 years. If and when Stony Hollow closes, the District anticipates the waste would be processed at the Montgomery County transfer facilities prior to landfilling. Currently, solid waste processed through the Montgomery County transfer facilities is transported to Cherokee Run in Logan County. Therefore, beginning in 2017, it is anticipated the waste that was being taken to Stony Hollow will be directed to Cherokee Run.

Rumpke's Hamilton County landfill is also scheduled to close during the planning period. Current information shows this closure will occur in 2021. Rumpke has two landfills in the area that accept District generated waste. One facility is located in Hamilton County and the other is in Brown County. When the Hamilton County landfill closes, the District predicts all waste collected by Rumpke will be disposed in the Brown County landfill.

Table VI-4 reflects options for when the District's waste may be disposed. As identified in Section III, the District has sufficient access to facilities to process recyclables and yard waste that are generated from the residential/commercial and industrial sectors.

C. Schedule for Facilities and Programs: New, Expansions, Closures, Continuations

The District does not specifically plan to own and/or operate solid waste management disposal facilities during the 15-year planning period. In addition, the calculations for waste generated and capacity available at solid waste disposal facilities indicate that the District does not need additional solid waste management capacity during the planning period. Therefore, a timeline for the development, expansion, and/or closure of solid waste facilities is not included.

D. Identification of Facilities

There are several Tables VI-4 that identify the different facilities that will manage solid waste, recyclables, and yard waste. The facilities that will manage solid waste facilities are listed as Table VI-4 landfills and Table VI-4 transfer facilities. Recycling facilities are listed as Table VI-4 recycling. The final table is TableVI-4 yard waste and it identifies facilities that will accept or process yard waste.

Table VI-4 landfill identifies the solid waste disposal facilities the District intends to use throughout the planning period. The landfills include American, Cherokee Run, Rumpke's facilities in Brown and Hamilton Counties, and Stony Hollow. All of the landfills are located in Ohio and are owned and operated by private companies. As discussed previously, two of the landfills identified are scheduled to reach capacity during the planning period. The resulting shift in waste disposal is reflected in this table.

The District does not intend to require solid waste that is generated within the District to be disposed at specific facilities. Any landfill or transfer station licensed and operating in the State of Ohio that accepts District waste is subject to the Generation Fee and must remit the funds to support the District operations.

Three transfer facilities are identified in Table VI-4 transfer. The transfer facilities are the Fayette County Transfer Facility, Montgomery County South Transfer Facility, and Montgomery County North Transfer Facility. Waste taken to these facilities will ultimately be disposed in a sanitary landfill. As shown in Table VI-4, beginning in 2015 waste will not be processed through Montgomery County North Transfer Facility because it is scheduled to close. It is anticipated this waste will be processed through Montgomery County South Transfer Facility.

As shown in Table VI-4, there are several recycling operations that provide services to the District for the residential, commercial, or industrial sectors. Greene County Recycling Center accepts materials from residents and small businesses. Tires are managed by companies that are licensed to collect, transport and process tires by OEPA. There are two Material Recovery Facilities (MRF) that also process recyclables. Rumpke's MRF is located in Montgomery County and processes materials collected by Rumpke and Republic. Waste Management's MRF is located in Greene County. Materials collected by Waste Management are processed at this MRF. Goodwill also collects and processes a significant amount of textiles and electronic waste. There are four Goodwill stores that serve the District. Also identified on the Table VI-4 recycling,

there are a few recyclers that collect specific materials from the residents. This is listed as various residential recyclers. Many different recyclers collect and process materials from the commercial and industrial sectors. On Table VI-4, these are identified as various commercial and various industrial recyclers.

The data presented on Tables VI-4 for landfill, transfer facilities, recycling, and yard waste, demonstrate there are adequate resources available to manage the District's waste and recycling.

E. Authorization Statement to Designate

The Board of Greene County Commissioners (Board) acting as the Board of Directors of the District is hereby authorized to designate solid waste management facilities in accordance with Section 343.014 of the Ohio Revised Code. At this time, the Board has not designated solid waste management facilities. The Board maintains its authority to designate facilities at a future date during the 15-year planning period and does not waive its authority.

F. Waiver Process for Undesignated Facilities

Since the District currently does not designate facilities, a waiver process has not been developed. If the Board does exercise its authority to designate solid waste facilities, the Board will concurrently develop, if determined appropriate, a waiver process that complies with Section 343.01(I)(2) of the Ohio Revised Code.

G. Siting Strategy for Facilities

Previous portions of this Plan Update have demonstrated that the District does not require new facilities to manage the waste generated from the District. Consequently, a siting strategy is not needed and has not been included in this Plan Update.

H. Contingencies for Capacity Assurance and District Program Implementation

Contingencies for Capacity Assurance

Using the OEPA Solid Waste Facility Report, the District will annually evaluate the capacity available at landfills and transfer facilities. Then, the District will determine if these landfills and transfer facilities, in aggregate, will be able to provide sufficient access to disposal capacity for the District's generated waste. If in aggregate, the landfills and transfer facilities are unable to provide the District with sufficient disposal capacity and other disposal alternatives are not available through existing authority or options in the Plan, the Board of County Commissioners may consider this a material change in circumstances and amend the plan.

Contingencies for District Program Implementation

Implementation of the District's Plan requires that the District receive adequate annual funding to support the programs. For some programs, it is necessary for the District to have access to qualified service providers. If financial or operational conditions exist that prevent the District

from implementing District programs, District staff will prepare a recommendation report which prioritizes programs and evaluates each based on the follow criteria:

- Impact on reducing or recycling the waste stream
- Economic analysis
- Long and short term needs and results
- Association with the enforcement of solid waste management laws and regulations
- Impact on human health and the environment
- Availability of non-District entities to provide the program

This report will be provided to the Policy Committee for their review and recommendations regarding modifications or elimination of District programs. If based on this report, it is determined that elimination or modification of the District programs has a substantial impact on the implementation of the District's Plan, the Board of County Commissioners may consider a material change in circumstances and amend the Plan.

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 by SWMD	Management Method Used and Processing Capacity Required in TPD or TPY								
				Recycling	Transfer	Yard Waste Composting	YW Land Application	Incineration	MSW Composting	Bio Digestion	Landfilling	Total
2011	181,090	-	181,090	40,762	45,299	25,870					114,458	181,090
2012	181,271	-	181,271	40,762	45,855	25,870					114,638	181,271
2013	181,451	-	181,451	40,762	45,927	25,870					114,819	181,451
2014	181,631	-	181,631	40,762	45,999	25,870					114,999	181,631
2015	181,811	-	181,811	40,762	46,061	25,896					115,153	181,811
2016	182,128	-	182,128	40,763	46,169	25,942					115,424	182,128
2017	182,446	-	182,446	40,764	46,278	25,987					115,695	182,446
2018	182,763	-	182,763	40,764	46,386	26,033					115,966	182,763
2019	183,080	-	183,080	40,765	46,495	26,078					116,237	183,080
2020	183,398	-	183,398	40,766	46,603	26,124					116,508	183,398
2021	183,620	-	183,620	40,766	46,679	26,156					116,698	183,620
2022	183,843	-	183,843	40,767	46,755	26,188					116,888	183,843
2023	184,065	-	184,065	40,767	46,831	26,220					117,078	184,065
2024	184,288	-	184,288	40,767	46,907	26,252					117,268	184,288
2025	184,510	-	184,510	40,768	46,983	26,284					117,458	184,510
2026	184,473	-	184,473	40,768	46,971	26,279					117,426	184,473
2027	184,435	-	184,435	40,768	46,958	26,273					117,394	184,435
2028	184,398	-	184,398	40,768	46,945	26,268					117,362	184,398
2029	184,360	-	184,360	40,768	46,932	26,262					117,330	184,360
2030	184,323	-	184,323	40,768	46,919	26,257					117,298	184,323

Sample Calculation: 181,811 - 40,762 - 25,896 = 115,153
Sample Calculation: 46,061 / 115,153 x 100 = 40%

Note: For transfer of waste the District used the percent of tons transfer for the reference year and straight lined the percent through 2030
Note: Exempt Waste included

Table VI-2 Summary for Residential/Commercial Waste Management Methods

Year	Tons Generated	Management Methods in TPY					
		Source Reduction & Recycling	Incineration	Composting	BioDigestion	Landfilling	Ash Disposal
2011	159,709	22,616		25,870		111,223	
2012	159,870	22,616		25,870		111,384	
2013	160,031	22,616		25,870		111,544	
2014	160,191	22,616		25,870		111,705	
2015	160,352	22,617		25,896		111,840	
2016	160,635	22,617		25,942		112,077	
2017	160,918	22,618		25,987		112,314	
2018	161,202	22,618		26,033		112,550	
2019	161,485	22,619		26,078		112,787	
2020	161,768	22,620		26,124		113,024	
2021	161,967	22,620		26,156		113,190	
2022	162,165	22,621		26,188		113,357	
2023	162,364	22,621		26,220		113,523	
2024	162,562	22,622		26,252		113,689	
2025	162,761	22,622		26,284		113,855	
2026	162,728	22,622		26,279		113,827	
2027	162,694	22,622		26,273		113,799	
2028	162,661	22,622		26,268		113,771	
2029	162,627	22,622		26,262		113,743	
2030	162,594	22,622		26,257		113,715	

Table VI-3 Summary for Industrial Waste Management Methods

Year	Tons Generated	Management Methods in TPY					
		Source Reduction & Recycling	Incineration	Composting	Bio Digestion	Landfilling	Ash Disposal
2011	19,251	18,146				1,105	
2012	19,270	18,146				1,124	
2013	19,289	18,146				1,144	
2014	19,309	18,146				1,163	
2015	19,328	18,146				1,182	
2016	19,362	18,146				1,216	
2017	19,397	18,146				1,251	
2018	19,431	18,146				1,285	
2019	19,465	18,146				1,319	
2020	19,499	18,146				1,353	
2021	19,523	18,146				1,377	
2022	19,547	18,146				1,401	
2023	19,571	18,146				1,425	
2024	19,595	18,146				1,449	
2025	19,619	18,146				1,473	
2026	19,615	18,146				1,469	
2027	19,611	18,146				1,465	
2028	19,607	18,146				1,461	
2029	19,602	18,146				1,457	
2030	19,598	18,146				1,453	

Table VI-4 Waste Management Method - Landfill

Facilities Used by District	AMDWRL	Remaining Capacity				Tons of SW Managed by Each Facililty
Name and Location (County & State)		Year	Data Source	Airspace (cubic yards)		Reference Year
				Gross	Net	2011
Rumpke Sanitary Landfill, Brown County, Ohio	3,000	61.6	OEPA Facility Data Report	44,311,000	848,000	45,299
Rumpke Sanitary Landfill, Hamilton County, Ohio	10,000	11.3	OEPA Facility Data Report	31,805,285	608,509	7,004
Cherokee Run Landfill, Logan County, Ohio	4,500	77.4	OEPA Facility Data Report	19,789,781	829,885	10,926
Stony Hollow Landfill, Montgomery County, Ohio	4,500	4.7	OEPA Facility Data Report	1,548,930	1,548,930	51,228
American Landfill, Stark County, Ohio	15,000	70	OEPA Facility Data Report	84,617,227	1,603,217	2
						114,458

Table VI-4 Waste Management Method

	Tons of SW Managed by Each Facililty					Totals
	Rumpke Brown	Rumpke Hamilton	Cherokee Run	Stony Hollow	American	
2011	45,299	7,004	10,926	51,228	2	114,458
2012	45,345	7,011	10,937	51,279	2	114,573
2013	45,390	7,018	10,947	51,331	2	114,688
2014	45,436	7,025	10,958	51,382	2	114,803
2015	45,481	7,033	10,969	51,434	2	114,918
2016	45,561	7,045	10,989	51,524	2	115,121
2017	45,641	7,057	62,623		2	115,323
2018	45,721	7,070	62,733		2	115,525
2019	45,801	7,082	62,843		2	115,728
2020	45,882	7,094	62,953		2	115,930
2021	45,938	7,103	63,030		2	116,072
2022	53,106		63,107		2	116,214
2023	53,171		63,184		2	116,356
2024	53,236		63,261		2	116,498
2025	53,300		63,338		2	116,640
2026	53,290		63,325		2	116,616
2027	53,279		63,312		2	116,592
2028	53,268		63,299		2	116,568
2029	53,257		63,286		2	116,545
2030	53,246		63,273		2	116,521

Table VI-4 Waste Management Method - Transfer Facilities

Facilities Used by District	Tons of SW Managed by Each Facililty
Name and Location (County & State)	**Reference Year**
	2011
Fayette County Transfer Facility	1
Montgomery County South Transfer	41,671
Montgomery County North Transfer	3,627
	45,299

Table VI-4 Waste Management Method

	Tons of SW Managed by Each Facililty			Totals
	Fayette County	Montgomery South	Montgomery North	
2011	1	41,671	3,627	45,299
2012	1	41,713	3,630	45,345
2013	1	41,755	3,634	45,390
2014	1	41,797	3,637	45,436
2015	1	45,480		45,481
2016	1	45,560		45,561
2017	1	45,640		45,641
2018	1	45,720		45,721
2019	1	45,800		45,801
2020	1	45,880		45,882
2021	1	45,936		45,938
2022	1	45,993		45,994
2023	1	46,049		46,050
2024	1	46,105		46,106
2025	1	46,161		46,163
2026	1	46,152		46,153
2027	1	46,142		46,144
2028	1	46,133		46,134
2029	1	46,123		46,125
2030	1	46,114		46,115

Table VI-4 **Waste Management Method - Recycling**

Facilities Used by District	Tons of SW Managed by Each Facililty
Name and Location (County & State)	**Reference Year**
	2011
Recycling Center Greene County Envionmental Services (Greene County, OH)	311
Recycling Center Special Collections Greene County Environmental Services (Greene County, OH)	37
Residential Recycling Rumpke's MRF (Montgomery County, OH) and Waste Management's MRF (Greene County, OH)	5,971
Commercial Recycling - Various Service Providers (multiple counties)	11,427
Private and Non-Profit Recyclers like Abtibi and Goodwill (multiple counties)	2,896
Scrap Tire - various providers (multiple counties)	1498.16
Recycling Center HHW Greene County Environmental Serivces (Greene County, OH)	16
Lead Acid Batteries -various provider for residentail recycling (Greene County, OH)	460
Vairous industrial recyclers	18,146
Total Recycling	40,762

Table VI-4 **Waste Management Method**

	Tons of SW Managed by Each Facililty									Totals
	Recycling Center	Recycling Center Special Collections	Residential Recycling	Commercial Recycling	Private and Non-Profit	Scrap Tires	Recycling Center HHW	Lead Acid Batteries Residential Recyclers	Industrial Recyclers	
2011	311	37	5,971	11,427	2,896	1,498	16	460	18,146	40,762
2012	311	37	5,971	11,427	2,896	1,498	16	460	18,146	40,762
2013	311	37	5,971	11,427	2,896	1,498	16	460	18,146	40,762
2014	311	37	5,971	11,427	2,896	1,498	16	460	18,146	40,762
2015	312	38	5,971	11,427	2,896	1,498	16	460	18,146	40,762
2016	312	38	5,971	11,427	2,896	1,498	16	460	18,146	40,763
2017	313	38	5,971	11,427	2,896	1,498	16	460	18,146	40,764
2018	313	38	5,971	11,427	2,896	1,498	16	460	18,146	40,764
2019	314	38	5,971	11,427	2,896	1,498	16	460	18,146	40,765
2020	314	38	5,971	11,427	2,896	1,498	16	460	18,146	40,766
2021	315	38	5,971	11,427	2,896	1,498	16	460	18,146	40,766
2022	315	38	5,971	11,427	2,896	1,498	16	460	18,146	40,767
2023	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,767
2024	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,767
2025	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768
2026	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768
2027	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768
2028	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768
2029	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768
2030	316	38	5,971	11,427	2,896	1,498	16	460	18,146	40,768

Table VI-4 Waste Management Method - Yard Waste and Composting

Facilities Used by District	Tons of SW Managed by Each Facililty
Name and Location (County & State)	Reference Year
	2011
Greene County - Xenia (Greene County, OH)	17,296
Greene County - Community Site including Bath Township, City of Beavercreek, and Sugarcreek (Greene County, OH)	2,716
Biosource (Greene County, OH)	273
Village of Cedarville (Greene County, OH)	138
Toms Mulch and Landscape (Greene County, OH)	1,608
Eco-Green Recycling Enterprises (Greene County, OH)	2,603
Paygro aka Garrick Corporation (Clark County, OH)	348
Mad River Topsoil (Clark County, OH)	271
The Seibenthaler Company (Greene County, OH)	198
Brausch Farms (Greene County, OH)	421
Horning's Farm (Greene County, OH)	
Beam Farms (Greene County, OH)	
	25,870

Table VI-4 Waste Management Method

	Tons of SW Managed by Each Facililty												Totals
	Greene County Xenia	Greene County community sites	Biosource	Cedarville	Tom's Mulch	Eco-Green	Paygro	Mad River	Seibenthaler	Brausch Farms	Horning's	Beam Farms	
2011	17,296	2,716	273	138	1,608	2,603	348	271	198	421	-	-	25,870
2012	17,296	2,716	273	138	1,608	2,603	348	271	198	421	-	-	25,870
2013	17,296	2,716	273	138	1,608	2,603	348	271	198	421	-	-	25,870
2014	17,296	2,716	273	138	1,608	2,603	348	271	198	421	-	-	25,870
2015	17,313	2,719	273	138	1,609	2,605	348	271	198	421	-	-	25,896
2016	17,344	2,723	273	138	1,612	2,610	349	272	199	422	-	-	25,941
2017	17,374	2,728	274	138	1,615	2,614	350	272	199	422	-	-	25,987
2018	17,405	2,733	274	139	1,618	2,619	350	272	199	423	-	-	26,033
2019	17,435	2,738	275	139	1,621	2,624	351	273	200	424	-	-	26,078
2020	17,466	2,743	275	139	1,623	2,628	351	273	200	425	-	-	26,124
2021	17,487	2,746	276	139	1,625	2,631	352	274	200	425	-	-	26,156
2022	17,509	2,749	276	139	1,627	2,635	352	274	200	426	-	-	26,188
2023	17,530	2,753	276	140	1,629	2,638	353	274	201	426	-	-	26,220
2024	17,551	2,756	277	140	1,631	2,641	353	275	201	427	-	-	26,252
2025	17,573	2,759	277	140	1,633	2,644	354	275	201	427	-	-	26,284
2026	17,569	2,759	277	140	1,633	2,644	354	275	201	427	-	-	26,278
2027	17,565	2,758	277	140	1,633	2,643	353	275	201	427	-	-	26,273
2028	17,562	2,758	277	140	1,632	2,643	353	275	201	427	-	-	26,268
2029	17,558	2,757	277	140	1,632	2,642	353	275	201	427	-	-	26,262
2030	17,555	2,757	277	140	1,632	2,642	353	275	201	427	-	-	26,257

Table VI-5

Implementation Schedule for Facilities Stategies, Program, and Activites: Dates and Description

Program #	Name of Facility, Stragegy, Program or Activity	Location	Description of Program/Facility	Approximate Date when the Following will take Place	
Residential/Commercial Goal #2 - Reduce and/or recycling 25%					
	Recycling Center	Greene County	Drop-off and Material Recovery Facility - expansion of drop-off evaluation to begin in 2015	currently active	on going
	Recycling Center	Greene County	Special Collections for HHW, Scrap Metal, some electronics and light bulbs	currently active	on going
	Recycling Center	Greene County	Interagency Recycling Program - collection of paper, bottles, cans and cardboard at various governement offices	currently active	on going
	Recycling Center	Greene County	Community Event Recycling Containers to collect bottles and cans at events and festivals	currently active	on going
	Recycling Center - Composting/Yard Waste Management	Greene & Adjoining SWDs	Drop-off locations for residents to manage yard waste	currently active	on going
	Residential Recycling	Greene County	OEPA and District surveying of residential recycling, includes non-subscription, subscription curbside recycling, plus volume based	currently active	on going
	Commercial Recycling	Greene County	OEPA and District surveys of commercial sector recycling	currently active	on going
	Wright Patterson Air Force Base	Greene County	Recycling activities provided at the Base	currently active	on going
	Private and Non-Profit	Greene County	Current recycling activities provided by private or non-profit organizations	currently active	on going
	Scrap Yards	Greene County	Monitor recycling activity	currently active	on going
	Materials Management	Greene County	Apply for grants to increase or support recycling - optional activity	2014	on going
	Grants	Greene County	Develop and award grants - optional activity	2015	

Table VI-5

Implementation Schedule for Facilities Stategies, Program, and Activites: Dates and Description

Program #	Name of Facility, Stragegy, Program or Activity	Location	Description of Program/Facility	Approximate Date when the Following will take Place	
Residential/Commercial Goal #3 - provide information and technical assistance on source reduction					
	Waste Audits	Greene County	Commercial waste audits - data included with Commercial Recycling	currently active	on going
	Waste Exchanges	Greene County	Recycling Resources - data included with Commercial Recycling	currently active	on going
	Materials Management	Greene County	Apply for grants to increase or support recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	
Residential/Commercial Goal #4 - provide information and technical assistance on recycling, reuse, and composting opportunities					
	Technical Assistance and Education	Greene County	Various media plus presentations and tours - data included with Residental or Commercial Recycling	currently active	on going
	Waste Audits	Greene County	Commercial waste audits - data included with Survey Commercial	currently active	on going
	Waste Exchanges	Greene County	Recycling Resources - data included with Survey Commercial	currently active	on going
	Recycling Center	Greene County	Yard Waste Collection, central and community sites - also listed on Goal #2	currently active	on going
	Recycling Forums	Greene County	Educate local jurisdictions concerning recycling options	2015	on going
	Advertising Media	Greene County	Promote and advertise District's programs to recycle, reuse, and compost	2015	on going
	Materials Management	Greene County	Apply for grants to increase or support recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	
	Debris Management	Greene County	Support services for debris generating events	currently active	on going
	Environmental Crimes	Greene County	Services for problem and nuisance issues	as needed	as needed

Table VI-5

Implementation Schedule for Facilities Stategies, Program, and Activites: Dates and Description

Program #	Name of Facility, Stragegy, Program or Activity	Location	Description of Program/Facility	Approximate Date when the Following will take Place	
Residential/Commercial Goal #5 - develop strategies managing scrap tires and HHW					
	Scrap Tires	Greene County	Littered tires and special collections or clean-ups	currently active	on going
	HHW	Greene County	Conduct collections	currently active	on going
	Lead Acid Batteries	Greene County	Reference Recycling Center and Private and Non-Profit	currently active	on going
	Advertising Media	Greene County	Promote and Advertise District's programs to recycle scrap tires and HHW	2015	on going
	Materials Management	Greene County	Targeted recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	
	Debris Management	Greene County	Support services for debris generating events	currently active	on going
	Environmental Crimes	Greene County	Services for problem and nuisance issues	as needed	as needed
Residential/Commercial non-goal					
Non-Goals	Litter Collection	Greene County	Adopt-A-Spot or more formal program	currently active	on going

Table VI-5

Implementation Schedule for Facilities Stategies, Program, and Activites: Dates and Description

Program #	Name of Facility, Stragegy, Program or Activity	Location	Description of Program/Facility	Approximate Date when the Following will take Place	
Industrial Goal #2 - reduce/recycle at least 50%					
	Industrial Recycling	Greene County	OEPA and District surveying of industrial sector	currently active	on going
	Materials Management	Greene County	Targeted recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	
Industrial Goal #3 - provide information and technical assistance on source reduction					
	Waste Audits	Greene County	Industrial Waste Audits - data included with industrial survey	currently active	on going
	Waste Exchanges	Greene County	Recycling Resources - data included with Survey Industrial	currently active	on going
	Materials Management	Greene County	Targeted recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	
Industrial Goal #4 - provide information and technical assistance on recycling, reuse, and composting					
	Technical Assistance and Education	Greene County	Various media - data included with Survey Industrial	currently active	on going
	Waste Audits	Greene County	Industrial Waste Audits - data included with industrial survey	currently active	on going
	Waste Exchanges	Greene County	Recycling Resources - data included with Survey Industrial	currently active	on going
	Materials Management	Greene County	Targeted recycling - optional activity	2014	
	Grants	Greene County	Develop and award grants - optional activity	2015	

SECTION VII

VII. Measurement of Progress Toward Waste Reduction Goals

A. District Will Comply with Goal(s) Identified

The District must comply with either "1", "2", or "3" below:

1. Goal #1 – Program standards for SWMDs: ensure the availability for reduction, recycling, and other waste reduction alternatives for residential/commercial solid waste by the Year 2000.

2. Goal #2 – By the Year 2000, a) 25 percent waste reduction for the Residential/Commercial Sector, and b) 50 percent waste reduction for the Industrial Sector

3. Both Goal #1 and Goal #2

   The District has demonstrated that the Residential/Commercial Sector had a recycling rate of 30%, and the Industrial Sector had a recycling rate of 94% during the reference year. The District is projecting that these waste reduction and recycling percentages will remain at relatively constant levels throughout the planning period. Therefore, the District elects to meet the program standards established by Goal #2.

B. Demonstration of Compliance with Goal #1

The District has elected to comply with Goal #2 and not pursue Goal #1. Since the District has chosen Goal #2, Tables VII-1 and VII-2 have been omitted from this plan.

C. Calculating Goal #2, the Waste Reduction Rate (WRR)

Goal #2 of the 1995 State Plan states that Ohio should "...reduce and/or recycle at least 50 percent of the total solid waste statewide by the Year 2000...". To implement this goal, the state established two objectives:

- Objective #1 – SWMDs must reduce or recycle 25% of the residential/commercial waste generated by the Year 2000; and

- Objective #2 – SWMDs must reduce or recycle 50% of the industrial waste generated by the Year 2000.

The following set of calculations present the amount of materials that has been recycled for the Residential/Commercial Sector, the Industrial Sector, and then for the combined/total waste stream for the District. Exempt Waste was not included in these calculations.

1. Residential/Commercial Sector

The following formulas were used to calculate the **T**ons of **W**aste **R**eduction (TWR) for the Residential /Commercial Sector:

TWR= R + (C - NC) + (I- A) + RA

where:

TWR	=	**T**ons of **W**aste **R**eduction for year 2011
R	=	tons of waste source reduced and **R**ecycled in year
C	=	tons of waste **C**omposted in year
NC	=	tons of **N**on-**C**ompostables delivered for composting, separated for landfilling in year
I	=	tons of waste **I**ncinerated in year
A	=	tons of incinerator **A**sh plus bypass waste in year
RA	=	tons of **R**ecycled incinerator **A**sh in year

TWR= 22,616 + (25,870 – 0) + (0 – 0) + 0

TWR = 48,486

The following formula was used to **E**stimate **G**eneration based upon **D**isposal and **W**aste **R**eduction amounts:

EGDWR = TWR + DL

where:

EGDWR	=	**E**stimated **G**eneration based upon **D**isposal plus **W**aste **R**eduction in year
DL	=	Tons of waste **D**isposed in Sanitary **L**andfills in year

EGDWR = 48,486 + 111,223

EGDWR = 159,709

The waste reduction rate can be calculated by dividing the sum from equation 1 by sum of equation 2:

$$\mathbf{WRR} = \frac{\mathbf{RWR}}{\mathbf{EGDWR}} \times 100 =$$

where:

WRR = the **W**aste **R**eduction **R**ate in year 2011 as a percent

$$\mathbf{WRR} = \frac{\mathbf{48{,}486}}{\mathbf{159{,}709}} \times 100 = \mathbf{30\%}$$

The amount of waste reduction per capita per day is calculated as follow:

$$\textbf{PCWR} = \frac{\textbf{TWR} \times 2{,}000 \text{ lbs.}}{\textbf{P} \times 365 \text{ days}} =$$

where:

PCWR = The **P**er **C**apita **W**aste **R**eduction rate in pounds per person per day in 2011
P = the **P**opulation of the District in year 2011

$$\textbf{PCWR} = \frac{\textbf{48,486} \times 2{,}000 \text{ lbs.}}{\textbf{162,427} \times 365 \text{ days}} = \textbf{1.64}$$

2. Industrial

The following formulas were used to calculate the **T**ons of **W**aste **R**eduction (TWR) for the Industrial Sector:

TWR = **R** + (**C** - **NC**) + (**I**- **A**) + **RA**

TWR = **18,146** + (**0** – b) + (**0** – **0**) + **0**

TWR = **18,146**

EGDWR = **TWR** + **DL**

EGDWR = **18,146** + **1,105**

EGDWR = **19,251**

WRR = the **W**aste **R**eduction **R**ate in year 2011 as a percent

$$\textbf{WRR} = \frac{\textbf{18,146}}{\textbf{19,251}} \times 100 = \textbf{94\%}$$

The amount of waste reduction per capita per day is calculated as follow:

$$\textbf{PCWR} = \frac{\textbf{18,146} \times 2{,}000 \text{ lbs.}}{\textbf{162,427} \times 365 \text{ days}} = \textbf{.61}$$

3. Total District Waste

The following formulas were used to calculate the **T**ons of **W**aste **R**eduction (TWR) for the District:

TWR = **R** + (**C** - **NC**) + (**I**- **A**) + **RA**

TWR = **40,762** + (**25,870** – **0**) + (**0** – **0**) + **0**

TWR = **66,632**

EGDWR = **TWR** + **DL**

EGDWR = **66,632** + **112,328**

EGDWR = **178,960**

WRR = the **W**aste **R**eduction **R**ate in year 2011 as a percent

$$\textbf{WRR} = \frac{\textbf{66,632}}{\textbf{178,960}} \times 100 = \textbf{37\%}$$

The amount of waste reduction per capita per day is calculated as follow:

$$\textbf{PCWR} = \frac{\textbf{66,632} \times 2{,}000 \text{ lbs.}}{\textbf{162,472} \times 365} = \textbf{2.25}$$

Each of these categories is further explained in the section below.

1. Tons of Source Reduction and Recycling - R

The tons of waste source reduced and recycled, as shown in Section V for reference year and projected amounts should be used for **R** in equation 1. For purposes of calculating this amount for industrial waste, **R** must not include train boxcars, ferrous metals from motor vehicle salvage operations conducted by licensed motor vehicle salvage dealers, or metals from demolition activities (The exclusion of these materials from industrial waste reduction amounts replaces the policy in the previous Format version which excluded industrial materials which were reduced/recycled through programs initiated prior to January 1, 1985). In addition, waste tires, lead-acid batteries, used motor oil collected for recycling from "do-it-yourselfers", and household hazardous wastes that are recycled can all be counted towards the waste reduction goal.

2. Tons of Waste Composted - C

The tons of waste composted should be found in the inventory section of the plan, and Section V. The waste **received** at all composting facilities used by the district should be summed to determine this value. Please note also that alternative management options for yard waste such as centralized composting can be counted towards the waste reduction goals if the quantity of yard waste can be documented.

3. Tons of Non-compostable Waste - NC

NC means the tons of non-compostable waste recovered from activities such as de-bagging and screening.

4. Tons of Waste Incinerated - I

The tons of solid waste received at all incinerators used by the district - both publicly-available and captive incinerators - should be summed to determine **I**. Districts should obtain the value of **I** from Table VI-1, VI-2, or VI-3.

5. Tons of Incinerator Ash Produced - A

The tons of incinerator ash produced from facilities burning solid waste should be summed to estimate **A**. Any bypass waste received at incinerators should be added to the value for ash produced. Please note that ash produced from facilities such as coal-burning power plants should not be included in this estimate.

6. Tons of Incinerator Ash Recycled - RA

The tons of incinerator ash recycled from district waste should be summed to determine **RA**, only if this amount has not already been included in **R**. Enter the value of **RA**, show all calculations, and explain all assumptions, if necessary.

7. Tons Waste Disposed in Landfills - DL

The tons of district waste disposed in solid waste landfills used by the districts should be summed to estimate **DL**. This value may need to be adjusted with the amount of "exempt waste." The total amount of district waste disposed in landfills should exclude any exempt waste such as construction and demolition materials received from the district. Please note that all solid waste disposed in licensed solid waste facilities, including waste received at captive landfills should be incorporated into the value of **DL**. Districts should use the values of **DL** as shown in Table VI-1, VI-2, or VI-3. (Districts unable to determine reasonably accurate disposal amounts due to non-responding facilities should contact Ohio EPA for guidance.)

Using the equations and guidance above, calculate the **WRR** and **PCWR** for the reference year and each year of the planning period, and enter the appropriate information into Tables VII-3, VII-4, and VII-5 for the residential/commercial waste, industrial waste, and total waste, respectively. If the SWMD has decided to demonstrate compliance with Goal #1, but not Goal #2, the waste reduction percentage must meet the target set by the district.

Table VII-3 **Annual Rate of Waste Reduction: Residental/Commercial Waste**

Year	Source Reduction and Recycling	Composted	Non-Composted	Incinerated	Incinerator Ash Recycled	Landfilled	Reduction	Population	Waste Reduction %	Waste Reduction per capita (p/p/p/d)
2011	22,616	25,870				111,223		162,427	30%	1.64
2012	22,616	25,870				111,384		162,591	30%	1.63
2013	22,616	25,870				111,544		162,754	30%	1.63
2014	22,616	25,870				111,705		162,918	30%	1.63
2015	22,617	25,896				111,840		163,081	30%	1.63
2016	22,617	25,942				112,077		163,369	30%	1.63
2017	22,618	25,987				112,314		163,657	30%	1.63
2018	22,618	26,033				112,550		163,945	30%	1.63
2019	22,619	26,078				112,787		164,233	30%	1.62
2020	22,620	26,124				113,024		164,521	30%	1.62
2021	22,620	26,156				113,190		164,723	30%	1.62
2022	22,621	26,188				113,357		164,925	30%	1.62
2023	22,621	26,220				113,523		165,127	30%	1.62
2024	22,622	26,252				113,689		165,329	30%	1.62
2025	22,622	26,284				113,855		165,531	30%	1.62
2026	22,622	26,279				113,827		165,497	30%	1.62
2027	22,622	26,273				113,799		165,463	30%	1.62
2028	22,622	26,268				113,771		165,429	30%	1.62
2029	22,622	26,262				113,743		165,395	30%	1.62
2030	22,622	26,257				113,715		165,361	30%	1.62

Sample Calculation: (22,617 + 25,896) / (22,617 + 25,896 + 111,840) x 100 = 30%
Sample Calculation: 22,617 + 25,896 x 2,000 / (163,081 x 365) = 1.63

Note: exempt waste not included

Table VII-4 **Annual Rate of Waste Reduction: Industrial Waste**

Year	Source Reduction and Recycling	Composted	Non-Composted	Incinerated	Incinerator Ash Recycled	Landfilled	Reduced	Population	Waste Reduction %	Waste Reduction per capita (p/p/d)
2011	18,146					1,105		162,427	94%	0.61
2012	18,146					1,124		162,591	94%	0.61
2013	18,146					1,144		162,754	94%	0.61
2014	18,146					1,163		162,918	94%	0.61
2015	18,146					1,182		163,081	94%	0.61
2016	18,146					1,216		163,369	94%	0.61
2017	18,146					1,251		163,657	94%	0.61
2018	18,146					1,285		163,945	93%	0.61
2019	18,146					1,319		164,233	93%	0.61
2020	18,146					1,353		164,521	93%	0.60
2021	18,146					1,377		164,723	93%	0.60
2022	18,146					1,401		164,925	93%	0.60
2023	18,146					1,425		165,127	93%	0.60
2024	18,146					1,449		165,329	93%	0.60
2025	18,146					1,473		165,531	92%	0.60
2026	18,146					1,469		165,497	93%	0.60
2027	18,146					1,465		165,463	93%	0.60
2028	18,146					1,461		165,429	93%	0.60
2029	18,146					1,457		165,395	93%	0.60
2030	18,146					1,453		165,361	93%	0.60

Sample Calculation: 18,146 / (18,146 + 1,182) x 100 = 94%
Sample Calculation: 18,146 x 2,000 / (163,081 x 365) = .61

Note: exempt waste not included

Table VII-5 **Annual Rate of Waste Reduction: Total District Waste**

Year	Source Reduction and Recycling	Composted	Non-Composted	Incinerated	Incinerator Ash Recycled	Landfilled	Reduced	Population	Waste Reduction %	Waste Reduction per capita (p/p/d)
2011	40,762	25,870				112,328		162,427	37%	2.25
2012	40,762	25,870				112,508		162,591	37%	2.25
2013	40,762	25,870				112,688		162,754	37%	2.24
2014	40,762	25,870				112,868		162,918	37%	2.24
2015	40,762	25,896				113,022		163,081	37%	2.24
2016	40,763	25,942				113,293		163,369	37%	2.24
2017	40,764	25,987				113,564		163,657	37%	2.23
2018	40,764	26,033				113,835		163,945	37%	2.23
2019	40,765	26,078				114,106		164,233	37%	2.23
2020	40,766	26,124				114,377		164,521	37%	2.23
2021	40,766	26,156				114,567		164,723	37%	2.23
2022	40,767	26,188				114,758		164,925	37%	2.22
2023	40,767	26,220				114,948		165,127	37%	2.22
2024	40,767	26,252				115,138		165,329	37%	2.22
2025	40,768	26,284				115,328		165,531	37%	2.22
2026	40,768	26,279				115,296		165,497	37%	2.22
2027	40,768	26,273				115,264		165,463	37%	2.22
2028	40,768	26,268				115,232		165,429	37%	2.22
2029	40,768	26,262				115,200		165,395	37%	2.22
2030	40,768	26,257				115,168		165,361	37%	2.22

Sample Calculation: (40,762 + 25,896) / (40,762 + 25,896 + 113,022) x 100 = 37%
Sample Calculation: 40,762 + 25,870 x 2,000 / (163,081 x 365) = 2.24

Note: exempt waste not included

SECTION VIII

VIII. Cost and Financing of Plan Implementation

This section includes the cost for all District-sponsored programs and activities, facilities constructed, and the funding mechanism(s) used to meet the district's budget. The current schedule for the generation fee is listed.

A. Funding Mechanism and Amount of Money Generated

1. District Disposal Fees (ORC Section 3734.57(B))

The District does not have any disposal facilities within its borders that could warrant the collection of disposal fees. Therefore, Table VIII-1 has not been completed.

2. Generation Fee (ORC Section 3734.573)

The District's generation fee as listed in the 2008 approved plan is $10.00 per ton and is slated to change to $10.50 per ton in 2016. With this Plan Update the District will maintain the $10.00 per ton generation fee through 2021. In 2022, the District will raise the fee to $10.50 per ton. As shown in Table VIII-2, the revenues produced by this generation fee schedule are sufficient to maintain the District's programs and activities described in Section IV, V, and VI. The programs and activities allow the District to meet the State Goals. Table VIII-2 was completed using the projections for population, waste generation, recycling, and composting.

3. Summary of District Revenues

As shown in Table VIII-3, the District has listed the generation fee and recycling revenue as the sources of revenue. Recycling revenue is generated from the sale of recyclable materials collected at the Recycling Center. These recyclable materials normally include cardboard, paper, metal cans, glass bottles, batteries, and scrap metal. Annually, sale of the material generates about $25,000. This amount has been straight lined through the planning period because markets can have significant fluctuations.

As described in Section V, Materials Management, the District may apply for grants. The grants would assist the District to implement various aspects of the plan. These grants are normally awarded annually and are competitive. Also, the targeted materials or recycling initiative change with each grant. Funding from grants has not been included as a revenue source because the amount of the possible grants awarded is not known or guaranteed as a constant funding source.

B. Cost of Plan Implementation

Greene County hosts a Recycling Center. This is a drop-off facility that collects and processes recyclable materials. The majority of materials collected include paper, cardboard boxes, metal cans, plastic bottles, glass containers, yard waste, scrap metal, appliances, select electronic waste, and household hazardous waste. The tons of materials processed through this Complex are listed in Section III and a full description of the facility was discussed in Section IV.

As a single county Solid Waste Management District, Greene County Environmental Services is subject to the County's annual budget process. This is a sophisticated system that includes budget development by Environmental Services plus an extensive review by the Sanitary Engineering Finance Office, County Finance Office, and Administrator. Ultimately, the Board of County Commissioners review, and is responsible to approve, the annual budget. The budget, including revenue and expenditures, is monitored and evaluated each month by Environmental Services. Each year, the Policy Committee reviews implementation of the plan including annual revenues and expenditures.

The cost to implement the plan must be shown by three methods. These methods are identified as categories, allowable uses, and activities. As listed below, each method identified is demonstrated on the attached tables.

1. Cost of Plan Implementation by categories – Table VIII-5
2. Cost of Plan Implementation by allowable uses – Table VIII-6
3. Cost of Plan Implementation by activity or strategy – Table VIII-8

Expenditures for these methodologies have been calculated beginning in 2015 and continuing through 2030. Additional detail describing these methods is included in this section. Table VIII-8 includes the annual cumulative balance. As demonstrated on Table VIII-8, the District will remain financially solvent during the planning period, 2015 to 2030.

Cost of Plan Implementation by Category

The first method describing the cost of plan implementation is shown by categories. Two categories are identified to implement the Plan. The first category lists costs for the District's Administration and Management. The second category show cost related to the District's Recycling Center and Operations. The cost to implement the plan by categories is shown on Table VIII-5.

The District's Administration and Management category includes cost for personnel and fringe benefits for management and administrative employees; administration building repair and maintenance including utilities such as electric, lighting, water and sewer, trash, and phones. Costs also listed with this category include insurance, advertising, indirect allocations, bond payment, supplies, and legal services.

Cost for the District's Recycling Center Operations category includes personnel and fringe benefits for labor employees. Other costs listed in this category include utilities, safety, professional dues, travel, training, fuel, maintenance, supplies and services. In addition, capital purchases and repairs plus certified processors for the management of refrigerant and household hazardous waste is listed with the operational expenses.

The District has used a 2% annual inflation rate to calculate the expenditures previously listed. Health and dental insurance is included with the fringe benefits. To account for the anticipated changes to Health Care, more aggressive inflation rates were used to calculate the health care costs. For the health and dental insurance the following rates of inflation were used for the various years of the planning period.

Health Insurance	Dental Insurance
10% for 2016 and 2017	2% for 2016 and 2017
15% for 2018	2% for 2018
10% for 2019	2% for 2019 through 2030
5% for 2020 through 2030	

To calculate the cost for the certified processor to manage refrigerant and household hazardous waste, the District used a 1% inflation rate. The rate was applied annually through the planning period.

For the purposes of the plan update, $30,000 has been allocated for Grants. Based on a review of the budget, cost savings, and inflations rates associated with expenditures, this amount may be adjusted.

Indirect cost allocation includes three separate annual payments. These payments are made to Greene County, Sanitary Engineering, and Data Processing. The 2% inflation rate was applied to Greene County and Sanitary Engineering allocations. The allocation to Data Processing is straight lined through the planning period.

Funds have been included for Capital Purchases and Repairs. These expenses will include facility improvements plus purchase or replacement of vehicles and equipment. To assist with the purchase of vehicles or equipment, the District may apply for grants. If necessary, the District may also secure additional bonds to finance the purchase of equipment.

In 2003, Greene County issued $2,300,000 in General Obligation bonds to finance the construction of the District's recycling and yard waste center. This bond, along with other Greene County bonds, was refinanced in 2010. As a result of the refinancing, the payments will balloon beginning in 2020. This information is listed on Table VIII-4. To prepare for this change in payments, the District has established a bond payment fund. The amount paid into this fund was determined by taking the total amount due and dividing it by the years remaining on the bond. As shown on Table VIII-4 and included in the cost listed in Table VIII-5, the annual payment is $207,926.

Cost of Plan Implementation by Allowable Uses

The cost of implementing the Plan by the allowable uses defined in the Ohio Revised Code (ORC) is discussed on page 5. It is labeled as C. Funds Allocated from ORC 3734.57 (B), ORC 3734.572, and ORC 3734.573. Table VIII-6 demonstrates the cost by the allowable uses.

Cost of Plan Implementation by Activity

The District's activities are identified and described in detail in Sections IV and V. Section IV lists all the activities that are established and operating. New activities and recommended modifications to the existing activities are described in Section V. Below, all activities are listed by title. The activities are listed according to the sectors served. These sectors are the Residential and Commercial sector plus the Industrial sector.

Activities for the Residential and Commercial Sector as identified on Table VIII-8 include:

- Recycling Center
- Special Collections
- Interagency
- Community Event Containers
- Residential Recycling
- Commercial Recycling
- Private and Non-Profit
- Scrap Yards
- Materials Management
- Grants
- Volume Based
- Technical Assistance and Education
- Waste Audits
- Waste Exchanges
- Recycling Center - yard waste
- Private Composters
- Recycling Forums
- Advertising and Advertising Media
- Debris Management
- Environmental Crimes
- Scrap Tires
- Household Hazardous Waste and Certified Processor
- Lead Acid Batteries
- Litter

Activities for the Industrial Sector as listed on Table VIII-8 include:

- Industrial Recycling
- Materials Management
- Grants
- Waste Audits
- Waste Exchanges
- Technical Assistance and Education

The cost to implement the Plan by activity must be calculated to complete Table VIII-8. As explained for the cost of plan implementation by category, the District is operated by two categories of employees, administrative and operational. The allocation of costs for the activities as shown on Table VIII-8 is based on the amount of hours-consumed. These are the hours that employees work to implement the activities. To determine the cost per activity, the District assigned work hours to each employee for each activity. Straight time and overtime were included. The assigned hours were based on 8 hour increments and experience with current operations.

2015 annual cost and the Recycling Center Activity will be used to demonstrate the calculation that connects annual cost and activity cost that is based on the hours-consumed. Annual costs are listed in Table VIII-5 and the Plan Implementation cost per Activity is listed on Table VIII-8.

Total annual cost for 2015 as listed on Table VIII-5 is $1,111,445. Costs for advertising, bond payment, grants, education, household hazardous waste processing, and vehicle/equipment purchasing have been subtracted from the annual cost. These costs are paid directly to vendors and not included with the employee hours-consumed operating cost.

In 2015, the total work hours for employees was 20,368. This included straight time and over time. Of this total, the hours-consumed for the Recycling Center equaled 4,602. To determine the annual cost for the Recycling Center, the annual operating cost was divided by the total work hours and multiplied by the Recycling Center hours-consumed.

The calculation is demonstrated below for 2015 and the Recycling Center Activity.

2015 annual expenditures	=	$1,111,445
Advertising	=	-$5,000
Bond Payment	=	-$207,926
Grants	=	-$30,000
Education	=	-$0
HHW Processor	=	-$40,400
Vehicle/Equipment Purchase	=	-$20,000
2015 annual operating cost	=	$808,119

$808,119 / 20,368 hours x 4,602 hours =

$182,588 Recycling Center Activity cost for 2015

For each year of the planning period, this process was repeated for all activities listed on Table VIII-8.

For the purposes of the plan update, $30,000 has been allocated for Grants. Based on a review of the budget, cost savings, and inflation rates associated with expenditures, this amount may be adjusted.

C. Funds Allocated from ORC 3734.57 (B), ORC 3734.572, and ORC 3734.573

As listed in the Ohio Revise Code, Solid Waste District's may expend funds for allowable uses. The nine allowable uses/expenditures are:

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 counties within the district to defray the cost of maintaining roads and other public services related to the location or operation of solid waste facilities;

5. Contract 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 3734.0 or to local law enforcement agencies having jurisdiction within the district for anti-littering;
8. Financial assistance to board of health for employees to participate on Ohio EPA's training and certification program for solid waste operators and facility inspections;
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.

Each of the District's activities has been assigned to an allowable expenditure. The District's activities and anticipated cost will be allocated to two of the nine allowable expenditures.

1. Preparation and monitoring of plan implementation
2. Implementation of the approved plan

The following residential and commercial plus industrial activities are assigned to the preparation and monitoring of Plan implementation:

- Residential Recycling
- Commercial Recycling
- Private and Non-profit
- Scrap Yards
- Volume Base Collection Rates
- Industrial Recycling

All other residential and commercial plus industrial activities are listed under the implementation of the approved Plan. These activities include:

- Recycling Center
- Special Collections
- Interagency
- Community Event Recycling
- Materials Management
- Grants
- Technical Assistance and Education
- Education
- Waste Audits
- Waste Exchanges
- Recycling Center – yard waste
- Private Composters
- Recycling Forums
- Advertising and Advertising Media
- Debris Management
- Environmental Crimes
- Scrap Tires

- Household Hazardous Waste and Certified Processor
- Lead Acid Batteries
- Litter
- Bond Payment
- Capital Purchases and Repairs

To complete Table VIII-6, the activity costs identified in Table VIII-8 have been assigned to the allowable expenditures as described above. As shown on Table VIII-6, the District is financially solvent through the planning period.

D. Contingent Funding or Financing

The District does not anticipate the types of uncertainties described in the State Format 3.0 for which the District must provide a source of contingent financing. Examples as listed in the format include:

- District fees collected from a grandfathered landfill which has received a draft permit denial;
- State or Federal legislative action which is anticipated and depended upon by the District; or
- District fees (or tipping fees for a District-owned facility) collected for a facility that has not yet received a permit; or

Since these scenarios do not exist or would not prevent the District from meeting the State Goals, the District has neither specified such contingent financial mechanisms nor prepared Table VIII-7.

The District reserves the right to implement contract fees.

E. Summary of Cost and Revenues

Based on the anticipated revenue and planned expenditures, the District will remain financially solvent through the planning period. This is demonstrated on Table VIII-8. The table is a summary of the District's costs by activity compared to the anticipated revenue that will result from the generation fee and recycling revenue.

To calculate the cost per activity, the District assigned employee work hours to each activity. These hours per activity allow the District to determine the hours-consumed for each activity. This methodology is explained and demonstrated on page 5. As listed on Table VIII-8, certain activities list expenditures that are not part of normal management or operational costs. These activities include advertising media, HHW certified processor, education, grants, bond payment, and capital purchase and repairs.

Activities for the Residential and Commercial Sector as identified on Table VIII-8 include:

- Recycling Center
- Special Collections
- Interagency
- Community Event Containers
- Residential Recycling
- Commercial Recycling
- Private and Non-Profit
- Scrap Yards
- Materials Management
- Grants
- Volume Based
- Technical Assistance and Education
- Waste Audits
- Waste Exchanges
- Recycling Center – yard waste
- Private Composters
- Recycling Forums
- Advertising and Advertising Media
- Debris Management
- Environmental Crimes
- Scrap Tires
- Household Hazardous Waste and Certified Processor
- Lead Acid Batteries
- Litter

Activities for the Industrial Sector as listed on Table VIII-8 include:

- Industrial Recycling
- Technical Assistance and Education
- Materials Management
- Grants
- Waste Audits
- Waste Exchanges

A detailed description of each activity can be found in Sections IV and V.

Table VIII-2 Generation Fee Schedule and Revenues

Year	Generation Fee	Amount of District Waste to be Disposed (TPY)	Total Generation Fee Revenue
2015	$ 10.00	113,022	$ 1,130,220
2016	$ 10.00	113,293	$ 1,132,931
2017	$ 10.00	113,564	$ 1,135,641
2018	$ 10.00	113,835	$ 1,138,352
2019	$ 10.00	114,106	$ 1,141,062
2020	$ 10.00	114,377	$ 1,143,773
2021	$ 10.00	114,567	$ 1,145,674
2022	$ 10.50	114,758	$ 1,204,954
2023	$ 10.50	114,948	$ 1,206,950
2024	$ 10.50	115,138	$ 1,208,946
2025	$ 10.50	115,328	$ 1,210,943
2026	$ 10.50	115,296	$ 1,210,607
2027	$ 10.50	115,264	$ 1,210,271
2028	$ 10.50	115,232	$ 1,209,935
2029	$ 10.50	115,200	$ 1,209,599
2030	$ 10.50	115,168	$ 1,209,263

Sample Calcualtion $10.00 x 113,022 = $1,130,220.00
Rounding causes difference in amount of waste disposed and calculated generation fee
Note: exempt waste not included

Table VIII-3 **Summary of Revenue Generated and Mechanisms Used**

Year	Types of Revenue Mechanism and Amount Generated			
	Generation Fee	Recycling Revenue	Reimbursement	Total Revenue Generated
2015	$ 1,130,220	$ 25,000		$ 1,155,220
2016	$ 1,132,931	$ 25,000		$ 1,157,931
2017	$ 1,135,641	$ 25,000		$ 1,160,641
2018	$ 1,138,352	$ 25,000		$ 1,163,352
2019	$ 1,141,062	$ 25,000		$ 1,166,062
2020	$ 1,143,773	$ 25,000		$ 1,168,773
2021	$ 1,145,674	$ 25,000		$ 1,170,674
2022	$ 1,204,954	$ 25,000		$ 1,229,954
2023	$ 1,206,950	$ 25,000		$ 1,231,950
2024	$ 1,208,946	$ 25,000		$ 1,233,946
2025	$ 1,210,943	$ 25,000		$ 1,235,943
2026	$ 1,210,607	$ 25,000		$ 1,235,607
2027	$ 1,210,271	$ 25,000		$ 1,235,271
2028	$ 1,209,935	$ 25,000		$ 1,234,935
2029	$ 1,209,599	$ 25,000		$ 1,234,599
2030	$ 1,209,263	$ 25,000		$ 1,234,263

Table VIII-4 **Loans Secured by the District**

Years	Annual Debt Service Schedule	Annual Debt Service Payments
2015	$ 94,902.50	$ 207,925.67
2016	$ 94,902.50	$ 207,925.67
2017	$ 94,902.50	$ 207,925.67
2018	$ 94,902.50	$ 207,925.67
2019	$ 134,902.50	$ 207,925.67
2020	$ 218,502.50	$ 207,925.67
2021	$ 242,252.50	$ 207,925.67
2022	$ 86,672.50	$ 207,925.67
2023	$ 321,487.50	$ 207,925.67
2024	$ 192,487.50	$ 207,925.67
2025	$ 532,687.50	$ 207,925.67
2026	$ 419,087.50	$ 207,925.67
2027	$ 418,362.50	$ 207,925.67
2028	$ 417,000.00	$ 207,925.67

Table VIII-5

Cost of Plan Implementation by Categories

Category 1	2015	2016	2017	2018	2019
District Administration & Management					
Personnel and Fringe Benefits	$ 221,072	$ 229,501	$ 238,499	$ 251,148	$ 261,748
Utilities	$ 37,186	$ 37,930	$ 38,689	$ 39,463	$ 40,252
Building Repair and Maintenance	$ 5,007	$ 5,107	$ 5,209	$ 5,313	$ 5,419
Insurance	$ 15,407	$ 15,715	$ 16,030	$ 16,350	$ 16,677
Advertising Media	$ 5,000	$ 5,100	$ 5,202	$ 5,306	$ 5,412
***Total Indirect Allocations**	$ 99,791	$ 101,713	$ 103,673	$ 105,672	$ 107,712
Bond Payment	$ 207,926	$ 207,926	$ 207,926	$ 207,926	$ 207,926
Supplies and Legal Services	$ 1,726	$ 1,761	$ 1,796	$ 1,832	$ 1,869
Grants (proposed)	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Category 2					
District Recycling Center Operations					
Personnel and Fringe Benefits	$ 327,520	$ 338,710	$ 350,587	$ 366,721	$ 380,512
Education		$ 6,000	$ 6,000	$ 6,000	$ 6,000
Utilities for Satellite Yard Waste Site	$ 151	$ 154	$ 158	$ 161	$ 164
Safety, Professional Dues, Travel and Training	$ 4,058	$ 4,139	$ 4,222	$ 4,306	$ 4,392
Vehicle Road Fuel	$ 20,907	$ 21,325	$ 21,752	$ 22,187	$ 22,631
Vehicle and Equipment Maintenance	$ 39,843	$ 40,640	$ 41,453	$ 42,282	$ 43,128
Equipment Fuel	$ 6,803	$ 6,939	$ 7,078	$ 7,220	$ 7,364
Certified Processors and Building Maintenance	$ 53,262	$ 53,795	$ 54,333	$ 54,876	$ 55,425
Operating Supplies and Services	$ 15,784	$ 16,099	$ 16,421	$ 16,750	$ 17,085
Capital Purchase and Repairs	$ 20,000	$ 43,177	$ 10,000	$ 15,000	$ 24,595
TOTAL PROJECTED COSTS	$ 1,111,445	$ 1,165,732	$ 1,159,027	$ 1,198,514	$ 1,238,310

*County Allocation	$ 40,535	$ 41,346	$ 42,173	$ 43,016	$ 43,877
*Sanitary Allocation	$ 55,556	$ 56,667	$ 57,800	$ 58,956	$ 60,135
*Data Processing	$ 3,700	$ 3,700	$ 3,700	$ 3,700	$ 3,700
***Total Indirect Allocations**	**$ 99,791**	**$ 101,713**	**$ 103,673**	**$ 105,672**	**$ 107,712**

NOTE: Due to rounding within the table some columns may not sum to the totals. This difference is two to three dollars.

NOTE: The funds listed for the Grant Activity is proposed. This amount may be adjusted based on an annual review of the budget, cost savings, or inflation.

Table VIII-5

Cost of Plan Implementation by Categories

Category 1	2020	2021	2022	2023	2024
District Administration & Management					
Personnel and Fringe Benefits	$ 269,283	$ 277,084	$ 285,162	$ 293,528	$ 302,194
Utilities	$ 41,057	$ 41,878	$ 42,716	$ 43,570	$ 44,441
Building Repair and Maintenance	$ 5,528	$ 5,638	$ 5,751	$ 5,866	$ 5,984
Insurance	$ 17,011	$ 17,351	$ 17,698	$ 18,052	$ 18,413
Advertising Media	$ 5,520	$ 5,631	$ 5,743	$ 5,858	$ 5,975
***Total Indirect Allocations**	$ 109,792	$ 111,914	$ 114,078	$ 116,286	$ 118,537
Bond Payment	$ 207,926	$ 207,926	$ 207,926	$ 207,926	$ 207,926
Supplies and Legal Services	$ 1,906	$ 1,944	$ 1,983	$ 2,023	$ 2,063
Grants (proposed)	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Category 2					
District Recycling Center Operations					
Personnel and Fringe Benefits	$ 390,785	$ 401,397	$ 412,361	$ 423,691	$ 435,401
Education	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Utilities for Satellite Yard Waste Site	$ 167	$ 171	$ 174	$ 177	$ 181
Safety, Professional Dues, Travel and Training	$ 4,480	$ 4,570	$ 4,661	$ 4,754	$ 4,849
Vehicle Road Fuel	$ 23,083	$ 23,545	$ 24,016	$ 24,496	$ 24,986
Vehicle and Equipment Maintenance	$ 43,990	$ 44,870	$ 45,767	$ 46,683	$ 47,616
Equipment Fuel	$ 7,511	$ 7,662	$ 7,815	$ 7,971	$ 8,131
Certified Processors and Building Maintenance	$ 55,979	$ 56,539	$ 57,105	$ 57,676	$ 58,252
Operating Supplies and Services	$ 17,427	$ 17,775	$ 18,131	$ 18,493	$ 18,863
Capital Purchase and Repairs	$ 65,912	$ 10,934	$ 126,888	$ 5,000	$ -
TOTAL PROJECTED COSTS	$ 1,303,358	$ 1,272,829	$ 1,413,974	$ 1,318,050	$ 1,339,815

*County Allocation	$ 44,754	$ 45,649	$ 46,562	$ 47,494	$ 48,443
*Sanitary Allocation	$ 61,338	$ 62,565	$ 63,816	$ 65,092	$ 66,394
*Data Processing	$ 3,700	$ 3,700	$ 3,700	$ 3,700	$ 3,700
***Total Indirect Allocations**	$ 109,792	$ 111,914	$ 114,078	$ 116,286	$ 118,537

NOTE: Due to rounding within the table some columns may not sum to the totals. This difference is two to three dollars.

NOTE: The funds listed for the Grant Activity is proposed. This amount may be adjusted based on an annual review of the budget, cost savings, or inflation.

Table VIII-5

Cost of Plan Implementation by Categories

Category 1	2025	2026	2027	2028	2029	2030
District Administration & Management						
Personnel and Fringe Benefits	$ 311,174	$ 320,480	$ 330,126	$ 340,128	$ 350,499	$ 361,255
Utilities	$ 45,330	$ 46,237	$ 47,161	$ 48,105	$ 49,067	$ 50,048
Building Repair and Maintenance	$ 6,103	$ 6,225	$ 6,350	$ 6,477	$ 6,606	$ 6,738
Insurance	$ 18,781	$ 19,157	$ 19,540	$ 19,931	$ 20,330	$ 20,736
Advertising Media	$ 6,095	$ 6,217	$ 6,341	$ 6,468	$ 6,597	$ 6,729
***Total Indirect Allocations**	$ 120,834	$ 123,177	$ 125,566	$ 128,004	$ 130,490	$ 133,026
Bond Payment	$ 207,926	$ 207,926	$ 207,926	$ 207,926		
Supplies and Legal Services	$ 2,104	$ 2,146	$ 2,189	$ 2,233	$ 2,278	$ 2,323
Grants (proposed)	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Category 2						
District Recycling Center Operations						
Personnel and Fringe Benefits	$ 447,508	$ 460,027	$ 472,975	$ 486,369	$ 500,227	$ 514,570
Education	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Utilities for Satellite Yard Waste Site	$ 185	$ 188	$ 192	$ 196	$ 200	$ 204
Safety, Professional Dues, Travel and Training	$ 4,946	$ 5,045	$ 5,146	$ 5,249	$ 5,354	$ 5,461
Vehicle Road Fuel	$ 25,486	$ 25,996	$ 26,516	$ 27,046	$ 27,587	$ 28,139
Vehicle and Equipment Maintenance	$ 48,569	$ 49,540	$ 50,531	$ 51,542	$ 52,572	$ 53,624
Equipment Fuel	$ 8,293	$ 8,459	$ 8,628	$ 8,801	$ 8,977	$ 9,156
Certified Processors and Building Maintenance	$ 58,835	$ 59,423	$ 60,017	$ 60,618	$ 61,224	$ 61,836
Operating Supplies and Services	$ 19,240	$ 19,625	$ 20,018	$ 20,418	$ 20,826	$ 21,243
Capital Purchase and Repairs	$ 20,000	$ -	$ -	$ 5,000	$ -	$ -
TOTAL PROJECTED COSTS	$ 1,387,411	$ 1,395,869	$ 1,425,224	$ 1,460,508	$ 1,278,834	$ 1,311,089

*County Allocation	$ 49,412	$ 50,401	$ 51,409	$ 52,437	$ 53,485	$ 54,555
*Sanitary Allocation	$ 67,722	$ 69,076	$ 70,458	$ 71,867	$ 73,304	$ 74,771
*Data Processing	$ 3,700	$ 3,700	$ 3,700	$ 3,700	$ 3,700	$ 3,700
***Total Indirect Allocations**	**$ 120,834**	**$ 123,177**	**$ 125,566**	**$ 128,004**	**$ 130,490**	**$ 133,026**

NOTE: Due to rounding within the table some columns may not sum to the totals. This difference is two to three dollars.

NOTE: The funds listed for the Grant Activity is proposed. This amount may be adjusted based on an annual review of the budget, cost savings, or inflation.

Table VIII-6 Revenues and Allocations In Accordance With ORC 3734.57 and ORC 3734.573

Year	Revenue	Allocations of ORC 3734.57 and ORC 3734.573 for the Following Purposes									Balance	Cummulative Balance
		1	2	3	4	5	6	7	8	9	$ 2,081,663	2014 estimated balance
		Monitoring	Implementation									
2015	$ 1,155,220	$ 15,553	$ 1,095,892									$ 2,125,438
2016	$ 1,157,931	$ 16,027	$ 1,149,705									$ 2,117,637
2017	$ 1,160,641	$ 16,526	$ 1,142,501									$ 2,119,250
2018	$ 1,163,352	$ 17,180	$ 1,181,334									$ 2,084,088
2019	$ 1,166,062	$ 17,751	$ 1,220,559									$ 2,011,840
2020	$ 1,168,773	$ 18,198	$ 1,285,160									$ 1,877,255
2021	$ 1,170,674	$ 18,658	$ 1,254,171									$ 1,775,100
2022	$ 1,229,954	$ 19,132	$ 1,394,842									$ 1,591,080
2023	$ 1,231,950	$ 19,622	$ 1,298,429									$ 1,504,980
2024	$ 1,233,946	$ 20,126	$ 1,319,689									$ 1,399,112
2025	$ 1,235,943	$ 20,646	$ 1,366,764									$ 1,247,644
2026	$ 1,235,607	$ 21,183	$ 1,374,686									$ 1,087,381
2027	$ 1,235,271	$ 21,737	$ 1,403,487									$ 897,428
2028	$ 1,234,935	$ 22,309	$ 1,438,200									$ 671,854
2029	$ 1,234,599	$ 22,899	$ 1,255,935									$ 627,619
2030	$ 1,234,263	$ 23,508	$ 1,287,581									$ 550,793

Revuenue should be consistent with the amounts shown in Table VIII-3 under Generation Fees

The allowable purposes for expenditure of revenue shown in the numbered columns of this table are as follows:

1 preparation and monitoring of plan implementaion
2 implementaion of approved plan
3 financial assistance to boards of health for solid waste enforcement
4 financial assistance to counties within the district to defray the cost 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 enforcment agencies having jurisdiction
8 financial assistance to boards of health for employees to participte in OEPA's training and certification program for solid waste operations 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 faciilites

The "Cummalitive Balance" should be the difference between the revenues and the total allocations for a given year, plus the remaining balance from the previous year

Sample Calculation: $2,125,438 + $1,157,931 - $16,027 -$1,149,705 = $2,117,637

Table VIII-8

Summary of District Revenues and Expenditures
Residential and Commercial Recycling Strategies

Year	Recycling Center	Special Collection	Interagency	Community Event Recycling Containers	Residential Recycling	Commercial Recycling	Private and Non Profit	Scrap Yards	Materials Management	Grants (Labor only)
2015	$ 182,588	$ 29,519	$ 87,604	$ 1,904	$ 4,126	$ 4,126	$ 2,539	$ 2,222	$ 5,713	$ 6,031
2016	$ 188,148	$ 30,418	$ 90,272	$ 1,962	$ 4,252	$ 4,252	$ 2,617	$ 2,290	$ 5,887	$ 6,214
2017	$ 194,014	$ 31,366	$ 93,086	$ 2,024	$ 4,384	$ 4,384	$ 2,698	$ 2,361	$ 6,071	$ 6,408
2018	$ 201,690	$ 32,607	$ 96,769	$ 2,104	$ 4,558	$ 4,558	$ 2,805	$ 2,454	$ 6,311	$ 6,662
2019	$ 208,395	$ 33,691	$ 99,986	$ 2,174	$ 4,709	$ 4,709	$ 2,898	$ 2,536	$ 6,521	$ 6,883
2020	$ 213,638	$ 34,539	$ 102,501	$ 2,228	$ 4,828	$ 4,828	$ 2,971	$ 2,600	$ 6,685	$ 7,056
2021	$ 219,041	$ 35,412	$ 105,094	$ 2,285	$ 4,950	$ 4,950	$ 3,046	$ 2,665	$ 6,854	$ 7,235
2022	$ 224,610	$ 36,312	$ 107,766	$ 2,343	$ 5,076	$ 5,076	$ 3,124	$ 2,733	$ 7,028	$ 7,419
2023	$ 230,353	$ 37,241	$ 110,521	$ 2,403	$ 5,206	$ 5,206	$ 3,204	$ 2,803	$ 7,208	$ 7,608
2024	$ 236,275	$ 38,198	$ 113,363	$ 2,464	$ 5,340	$ 5,340	$ 3,286	$ 2,875	$ 7,393	$ 7,804
2025	$ 242,383	$ 39,186	$ 116,293	$ 2,528	$ 5,478	$ 5,478	$ 3,371	$ 2,949	$ 7,584	$ 8,006
2026	$ 248,685	$ 40,205	$ 119,317	$ 2,594	$ 5,620	$ 5,620	$ 3,458	$ 3,026	$ 7,782	$ 8,214
2027	$ 255,187	$ 41,256	$ 122,437	$ 2,662	$ 5,767	$ 5,767	$ 3,549	$ 3,105	$ 7,985	$ 8,429
2028	$ 261,898	$ 42,341	$ 125,656	$ 2,732	$ 5,919	$ 5,919	$ 3,642	$ 3,187	$ 8,195	$ 8,650
2029	$ 268,826	$ 43,461	$ 128,980	$ 2,804	$ 6,075	$ 6,075	$ 3,739	$ 3,271	$ 8,412	$ 8,879
2030	$ 275,979	$ 44,617	$ 132,412	$ 2,879	$ 6,237	$ 6,237	$ 3,838	$ 3,358	$ 8,636	$ 9,115

NOTE: The funds listed for Grant Activity is proposed. This amount may be adjusted based on a annual review of the budget, cost savings, or inflation.

Table VIII-8

Summary of District Revenues and Expenditures
Residential and Commercial Recycling Strategies

Year	Grant Funds (proposed)	Volume Base Collection Rates	Technical Assistance and Education	Education	Waste Audits	Waste Exchanges	Recycling Center - Yard Waste	Private Composters	Recycling Forums	Advertising (Labor only)	Advertising Media w/1% Inflation
2015	$ 30,000	$ 635	$ 20,631		$ 635	$ 635	$ 397,156	$ 3,809	$ 1,904	$ 10,157	$ 5,000
2016	$ 30,000	$ 654	$ 21,260	$ 6,000	$ 654	$ 654	$ 409,249	$ 3,925	$ 1,962	$ 10,466	$ 5,100
2017	$ 30,000	$ 675	$ 21,922	$ 6,000	$ 675	$ 675	$ 422,008	$ 4,047	$ 2,024	$ 10,793	$ 5,202
2018	$ 30,000	$ 701	$ 22,790	$ 6,000	$ 701	$ 701	$ 438,703	$ 4,207	$ 2,104	$ 11,220	$ 5,306
2019	$ 30,000	$ 725	$ 23,547	$ 6,000	$ 725	$ 725	$ 453,289	$ 4,347	$ 2,174	$ 11,593	$ 5,412
2020	$ 30,000	$ 743	$ 24,140	$ 6,000	$ 743	$ 743	$ 464,692	$ 4,457	$ 2,228	$ 11,884	$ 5,520
2021	$ 30,000	$ 762	$ 24,750	$ 6,000	$ 762	$ 762	$ 476,444	$ 4,569	$ 2,285	$ 12,185	$ 5,631
2022	$ 30,000	$ 781	$ 25,380	$ 6,000	$ 781	$ 781	$ 488,559	$ 4,685	$ 2,343	$ 12,495	$ 5,743
2023	$ 30,000	$ 801	$ 26,029	$ 6,000	$ 801	$ 801	$ 501,050	$ 4,805	$ 2,403	$ 12,814	$ 5,858
2024	$ 30,000	$ 821	$ 26,698	$ 6,000	$ 821	$ 821	$ 513,931	$ 4,929	$ 2,464	$ 13,143	$ 5,975
2025	$ 30,000	$ 843	$ 27,388	$ 6,000	$ 843	$ 843	$ 527,217	$ 5,056	$ 2,528	$ 13,483	$ 6,095
2026	$ 30,000	$ 865	$ 28,100	$ 6,000	$ 865	$ 865	$ 540,924	$ 5,188	$ 2,594	$ 13,834	$ 6,217
2027	$ 30,000	$ 887	$ 28,835	$ 6,000	$ 887	$ 887	$ 555,068	$ 5,323	$ 2,662	$ 14,196	$ 6,341
2028	$ 30,000	$ 911	$ 29,593	$ 6,000	$ 911	$ 911	$ 569,665	$ 5,463	$ 2,732	$ 14,569	$ 6,468
2029	$ 30,000	$ 935	$ 30,376	$ 6,000	$ 935	$ 935	$ 584,735	$ 5,608	$ 2,804	$ 14,954	$ 6,597
2030	$ 30,000	$ 960	$ 31,184	$ 6,000	$ 960	$ 960	$ 600,293	$ 5,757	$ 2,879	$ 15,352.16	$ 6,729

Table VIII-8

Summary of District Revenues and Expenditures
Residential/Commercial Strategies

Year	Debris Mangement	Environmental Crimes	Scrap Tires	HHW (Labor Only)	HHW CERTIFIED PROCESSOR W/ 1% INFLATION	Lead Acid Batteries	Litter
2015	$ 2,539	$ 952	$ 6,031	$ 21,266	$ 40,400	$ 2,698	$ 6,666
2016	$ 2,617	$ 981	$ 6,214	$ 21,914	$ 40,804	$ 2,780	$ 6,869
2017	$ 2,698	$ 1,012	$ 6,408	$ 22,597	$ 41,212	$ 2,867	$ 7,083
2018	$ 2,805	$ 1,052	$ 6,662	$ 23,491	$ 41,624	$ 2,980	$ 7,363
2019	$ 2,898	$ 1,087	$ 6,883	$ 24,272	$ 42,040	$ 3,079	$ 7,608
2020	$ 2,971	$ 1,114	$ 7,056	$ 24,883	$ 42,461	$ 3,157	$ 7,799
2021	$ 3,046	$ 1,142	$ 7,235	$ 25,512	$ 42,885	$ 3,237	$ 7,996
2022	$ 3,124	$ 1,171	$ 7,419	$ 26,161	$ 43,314	$ 3,319	$ 8,200
2023	$ 3,204	$ 1,201	$ 7,608	$ 26,829	$ 43,747	$ 3,404	$ 8,409
2024	$ 3,286	$ 1,232	$ 7,804	$ 27,519	$ 44,185	$ 3,491	$ 8,625
2025	$ 3,371	$ 1,264	$ 8,006	$ 28,231	$ 44,627	$ 3,581	$ 8,848
2026	$ 3,458	$ 1,297	$ 8,214	$ 28,965	$ 45,073	$ 3,675	$ 9,078
2027	$ 3,549	$ 1,331	$ 8,429	$ 29,722	$ 45,524	$ 3,771	$ 9,316
2028	$ 3,642	$ 1,366	$ 8,650	$ 30,504	$ 45,979	$ 3,870	$ 9,561
2029	$ 3,739	$ 1,402	$ 8,879	$ 31,310	$ 46,439	$ 3,972	$ 9,814
2030	$ 3,838	$ 1,439	$ 9,115	$ 32,144	$ 46,903	$ 4,078	$ 10,075

Table VIII-8

Summary of District Revenues and Expenditures

Industrial Recycling Strategies

Year	Industrial Recycling	Technical Assistance and Education	Waste Audits	Waste Exchanges	Materials Management	Grants	Bond Payment	Capital Purchase and Repairs	TOTAL ANNUAL COSTS	Revenue Generated	Cumulative Balance
2015	$ 1,904	$ 952	$ 635	$ 635	$ 952	$ 952	$ 207,926	$ 20,000	**$ 1,111,445**	$ 1,155,220	$ 2,125,438
2016	$ 1,962	$ 981	$ 654	$ 654	$ 981	$ 981	$ 207,926	$ 43,177	**$ 1,165,732**	$ 1,157,931	$ 2,117,637
2017	$ 2,024	$ 1,012	$ 675	$ 675	$ 1,012	$ 1,012	$ 207,926	$ 10,000	**$ 1,159,027**	$ 1,160,641	$ 2,119,250
2018	$ 2,104	$ 1,052	$ 701	$ 701	$ 1,052	$ 1,052	$ 207,926	$ 15,000	**$ 1,198,514**	$ 1,163,352	$ 2,084,088
2019	$ 2,174	$ 1,087	$ 725	$ 725	$ 1,087	$ 1,087	$ 207,926	$ 24,595	**$ 1,238,310**	$ 1,166,062	$ 2,011,840
2020	$ 2,228	$ 1,114	$ 743	$ 743	$ 1,114	$ 1,114	$ 207,926	$ 65,912	**$ 1,303,358**	$ 1,168,773	$ 1,877,255
2021	$ 2,285	$ 1,142	$ 762	$ 762	$ 1,142	$ 1,142	$ 207,926	$ 10,934	**$ 1,272,829**	$ 1,170,674	$ 1,775,100
2022	$ 2,343	$ 1,171	$ 781	$ 781	$ 1,171	$ 1,171	$ 207,926	$ 126,888	**$ 1,413,974**	$ 1,229,954	$ 1,591,080
2023	$ 2,403	$ 1,201	$ 801	$ 801	$ 1,201	$ 1,201	$ 207,926	$ 5,000	**$ 1,318,050**	$ 1,231,950	$ 1,504,980
2024	$ 2,464	$ 1,232	$ 821	$ 821	$ 1,232	$ 1,232	$ 207,926	$ -	**$ 1,339,815**	$ 1,233,946	$ 1,399,112
2025	$ 2,528	$ 1,264	$ 843	$ 843	$ 1,264	$ 1,264	$ 207,926	$ 20,000	**$ 1,387,411**	$ 1,235,943	$ 1,247,644
2026	$ 2,594	$ 1,297	$ 865	$ 865	$ 1,297	$ 1,297	$ 207,926	$ -	**$ 1,395,869**	$ 1,235,607	$ 1,087,381
2027	$ 2,662	$ 1,331	$ 887	$ 887	$ 1,331	$ 1,331	$ 207,926	$ -	**$ 1,425,224**	$ 1,235,271	$ 897,428
2028	$ 2,732	$ 1,366	$ 911	$ 911	$ 1,366	$ 1,366	$ 207,926	$ 5,000	**$ 1,460,508**	$ 1,234,935	$ 671,854
2029	$ 2,804	$ 1,402	$ 935	$ 935	$ 1,402	$ 1,402		$ -	**$ 1,278,834**	$ 1,234,599	$ 627,619
2030	$ 2,879	$ 1,439	$ 960	$ 960	$ 1,439	$ 1,439		$ -	**$ 1,311,089**	$ 1,234,263	$ 550,793

SECTION IX

IX. District Rules - ORC Section 3734.53(C)

A. Existing Rules

The District has not currently adopted rules as authorized in ORC Section 3734.53.

B. Proposed Rules

The District does not anticipate adopting any new rules. However, all existing and future rule making authority is granted to the District in this Plan Update.

The District reserves in this Plan Update the specific authority to adopt, publish and enforce all of the rule-making powers authorized by Ohio Revised Code 343.01, Divisions G1, G2, G3, and G4 with regards to any of the following:

> 343.01 (G)(1) "Prohibiting or limiting the receipt of solid wastes generated outside of the district...at facilities covered by the plan...
>
> 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 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 construction, enlarging or modifying any sold waste facility until general plans and specifications for the proposed improvements have been submitted to and approved by the board of county commissioners...as complying with the solid waste management plan or amended plan of the District. The construction of such a facility..."
>
> 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 facilities included in the district's solid waste management plan or amended plan. A board of county commissioners..."
>
> 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...or a county rural zoning resolution...that rezoned or redistricted a parcel or parcels upon which the facility is to be constructed and that became effective within two years prior to the filing of an application for a permit..."

This Plan empowers the Board to make any lawful use of rulemaking authorities that exist or come to exist during implementation.

It is the desire of the Policy Committee that the Board refrains from using the rules and their authorities unless reasonable attempts have been made to affect a desired outcome through voluntary methods and/or mediation.

Appendix A

District Formation

RESOLUTION

The Board of County Commissioners of Greene County, Ohio met in regular session on the 1st day of September 1988 at the office of said Board, with the following members present: Kathryn K. Hagler, Delmer L. Bone and w. Reed Madden.

Mr. Bone introduced the following resolution and moved its passage:

RESOLUTION NO. 88-9-1-6

RESOLUTION ESTABLISHING THE GREENE COUNTY SOLID WASTE MANAGEMENT DISTRICT

WHEREAS, on 24 June 1988 the Ohio Solid Waste Disposal Act of 1988 (Am. Sub. H.B. 592) was signed into law; and

WHEREAS, said Act requires that before 24 March 1989 each County establish its own Solid Waste Management District, or participate in the establishment of a joint County District; and

WHEREAS, the establishment of a district consisting solely and entirely of Greene County is consistent with recent solid waste management planning efforts taken by this Board of County Commissioners;

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Greene County, Ohio as follows:

SECTION 1: That the Greene County Solid Waste Management District, consisting solely and entirely of Greene County, Ohio, be and is hereby established

SECTION 2: This Board of County Commissioners hereby finds and determines that all formal actions relative to the passage of this resolution were taken in an open meeting of this Board, and that all deliberations of this Board and of its committees, if any, which resulted in formal action, were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Revised Code.

Mr. Madden seconded the motion, and upon call of the roll, the vote thereon resulted as follows:

All Ayes

PASSED: September 1, 1988

Nancy L. Boyer
Clerk, Board of County Commissioners
Greene County, Ohio

Appendix B
Copies of Public Notices for Public Hearings and Public Comment

Greene County
Sanitary Engineering Department
Environmental Services Division

Notice of Public Comment Period and Notice of Public Hearing

The Greene County Solid Waste Management District Policy Committee has completed a Draft Amended Solid Waste Management Plan Update (Draft Plan) for the Greene County Solid Waste Management District.

The Draft Plan includes a solid waste facility inventory, projections and strategies, facilities and activities or programs to be used, an analysis of progress made toward achieving the State's recycling goal, cost to finance the District, and District rules. The Draft Plan includes the District's activities scheduled for the next 15 years. To fund the activities described in the Draft Plan, the generation fee is set at $10.00 per ton until 2022 when it is scheduled to be $10.50 per ton. Also, as listed in this Draft Plan, the District will not designate facilities but reserves the right to enter into Capacity Assurance Agreements and if necessary designate facilities to maintain operations of the District as listed in the Draft Plan.

This Draft Plan is an update to a Plan approved in 2008. This Draft Plan includes operations of the Recycling Center. At the Recycling Center materials are accepted and processed. Materials collected include household recyclables, yard waste, household hazardous waste, certain special waste such as electronic waste and scrap metal. Yard Waste is recycled to mulch and made available to the residents. Also, the Draft Plan includes activities that promote recycling through education and establishment of grants. Activities listed in the Draft Plan demonstrate that the District has and will maintain the State's recycling goal. This goal requires a 25% recycling rate for the residential and commercial sectors plus a 50% recycling rate for industrial businesses.

Notice of Public Comment

Comments on the Draft Plan will be accepted by the Greene County Solid Waste Management Policy Committee for a thirty (30) day period beginning August 8, 2014 extending to September 8, 2014. The Draft Plan will be available for public review at:

Greene County Sanitary Engineering Department
Environmental Services Division
2145 Greene Way Boulevard
Xenia, OH 45385-2675

Greene County Public Libraries - all branches

Greene County Website at www.co.greene.oh.us, go to Environmental Services

During the comment period, anyone may comment on the Draft Plan by forwarding their comments, in writing, to Environmental Services at the mailing address or website listed above.

Notice of Public Hearing

Notice is hereby given that the Greene County Solid Waste Management Policy Committee will conduct a Public Hearing in accordance with ORC Section 3734.55 (A), in order to solicit citizen input concerning the District's Draft Amended Solid Waste Management Plan Update. The Public Hearing will be held on September 10, 2014, at 6:00 pm at the Greene County Media Room, 541 Ledbetter Road, Xenia, OH 45385. The public is invited to attend. Copies of the Draft Plan will be made available at Greene County Environmental Services, 2145 Greene Way Blvd., Xenia, OH and the public libraries until the Public Hearing. The Draft Plan may also be reviewed at www.co.greene.oh.us, go to Environmental Services listed under Departments.

YELLOW SPRINGS NEWS

An INDEPENDENT JOURNAL of NEWS and OPINION SINCE 1880

THURSDAY, AUGUST 7, 2014 VOLUME 135, NUMBER 32 PRICE: $1.50

YELLOW SPRINGS, OHIO

IN THIS ISSUE:
2014-2015 BACK TO SCHOOL TAB

**********5-DIGIT 45385
2830 01-01-14 24P 3S
GREENE CTY SANITARY ENG DEP**C012
JANESE BROOKS
2145 GREENE WAY BLVD
XENIA OH 45385-2675

— Public Notice —

GREENE COUNTY SANITARY ENGINEERING DEPARTMENT ENVIRONMENTAL SERVICES DIVISION

NOTICE OF PUBLIC COMMENT PERIOD AND NOTICE OF PUBLIC HEARING

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AFFP
Xenia Greene County Sanitary E

RECEIVED
2014 AUG 14 PM 3:42
GREENE COUNTY
SAN. ENGR. FINANCE

Affidavit of Publication

STATE OF OHIO }
COUNTY OF GREENE } SS

Pamela Stricker, being duly sworn, says:

That she is Regional Bus. Dev. Mgr of the Xenia Daily Gazette, a daily newspaper of general circulation, printed and published in Xenia, Greene County, Ohio; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

August 07, 2014

$198.00

That said newspaper was regularly issued and circulated on those dates.
SIGNED: Pamela Stricker

Regional Bus. Dev. Mgr

Subscribed to and sworn to me this 7th day of August 2014.

NOTARIAL SEAL
JANICE POWELL
Notary Public, State of Ohio
My Commission Exp. March 29, 2015
Recorded in Clinton County

Janice Powell

Janice Powell, Notary Public, Greene County, Ohio

My commission expires: March 29, 2015

40018779 40635244 9375627465

GREENE CO SANITARY ENGINEERING
667 DAYTON-XENIA
XENIA, OH 45385

Xenia
Greene County
Sanitary Engineering Department
Environmental Services Division

Notice of Public Comment Period and Notice of Public Hearing

The Greene County Solid Waste Management District Policy Committee has completed a Draft Amended Solid Waste Management Plan Update (Draft Plan) for the Greene County Solid Waste Management District.

The Draft Plan includes a solid waste facility inventory, projections and strategies, facilities and activities or programs to be used, an analysis of progress made toward achieving the State's recycling goal, cost to finance the District, and District rules. The Draft Plan includes the District's activities scheduled for the next 15 years. To fund the activities described in the Draft Plan, the generation fee is set at $10.00 per ton until 2022 when it is scheduled to be $10.50 per ton. Also, as listed in this Draft Plan, the District will not designate facilities but reserves the right to enter into Capacity Assurance Agreements and if necessary designate facilities to maintain operations of the District as listed in the Draft Plan.

This Draft Plan is an update to a Plan approved in 2008. This Draft Plan includes operations of the Recycling Center. At the Recycling Center materials are accepted and processed. Materials collected include household recyclables, yard waste, household hazardous waste, certain special waste such as electronic waste and scrap metal. Yard Waste is recycled to mulch and made available to the residents. Also, the Draft Plan includes activities that promote recycling through education and establishment of grants. Activities listed in the Draft Plan demonstrate that the District has and will maintain the State's recycling goal. This goal requires a 25% recycling rate for the residential and commercial sectors plus a 50% recycling rate for industrial businesses.

Notice of Public Comment

Comments on the Draft Plan will be accepted by the Greene County Solid Waste Management Policy Committee for a thirty (30) day period beginning August 8, 2014 extending to September 8, 2014. The Draft Plan will be available for public review at:

Greene County Sanitary Engineering Department
Environmental Services Division
2145 Greene Way Boulevard
Xenia, OH 45385-2675

Greene County Public Libraries - all branches

Greene County Website at www.co.greene.oh.us, go to Environmental Services

During the comment period, anyone may comment on the Draft Plan by forwarding their comments, in writing, to Environmental Services at the mailing address or website listed above.

Notice of Public Hearing

Notice is hereby given that the Greene County Solid Waste Management Policy Committee will conduct a Public Hearing in accordance with ORC Section 3734.55 (A), in order to solicit citizen input concerning the District's Draft Amended Solid Waste Management Plan Update. The Public Hearing will be held on September 10, 2014, at 6:00 pm at the Greene County Media Room, 541 Ledbetter Road, Xenia, OH 45385. The public is invited to attend. Copies of the Draft Plan will be made available at Greene County Environmental Services, 2145 Greene Way Blvd., Xenia, OH and the public libraries until the Public Hearing. The Draft Plan may also be reviewed at www.co.greene.oh.us, go to Environmental Services listed under Departments.

PUB: August 7, 2014
40635244

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2014 AUG 14 PM 3:42

GREENE COUNTY
SAN. ENGR. FINANCE

AFFP
Xenia Greene County Sanitary E

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GREENE COUNTY
SAN. ENGR. FINANCE

Affidavit of Publication

STATE OF OHIO }
COUNTY OF GREENE } SS

Pamela Stricker, being duly sworn, says:

That she is Regional Bus. Dev. Mgr of the Fairborn Daily Herald, a daily newspaper of general circulation, printed and published in Xenia, Greene County, Ohio; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

August 07, 2014

#198.00

That said newspaper was regularly issued and circulated on those dates.
SIGNED: Pamela Stricker

Regional Bus. Dev. Mgr.

Subscribed to and sworn to me this 7th day of August, 2014.

JANICE POWELL
Notary Public, State of Ohio
My Commission Exp. March 29, 2015
Recorded in Clinton County

Janice Powell

Janice Powell, Notary Public, Greene County, Ohio

My commission expires: March 29, 2015

40018779 40635244 9375627465

GREENE CO SANITARY ENGINEERING
667 DAYTON-XENIA
XENIA, OH 45385

Xenia
Greene County
Sanitary Engineering Department
Environmental Services Division

Notice of Public Comment Period and Notice of Public Hearing

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The Draft Plan includes a solid waste facility inventory, projections and strategies, facilities and activities or programs to be used, an analysis of progress made toward achieving the State's recycling goal, cost to finance the District, and District rules. The Draft Plan includes the District's activities scheduled for the next 15 years. To fund the activities described in the Draft Plan, the generation fee is set at $10.00 per ton until 2022 when it is scheduled to be $10.50 per ton. Also, as listed in this Draft Plan, the District will not designate facilities but reserves the right to enter into Capacity Assurance Agreements and if necessary designate facilities to maintain operations of the District as listed in the Draft Plan.

This Draft Plan is an update to a Plan approved in 2008. This Draft Plan includes operations of the Recycling Center. At the Recycling Center materials are accepted and processed. Materials collected include household recyclables, yard waste, household hazardous waste, certain special waste such as electronic waste and scrap metal. Yard Waste is recycled to mulch and made available to the residents. Also, the Draft Plan includes activities that promote recycling through education and establishment of grants. Activities listed in the Draft Plan demonstrate that the District has and will maintain the State's recycling goal. This goal requires a 25% recycling rate for the residential and commercial sectors plus a 50% recycling rate for industrial businesses.

Notice of Public Comment

Comments on the Draft Plan will be accepted by the Greene County Solid Waste Management Policy Committee for a thirty (30) day period beginning August 8, 2014 and ending to September 8, 2014. The Draft Plan will be available for public review at:

Greene County Sanitary Engineering Department
Environmental Services Division
2145 Greene Way Boulevard
Xenia, OH 45385-2675

Greene County Public Libraries - all branches

Greene County Website at www.co.greene.oh.us, go to Environmental Services

During the comment period, anyone may comment on the Draft Plan by forwarding their comments, in writing, to Environmental Services at the mailing address or website listed above.

Notice of Public Hearing

Notice is hereby given that the Greene County Solid Waste Management Policy Committee will conduct a Public Hearing in accordance with ORC Section 3734.55 (A), in order to solicit citizen input concerning the District's Draft Amended Solid Waste Management Plan Update. The Public Hearing will be held on September 10, 2014, at 6:00 pm at the Greene County Media Room, 541 Ledbetter Road, Xenia, OH 45385. The public is invited to attend. Copies of the Draft Plan will be made available at Greene County Environmental Services, 2145 Greene Way Blvd., Xenia, OH and the public libraries until the Public Hearing. The Draft Plan may also be reviewed at www.co.greene.oh.us, go to Environmental Services listed under Departments.

PUB: August 7, 2014
40635244

RECEIVED

2014 AUG 14 PM 3:43

GREENE COUNTY
SAN. ENGR. FINANCE

Appendix C
Copies of Resolutions and Certification Statements for Documenting Ratification

Certification Statement for the Solid Waste Management Plan Update

For the Greene County Solid Waste Management District, comprised of Greene County, Ohio,

We as representative of the Greene County Solid Waste Management District Policy Committee, do hereby certify that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the 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 15-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.

Mr. Tom Koogler, County Commissioner	Date Signed
Mr. Michael Cornell, City of Beavercreek	9/17/14 Date Signed
Ms. Deborah Leopold, Combined Health District	9/17/14 Date Signed
Mr. John Martin, Bath Township Trustee, Chairperson	9-17-2014 Date Signed
Mr. Daniel Graeter, Citizen Representative	9/17/14 Date Signed
Mr. John Banford, Industrial/Commercial/Institution	17 SEP 14 Date Signed
Mr. Matthew McNelly, Public Representative, Vice-Chairperson	9/17/14 Date Signed

Greene County Solid Waste Management District
Greene County, Ohio

RESOLUTION NO. 2014-9-17-1

SECTION I.

A Resolution declaring that the Amended Solid Waste Management Plan for the Greene County Solid Waste Management District has been adopted.

WHEREAS, the District completed the draft amended Solid Waste Management Plan and submitted it to the Ohio Environmental Protection Agency for review and comment July 23, 2013, and the Ohio Environmental Protection Agency provided comments in a non-binding advisory opinion on September 6, 2013; and

WHEREAS, this Solid Waste Management District Policy Committee has reviewed the non-binding advisory opinion received from the Ohio Environmental Protection Agency and taken into consideration these comments, incorporating changes into the Amended Plan where necessary; and

WHEREAS, the Solid Waste Management District has conducted a 30-day public comment period, and a public hearing held on September 10, 2014, to provide the public an opportunity to have input in this Plan:

NOW THEREFORE BE IT RESOLVED, that the Solid Waste Management Policy Committee of the Greene County Solid Waste Management District;

1. adopts the amended Plan for the Greene County Solid Waste Management District; and

2. certifies that, to the best of our 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 15-year period covered by the Plan, are accurate and are in compliance with the requirement of the District Solid Waste Management Plan Format, revision 3.0.

This resolution shall be in effect immediately upon its adoption.

SECTION II.

VOTING FOR THE RESOLUTION	MEMBERS	VOTING AGAINST THE RESOLUTION
	Mr. Tom Koogler	
	Mr. Michael Cornell	
	Ms. Deborah Leopold	
	Mr. John Martin	
	Mr. Daniel Graeter	
	Mr. John Banford	
	Mr. Matthew McNelly	

Greene County Solid Waste Management District
Greene County, Ohio

RESOLUTION NO. 2014-11-19-2

Resolution declaring that the Amended Solid Waste Management Plan for the Greene County Solid Waste Management District has been ratified.

WHEREAS, the District completed the draft Amended Solid Waste Management Plan and submitted it to the Ohio Environmental Protection Agency for review and comment July 23, 2013, and the Ohio Environmental Protection Agency provided comments in a non-binding advisory opinion on September 6, 2013; and,

WHEREAS, this Solid Waste Management District Policy Committee has reviewed the non-binding advisory opinion received from the Ohio Environmental Protection Agency and taken into consideration these comments, incorporating changes into the Amended Plan where necessary; and,

WHEREAS, the Solid Waste Management District has conducted a 30-day Public Comment Period, and a Public Hearing held on September 10, 2014, to allow the public an opportunity to have input in this Plan; and,

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, the Adopted Amended Plan has been ratified, by resolution or ordinance, by the Greene County Board of Commissioners on September 25, 2014 and by the largest municipality, the City of Beavercreek on October 13, 2014; and,

WHEREAS, the following legislative authorities have ratified, by resolution or ordinance, the Adopted Amended Plan: Cities including Beavercreek, Bellbrook, Fairborn, and Xenia; Villages including Bowersville, Cedarville, Clifton and Yellow Springs; and Townships including Bath, Beavercreek, Caesarcreek, Cedarville, Jefferson, New Jasper, Ross, Silvercreek, Spring Valley, and Sugarcreek; and,

WHEREAS, the Adopted Amended Plan has been ratified, by resolution or ordinance, by legislative authorities within the Greene County Solid Waste Management District representing a combined population in excess of 75% of the Greene County Solid Waste Management's total population.

NOW THEREFORE BE IT RESOLVED, that the Solid Waste Management Policy Committee of the Greene County Solid Waste Management District;

1. declares the Greene County Solid Waste Management District Amended Plan is ratified; and

2. certifies that, to the best of our 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 15-year period covered by the Plan, are accurate and are in compliance with the requirement of the District Solid Waste Management Plan Format, revision 3.0.

This Resolution shall be in effect immediately upon its adoption.

VOTING FOR THE RESOLUTION	MEMBERS	VOTING AGAINST THE RESOLUTION
	Mr. Tom Koogler	
	Mr. Michael Cornell	
	Ms. Deborah Leopold	
	Mr. John Martin	
	Mr. Daniel Graeter	
	Mr. John Banford	
	Mr. Matthew McNelly	

CITY OF BEAVERCREEK

RESOLUTION NO. 14-50

SPONSORED BY COUNCIL MEMBER GIAMBRONE ON THE 13TH DAY OF OCTOBER, 2014

A RESOLUTION APPROVING THE AMENDED SOLID WASTE MANAGEMENT PLAN OF THE GREENE COUNTY SOLID WASTE MANAGEMENT DISTRICT

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1, the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55(B), the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and,

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF BEAVERCREEK, OHIO, THAT:

SECTION I.

The Amended Solid Waste Management Plan for Greene County Solid Waste Management District adopted on September 17, 2014 by the Greene County Solid Waste District Policy Committee is hereby approved and adopted.

SECTION II.

It is hereby found and determined that all formal actions of this Council concerning and relating to the adoption of this Resolution were adopted in an open meeting of this Council, and that any and all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public, in

compliance with all legal requirements, including, but not limited to Section 121.22 of the Ohio Revised Code.

SECTION III.

A copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, Ohio 45385.

SECTION IV.

This Resolution shall become effective immediately upon its passage.

THIS RESOLUTION IS ADOPTED BY THE Council of the City of Beavercreek, Ohio this 13th day of October, 2014

Brian Jarvis, Mayor

ATTEST:

Dianne Lampton, Clerk of Council

RESOLUTION NO. 78-14

APPROVING THE AMENDED SOLID WASTE MANAGEMENT PLAN.

WHEREAS, the Greene County Solid Waste Management District, by its Solid Waste Management District Policy Committee, has prepared the Amended Solid Waste Management Plan for the District; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.54(B), the Board of County Commissioners and the legislative authority of each municipal corporation or township under jurisdiction of the District must approve or disapprove the Amended Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Plan and considered it at a duly called meeting; and

WHEREAS, the Amended Plan furthers the public interest.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF FAIRBORN HEREBY RESOLVES:

SECTION 1. That the Amended Solid Waste Management Plan for Greene County Solid Waste Management District is hereby approved.

SECTION 2. That a copy of this Resolution of Approval shall be promptly delivered or caused to be delivered to the Solid Waste Management Policy Committee at Greene County Solid Waste Management District, 2145 Greene Way Boulevard, Xenia, Ohio 45385.

MICHAEL A. MAYER
CITY SOLICITOR
CITY OF FAIRBORN
510 W. MAIN STREET
FAIRBORN, OHIO 45324

Marilyn McCauley
DEPUTY MAYOR

PASSED: OCT 06 2014

EFFECTIVE: OCT 06 2014

ATTEST:

Julie R Taylor
CLERK, CITY OF FAIRBORN, OHIO

MICHAEL A. MAYER
CITY SOLICITOR
CITY OF FAIRBORN
510 W. MAIN STREET
FAIRBORN, OHIO 45324

RECEIVED

OCT - 7 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

CITY OF XENIA, OHIO
RESOLUTION NUMBER 14 – HH

RESOLUTION APPROVING THE AMENDED SOLID WASTE MANAGEMENT PLAN OF THE GREENE COUNTY SOLID WASTE MANAGEMENT DISTRICT.

WHEREAS, the Greene County Solid Waste Management District Policy Committee, has adopted the Amended Solid Waste Management Plan on September 17, 2014, with passage of Resolution #2014-9-17-1; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55(B), the Board of County Commissioners and the legislative authority of each municipal corporation or township under jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting to further the public interest.

THEREFORE, the City of Xenia hereby resolves:

Section 1. The Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved.

Section 2. A copy of this Resolution shall promptly be delivered or caused to be delivered to the Solid Waste Management Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, Ohio 45385.

Passed: October 23, 2014
Effective: October 24, 2014

Michael D. Engle
President, Xenia City Council

Attest:

Michelle D. Johnson
Clerk, Xenia City Council

RECEIVED

OCT 27 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

RECORD OF RESOLUTIONS

Resolution No. 2014-EE October 13, 2014

CITY OF BELLBROOK, OHIO

RESOLUTION NO. 2014-EE

A RESOLUTION APPROVING RATIFICATION OF THE GREENE COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, the Greene County Solid Waste Management District, by its Solid Waste Management Policy Committee, has adopted a Solid Waste Management Plan Update for the District; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55(B), the Board of County Commissioners and the legislative authority of each municipal corporation or township under jurisdiction of the District must approve or disapprove the Plan Update by Ordinance or Resolution; and

WHEREAS, this body has reviewed the Plan Update and considered it at a duly called meeting.

NOW, THEREFORE, THE CITY OF BELLBROOK HEREBY RESOLVES:

Section 1. That the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved.

Section 2. That a copy of this Resolution of Approval shall promptly be delivered or caused to be delivered to the Solid Waste Management Policy Committee at Greene County Solid Waste Management District, 2145 Greene Way Boulevard, Xenia, OH 45385.

Section 3. That this Resolution shall take effect and be in force forthwith.

Robert L. Baird, Mayor

Carrie C. Smith, Clerk of Council

RECEIVED

OCT 15 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Village of Cedarville

P. O. Box 51
Cedarville, Ohio 45314
cedarvillevillage@sbcglobal.net

PHONE
Mayor's Office
(937)238-5910
Fiscal Officer
(937)766-2061, ext. 21
Police Department
(937)766-5205
Village Administrator
(937)766-2911, ext. 12
Collection Office
(937)766-2061, ext. 10
Village Fax
(937)766-9378

Resolution 2014-14

Approving the Amended Solid Waste Management Plan of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan on September 17, 2014; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55(B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the district must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, THE Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Cedarville Village, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

OCTOBER 27, 2004
Date Approved

Mayor: Robert Fudge

Attest: Ronald E. Corry

RECEIVED
OCT 29 2014
GREENE COUNTY
ENVIRONMENTAL SERVICES

VILLAGE OF YELLOW SPRINGS, OHIO
Resolution 2014-52

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW THEREFORE BE IT RESOLVED, THAT;

Section One: The Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Council for the Village of Yellow Springs, and

Section Two: The Clerk of Council shall promptly deliver a copy of this Resolution of Approval to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Karen Wintrow, President of Council

Passed: 10-6-2014

Attest: Judy Kintner, Council Clerk

ROLL CALL

Karen Wintrow __Y__ Lori Askeland __Y__ Marianne MacQueen __Y_

Brian Housh _Y___ Gerald Simms__Y___

RECEIVED

OCT 10 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number 14-05

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Village of Spring Valley, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Village of Spring Valley
Name of Political Subdivision

11-10-2014
Date of Resolution

Eric J Snell
Authorized Official

RECEIVED

NOV 13 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Ordinance Number 14-05

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT ORDAINED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by the Village of Bowersville, and

BE IT FURTHER ORDAINED, a copy of this Ordinance of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Village of Bowersville
Name of Political Subdivision

Oct. 20, 2014
Date of Ordinance

Authorized Official

RECEIVED

OCT 23 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number 14-10-1

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Clifton Village Council, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Village of Clifton
Name of Political Subdivision

10/03/14
Date of Resolution

Authorized Official
Mayor J. Alex Bieri

RECEIVED

OCT 16 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Sue Chasnov, Clerk-Treasurer

BATH TOWNSHIP BOARD OF TRUSTEES

Greene County ~ 1006 Yellow Springs-Fairfield Road ~ Fairborn, Ohio 45324
Phone 937-878-0611 ~ Fax 937-878-9081
E-mail BATHTWPGREENECO@sbcglobal.net
Steven E. Ross, Chairman ~ John O. Martin ~ Tom Pitstick
Elaine M. Brown, Fiscal Officer

RESOLUTION 24-2014

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.54 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has review the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by the Bath Township Board of Trustees, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Passed: October 15, 2014
Effective: October 15, 2014

ATTEST: Elaine M Brown
Elaine M. Brown
Fiscal Officer

Steven E. Ross

John O. Martin

Tom Pitstick

RECEIVED
OCT 17 2014
GREENE COUNTY
ENVIRONMENTAL SERVICES

SUGARCREEK TOWNSHIP
RESOLUTION NO. 2014.10.06.03

IN RE: Approving the Amended Solid Waste Management Plan of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and,

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and,

WHEREAS, pursuant to Ohio Revised Code Section 3734.55(B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and,

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and,

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest,

NOW THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by this Board of Trustees on October 6, 2014.

FURTHER BE IT RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, Ohio 45385.

Scott W. Bryant

Scott W. Bryant, Chairperson

Nadine S.

Nadine S. Daugherty, Vice Chairperson

Michael E. Pittman

Michael E. Pittman, Trustee

Theodore L. Hodson

Theodore L. Hodson, Fiscal Officer

RECEIVED
OCT 14 2014
GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number 2014-265

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Xenia Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Xenia Township Board of Trustees
Name of Political Subdivision

2014.10.16
Date of Resolution

Authorized Official

Alan D Stick
Xenia Township Administrator

RECEIVED

OCT 21 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

BEAVERCREEK TOWNSHIP

1981 Dayton-Xenia Road
Beavercreek, Ohio 45434-7158
(937) 429-4472
(937) 429-5678 Fax

Trustees - Carol Graff
Dan Paxson
Tom Kretz

Fiscal Officer - Christy L. Ahrens

Administrator - J. Alexander Zaharieff

BEAVERCREEK TOWNSHIP TRUSTEES
GREENE COUNTY, OHIO

RESOLUTION NUMBER: 2014-361
ADOPTION DATE: SEPTEMBER 29, 2014

APPROVING THE AMENDED SOLID WASTE MANAGEMENT PLAN OF THE GREENE COUNTY SOLID WASTE DISTRICT

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, the Beavercreek Township board of Trustees has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest;

NOW THEREFORE BE IT RESOLVED that the Board of Trustees of Beavercreek Township, Greene County, Ohio hereby approves the Amended Greene County Solid Waste Management Plan adopted by the Policy Committee on September 17, 2014; and

BE IT FURTHER RESOLVED that the Board of Trustees of Beavercreek Township shall deliver or cause to be delivered a copy of this Resolution of Approval to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, Ohio 45385.

THE VOTE WAS AS FOLLOWS:

Carol Graff yes

Tom Kretz yes

Dan Paxson yes

APPROVED BY:

BEAVERCREEK TOWNSHIP TRUSTEES

Carol Graff, Chair

Tom Kretz, Vice Chair

Dan Paxson, Trustee

ATTESTED BY:

Christy L. Ahrens
Fiscal Officer

RECEIVED

OCT 10 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

SPRING VALLEY TOWNSHIP TRUSTEES

GREENE COUNTY, OH

APPROVING THE AMENDED SOLID WASTE MANAGEMENT PLAN OF THE GREENE COUNTY SOLID WASTE MANAGEMENT DISTRICT

RESOLUTION NUMBER: 14-09

ADOPTION DATE: OCTOBER 20TH, 2014

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amedned Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approve by Spring Valley Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

RECEIVED

NOV - 4 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

THE VOTE WAS AS FOLLOWS:

Carrie Smith	Yes
John K. DeWine	Yes
Wendell C. Johnson	Yes

APROVED BY:
SPRING VALLEY TOWNSHIP TRUSTEES:

Carrie C Smith

Carrie Smith, Chr

Wendell C. Johnson, V. Chr.

John K. DeWine, Trustee

ATTESTED BY:

Kitty D. Crockett

Kitty D. Crockett, Fiscal Officer

Resolution Number 16-14

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Cedarville Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Cedarville Township
Name of Political Subdivision

9 Oct 2014
Date of Resolution

Authorized Official

RECEIVED

OCT 27 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number M-30-14

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Silvercreek Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Silvercreek Township
Name of Political Subdivision

October 1st, 2014
Date of Resolution

Randy Applegate
Authorized Official

Resolution Number 2014- 38

Approving the Amended Solid Waste Management Plan of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, Miami Township has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by the Miami Township Board of Trustees at a public meeting held October 06, 2014 at 7:00pm, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Motion made by Mr. Eastman

Motion seconded by Mr. Crockett

Vote: Yes 3 No 0

Resolution passed.

RECEIVED

OCT - 9 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Attest Margaret A. Silliman

Ms. Margaret A. Silliman. Fiscal Officer Miami Township

Resolution Number 13-14

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by CAESARSCREEK TWP, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

CAESARSCREEK TOWNSHIP
Name of Political Subdivision

10/6/2014
Date of Resolution

James A Randall - Fiscal Officers
Authorized Official

RECEIVED

OCT 14 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number 14-36

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Jefferson Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Jefferson Township
Name of Political Subdivision

10/16/14
Date of Resolution

Richard Schering
Authorized Official

RECEIVED

OCT 21 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Resolution Number 10-13-2014-4

Approving the Amended Solid Waste Management Plan
of the Greene County Solid Waste Management District

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and

WHEREAS, this body has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, is hereby approved by Ross Township, and

BE IT FURTHER RESOLVED, a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, OH 45385.

Ross Township
Name of Political Subdivision

10-13-2014
Date of Resolution

Lee Snell, Fiscal Officer
Authorized Official

RECEIVED

OCT 15 2014

GREENE COUNTY
ENVIRONMENTAL SERVICES

Board of Commissioners

Alan G. Anderson
Robert J. Glaser, Jr.
Tom Koogler

35 Greene Street
Xenia, Ohio 45385-3101

Phone: (937) 562-5006
Fax: (937) 562-5331
Administrator: (937) 562-5002
Clerk: (937) 562-5165
www.co.greene.oh.us

RECEIVED
SEP 26 2014
GREENE COUNTY
ENVIRONMENTAL SERVICES

Approving the Amended Solid Waste Management Plan of the Greene County Solid Waste Management District

Resolution No. 14-9-25-5

WHEREAS, the Greene County Solid Waste Management District Policy Committee is responsible to prepare and amend the Greene County Solid Waste Management Plan; and,

WHEREAS, by Resolution #2014-9-17-1 the Greene County Solid Waste Management District Policy Committee adopted the Amended Solid Waste Management Plan on September 17, 2014; and,

WHEREAS, pursuant to Ohio Revised Code Section 3734.55 (B) the Board of County Commissioners and the legislative authority of each municipal corporation or township under the jurisdiction of the District must approve or disapprove the Amended Solid Waste Management Plan by ordinance or resolution; and,

WHEREAS, the Greene County Board of Commissioners has reviewed the Amended Solid Waste Management Plan and considered it at a duly called public meeting; and,

WHEREAS, the Amended Solid Waste Management Plan furthers the public interest.

NOW, THEREFORE, BE IT RESOLVED, that the Amended Greene County Solid Waste Management Plan adopted on September 17, 2014, by the Policy Committee, is hereby approved by the Greene County Board of Commissioners.

BE IT FURTHER RESOLVED, that a copy of this Resolution of Approval shall promptly be delivered or cause to be delivered to the Greene County Solid Waste Management District Policy Committee at Greene County Environmental Services, 2145 Greene Way Boulevard, Xenia, Ohio, 45385.

THE GREENE COUNTY BOARD OF COMMISSIONERS

Robert J. Glaser, President

Tom Koogler, Vice President

Alan G. Anderson, Commissioner

Certified to be a true copy of the original
Recorded in Commissioner's Journal, Vol. 207
Page 42, Date Sept 25, 2014
Lisa Mock
Clerk, Greene County Commissioners

Solid Waste Management Plan Update
2014 Ratification

	2010 Population	2010 Households	Percent of Population	Percent of Total Population Ratified	Action Date
Beavercreek	45,193	17,382	28.04%	28.04%	October 13, 2014
Fairborn	32,352	12,443	20.08%	20.08%	October 6, 2014
Xenia	25,719	9,892	15.96%	15.96%	October 23, 2014
Bellbrook	6,943	2,670	4.31%	4.31%	October 13, 2014
Cedarville	4,019	1,546	2.49%	2.49%	October 27, 2014
Yellow Springs	3,487	1,341	2.16%	2.16%	October 6, 2014
Jamestown	1,993	767	1.24%	0.00%	October 20, 2014
Spring Valley	479	184	0.30%	0.30%	November 10, 2014
Bowersville	312	120	0.19%	0.19%	October 20, 2014
Clifton	152	58	0.09%	0.09%	October 3, 2014
Bath	8,241	3,170	5.11%	5.11%	October 15, 2014
Sugarcreek	8,041	3,093	4.99%	4.99%	October 6, 2014
Xenia	6,537	2,514	4.06%	4.06%	October 16, 2014
Beavercreek	5,762	2,216	3.58%	3.58%	September 29, 2014
New Jasper	2,568	988	1.59%	1.59%	October 14, 2014
Spring Valley	2,102	808	1.30%	1.30%	October 20, 2014
Silvercreek	1,745	671	1.08%	1.08%	October 1, 2014
Cedarville	1,481	570	0.92%	0.92%	October 9, 2014
Miami	1,199	461	0.74%	0.74%	October 6, 2014
Caesarscreek	1,137	437	0.71%	0.71%	October 6, 2014
Jefferson	942	362	0.58%	0.58%	October 16, 2014
Ross	750	288	0.47%	0.47%	October 13, 2013
	161,154	61,982	100%	99%	
Commissioners					September 25, 2014

Appendix D
Identification of Consultants Retained for Plan Preparation

Consultants were not retained for preparation of the Draft Amended Solid Waste Management Plan Update.

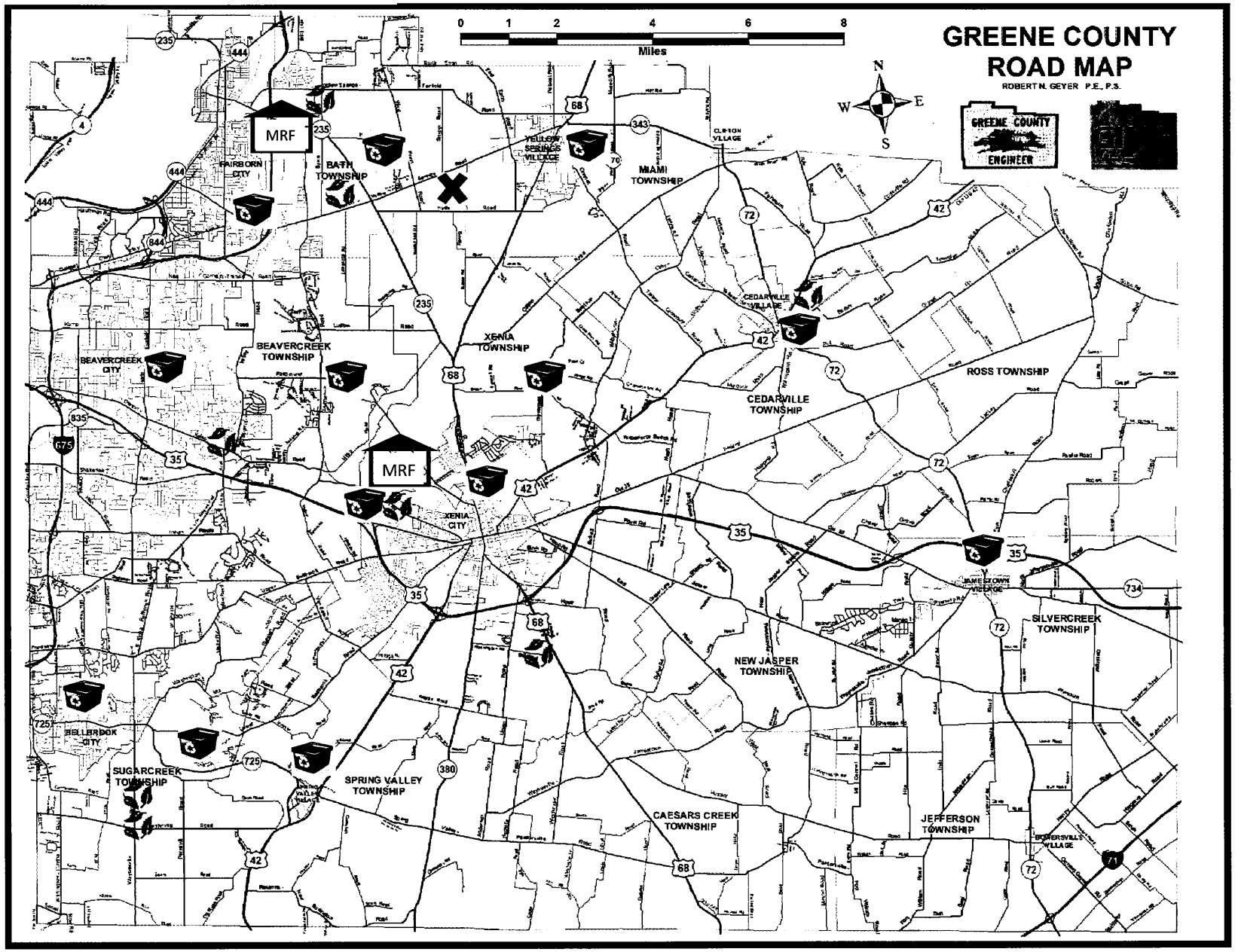
Appendix E
District Map

= COMPOSTING & YARD WASTE DROP-OFF

= RECYCLING Subscription, Non-subscription, & Drop-off

= FOUNDRY SAND DISPOSAL SITE

MRF = MATERIAL RECOVERY FACILITY



Appendix F
Commercial and Industrial Survey Results

2014 Commercial Survey Results

Business	Total Tonnage	Appliances/ "White Goods"	Lead-Acid Batteries	Dry Cell Batteries	Rechargeable Batteries.	Food Waste	Glass	HHW
Antioch College	3.01							
Batteries Plus	0.00							
Batteries Warehouse	0.00		0.00					
Beavercreek City Schools	0.00							
Best Buy	175.72	70.20			0.50			
Bueckers Interiors	0.00							
Cedarville University	42.64			0.39				
Central State	7.21							
Clark State	0.00							
Cub Foods	0.00							
Dick's Sporting Goods	30.00							
Dollar Towne	1.80							
Dots Market	0.00							
Drug Mart	18.20							
EDS	0.00							
Elder Beermans (Bon-Ton)	1,810.92							
Fairborn City Offices	0.00							
Fairborn City Schools	0.00							
Fed-Ex Kinkos	0.00							
Greater Dayton Recycling	2.16							
Greene County Career Center	0.00							
Greene County Library - Xenia	0.00							
Greene Memorial Hospital	0.00							
Hancock Fabrics	0.00							
Handyman Fairborn/Xenia	0.00							
Home Depot	381.44							
Hometown Market	0.00							
J C Penney Beavercreek	88.65							
JoAnn Fabrics	0.00							
K Mart Beavercreek	0.00							
Kmart Fairborn	61.80							
Kmart Xenia	67.15							
Koh'ls Beavercreek #204	119.34		0.00					
Koh'ls Sugarcreek #205	143.11		0.00					
Kroger 4-locations	1,549.03							
Lockheed Martin	0.74							
Lowe's	829.79							
Macy's	0.00							
Meijer	424.26							
Michael's Arts & Crafts	0.00							
Rumpke Recycling Cincinnati	1.27						0.05	
Rumpke Recycling Dayton	652.75						4.40	
Sailor's Tailors	0.00							
Sears	45.92							
Target	137.26							
Teleperformance USA	0.00							
The Greene	0.00							
Toys R Us	0.00							
Vernay Labs	0.00							
Walmart	2,446.65					295.27		
WM Dayton MRF	573.00							
Woolpert	5.97							
Wright Patterson AFB	1,806.89					12.00	28.50	
Xenia Community Schools	0.00							
YMCA Beavercreek	0.12							
YMCA Fairborn	0.00							
YMCA Xenia	0.00							
YSI	0.00			Rumpke	Rumpke		Rumpke	
TOTAL TONNAGES	**11,426.80**	**70.20**	**0.00**	**0.39**		**307.27**	**32.95**	**0.00**

2014 Commercial Survey Results

Business	Ferrous Metal (includes aluminum)	Non-Ferrous Metal	OCC	All Other Paper (includes newspaper)	Plastics	Scrap Tires (Tons)	Textiles	Used Motor Oil	Wood	Yard Waste
Antioch College			0.32	2.63	0.06					
Batteries Plus			WM	WM	WM					
Batteries Warehouse										
Beavercreek City Schools										
Best Buy			104.00	1.00						
Bueckers Interiors										
Cedarville University	7.02	7.02	10.50	16.18						
Central State		0.01	3.60	3.43	0.17					
Clark State			WM	WM	WM					
Cub Foods			WM	WM	Super Valu					
Dick's Sporting Goods			30.00							
Dollar Towne		1.80								
Dots Market			Newark Group							
Drug Mart			12.74	5.46						
EDS										
Elder Beermans (Bon-Ton)	5.23		1,673.77		131.92					
Fairborn City Offices			WM	WM	WM					
Fairborn City Schools	WM									
Fed-Ex Kinkos			?	Iron Mtn.						
Greater Dayton Recycling			0.51	1.58	0.07					
Greene County Career Center			Rumpke	Rumpke	Rumpke					
Greene County Library - Xenia			WM	WM	WM					
Greene Memorial Hospital			WM	WM	WM					
Hancock Fabrics			Republic	Republic						
Handyman Fairborn/Xenia			Republic	Republic						
Home Depot	16.50		102.44						262.50	
Hometown Market			Rumpke		Super Valu					
J C Penney Beavercreek	1.00	0.42	76.77	1.00	2.16					
JoAnn Fabrics			WM							
K Mart Beavercreek										
Kmart Fairborn			61.80							
Kmart Xenia			67.15							
Koh'ls Beavercreek #204			109.84		3.98					
Koh'ls Sugarcreek #205			133.80		3.98					
Kroger 4-locations			1,519.04	29.99						
Lockheed Martin				0.74						
Lowe's	223.47		291.54		6.08				308.70	
Macy's										
Meijer			424.26							
Michael's Arts & Crafts			Rumpke	Rumpke						
Rumpke Recycling Cincinnati			0.01	1.20	0.01					
Rumpke Recycling Dayton	0.68	0.40	633.19	12.40	1.68					
Sailor's Tailors										
Sears	0.10		43.99							
Target			136.52		0.74					
Teleperformance USA			WM	WM						
The Greene			WM	WM	WM					
Toys R Us										
Vernay Labs										
Walmart		0.66	2,085.00	10.83	54.89					
WM Dayton MRF			472.00	101.00						
Woolpert		0.01	1.69	3.84	0.43					
Wright Patterson AFB	526.98	180.40	396.03	462.26	54.42				146.30	
Xenia Community Schools										
YMCA Beavercreek				0.12						
YMCA Fairborn										
YMCA Xenia										
YSI	Rumpke		Rumpke	Rumpke	Rumpke					
TOTAL TONNAGES	**780.98**	**190.72**	**8,390.51**	**653.66**	**260.59**	**0.00**	**0.00**	**0.00**	**717.50**	**0.00**

2014 Commercial Survey Results

Business	Commingled Recyclables	Electronics	Hangers	Fl. Lights
Antioch College				
Batteries Plus				WM
Batteries Warehouse				
Beavercreek City Schools				
Best Buy		0.00		0.02
Bueckers Interiors				
Cedarville University	1.53	0.00		
Central State				
Clark State				
Cub Foods				
Dick's Sporting Goods				
Dollar Towne				
Dots Market				
Drug Mart				
EDS				
Elder Beermans (Bon-Ton)				
Fairborn City Offices				
Fairborn City Schools				
Fed-Ex Kinkos				
Greater Dayton Recycling				
Greene County Career Center				
Greene County Library - Xenia				
Greene Memorial Hospital				
Hancock Fabrics				
Handyman Fairborn/Xenia	Republic			
Home Depot				
Hometown Market				
J C Penney Beavercreek			7.30	
JoAnn Fabrics				
K Mart Beavercreek				
Kmart Fairborn				
Kmart Xenia				
Koh'ls Beavercreek #204		0.00	5.30	0.22
Koh'ls Sugarcreek #205		0.00	5.30	0.03
Kroger 4-locations				
Lockheed Martin				
Lowe's				
Macy's				
Meijer				
Michael's Arts & Crafts				
Rumpke Recycling Cincinnati				
Rumpke Recycling Dayton				
Sailor's Tailors				
Sears				1.83
Target				
Teleperformance USA				
The Greene				
Toys R Us				
Vernay Labs				
Walmart				
WM Dayton MRF				
Woolpert				
Wright Patterson AFB				
Xenia Community Schools				
YMCA Beavercreek				
YMCA Fairborn				
YMCA Xenia				
YSI		Rumpke		Rumpke
TOTAL TONNAGES	**1.53**	**0.00**	**17.90**	**2.10**

2011 Industrial Survey Results

Business	Total Tons	Appliances/ "White Goods"	Lead-Acid Batteries	Dry Cell Batteries	Food Waste	Glass
Advanced Telemetrics International	-					
Ali Industries	-					
ASC Inc.	-					
Astro Industries Inc.	-					
Beaver Valley Manufacturing	-					
Bob Evans Farms, Inc.	**6,972.00**					
Brown Precision Machine	-					
Brown Publishing Company	-					
Carbide Probes	-					
Cemex	**8,342.18**					
Custom Manufacturing Solutions, Inc.	-					
Deban Enterprises	-					
EDL Displays	-					
File Sharpening Co. Inc. and TRG Tool Company	-					
Kotobuki Reliable Inc.	-					
Miami Valley Publishing	**841.01**					
Modern Entrance systems	**3.30**					
Morris Bean	-					
National Carton and Coating Company	**20.00**					
Ohta Press U.S., Inc.	-					
Phillips Ready Mix Corporation	-					
SAS Automation, LLC	-					
Sonoco Products Company	**78.00**					
Stadco Automatics	**213.92**					
Superion, Inc.	-					
TDL Tool, Inc.	-					
Tremac Corporation	-					
Twist, Inc.	**430.50**		RMR			
Unison/ Elano	**445.81**					
Xenia Foundry & Machine Co.	-					
Xylem Inc.	-					
WM Dayton MRF	**388.00**					
Rumpke MRF Cincinnati	**411.20**					12.41
TOTAL TONNAGES	**18,145.92**	-	-	-	-	**12.41**

RMR = River Metals Recycling, LLC
WM = Waste Management

2011 Industrial Survey Results

Business	HHW	Ferrous Metal	Non-Ferrous Metal	OCC	All Other Paper (includes newspaper)	Plastics
Advanced Telemetrics International						
Ali Industries						
ASC Inc.						
Astro Industries Inc.						
Beaver Valley Manufacturing						
Bob Evans Farms, Inc.						
Brown Precision Machine						
Brown Publishing Company						
Carbide Probes						
Cemex		173.65				
Custom Manufacturing Solutions, Inc.						
Deban Enterprises						
EDL Displays						
File Sharpening Co. Inc. and TRG Tool Company						
Kotobuki Reliable Inc.						
Miami Valley Publishing			34.69	21.24	785.08	
Modern Entrance systems			3.30			
Morris Bean						
National Carton and Coating Company					20.00	
Ohta Press U.S., Inc.						
Phillips Ready Mix Corporation						
SAS Automation, LLC						
Sonoco Products Company				78.00		
Stadco Automatics		109.92	104.00			
Superion, Inc.						
TDL Tool, Inc.						
Tremac Corporation						
Twist, Inc.		215.00	212.50	WM	3.00	
Unison/ Elano		158.61	285.21		1.99	
Xenia Foundry & Machine Co.						
Xylem Inc.						
WM Dayton MRF				388.00		
Rumpke MRF Cincinnati			3.05	182.02	208.98	4.74
TOTAL TONNAGES	**-**	**657.18**	**642.75**	**669.26**	**1,019.05**	**4.74**

2011 Industrial Survey Results

Business	Scrap Tires (tons)	Textiles	Used Motor Oil	Wood	Yard Waste	Commingled Recyclables
Advanced Telemetrics International						
Ali Industries						
ASC Inc.						
Astro Industries Inc.						
Beaver Valley Manufacturing						
Bob Evans Farms, Inc.						
Brown Precision Machine						
Brown Publishing Company						
Carbide Probes						
Cemex						
Custom Manufacturing Solutions, Inc.						
Deban Enterprises						
EDL Displays						
File Sharpening Co. Inc. and TRG Tool Company						
Kotobuki Reliable Inc.						
Miami Valley Publishing						
Modern Entrance systems						
Morris Bean						
National Carton and Coating Company						
Ohta Press U.S., Inc.						
Phillips Ready Mix Corporation						
SAS Automation, LLC						
Sonoco Products Company						
Stadco Automatics						
Superion, Inc.						
TDL Tool, Inc.						
Tremac Corporation						
Twist, Inc.						
Unison/ Elano						
Xenia Foundry & Machine Co.						
Xylem Inc.						
WM Dayton MRF						
Rumpke MRF Cincinnati						
TOTAL TONNAGES	-	-	-	-	-	-

2011 Industrial Survey Results

Business	Electronics	Ash (recycled ash only)	Non-Excluded Foundry Sand	Slaughter-house	cement kiln dust
Advanced Telemetrics International					
Ali Industries					
ASC Inc.					
Astro Industries Inc.					
Beaver Valley Manufacturing					
Bob Evans Farms, Inc.				6,972.00	
Brown Precision Machine					
Brown Publishing Company					
Carbide Probes					
Cemex					8,168.53
Custom Manufacturing Solutions, Inc.					
Deban Enterprises					
EDL Displays					
File Sharpening Co. Inc. and TRG Tool Company					
Kotobuki Reliable Inc.					
Miami Valley Publishing					
Modern Entrance systems					
Morris Bean					
National Carton and Coating Company					
Ohta Press U.S., Inc.					
Phillips Ready Mix Corporation					
SAS Automation, LLC					
Sonoco Products Company					
Stadco Automatics					
Superion, Inc.					
TDL Tool, Inc.					
Tremac Corporation					
Twist, Inc.					
Unison/ Elano					
Xenia Foundry & Machine Co.					
Xylem Inc.					
WM Dayton MRF					
Rumpke MRF Cincinnati					
TOTAL TONNAGES	-	-	-	**6,972.00**	**8,168.53**

Appendix G
Educational Resources

Household Hazardous Waste, Electronics, Metal Appliances and Scrap Metal

9:00 am to 1:00 pm on the following dates:

Saturday - **January 8, 2011**

Saturday - **February 12, 2011**

Saturday - **March 12, 2011**

Saturday - **April 9, 2011**

Saturday - **May 14, 2011**

Saturday - **June 11, 2011**

Saturday - **July 9, 2011**

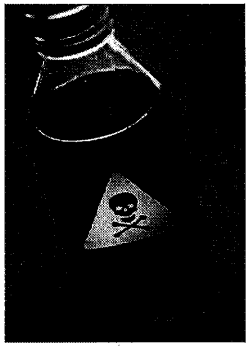
Saturday - **August 13, 2011**

Saturday - **September 10, 2011**

Saturday - **October 8, 2011**

Saturday - **November 5, 2011**

Saturday - **December 10, 2011**



ACCEPTING:

Household Hazardous Waste Accepted:

- Herbicides, Fertilizers, Insecticides and Pesticides
- Fuel up to 5 gallons - Gasoline and Kerosene
- Antifreeze
- Acids and Cleaners
- Putty and Adhesives
- Stains, Varnishes and Paint Thinner
- Aerosol Spray Cans
- Fluorescent Bulbs, Compact and Tubes – unbroken

NOT ACCEPTED - PAINT or MOTOR OIL

Household Electronic Items Accepted:

- DVD Players and VCRs
- Faxes and Copy Machines (table top)
- Cell Phones and Telephones
- Stereo Equipment - no speakers

NOT ACCEPTED – TELEVISIONS, COMPUTERS, and COMPUTER ACCESSORIES

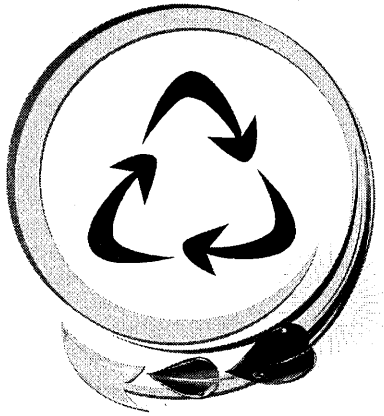
Metal Appliances and Scrap Metal Accepted:

- Appliances with Freon: Freezers, Refrigerators, Dehumidifiers and Window Air Conditioners
- Large Kitchen Appliances: Stoves, Ovens, Washers, Dryers, Dishwashers and Microwaves
- Furnaces and Heaters
- Steel Sinks and Bathtubs
- Fencing and Scrap Metal
- Lawn Mowers and Engines - drain all fluids
- Gas and Charcoal Grills
- Pipes
- Aluminum

Accepted Every Day:

- Cell Phones, Household and Vehicle Batteries, plus Mercury (Mercury must be in 2 zip locked plastic bags).
- *For questions please call 937-562-5925.*

Greene County



2011

Environmental Services
2145 Greene Way Blvd.
Xenia, OH 45385

Website:
http://www.co.greene.oh.us
Click on Environmental Services

Office: 937-562-5925
Fairborn: 937-426-1779 ext 5925
Fax: 937-562-5940

YARD WASTE

Central Site – Xenia

March 7 to December 10, 2011

Monday - Thursday, 1:00 pm - 8:00 pm
Friday, Closed
Saturday, 9:00 am - 4:00 pm

Winter Hours:
December 13, 2010 to March 3, 2011 and
December 12, 2011 to March 1, 2012

Monday - Thursday, 10:30 am - 6:00 pm
Friday, Closed
Saturday, 9:00 am - 4:00 pm

Community Sites - Open April 4 through December 1, 2011

Beavercreek
2260 Dayton-Xenia Road
Monday and Wednesday 4:00 pm - 8:00 pm

Bellbrook - Sugarcreek
2021 Ferry Road
Monday and Wednesday 4:00 pm - 8:00 pm

Fairborn (Closed Election Days)
1018 Yellow Springs - Fairfield Road
Tuesday and Thursday 4:00 pm - 8:00 pm

All sites accept leaves, grass and brush. Brush must be no more than 4 feet long and 4 inches in diameter.

Please arrive on site 15 minutes prior to closing to allow adequate time to unload your yard waste.

New Year's Day - January 1, 2011
Martin Luther King, Jr. Day - January 17, 2011
President's Day - February 21, 2011
Memorial Day - May 30, 2011
Independence Day - July 4, 2011
Labor Day - September 5, 2011
Veteran's Day - November 11, 2011
Thanksgiving Day and the day after - November 24 and November 25, 2011
Christmas Eve - December 24, 2011
Christmas Day Observed - December 26, 2011
New Year's Day Observed – January 2, 2012

RECYCLABLES

March 7 to December 10, 2011

Monday - Thursday, 7:30 am - 8:00 pm
Friday, 7:30 am - 4:30 pm
Saturday, 9:00 am - 4:00 pm

Winter Hours:
December 13, 2010 to March 3, 2011 and
December 12, 2011 to March 1, 2012

Monday - Thursday, 7:30 am - 6:00 pm
Friday, 7:30 am - 4:30 pm
Saturday, 9:00 am - 4:00 pm

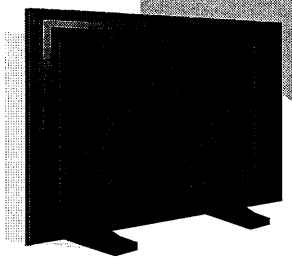
Please arrive on site 15 minutes prior to closing to allow adequate time to unload your recyclables.

- Cardboard
- Office Paper
- Magazines
- Newspaper
- Phone Books
- Junk Mail
- Plastic Bottles - #1 and #2
- Metal Cans - Food and Beverage
- Glass Bottles and Jars - unbroken
- Household and Vehicle Batteries

Fairborn Yard Waste Site is closed on Election Days.

Recycling and Yard Waste Complex will be closed:

- **Christmas Eve, December 24, 2011**
- **Christmas Day Observed, December 26, 2011**
- **New Year's Day Observed, January 2, 2012**



TELEVISIONS

Best Buy, 937-320-1484, will accept televisions up to 50". There is a small fee for this program but currently the charge is offset by a gift card for their store in the same amount. There are some restrictions which apply to this program. Please contact Best Buy for more information.

Waste Management, 937-318-5383, has entered into a partnership to recycle Sony and LG brand televisions at no cost to the consumer. These brands include LG, Zenith, Goldstar, and Sony.

For, projection screen, floor or console models, and large televisions you may take them to **Special Waste Systems,** 937-866-8898, 325 Riverview Ave., Sec C, Miamisburg, for recycling. Please contact them for fees and hours of operation.

REDUCE AND REUSE

Before deciding to recycle your broken televisions and electronic gadgetry try to repair it. A great no-cost resource for do-it-yourself repairs on common household items is www.fixitclub.com. This website offers repair know how on a variety of items including small and large household appliances, electronics, cordless phones, and many other items. This is a great way to reduce your waste and save money.

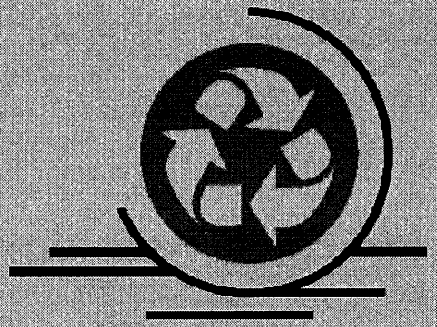
For your gently used televisions and electronic gadgetry that is still in working order, but is slightly outdated, give it to someone who will use it or donate it to a charity.

The Freecycle Network is a non-profit organization that strives to reduce waste, save precious resources, and ease the burden on landfills by connecting people with "stuff" to give with people who need "stuff". Please check out http://www.freecycle.org/ for information on this grassroots movement.

Check with the company that manufactured your **television, computer, monitor, computer accessory, or other electronics** such as cell phones, stereos, MP3 players, VCR DVD players/recorders, GPS', PDAs, cameras, etc. They may offer a trade-in option when purchasing new equipment or may have a no cost recycling program.

Greene County
Environmental Services

WHERE DO I RECYCLE ELECTRONICS?

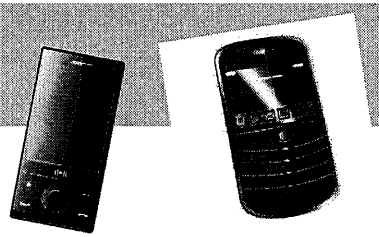


Greene County

Sanitary Engineering Department
Environmental Services Division
2145 Greene Way Blvd.
Xenia, OH 45385
937-562-5925

http://co.greene.oh.us/saneng/EnvServ

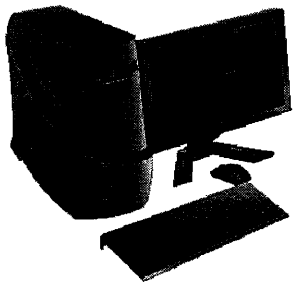
COMPUTERS & ELECTRONICS



COMPUTERS, MONITORS, COMPUTER ACCESSORIES, and other ELECTRONICS such as Cell Phones, Stereos, MP3 Players, VCR DVD players/recorders, GPS', PDAs, Cameras, etc., can be recycled at these retail locations.

Options for recycling and reusing these materials are constantly changing. Please check with each individual company or organization directly for the most up to date options for recycling or reuse.

Reconnect, http://reconnectpartnership.com, a partnership between Dell and Goodwill Industries accepts monitors, computers – desk top and laptop, printers, hard drives, keyboards, mice, speakers, cords, cables, ink and toner cartridges, and software. These items can be any brand and do not need to be in working condition. Please check their website for a Goodwill location near you accepting electronic waste. Some Goodwill locations may accept cell phones.



Resources listed in this brochure are for residential, household electronic waste.

Waste Management, 937-318-5383, has entered into a partnership to recycle Sony and LG brand electronics at no cost to the consumer. These brands include LG, Zenith, Goldstar, and Sony.

BEST BUY, 937-320-1484, will accept consumer electronics, computers, and computer accessories at no charge to the consumer. There is a small fee for monitors but currently the charge is offset by a gift card for their store in the same amount. There are some restrictions which apply to this program. Please contact Best Buy for more information.

Office Depot, 937-320-7334 and **Staples,** 937-848-6917, accept consumer electronics, monitors, computers, and accessories. Please contact Office Depot and Staples for their policies and applicable fees.

Special Waste Systems, 937-866-8898 325 Riverview Ave., Sec C, Miamisburg, accepts computers, monitors, computer accessories, televisions, and other electronics for recycling. Please contact Special Waste Systems for their fees and hours of operation.

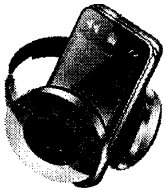
Additionally, some manufacturers are offering recycling to consumers of their brand of computers and electronics. Check with the manufacturer of your item to see what options they offer.

Operable computers, monitors, and computer accessories can be refurbished, updated, and reused. The following organizations use these computers to teach high school students, adult students, and disabled persons skills that can help them find employment. These computers are then generally given to under privileged families, schools and charitable organizations. **Please consider this option for all working computers, monitors, printers, and computer accessories.** You may contact these organizations for more information.

Access Project, 937-837-5481
5 S. Broadway Street, Trotwood. Please contact this organization for information regarding drop off procedures.

Cristina Project, in partnership with **Dell.** Please visit www.cristina.org for more information.

The information contained in this publication is accurate as of August 2011.



Before you dispose of paint,

- Apply a second coat,
- Use the paint to brighten a closet, basement or garage,
- Give the paint to a friend, church, school, community theater group, low-income housing program, or housing rehabilitation organization.

Habitat for Humanity
937-374-8726

Interfaith Hospitality Network
937-429-5111

Xenia Area Community Theater
937-372-0516

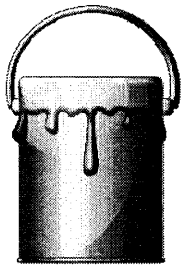
Goodwill Locations

If stored properly, some paints can last up to 15 years. For storage tips go to www.paint.org/con_info/leftover.cfm.

Only purchase the amount of paint you need to complete the job.

HOW DO I DISPOSE OF HOUSEHOLD PAINT?

Greene County
Environmental Services

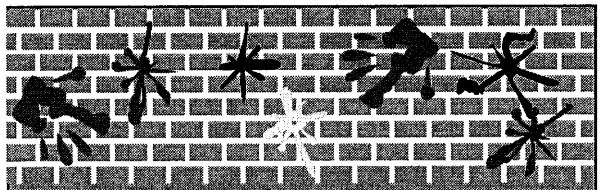


2145 Greene Way Blvd.
Xenia, OH 45385
937-562-5925

http://www.co.greene.oh.us/saneng/EnvServ

Greene County Environmental Services accepts paint strippers, thinners, varnishes, stains, and turpentine from residents at our monthly Household Hazardous Waste Collection Events.

Please check our annual brochure, website, or call us for specific details, dates, and times of the collections.



- Aerosol paint cans should be emptied and placed with normal household trash.
- Completely empty the can by spraying any remaining paint onto cardboard or trash.
- Place the empty can into the trash unless it can be recycled by your waste hauler.

All you have to do is dry out the paint and it is safe to place it with your normal household trash.

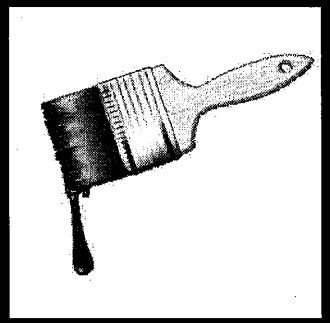
TO DRY OUT LATEX PAINT:

If there is just a small amount of paint in the can, remove the lid and place the can and lid in a dry, well-ventilated area away from children and pets.

For larger amounts of paint or to speed up drying time, mix a drying agent into the paint. Drying agents include sawdust, kitty litter, or paint hardeners. Paint hardeners are available at local retail hardware stores.

Once you have mixed a drying agent into the paint, leave the lid off, and place the can in a dry, well-ventilated area to harden. Sawdust and kitty litter have a longer dry time. Paint hardeners take only about 20 minutes to dry.

Once the paint has dried or hardened, place the can with the lid off in a trash bag with the household trash. Tie up the bag and set it out for weekly trash service.



Sawdust is available at no charge to Greene County residents between the hours of 7:30 am and 4:30 pm Monday through Friday at the office.

Sawdust is also available at the guard shack during normal operating hours for the yard waste facility. The office and guard shack are located at 2145 Greene Way Blvd., Xenia.

Latex paint in containers can be dried out and disposed of in an environmentally responsible manner.

Paint is not accepted at Greene County Environmental Services.

Even YARD WASTE, such as grass, leaves, twigs, and small tree branches can be reduced, reused or recycled!

REDUCE
Leaving grass clippings that are one inch or smaller in length will not harm your lawn. In fact the clippings will filter down to the soil, decompose and nourish the soil.

REUSE
Residents can compost grass and leaves and use the compost as a soil amendment for flower or vegetable gardens or as landscaping material. Contact Greene County Environmental Services for a brochure on how to compost or visit the web for more information.

RECYCLE
Residents and businesses can take grass clippings, leaves, twigs and tree branches to **BioSource** 937-372-5921, 869 US Rte., 68 S., Xenia, where they will compost or mulch the organic materials to be reused. Please contact BioSource for more information about any limitations or fees.

Greene County residents can bring grass, leaves, twigs, and small tree branches to **Greene County Environmental Services,** 937-562-5925, 2145 Greene Way Blvd. Xenia, or our Community Sites:

Fairborn, 1018 Yellow Springs-Fairfield Rd.;

Bellbrook - Sugarcreek, 2120 Ferry Rd.;

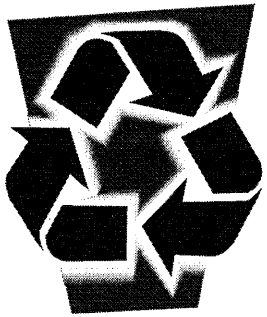
Beavercreek, 2260 Dayton-Xenia Rd.

Please contact us or visit our website for days and hours of operation and limitations on tree sizes. We recycle the tree materials into mulch which is then available to Greene County residents to reuse at no charge.

Greene County

ENVIRONMENTAL SERVICES

Where Do I Recycle?



Greene County Environmental Services
2145 Greene Way Blvd.
Xenia, OH 45385
937-562-5925

http://www.co.greene.oh.us/saneng/EnvServ

AUTOMOTIVE, LAWNMOWER, AND MOTORCYCLE BATTERIES, can be recycled at the following locations:

Advanced Auto Parts
937-376-4313,
34 North Allison Ave., Xenia

Batteries Plus
937-433-9222,
4496 St. Rte. 725, Bellbrook

Battery Warehouse
937-426-2525,
44100 Industrial Ln., Beavercreek

Wal-Mart Automotive Centers & Sears Automotive Centers

RECHARGEABLE BATTERIES can be taken to most **Batteries Plus, Office Depot, Lowe's, and Radio Shack** locations.

Greene County Environmental Services will also accept **AUTOMOTIVE, LAWNMOWER, MOTORCYCLE, RECHARGEABLE, and HOUSEHOLD (alkaline) BATTERIES** from Greene County Residents.

TIRES can be taken to **SRI, Inc.,** 937-268-8991, 1550 West Carrolton Road, Dayton. Fee applies.

You may also contact a local retail facility that sell tires for information on take–back programs and applicable fees.

FLUORESCENT LIGHT BULBS
Compact fluorescent light bulbs (CFLs) can be recycled at any **Home Depot** location.

Tube type fluorescent bulbs and CFLs can be recycled at **Greene County Environmental Services** during our Special Monthly Collection Event.

Check our website for information on mail back programs for fluorescent bulbs.

HOUSEHOLD HAZARDOUS WASTE such as pesticides, herbicides, insecticides, fertilizers, old gasoline or kerosene, acids, household cleaners, stains, varnishes, etc. can be brought to our Special Monthly Collection Event at **Greene County Environmental Services.** Please check our brochure, website, or call us for specific details, dates and times of the collections.

MOTOR OIL may be recycled at most locations that sell or change motor oil including **Wal-Mart and Sears Automotive Centers** and most **Jiffy** or **Quick Lube** locations.

PLEASE CONTACT YOUR LOCAL VENDOR FOR LIMITS ON MOTOR OIL. SOME VENDORS MAY ACCEPT ANTIFREEZE.

Fairborn City Garage, 937-754-3025, 300 North Third St., accepts motor oil from Fairborn City residents.

Xenia City Garage, 937-376-7265, 966 Towler Rd., Xenia, accepts motor oil, clean cooking oil, antifreeze, and gasoline.

BioSource, 937-372-5921, 869 US Rte 68 S., Xenia accepts motor oil from businesses and residents.

Greene County Sanitary Engineering Vehicle Maintenance Division
937-562-7116, 1124 Beaver Valley Rd., Beavercreek, accepts motor oil from residents and businesses.

Greene County Environmental Services does not accept motor oil.

PLASTIC BOTTLES, PAPER, CARDBOARD, GLASS BOTTLES & JARS, NEWSPAPERS & METAL CANS

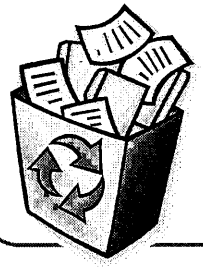
CURBSIDE RECYCLING
In communities that have curbside recycling you are able to recycle #1 and #2 plastic bottles, paper, junk mail, newspapers, cardboard, metal cans, plus glass bottles and jars right from your home. Contact your local municipal government or your waste hauler about participation in a curbside recycling program.

Contact information for communities that offer curbside recycling

Communities	Community Contact Number	Waste Hauler
Beavercreek City	937-427-5510	Rumpke or Waste Management
Bellbrook	937-848-4321	Allied Waste Services
Cedarville	937-766-2061	Rumpke
Fairborn	937-754-3030	Waste Management
Jamestown	937-675-5540	Waste Management
Xenia	937-376-7231	Rumpke
Yellow Springs	937-767-9126	Rumpke

Local Waste Haulers

Allied Waste Services	**937-268-8110**
Rumpke	**937-461-0004**
Waste Management	**800-343-6047**



If curbside recycling is not an option, bring your materials to:
Greene County Environmental Services
937-562-5925
2145 Greene Way Blvd., Xenia

The following locations **may** pay for **ALUMINUM & SCRAP METAL:**

First Street Recycling
937-223-7231
1321 E. First St., Dayton

Franklin Iron & Metal
937-253-8184
2015 E. First St., Dayton

JR's Auto Recycling
937-562-2857
1084 Cincinnati Ave., Xenia

Rivers Metal Recycling
937-372-3533
840 Jasper Rd., Xenia

Greene County Environmental Services will accept aluminum and scrap metal from residents at our Special Monthly Collection Event. There is no payment to residents for aluminum or scrap metal.

STYROFOAM, PACKING PEANUTS, AND BUBBLE WRAP may be taken to:

The Mad Packer, 937-426-1255
3348 Dayton-Xenia Rd., Beavercreek

Sketches Frame Shop,
937-427-0042 3348 Dayton-Xenia Rd., Beavercreek

The Packaging Store, 937-436-3776
7999 Clyo Rd., Centerville

Please contact these retailers for specific information regarding the types of Styrofoam they accept.

PLASTIC BAGS may be recycled at all **Wal-Mart, Lowe's,** and **Kroger Locations. Kroger also** accepts dry cleaning bags.

HOUSEHOLD APPLIANCES such as appliances with Freon: Freezers, Refrigerators, Dehumidifiers and Window Air Conditioners. Other large Appliances: Stoves, Ovens, Washers, Dryers, Dishwashers, Microwaves, Furnaces, and Heaters. These types of appliances may be taken to the following locations:

First Street Recycling – 937-223-7231
http://www.firststreetrecyclinginc.com/

Franklin Iron & Metal – 937-253-8184
http://www.franklin-iron.com/

JR'S Auto Recycling – 937-562-2857

River Metal Recycling – 937-372-3533
http://www.rmrecycling.com/

Rumpke – 937-461-0004
http://www.rumpke.com/

SI Liquidators – 937-374-2227
Will pick-up appliances.

Waste Management, Inc.
800-343-6047
http://www.wastemanagement.com/

Wilmington Iron & Metal, Inc.
937-382-3867
http://www.sunsetdurango.com/

Not all of the above locations will accept appliances with Freon. Please contact individual recyclers for their policies regarding household appliances.

Greene County Environmental Services 937-562-5925 accepts large household appliances, including those with Freon at our Special Monthly Collection Event. Please check our brochure, website or call us for specific details, dates, and times of the collections.

PLEASE SEE OUR WEBSITE www.co.greene.oh.us/saneng/EnvServ **FOR THE MOST UP TO DATE INFORMATION ABOUT ALL YOUR RECYCLING OPTIONS!**

WHAT CAN I COMPOST?

COMPOST INGREDIENTS

The main ingredients in compost includes "green" and "brown" yard waste. Materials referred to as "green" are high in nitrogen. The "brown" ingredients contain mostly carbon. Compost is created by mixing the "green" and "brown" materials, along with water, air, sunlight, plus decomposing microorganisms and macro organisms.

GRASS AND LAWN CLIPPINGS

Add grass clippings in very thin layers, or thoroughly mix them in with other compost ingredients. Otherwise, the grass tends to become slimy and matted down, excluding air from the pile. Fresh grass clippings are high in nitrogen, making them a "green" compost ingredient.

KITCHEN WASTES

Fruit and vegetable peels or rinds, tea bags, coffee grounds, eggshells, and similar materials are great stuff to compost. They tend to be high in nitrogen. This puts them in the "greens" category. Kitchen wastes are usually quite soft and moist. Mix drier and bulkier materials with the kitchen waste to allow complete air penetration. **DO NOT compost meat scraps, fatty food wastes, milk products, or bones - these materials do not compost efficiently and attract pests.**

LEAVES

Generally, leaves are an excellent compost ingredient. They can mat down and exclude air, so be sure to spread thin layers on the compost pile and break up any clumps of leaves. While most leaves are in the "brown" category, ash and poplar contain abundant nitrogen and are considered "greens".

STRAW

Dry straw is a good material for helping to keep a compost pile aerated, because it tends to create lots of passageways for air. Be sure to wet the straw, otherwise it is very slow to decompose. Straw is definitely a "brown" and also requires mixture with "greens" to break down quickly.

WEEDS AND OTHER GARDEN WASTES

Many types of weeds and garden plants can be composted. Avoid weeds that have begun to go to seed, as seeds may survive all but the hottest compost piles. Some types of weeds are "very aggressive" and will re-sprout in any compost pile. Do not add these to the compost. Newly pulled weeds are a "green" while dead weeds are a "brown".

WOODCHIPS AND SAWDUST

Wood products belong in the "browns" category, because they are fairly low in nitrogen. Sawdust breaks down at various rates, depending on the tree source. Stir sawdust thoroughly into the pile or use very thin layers. Coarse wood chips will very slowly decay, and are probably better used as mulch. Do not compost chips or sawdust from any sort of chemically-treated wood. For example, some woods are treated with arsenic which is a toxin.

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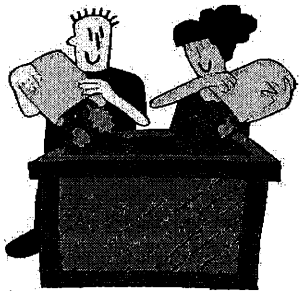
Home Composting



Reap a heap of benefits

Composting is a practical and convenient way to handle your yard wastes. It can be easier and cheaper than bagging. Compost also improves your soil and the plants growing in it. If you have a garden, a lawn, trees, shrubs, or planter boxes, you have a use for compost.

Don't Bag It

Mow your lawn often and let the clippings lie.

How to compost

Remove grass and sod cover from the area where you will construct your compost pile. This will allow materials direct contact with soil microorganisms and macroorganisms. The following "recipe" for constructing your compost heap is recommended for the best results:

1st layer: 3"-4" of chopped brush or other coarse material on top of the soil surface. This allows air circulation around the base of the heap.

2nd layer: 6"-8" of mixed food scraps, leaves, grass clippings, sawdust, etc. Material should be "sponge damp".

3rd layer: 1" of soil provides necessary microorganisms to the heap.

4th layer: repeat layers until bin is almost full. Top off the heap with a 4"-6" layer of straw and scoop out a basin at the top to catch rain water.

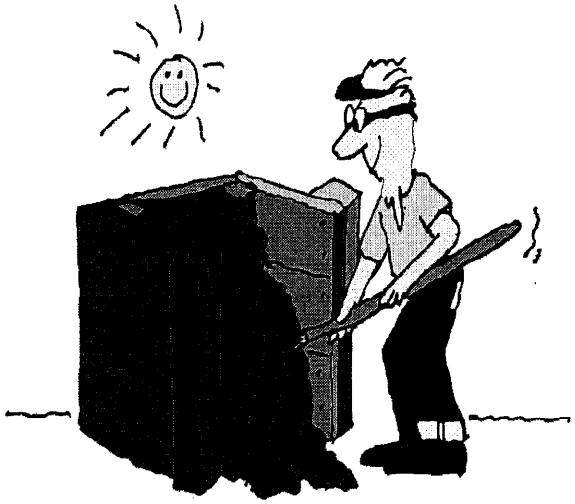
A properly made heap will reach temperatures of 140-160 degrees in four to five days. At this time, you'll notice the pile "settling". This is a good sign your heap is working properly.

After 5-6 weeks, build a new pile, turning the outside of the old pile into the center of the new pile. You should not need to turn your heap a second time. However, turning more often can reduce the time the compost takes to break down. The compost should be ready to use in three to four months. A heap started in the spring can be ready for use in the autumn; start another heap in autumn for use in the spring.

Compost is ready to use when it is dark brown, crumbly, and smells like earth. Let it stabilize for a few extra days and screen it through a 1/2 inch screen if you want the finest product.

Turn your soil, apply 1"-3" of compost and work it into the soil. Add up to one pound of compost or a heaping double handful, per square foot.

For more information about composting, just visit the web, the Ohio State University Extension Service, or a master gardeners group. There is a wealth of information available that will show many options to create compost.



Troubleshooting your compost pile

Symptoms	Problem	Solution
The compost has a bad odor.	Not enough air.	Turn it. Add dry material if the pile is too wet.
The center of the pile is dry.	Not enough water.	Moisten and turn the pile.
The compost is damp and warm only in the middle.	Too small.	Collect more material and mix the old ingredients into a new pile. Turn the pile.
The heap is damp and sweet-smelling, but still will not heat up.	Not enough nitrogen.	Mix in a nitrogen source like fresh grass clippings, farmyard manure, composted poultry manure, blood meal or urea fertilizer.