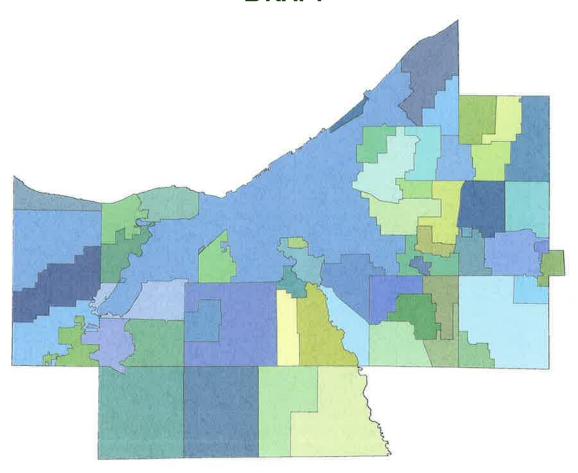


### 2013 – 2028 SOLID WASTE MANAGEMENT PLAN UPDATE DRAFT



Prepared by



August, 2012

# CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT 2013-2028 DRAFT PLAN UPDATE

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### I. Introduction

On August 29, 1988, the Board of Commissioners of Cuyahoga County formed the first and largest populated solid waste management district in the State of Ohio. (Appendix A). The Cuyahoga County Solid Waste Management District (referred to herein as the "District or Cuyahoga County") includes all incorporated and unincorporated territory in Cuyahoga County and a small portion of neighboring Geauga County (Village of Hunting Valley).

The Board of County Commissioners of Cuyahoga County exercised their statutory option (ORC 3734.54(D)) of appointing the eleven-member Cuyahoga County Planning Commission as the Policy Committee to develop the *Initial Cuyahoga County Solid Waste Management Plan*. This waiver request was approved by the Director of the Ohio Environmental Protection Agency (Ohio EPA) on March 30, 1989. On October 29, 1993, the Policy Committee was expanded from eleven to thirteen members, as required by legislation affecting policy committee membership for all districts.

Commencing January 1, 2011, Cuyahoga County became a charter county. The charter replaced the former county commissioner governance structure to a county executive/county council governance structure. As a result, a new three-member board was created to govern the District. The new Board of Directors is comprised of the Cuyahoga County Executive, a Cuyahoga County Council Member, and the Cuyahoga County Public Works Director. The District has been and will continue to evaluate the potential benefits of forming a solid waste management authority. If an Authority is formed during the planning period, the new Board of Trustees shall assume the responsibilities of implementing this *Plan Update* from the former Board of Directors without an amendment to the *Plan Update*.

On February 21, 1995, the Board designated the Cuyahoga County Planning Commission to continue to provide planning services to the District, including the preparation of this mandatory *Five Year Plan Update* ("Plan" or "Plan Update").

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

### 1. Under current approved (or ordered to be implemented) plan:

Date of Ohio EPA Approval

or order to implement: November 8, 2006

Counties within district: Cuyahoga

Years in planning period: 15

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

Counties within District: Cuyahoga

Years in planning period: 16

Year 1 of the planning period: 2013

#### B. Reason for Plan Submittal

Mandatory five-year plan update.

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

This section of the *Plan Update* outlines the process to determine whether a material change in circumstance has occurred. If a material change in circumstances occurs, a plan amendment is required. See, R,C. section 3734.56 (D)). The District *Plan* must be updated "...when the [Board]... determines that circumstances materially changed from those addressed in the approved initial or amended plan of the district . . ."

The Format for the preparation of a solid waste management plan, and informal guidance from the Director of the Ohio Environmental Agency, suggest that the Board should evaluate whether a material change in circumstances has occurred. Ohio EPA advises that the assessment of whether a material change may be appropriate if there is a change in circumstances that would significantly interfere with the District's achievement of the *Plan Update* goals. Changes in the following list may affect whether the Board determines there is a material change in circumstances:

- Facility designations, flow control of waste
- Waste generation
- Capacity availability
- Strategies for waste reduction and/or recycling
- · Availability of revenue for *Plan* implementation
- · Procedures to be followed for *Plan* implementation
- Timetable for implementation of programs and/or activities

District staff and Policy Committee members will monitor District conditions and the implementation of the *Plan Update* and provide reports and information to the Board sufficient to evaluate whether the Board should consider that a material change in circumstances has occurred. The Policy Committee meets bi-monthly and the Chairman of the Policy Committee can convene special meetings if required. Annually, in

conjunction with the Executive Director's annual report of District activities to the Policy Committee, the Executive Director will include an evaluation of the state of the District, including changes in circumstances, if any, and the effect of those changes on the ability of the Board to implement the *Plan Update*. The Board and the Cuyahoga County Council are represented on the District Policy Committee and will review, discuss, and interpret recommendations of the Policy Committee and Executive Director in response to any change in circumstances.

Section 3734.56(D) of the Revised Code states that the *Plan Update* must be revised if the Board has determined that "circumstances materially changed from those addressed in the approved initial or amended plan of the District." A material change in circumstances shall be defined as a change that significantly interferes with the ability of the Board to: (1) assure waste disposal capacity during the planning period; (2) maintain compliance with applicable waste reduction or access goals; or (3) adequately finance implementation of the *Plan Update*.

The Board shall make the determination of whether a material change in circumstances has occurred according to the following guidelines:

### (1) Assurance of Waste Disposal Capacity

### a. Change in facility designations/flow control

The District reserves the right to designate facilities and thereby direct all or a portion of the solid waste generated within the District to designated solid waste facilities, commonly referred to as flow control (see Section 6). If the Board implements or subsequently changes the designation of any public or private solid waste facility, any such designation or change does not constitute a material change in circumstances requiring an amendment to the *Plan*. Designation of private and public solid waste facilities is authorized in sections 343.013 and 343.014 of the Revised Code.

### b. Change in capacity availability

The Board may determine that a material change in circumstances exists if there is a twenty-five percent (25%) decrease in the solid waste disposal capacity necessary for the disposal of solid waste generated within the District. District staff shall monitor the availability of solid waste disposal capacity and shall provide information to the Board and Policy Committee when closures and/or reductions (in

any combination) of designated or *Plan*-identified solid waste facilities adversely affect the ability of the Board to assure sufficient capacity to process or dispose of District generated solid waste. A material change in circumstances has not occurred if the Board identifies alternate solid waste disposal capacity to meet the *Plan*-forecasted requirements for solid waste disposal.

### (2) Maintain Compliance with Waste Reduction Goals

### a. Changes in procedures and time table for implementation of programs and/or activities

The Executive Director's annual report of District activities evaluates the District's progress in implementing the District Plan. In the event that a program or activity identified in the implementation schedule of this *Plan Update* is delayed by more than one year from the commencement date identified in this Plan Update, the Board will consider whether such delay constitutes a material change in circumstances (i.e., a materially and adversely affects that implementation of the District Plan). A material change in circumstances has not occurred, however, where the Board is able to implement new programs or modify existing programs to meet the current goal, or utilize the alternate goal available to the District as provided in the State Solid Waste Management Plan.

### (3) Finance Implementation of Plan Update

### a. Change in waste generation (disposal) and availability of revenues for plan implementation

District staff will monitor the total tons of solid waste accepted at facilities remitting generation fees to the District. On a monthly basis, the District's Executive Director will review the cumulative total revenue collected to determine whether revenues are adequate to finance implementation of the District *Plan*. The Executive Director will review operations and the cost of financing implementation of the District *Plan* and prepare reports to the Board and the Policy Committee that reflect the financial condition of the District and the ability of the Board to finance implementation of the District *Plan*.

The Board will evaluate whether a material change in circumstances (after line item adjustments considering prior year carryover, revenues and expenditures) has occurred when revenues are more than twenty-five percent (25%) below the projections in this *Plan Update* (See Section VIII). The Board may determine that no material change in circumstances has occurred if the Board is able to maintain funding for programs identified in the implementation schedule of this *Plan Update* through: (1) the re-allocation of District funds, (2) an increase in the District generation fee (or) generating additional revenues by designating solid waste facilities and collecting a designation or contract fee as consideration for the designation of those facilities.

In the event that the District fund balance is less than \$1,000,000, the District Board will consider whether to request that the District Policy Committee commence the process to increase the District generation fee or to pursue other sources of funds.

If the Board determines that a material change in circumstances has occurred (*i.e.*, a change that materially and adversely affects the implementation of the District *Plan*), the Executive Director shall notify the Director of Ohio EPA of the Board's conclusion that a material change in circumstances has occurred. The Board will direct the Policy Committee to revise, within ninety (90) days, all relevant sections of the *Plan Update* to address the cause and effect of the material change in circumstances.

#### D. District Formation and Certification Statement

Appendix B includes all public notices in local newspapers publicizing hearings and comments on the *Plan Update*. Appendix C includes a certification statement signed by members of the Policy Committee that the contents of the *Plan Update* are true and accurate. It also includes resolutions by the Policy Committee: 1) adopting the *Plan Update* prior to ratification, and 2) certifying that it has been properly ratified. This Appendix also lists all political jurisdictions in the District which voted on ratification, the population of each, and the percentage population of the District represented by the political jurisdictions which ratified the *Plan Update*.

### E. Policy Committee Members

The Board of County Commissioners of Cuyahoga County exercised their statutory option (ORC 3734.54(D)) of appointing the eleven-member Cuyahoga County Planning Commission as the Policy Committee to

develop the *Initial Cuyahoga County Solid Waste Management Plan*. This waiver request was approved by the Director of the Ohio Environmental Protection Agency (Ohio EPA) on March 30, 1989. On October 29, 1993, the Policy Committee was expanded from eleven to thirteen members, as required by legislation affecting policy committee membership for all districts. The following table depicts the Policy Committee membership and the entities they represent. The representation is not typical of a standard Policy Committee.

Cuyahoga County So	lid Waste Policy Committee
Honorable Robert Blomquist	Mayor, City of Olmsted Falls
Mr. Robert Brown (for Mayor	Director, City of Cleveland Planning
Frank Jackson)	Commission
Honorable Dean DePiero	Mayor, City of Parma
Mr. Edward Jerse	Cuyahoga County Director of
IVII. Edward Jerse	Regional Collaboration
Honorable Edward Kelley	Mayor, City of Cleveland Heights
Mr. Nathan Kelly, Chair	Cuyahoga County Deputy Chief of
Wir. Nathan Kelly, Chair	Staff
Honorable Kathy Mulcahy	Mayor, Village of Orange
Honorable Eileen Patton	Mayor, City of Fairview Park
Honorable Michael Procuk	Mayor, Village of Brooklyn Heights
Ms. Sunny Simon, Vice Chair	Cuyahoga County Council
Honorable Georgine Welo	Mayor, City of South Euclid
Ms. Virginia Aveni	Public Representative
Mr. John Molan ID	Government Relations, Cleveland
Mr. John Nolan, JD	Clinic

### F. Board of Directors of the Cuyahoga County Solid Waste Management District ("Board")

Cuyahoga County Solid V	Vaste District Board of Directors
Mr. Edward FitzGerald, Secretary	Cuyahoga County Executive
Mr. Julian Rogers, Chair	Cuyahoga County Council
Ms. Bonnie Teeuwen, Vice Chair	Cuyahoga County Director of Public Works

### G. District Address and Phone Number

Ms. Diane Bickett, Executive Director Cuyahoga County Solid Waste Management District 4750 East 131 Street

Garfield Heights, Ohio 44105

Phone: (216) 443-3749 Fax: (216) 478-0014

Email: dbickett@cuyahogacounty.us Web: www.cuyahogaswd.org

### H. Technical Advisory Council and Other Subcommittees

The District did not utilize a Technical Advisory Committee (TAC) for the development of this *Plan Update*.

### I. Policy Committee Review of Plan Update

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

### **II.** Executive Summary

The Cuyahoga County Solid Waste Management District (District) is required by Section 3734.54 of the Ohio Revised Code (ORC) to periodically update its solid waste management plan (*Plan Update*). This *Plan Update* will cover a planning period beginning in 2013 and ending in 2028. This *Plan Update* includes a description of District programs and projections for solid waste generation, recycling and disposal. This *Plan Update* identifies the District's strategies for managing the District's facilities and programs and provides an assessment on achieving statewide recycling and waste reduction goals. This *Plan Update* follows Ohio EPA's format version 3.0. The format requires specific narrative information and data tables. There are nine major sections to the Plan Format.

- Section I includes basic information about the District and an important section on determining when material changes would require an amendment to the *Plan Update*.
- Section II is an Executive Summary and includes brief narrative descriptions of each section in the Plan Update.
- Section III includes an inventory of facilities, activities, and haulers used by the District in the reference year (2009).
- Section IV includes the reference year statistics for the *Plan Update* including population data, waste generation and waste reduction estimates for the residential/commercial sector and the industrial sector.
- Section V includes projections of population, waste generation and waste reduction for each year of the planning period.
- Section VI includes the District's management of facilities and programs to be used by the District throughout the planning period.
- Section VII presents how the District meets the state waste reduction and recycling goals.
- Section VIII includes a presentation of the financial resources of the District necessary to implement this Plan.
- Section IX District rules proposed, approved and authorized for adoption are presented by the District.

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

#### A. Section I. Introduction

On August 29, 1988, the Board of Commissioners of Cuyahoga County formed the first and largest populated solid waste management district in the State of Ohio. (Appendix A). The Cuyahoga County Solid Waste Management District (referred to herein as the "District or Cuyahoga County") includes all incorporated and unincorporated territory in Cuyahoga County and a small portion of neighboring Geauga County (Village of Hunting Valley).

The Board of County Commissioners of Cuyahoga County exercised their statutory option (ORC 3734.54(D)) of appointing the eleven-member Cuyahoga County Planning Commission as the Policy Committee to develop the *Initial Cuyahoga County Solid Waste Management Plan*. This waiver request was approved by the Director of the Ohio Environmental Protection Agency (Ohio EPA) on March 30, 1989. On October 29, 1993, the Policy Committee was expanded from eleven to thirteen members, as required by legislation affecting policy committee membership for all districts.

Commencing January 1, 2011, Cuyahoga County became a charter county. The charter replaced the former county commissioner governance structure to a county executive/county council governance structure. As a result, a new three-member board was created to govern the District. The new Board of Directors is comprised of the Cuyahoga County Executive, a Cuyahoga County Council Member, and the Cuyahoga County Public Works Director. The District has been and will continue to evaluate the potential benefits of forming a solid waste management authority. If an Authority is formed during the planning period, the new Board of Trustees shall assume the responsibilities of implementing this *Plan Update* from the former Board of Directors without an amendment to the *Plan Update*.

The current Plan was approved by Ohio EPA on November 8, 2006. This *Plan Update* begins with the planning year 2009 and includes a 16 year planning period ending in 2028.

### **Policy Committee Members**

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

Cuyahoga County So	lid Waste Policy Committee
Honorable Robert Blomquist	Mayor, City of Olmsted Falls
Mr. Robert Brown (for Mayor	Director, City of Cleveland Planning
Frank Jackson)	Commission
Honorable Dean DePiero	Mayor, City of Parma
Mr. Edward Jerse	Cuyahoga County Director of
IVII. Luwaru Jerse	Regional Collaboration
Honorable Edward Kelley	Mayor, City of Cleveland Heights
Mr. Nathan Kelly, Chair	Cuyahoga County Deputy Chief of
IVII. IVatilati Kelly, Cilali	Staff
Honorable Kathy Mulcahy	Mayor, Village of Orange
Honorable Eileen Patton	Mayor, City of Fairview Park
Honorable Michael Procuk	Mayor, Village of Brooklyn Heights
Ms. Sunny Simon, Vice Chair	Cuyahoga County Council
Honorable Georgine Welo	Mayor, City of South Euclid
Ms. Virginia Aveni	Public Representative
Mr. John Nolan, JD	Government Relations, Cleveland Clinic

### **Board of Directors of the Cuyahoga County Solid Waste Management District**

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

Cuyahoga County Solid W	Vaste District Board of Directors
Mr. Edward FitzGerald, Secretary	Cuyahoga County Executive
Mr. Julian Rogers, Chair	Cuyahoga County Council
Ms. Bonnie Teeuwen, Vice Chair	Cuyahoga County Director of Public Works

### **Process to Determine Material Change in Circumstances and Amend the Plan**

Section I of the *Plan Update* outlines the process which will be used by the District to determine when a material change in circumstance has occurred. If a material change in circumstances occurs, a plan amendment is required by Ohio law (ORC Section 3734.56 (D)). The District plan must be updated "...when the Board of County Commissioners...or Board of Directors...determines that circumstances materially changed from those addressed in the approved initial or amended plan of the district..."

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

- · Facility designations, flow control of waste
- Waste generation
- Capacity availability
- Strategies for waste reduction and/or recycling
- · Availability of revenue for plan implementation
- · Procedures to be followed for plan implementation
- Timetable for implementation of programs and/or activities

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

#### B. Section III. Inventories

Section III provides an inventory of facilities, programs and activities during the reference year (2009) of the *Plan Update*.

Inventories include the following:

- Landfills
- Transfer Facilities
- Incinerators and Waste-to-Energy Facilities
- Recycling Programs
- Collection Programs
- Composting Facilities and Programs
- Open Dumps and Waste Tire Dumps
- Ash, Slag and Foundry Sand Disposal Sites
- Solid Waste Haulers

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

### 1. Reference Year Population

The District's 2009 reference year population of 1,275,859 was determined by using the 2009 Ohio Department of Development's 2009 Population Estimates for Counties, Cities, Villages and

Townships. This information was obtained from the Ohio Department of Development, Office of Strategic Research.

#### 2. Waste Generation

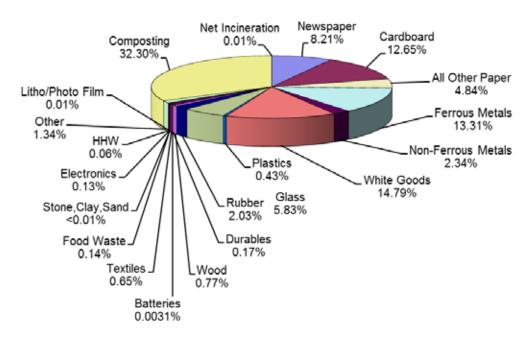
Residential and commercial waste generation was 1,731,395 tons including 1,212,855 tons landfilled (see Table III-1) and 518,540 tons recycled, including composting (see Table IV-5). Based on the District population, this is 7.44 pounds per person per day of residential/commercial waste generation.

Industrial waste generation was 748,970 tons. This includes 185,569 tons landfilled (see Table III-1) and 563,401 tons recycled (see Table IV-6). Based on the District population, this is 3.22 pounds per person per day of industrial waste generation.

#### 3. Reference Year Waste Reduction

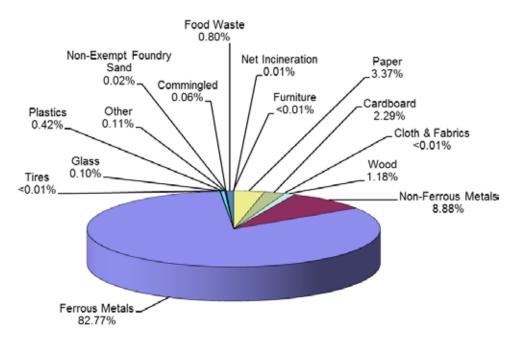
Residential/commercial waste reduction that occurred in the District during the reference year is summarized in Table IV-5. Residential/commercial waste reduction activities include curbside and drop-off collection; District sponsored special collection events, such as household hazardous waste collections and electronics collections; commercial recycling completed by commercial entities operating within the District; and composting. The following graph depicts the residential and commercial waste reduction totals as a percentage for 2009:

#### Residential/Commercial Waste Reduction



Industrial waste reduction activities that occurred during the reference year are summarized in Table IV-6. The following graph depicts the industrial waste reduction totals as a percentage for 2009.

#### **Industrial Waste Reduction in the District**



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

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

In 2009, the following facilities/programs were implemented:

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

Program	Description
CCSWD-1	Non-Subscription Recycling Programs
CCSWD-2	Drop-Off Recycling
CCSWD-3	Yard Waste Management
CCSWD-4	Household Hazardous Waste Collection
CCSWD-5	Computer Recycling
CCSWD-6	Scrap Tire Recycling
CCSWD-7	Litter Collection
CCSWD-8	Mercury Collection Program
CCSWD-9	Phone Book Recycling Campaign

Program	Description
CCSWD-10	Special Waste Convenience Center
	Local Government Outreach and Assistance
	<ul> <li>Contracting Consortiums and</li> </ul>
	Assistance
CCSWD-11	<ul> <li>Residential Recycling Report</li> </ul>
	<ul> <li>Trash Talk Seminars</li> </ul>
	<ul> <li>Trash Oscars</li> </ul>
	<ul> <li>Waste Management Advisories</li> </ul>
	Children's Education Program
	<ul> <li>School Presentations</li> </ul>
	<ul> <li>School Assemblies</li> </ul>
CCSWD-12	<ul> <li>Teacher Workshops</li> </ul>
	<ul> <li>Student and Teacher Publications</li> </ul>
	<ul> <li>School Contests</li> </ul>
	<ul> <li>Scout/Youth Organizations</li> </ul>
	General Public Education and Outreach
	<ul> <li>Publications</li> </ul>
	<ul> <li>Media Promotions and Advertising</li> </ul>
CCSWD-13	· Web Site
	- Hotline
	<ul> <li>Technical Assistance</li> </ul>
	<ul> <li>Presentations</li> </ul>
	Commercial, Institutional and Industrial
	Recycling Assistance
CCSWD-14	Waste Assessments
	Technical Assistance and
	Presentations
	Recycling Market Development
CCSWD-15	ODNR Market Development Grants
	Recycling and Sustainable Business  Basic et Sugar and
	Project Support
	District Grant Programs
	<ul> <li>Community Recycling Awareness</li> <li>Grant</li> </ul>
CCSWD-16	School Recycling Mini Grant
	Recycling Container Grant for Non-
	Profit Agencies
CCSWD-17	Solid Waste Code Enforcement
CCSWD-18	Securing Landfill Disposal Capacity
CCSWD-19	Solid Waste Management Planning
CCSWD-20	District Wide Contracting for Service

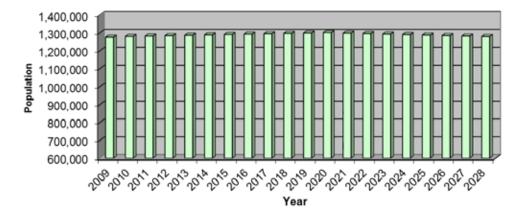
### D. Section V. Planning Period Projections and Strategies

Section V includes a summary of projections of population, waste generation and recycling for the planning period (2013 to 2028). New programs and changes to existing programs are presented in this section.

### 1. Population Projections

The District anticipates population will increase 0.19% from the beginning of the planning period until 2020, then decline 0.21% from 2021 until the end of the planning period. Population projections were made using growth rates from the Ohio Department of Development's (ODOD) *Ohio County Profiles* based on the growth rate of the county that each political subdivision or portion of a political subdivision is located. ODOD *2009 Population Estimates for Ohio Counties, Cities and Villages* and U.S. Census Bureau data were used for 2009 and 2010. The following graph depicts the population projections throughout the planning period.

### District Population Projections 2009 – 2028

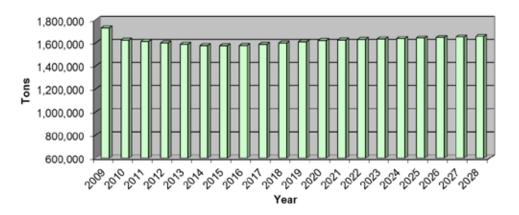


### 2. Waste Generation Projections

### Residential/Commercial Sector

The total residential/commercial waste generation estimate for 2009 is 1,731,395 tons. Residential/commercial waste generation is projected to decrease until 2015, then begin increasing until 2028 based on per capita generation rate projections. Residential/commercial sector waste generation is projected to be 1,588,912 tons at the start of the planning period. This is expected to increase 4.3% over the planning period to 1,657,763 tons in 2028. The following graph depicts the residential/commercial waste generation projections throughout the planning period.

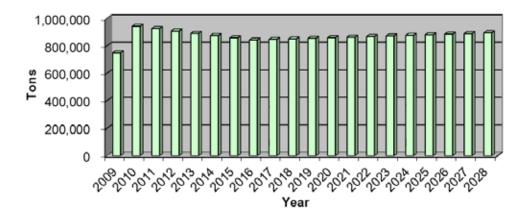
Residential/Commercial Waste Generation Projections 2009 – 2028



#### Industrial Sector

Industrial waste generation is projected for SIC codes 20 and 22-39. The classifications are summarized in Table V-3A, "Standard Industrial Classifications". Table V-3A presents the average annual change in employment for all SIC codes. Industrial waste generation projections are based on industrial employment projections provided by the Ohio Department of Job and Family Services Job Outlook for the period 2006 – 2016 for the Cleveland-Elyria-Mentor Metropolitan Statistical Service Area (MSA) which included Cuyahoga County. According to the Cleveland-Elyria-Mentor MSA, manufacturing employment is projected to decrease 18.6% during this period (2006 – 2016). The following graph depicts the industrial waste generation projections throughout the planning period.

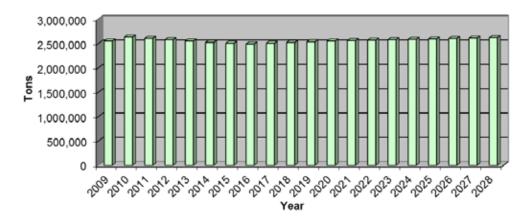
Industrial Waste Generation Projections 2009 – 2028



#### **Total Waste Generation**

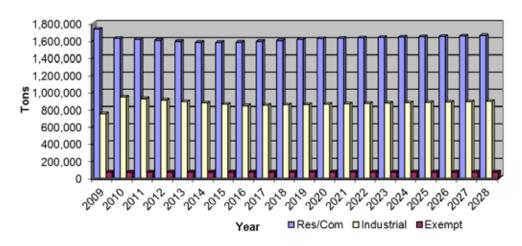
Total waste generation projections for the District during the planning period are presented in Table V-4, "Total Waste Generation for the District during the Planning Period (in TPY)". The total waste generation estimate for the 2009 reference year was 2,551,482 tons. This includes residential/commercial waste (1,731,395 tons), industrial waste (748,970 tons), and exempt waste (71,117 tons). The following graph depicts the total waste generation projections throughout the planning period.

Total Waste Generation Projections 2009 – 2028



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

**Total Waste Generation Projections by Sector** 2009 – 2028



# 3. Waste Reduction and Recycling Strategies through the Planning Period

The District must continue to develop recycling and waste reduction strategies to meet the goals established in the *2009 State Plan* and to pursue continuous improvement in meeting the 2009 State Plan goals. The following table summarizes the program, initiatives and strategies for the planning period and which goals each program meets.

Program	Program #			2009	9 Sta	te Pl	an G	oals		
Program	Frogram #	#1	#2	#3	#4	#5	#6	#7	#8	#9
Non-Subscription Curbside Recycling Programs	CCSWD-1	ü	ü					ü		
Drop-Off Recycling	CCSWD-2	ü	ü					ü		
Yard Waste Management	CCSWD-3	ü	ü					ü		
Household Hazardous Waste Collection	CCSWD-4	ü	ü			ü		ü		
Computer Recycling	CCSWD-5	ü	ü			ü		ü		
Scrap Tire Recycling	CCSWD-6	ü	ü			ü		ü		
Litter Collection	CCSWD-7									
Mercury Collection Program	CCSWD-8	ü	ü			ü		ü		
Phone Book Recycling Campaign	CCSWD-9	ü	ü					ü		
Special Waste Convenience Center	CCSWD-10		ü			ü		ü		
Local Government Outreach and Assistance	CCSWD-11			ü	ü					
Children's Education Program	CCSWD-12			ü	ü					
General Public Education and Outreach	CCSWD-13			ü	ü					
Commercial, Institutional and Industrial Recycling Assistance	CCSWD-14			ü	ü					
Recycling Market Development	CCSWD-15		ü						ü	
District Grant Programs	CCSWD-16		ü				ü	ü	ä	
Solid Waste Code Enforcement	CCSWD-17									
Securing Landfill Disposal	CCSWD-18									
Solid Waste Management Planning	CCSWD-19									ü
District Wide Contracting for Service	CCSWD-20									
Education/Awareness Branding	CCSWD-21			ü	ü					
Number of Strategies	Per Goal	8	11	5	5	5	1	10	2	1

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

Section VI presents the District's methods for managing solid waste. It includes management methods, a siting strategy, and a demonstration of capacity for the planning period 2013 to 2028.

### 1. District Methods for Management of Solid Waste

The net tons to be managed by the District in 2009 are calculated to be 2.5 million tons. The landfill total in Table VI-1 is calculated by subtracting recycling, yard waste composted, and net incinerated tonnage from the net tons to be managed. The District projects 2.5 million tons of solid waste will need to be managed in 2013 and by the end of the planning period in 2028, the District will need to manage 2.6 million tons.

### 2. Demonstration of Access to Capacity

During the reference year, 18 landfills managed 1,469,419 tons of solid waste generated by District residents, businesses and industries.

### **Regional Capacity Analysis**

The District's assessment of regional landfill capacity demonstrates there is sufficient permitted capacity available to manage the District's waste until December 31, 2028. The 18 landfills utilized by the District either directly or indirectly through transfer stations have permitted capacity to manage the District's solid waste through 2028.

### 3. Identification and Designation of Facilities

The District continues to support an open market for the collection, transport and disposal of solid waste. As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer and resource recovery facilities and all licensed and permitted out-of-state landfill, transfer and resource recovery facilities. The District is also identifying recycling and composting programs and facilities that are identified in Section III Inventories.

The District is not designating any facilities in this *Plan Update*. The District reserves the right to designate one or more solid waste facilities and recycling activities to receive solid waste and recyclable materials.

The Board is authorized to establish facility designations in accordance with Section 343.013 and 343.014 of the Ohio Revised Code. In addition, facility designations, if adopted, will be supported by applicable District rules.

### 4. Siting Strategy for Facilities

Section 343.01(G)(2) authorizes the Board to adopt a rule requiring the submission of general plans and specifications to the Board for a determination by the Board that the proposed solid waste facility complies with the District Plan. The *Plan Update* authorizes the Board to adopt the rule authorized by section 343.01(G)(2) of the Revised Code, but the Board has not adopted a rule to implement the siting strategy included in section VI.G. In the event that the Board adopts a rule to implement the siting strategy, that rule shall comply with the following:

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

## 5. Contingencies for Capacity Assurance and District Program Implementation

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

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

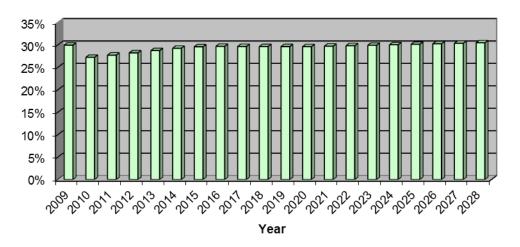
The District annually conducts a comprehensive survey that has consistently provided high quality waste reduction data over the last several years. This data, coupled with District waste generation, has resulted in the District achieving, in the reference year, a 30% waste reduction rate in the residential/commercial sector and a 75% waste reduction rate in the industrial sector. Therefore, the District is choosing to show compliance with Goal #2 of the 2009 State Solid Waste Management Plan. Goal #2 requires solid waste districts to:

 Reduce or recycle at least 25% of the residential/commercial waste generated; and Reduce or recycle at least 66% of the industrial waste generated.

### 1. Compliance with Goal #2

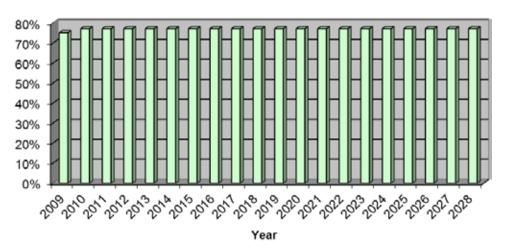
the 2009 30% District's In reference vear. of the residential/commercial waste stream was reduced. This percentage reflects tonnage that was diverted from landfill disposal by recycling and composting. The residential/commercial waste reduction percentage rate is expected to gradually increase to more than 32% by the end of the planning period as depicted by the following chart.

Residential/Commercial Waste Reduction Percentage 2009 – 2028

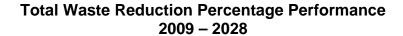


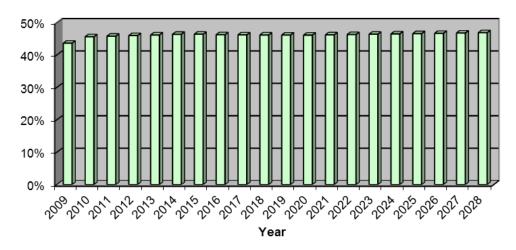
The industrial sector had a waste reduction rate of 75% in 2009 and rose to 77% in 2010. The rate will remain steady throughout the planning period as indicated by the following chart.

Industrial Waste Reduction Percentage 2009 – 2028



The District's annual waste reduction rate for the reference year was 44%. The District projects the total waste reduction rate will increase to 47% by the end of the planning period (2028). The following figure depicts the District's projected waste reduction rate over the planning period for the residential/commercial and industrial sectors combined:





### G. Section VIII. Cost of Financing Plan Implementation

### 1. Funding Mechanisms

### a. District Disposal Fees

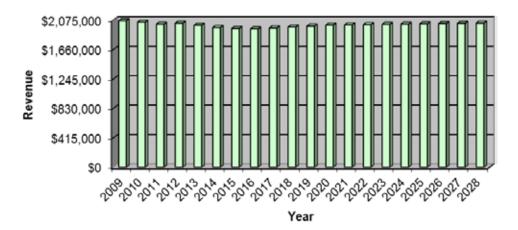
The District does not currently assess a tiered disposal fee. The District is not proposing to adopt or impose a tiered disposal fee with the ratification of the *Plan Update*.

#### b. Generation Fee

As authorized by Section 3734.573 of the Ohio Revised Code and under the District's current solid waste management plan, the District instituted a \$1.50 per ton generation fee. The generation fee will continue to be collected by the receiving transfer stations, landfills or any other applicable solid waste facility for each ton of solid waste originating within the District and disposed in the State of Ohio. These monies will be forwarded to the District pursuant to Section 3745-28-03 of the Ohio Administrative Code.

The following graph depicts the actual and projected disposal fee revenue for this *Plan Update*:

District Generation Fee Projections 2009 – 2028

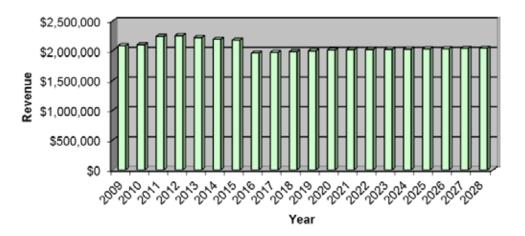


Estimated revenues include generation fees, miscellaneous revenue, grant revenue and recycling income. Miscellaneous revenues include refunds and reimbursements. Grant revenue includes funds received from ODNR grants and other grants as applied for by the District. Recycling revenue includes income from the sale of recyclables.

In addition to the revenue sources described above, for the years 2011 – 2015, the District will receive a total of \$1,000,000 in SEP (Supplemental Environmental Project) funding from the Northeast Ohio Regional Sewer District (NEORSD). This funding must be used exclusively for the household hazardous waste program. Under the terms of the Intergovernmental Agreement by and between the District and NEORSD in 2010, the NEORSD will reimburse the District for 50% of the cost of operating its countywide household hazardous waste disposal program up to \$250,000 per year. NEORSD will continue to pay for half of the HHW disposal costs until the \$1,000,000 funding is exhausted. The District projects the limit to be reached by 2015.

The following graph depicts the District's total actual and projected revenue from 2009 – 2028 and includes all anticipated revenue sources identified above.

District Total Revenue Projections 2009 – 2028



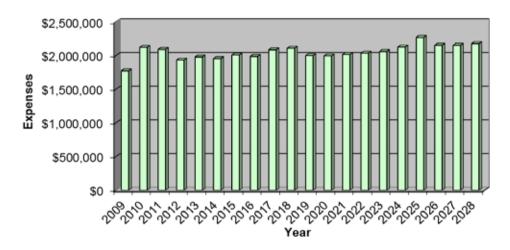
### 2. Cost of Plan Implementation

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

The District is projecting to spend \$1,979,410 in 2013, the first year of the planning period and \$2,178,128 in 2028, the final year of the planning period.

The following chart summarizes the District's actual and projected expenses throughout the planning period. Note the increase in expenditures in 2010 includes the one-time development costs for the District's Special Waste Convenience Center.

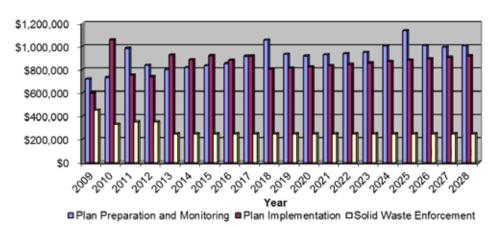
District Expense Projections 2009 - 2028



The District's budget falls into three categories: preparation and monitoring of plan implementation, implementation of the approved plan, and solid waste enforcement.

The following graph depicts the District's annual expense to implement this *Plan Update*:

### **District Expense Distribution 2009 – 2028**



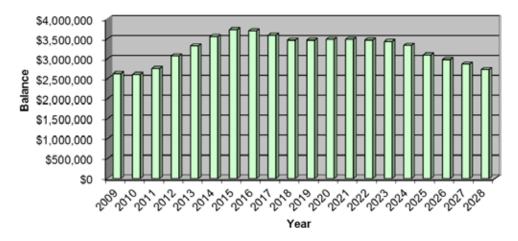
### 3. Contingent Funding

The District and its Board do not consider funding to be an issue of concern during this planning period. The following contingent funding procedure includes options for increasing the District's generation fee if warranted. Prior to increasing the generation fee, the District will evaluate the estimated expenditures in Table VIII-5 to determine the minimum annual budget to sustain the District's essential strategies, facilities, programs and activities and finance implementation of the District Plan. If an increase in the generation is justified, the District Board will request that the District Policy Committee approve the increase of the generation fee and obtain ratification of that increase.

### 4. Summary of Costs and Revenues

A summary of district revenues and expenditures for each year of the planning period is included in Table VIII-8. The District has a positive year end cash flow for each year of the planning period. At the end of the planning period in 2028, the District projects a carryover of approximately \$2.7 million dollars. The following figure presents the District's year-end cash flow from 2009 through 2028.

### Projected District Fund Balance 2009 – 2028



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

### 1. Existing Rules

The District has not adopted any rules. The District continues to reserve the right to adopt rules specifically authorized by the Ohio Revised Code (ORC). Section 343.01 (G) of the ORC provides the Board of County Commissioners with the authority to adopt, publish and enforce rules if the District Plan authorizes rule adoption under ORC Section 3734.53 (C).

### 2. Proposed Rules

The Board of Directors of the Cuyahoga County Solid Waste Management District have decided that at this time no rules will be made, published, or enforced in accordance with divisions (G)(1), (2), and (3) of Section 343.01 of the Ohio Revised Code and divisions (C)(1), (2), (3), and (4) of Section 3734.53 of the Ohio Revised Code.

Table ES-1 General Information

Dist	rict Nar	me: Cu	District Name: Cuyahoga County Solid Waste Management District	aste Manage	ement I	District		
Disti	rict ID <sub>1</sub>	# (for O	District ID # (for OEPA use only)			Refe	Reference Year 2009	Planning Period 2013-2028
Plan	Status	e (nude	Plan Status (underline one)					Reason for Plan Submittal:
Ω	RD	DR	Approved (date) /	/ Ol (date) /	ate)	/ /	DA	Mandatory five year update

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

Table ES-2
District/Coordinator/Office

Name:	Ms. Diane Bickett, Executive Director, Cuyahoga County Solid Waste Management District	shoga County Solid Waste Manageme	ent District
Address:	Address: 4750 East 131 Street		
City:	Garfield Heights	State: Ohio	Zip: 44105
Phone:	216/443-3749	Fax: 216/478-0014	

Table ES-3
Plan Data Summary

Plan Data		Reference Year 2009	2017 (year 5)	2022 (year 10)	2028 (year 16)
Population		1,275,859	1,295,472	1,296,431	1,279,725
Generation	Industrial	748,970	845,956	867,317	893,664
	Res/Comm	1,731,395	1,588,573	1,629,893	1,657,763
	Exempt	71,117	72,184	72,277	71,353
Total Generation (tons)		2,551,482	2,506,713	2,569,488	2,622,780
Waste Reduction	Industrial Source Reduction	0	0	0	0
	Industrial Waste Reduction	43	43	43	43
	(Incin)				
	Industrial Recycling	563,359	653,489	669,990	690,343
	Res/Comm Source Reduction	0	0	0	0
	Res/Comm Waste Reduction	27	27	27	27
	(Incin)				
	Res/Comm Recycling	351,034	315,281	330,339	349,442
	Yard Waste Composting	167,479	155,702	155,702	155,702
	MSW Composting	0	0	0	0
	Net Incineration	70	70	70	70
	Ash Disposed	0	0	0	0
Total Waste Reduction (tons)		1,081,941	1,124,542	1,156,101	1,195,557
Disposal	In-District Landfills	11,930	7,700	7,874	7,951
Disposal	Out of District Landfills	1,457,490	1,374,350	1,405,392	1,419,151
Total Landfill (tons)		1,469,420	1,382,050	1,413,266	1,427,103
Waste Reduction Rate		44%	46%	46%	47%

Table ES-4
Existing Disposal Facilities

Name	County	District Tons	Total Tons	Years Left				
In-District Facilities								
City of Brooklyn	Cuyahoga	3,743	3,743	0				
Arcelor Mittal	Cuyahoga	8,187	8,187	29				
Out-of-District Facilities								
American	Stark	244,423	3,362,115	73.8				
Athens Hocking	Athens	1,992	634,500	83.8				
Carbon Limestone	Mahoning	132,298	3,327,594	25.8				
Central Waste	Mahoning	13,688	1,966,554	7.5				
County Environmental	Wyandot	583	180,798	100				
Countywide	Stark	539,210	3,644,532	37.7				
Evergreen	Wood	11,384	1,185,819	25				
Geneva	Ashtabula	18,465	527,415	4.59				
Kimble	Tuscarawas	50,224	1,643,679	77.4				
Lake County	Lake	2,298	686,592	12.4				
Lorain County	Lorain	379,231	2,825,853	22.2				
Mahoning County	Mahoning	4	1,006,020	7.45				
Noble Road	Richland	48,461	1,639,800	21.9				
Ottawa County	Ottawa	5,779	367,107	78.2				
Suburban	Perry	9,449	1,602,057	19.6				
Caldwell Landfill	Indiana	1	176,316	3				
Totals/Averag	1,469,420	24,788,681	34.96					

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

This section establishes a reference year for use in all subsequent parts of the Plan and updates information previously collected for the baseline year. Also contained in this section is information for all existing solid waste disposal, recycling, transfer facilities, incinerators, processors, haulers and out-of-state facilities which were used by the District in the reference year as reported by survey respondents, District knowledge and third party data providers. Facilities listed in the tables that follow are grouped according to their location in-District, out-of-District, or out-of-state. In addition, results from open dump and solid waste hauler inventories are listed.

The information presented in this *Plan Update* includes information obtained through surveys and direct contact with communities, businesses and manufacturers, as well as solid waste and recycling service providers. The District made an extensive effort to contact commercial and industrial businesses to obtain information about solid waste generation, composting, collection and recycling. The information collected was used to verify, enhance and correct inconsistencies with the Annual District Report (ADR) that were submitted for 2009. This *Plan Update* is based on information collected from current surveys and contacts and supersedes the 2009 ADR data.

#### A. The Reference Year

In accordance with ORC 3734.56(A), the District began preparation of the revised plan on August 8, 2010, 15 months prior to the required submittal date of November 8, 2011. Therefore, the District will use calendar year 2009 as a reference year for all subsequent projections in the plan.

### B. Existing Solid Waste Landfills

In 2009, the District primarily relied on municipal solid waste landfills for the disposal of solid waste and exempt waste. The District did not own a landfill and waste generators and waste haulers used a number of privately owned facilities to manage and dispose of solid waste generated within the District.

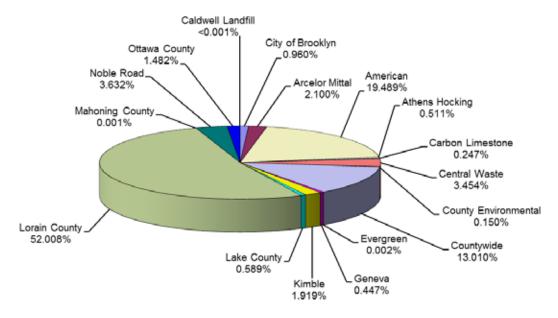
In 2009, the District's solid waste was disposed in 17 landfills. Two of these were located in Cuyahoga County and 14 were located in 11 different counties throughout Ohio (Table III-1). One landfill was located in Indiana. These 17 facilities directly managed 389,934 tons of solid and exempt waste.

Ohio EPA records indicate that an additional 6.85 tons of industrial solid waste was disposed of at Pollution Controls Industries in Indiana. This data came from a report produced by the Indiana Department of Environmental Management that indicated that the 6.85 tons of waste was

classified as non-municipal other waste (NMOTH). The District investigated this situation as Pollution Controls Industries is a hazardous waste facility and non-hazardous waste liquids processor. Several calls were placed to this facility to determine the true characteristics of the waste received. All waste accepted at this facility is either hazardous waste or liquid/sludge non-hazardous waste and would have been manifested from the generator. The facility could not directly identify the source of the 6.85 tons of waste since a manifest number could not be provided. Based on this investigation, the District did not conclude that the tonnage was industrial solid waste and did not include this data in the *Plan Update*.

The following chart depicts the landfills that received District generated direct haul solid and exempt waste in 2009.

### Direct Haul Landfills Receiving District Solid/Exempt Waste in 2009



The following map depicts the location of these facilities in relation to Cuyahoga County:

### **Direct Haul Landfill Facilities Used for District Solid Waste in 2009**



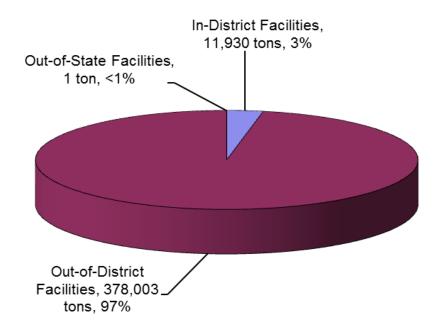
Landfills

# Solid Waste in 2009 UNIVERSITYHTS CHAORIN FALLS BENTLEVALLE 42

In-District Direct Haul Landfill Facilities Used for Cuyahoga County

The following chart depicts the distribution of tonnage among direct haul in-District, out-of-District, and out-of-state landfill disposal:



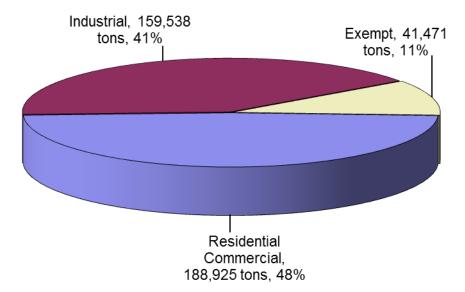


In 2009, the District was a net exporter of solid waste. Approximately ninety-seven percent of the District's solid and exempt waste was disposed in landfills located outside the District. Two solid waste facilities were operating in the District. The two in-District facilities managed 11,930 tons (3%) of solid and exempt waste disposed by the District generators. Approximately 69% of that total (8,187 tons) was managed by Arcelor Mittal's captive industrial landfill. Less than one percent of the District's solid waste was disposed in an out-of-state landfill facility.

Landfills receiving solid waste are required to classify the material into three basic categories. The categories include residential/commercial waste (municipal waste); waste received directly from industrial customers (industrial waste); and exempt waste. Exempt waste is material that is not defined by Ohio law as a solid waste. A common example of exempt waste is construction and demolition debris (CD&D) material. Construction and Demolition debris is defined as material that comes from the construction, destruction or rehabilitation of man-made physical structures. Exempt waste also includes foundry sand and slag. Exempt wastes are not subject to ORC 3734 disposal or generation fees.

In 2009, direct haul landfills reported receiving 188,925 tons of residential/commercial waste, 159,538 tons of industrial waste and 41,471 tons of exempt waste. The following figure graphically depicts the direct haul disposal tonnage by sector in 2009:

#### 2009 Direct Haul Landfill Disposal by Sector



#### Total Landfill Disposal

In 2009, the District indirectly disposed of 1,079,485 tons of solid and exempt waste in landfills that first went to transfer stations. The total

landfilled solid and exempt waste for 2009 including direct (landfills) and in-direct (transfer stations) facilities was 1,469,419 tons.

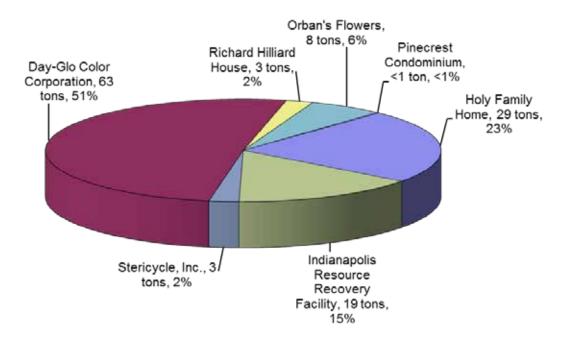
Including incineration to the above total adds an additional 123 tons bringing the total tons of solid and exempt waste disposed by District generators to 1,469,542.

#### C. Existing Incinerators and Resource Recovery Facilities

The District surveyed incinerators that were operating under the previous Plan and others that were on the licensed incinerator list from the local health departments and/or Ohio EPA. There were five in-District and one out-of-District incinerators that responded to the survey that incinerated solid waste in 2009. In addition, one out-of-state facility (Indianapolis Resource Recovery Facility) was identified through the commercial/industrial survey. The total tons incinerated in-district was 123 tons in 2009. The following chart depicts the incinerators used by the District for direct hauled solid and exempt waste in 2009.

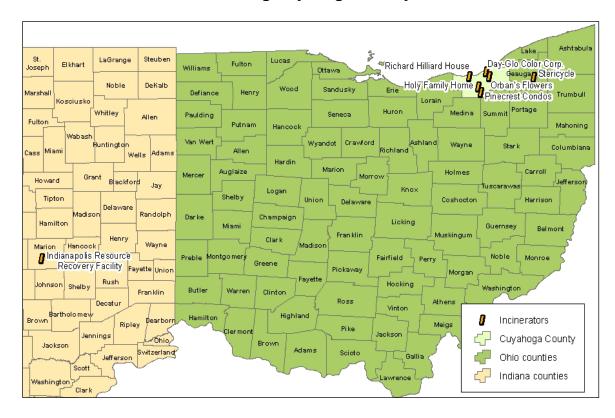
Incineration was not a primary solid waste disposal method for the District in 2009. In 2009, the actual amount of solid waste incinerated was insignificant when compared to the total generation of solid waste as well as the other traditional methods of managing solid waste through recycling and landfill disposal.

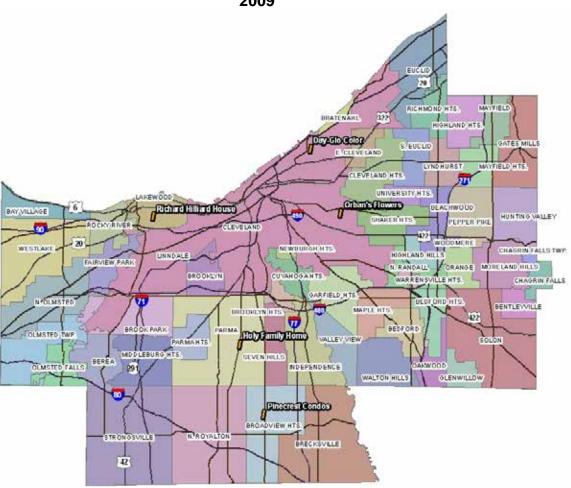
#### **Incinerators Receiving District Solid/Exempt Waste in 2009**



The figure below depicts the location of solid waste incinerators in the District in 2009:

#### **Incinerators Receiving Cuyahoga County Solid Waste in 2009**





### In-District Incinerators Receiving Cuyahoga County Solid Waste in 2009

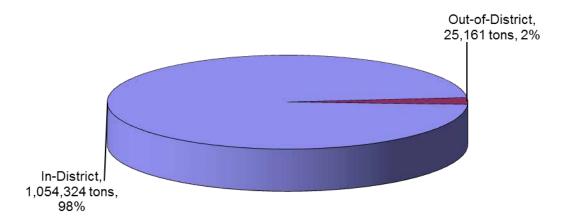
Incinerators and Waste-to-Energy Facilities

#### D. Existing Transfer Facilities

Table III-3, "Solid Waste Transfer Facilities Used by the District", presents a listing of all transfer facilities used by the District in 2009. The District does not use out-of-state transfer facilities. Information in this section has been obtained through the results of surveys, transfer station records and direct inquiry.

Total transferred solid and exempt waste from the District in 2009 was 1,079,485 tons. Of this amount, nine in-District transfer facilities processed 1,054,324 tons (98%) and five out-of-District transfer facilities processed 25,161 tons (2%) of District solid and exempt waste. The following chart presents the distribution of tonnage between in-District and out-of-District transfer stations in 2009.

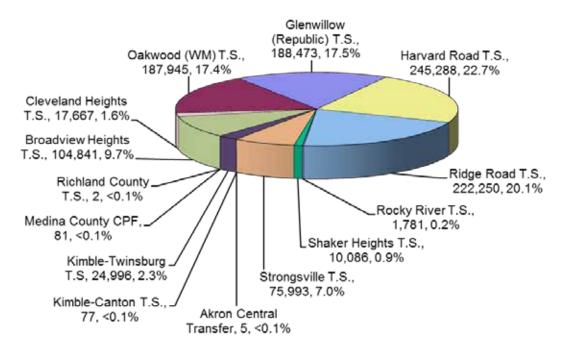
2009 In-District vs. Out-of-District Transfer Station Usage



The Harvard Road Transfer Station accepted the highest amount of waste at 245,288 followed by the Ridge Road Transfer Facility at 222,250 tons, Glenwillow at 188,473 tons, Oakwood Transfer Station at 187,945 tons, Broadview Heights at 104,841 tons and Strongsville at 75,993 tons. The remaining three transfer stations (Cleveland Heights, Rocky River and Shaker Heights) processed a total of 29,534 tons.

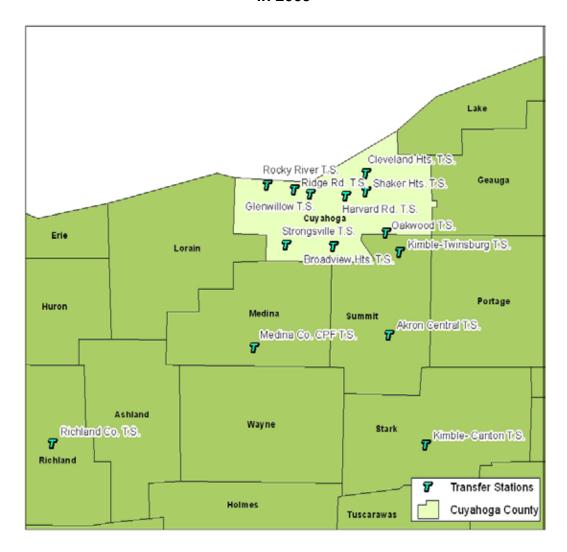
The following chart depicts the transfer stations used by the District in 2009 and their respective market share.

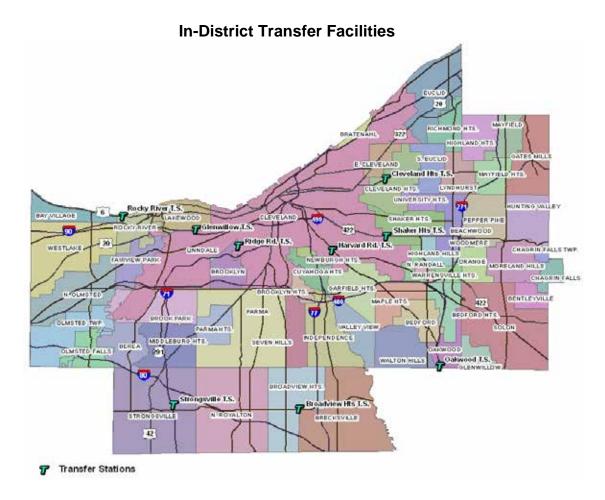
### Transfer Stations Receiving District Solid/Exempt Waste in 2009 (Tons/Percent of Total)



The following figure shows the location of the transfer stations used by the District in 2009:

### Transfer Facilities Accepting Cuyahoga County Solid/Exempt Waste in 2009

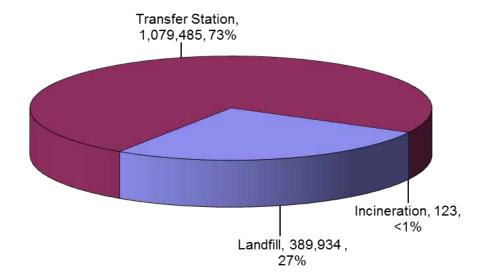




#### **Solid Waste Flow**

The flow of solid and exempt waste in 2009 occurred through direct shipments to landfills, indirectly to landfills from transfer stations, and to incinerators. In 2009, 73% was first delivered to transfer stations, 27% was direct hauled to landfills, and <1% was incinerated as represented by the following graphic:

#### 2009 Solid/Exempt Waste Flow by Facility Type (Tons/Percent of Total)



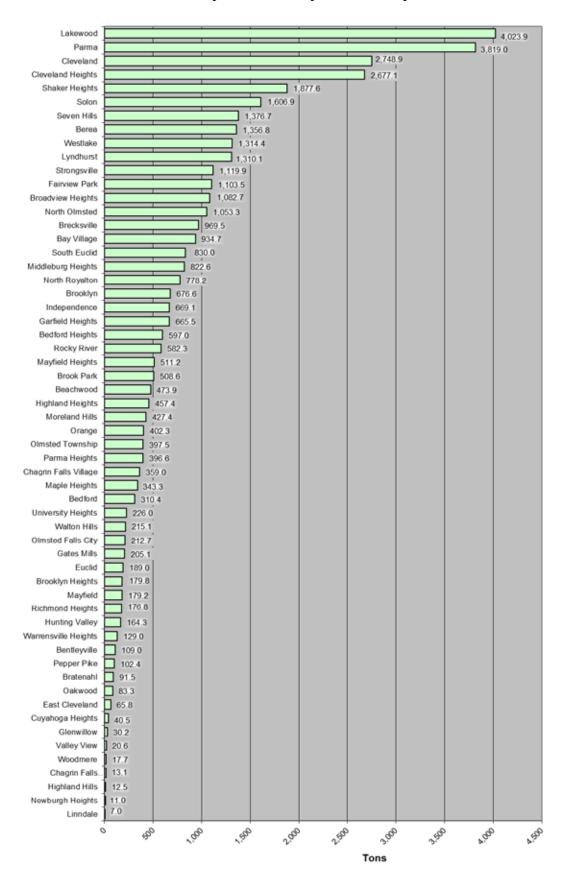
### E. Existing Recycling and Household Hazardous Waste Collection Activities

Fifty-five of the 59 Cuyahoga County communities had traditional non-subscription curbside recycling programs in 2009 (Table III-4). There were 3 communities that collected non-traditional recyclables from the curb such as oil, white goods, lead acid batteries, tires and other materials. There was only 1 community that did not offer curbside recycling of the 59 communities in the District. Non-subscription means all single-family household residents have access to the recycling program whether or not they participate. A non-subscription program can be paid for by the resident or by the political subdivision. The communities that provided non-subscription curbside recycling programs reported they collected 41,065 tons of recyclable materials in 2009, excluding yard waste. Most of the community programs collected five materials including aluminum and steel containers, glass, plastics and newspaper. Many communities collected other materials including cardboard, tires, white goods and other metals.

The City of Cleveland is in the process of transitioning from manual collection of trash to fully automated collection. During this transition, curbside recycling was also provided to automated collection customers. In 2009, the City provided non-subscription curbside recycling to 13,000 residential households. The City intends to expand its non-subscription curbside recycling over the next five years.

There were no communities operating subscription curbside recycling in 2009. Subscription means that single-family households must subscribe to the recycling program to participate. A subscription program is paid for directly by the resident. The following chart depicts the annual tonnage recycled through each of the curbside recycling programs in 2009:

#### **District Curbside Recycled Tons by Community in 2009**



In 2009, there were 619 drop-off recycling locations operating in the District (Table III-5). Of this total, 458 were from Abitibi Bowater, a company that collects mixed paper by placing 10-yard recycling containers in the parking lots of schools and churches. The remaining 161 sites collected a variety of materials including aluminum and steel containers, glass, plastics, mixed paper, cardboard, tires, white goods and other In 2009, these drop-off locations recycled 22,732 tons of The following figure presents the locations of the drop-offs (minus Abitibi Bowater) within the Cuyahoga County Solid Waste District identified in Table III-5.

### **Activities in the District** D HUNTING WALLEY CHAORIN FALLS TWP ELAND HILLS CHAGRIN FALLS BENTLEYVILLE D D D D **Drop-Off Recycling Locations** Non-Subscription Curbside Recycling No Curbside Recycling 42 Modified Non-Subscription Curbside Recycling

2009 Drop-Off Recycling Locations and Curbside Recycling

In 2009, the District conducted several special collection programs. Specific information about the programs is provided below.

#### **Household Hazardous Waste Round-Up**

The District operated several special waste collection programs including the Household Hazardous Waste (HHW) Round-Up. In 2009, the HHW Round-Up collected 280 tons of materials which were recycled and diverted from landfills. In addition, 35 tons of HHW was collected and recycled by the communities within the District independently. The total HHW program tons collected and recycled in 2009 was 314. The HHW Round-Up was held twice in 2009 at the County Fairgrounds. Residents delivered their HHW for free either to their local city service department or directly to the County Fairgrounds. Forty-four communities held local HHW collections and then transported these materials to the County Fairgrounds for processing by the District's HHW contractor.

#### **Recycle Your Computer Month**

In 2009, 931 tons of computers and other electronics were collected and either refurbished for reuse or disassembled for recycling through two Recycle Your Computer Month events sponsored by the District. These events encouraged cities to hold local municipal collections of computers and electronic materials. Of the 932 tons recycled, 640 tons were from residents and 291 tons were from businesses. In addition, 59 tons of residentially generated computers were recycled by the communities directly or at RET3 job corp.

Fifty-three communities participated in the collection of CPU's, monitors, printers, other peripheral computer equipment, and cell phones from their residents. Cities delivered this equipment to the RET3 job corp., a local non-profit electronics recycler that recycles and refurbishes computer equipment to benefit local schools.

#### **Phone Book Collection Program**

The Cuyahoga County Solid Waste District's 17<sup>th</sup> annual Phone Book Recycling Campaign ran from June 1 through September 30, 2009 to coincide with the delivery of the new phone books by AT&T.

In 2009, approximately 2.2 million books were delivered by AT&T in Cuyahoga County. Individuals and businesses could recycle outdated phone books at twelve Cleveland Metroparks locations. Phone books could be dropped off seven days per week during regular park hours.

Some cities collected phone books from their residents with regular curbside recycling. These county residents recycled their phone books with other mixed paper products including newspaper, cardboard, boxboard, junk mail, magazines and other materials. In 2009, the phone book collection recycled 417 tons.

#### **Scrap Tire Round-Up**

The District provided free recycling of scrap tires for communities during its Scrap Tire Round-Up held in September. Tires were picked up at city service garages by the District's recycling contractor. This program helped communities recycle the scrap tires collected from residents and

reduced the financial burden of this costly service. In 2009, 210 tons of scrap tires were recycled.

The District advised all communities to inform their residents that the best way to dispose of tires is through the retailer who sells them their new tires. Most tire dealers charge a small disposal fee.

#### F. Existing Composting/Yard Waste Management Facilities

In 2009, the District had an extensive yard waste management infrastructure including 30 in-District facilities, 5 out-of-District facilities, 2 backyard composting programs, 11 Grasscycling programs and 3 programs that managed yard waste in Cuyahoga County.

#### Registered/Licensed Facilities

The registered in-District facilities included 28 Class IV facilities and 4 Class II facilities. Two facilities are registered and licensed as both Class II and Class IV. The out-of-District facilities included 4 Class IV facilities and 1 Class II facility. The following describes compost facility classifications:

#### Class I

Class I composting facilities may accept a variety of solid wastes such as mixed solid waste, food waste, yard waste and certain industrial wastes. Class I facilities do not have size restrictions. These facilities require a permit, license and financial assurance.

#### Class II

Class II composting facilities may only accept source-separated yard waste, animal wastes, specified agricultural wastes, authorized bulking agents, and other alternative materials. Alternative materials (feed stocks, bulking agents and additives) may be utilized in the compost process, if prior approval is obtained from the Director of Ohio EPA. Class II facilities do not have size limitations. Such facilities require a license, financial assurance and registration.

Exceptions: If the facility exclusively co-composts sewage sludge with source-separated yard wastes and/or animal wastes and/or bulking agents, it is exempt from the requirements of the solid and infectious waste regulations and solid waste disposal fees, but subject to the requirements of the water pollution control and air pollution control regulations.

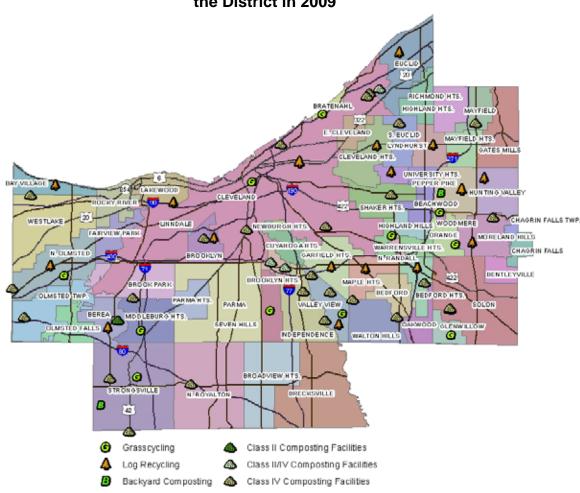
#### Class III

Class III composting facilities may accept only source-separated yard waste, animal wastes, specified agricultural wastes, authorized bulking agents and additives. These facilities must be limited to less than fifteen thousand square yards of total area. Class III facilities only require a registration.

#### Class IV

Class IV composting facilities may accept only source-separated yard waste, authorized bulking agents, and the following additives: urea and bacteria or fungal inoculums. These facilities do not have size restrictions. Class IV facilities only require a registration. More information on the compost classification system can be found in Ohio Administrative Code (OAC) 3745-27-40. The following figure depicts the locations of all registered or licensed compost facilities in the District in 2009.

### Registered Compost Facilities and Organics Recycling Activities in the District in 2009



#### Non-Registered/Licensed Facilities/Programs

There were 26 community programs that operated non-registered yard waste activities such as backyard composting, grass recycling and log recycling programs. The District could not ascertain whether they had applied to obtain registrations for their yard waste management locations. The District was careful not to double count yard waste. The District worked carefully with each community to determine if yard waste collected and processed in one community was shipped to a registered compost facility or another community also on the list.

A complete detailed description of these non-registered programs and the methodology used to obtain the reference year recycling data is provided in Section IV of this *Plan Update*.

In 2009, the combination of registered/licensed in-District and out-of-District facilities and non-registered/licensed facilities/programs recycled 167,479 tons of yard waste materials.

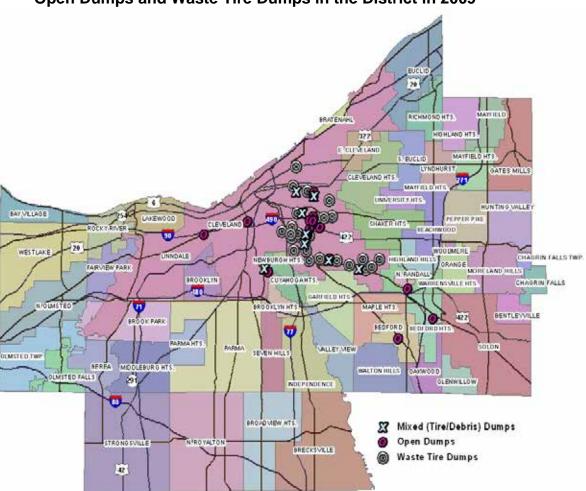
#### G. Facilities Used by the District which are Located Outside Ohio

Table III-7 presents a list of facilities that are located outside of Ohio that received District waste and/or recyclables. There were 18 facilities in eight states that accepted waste from the District. In 2009, these facilities received a total of 3,356 tons.

#### H. Existing Open Dumps and Waste Tire Dumps

Table III-8 presents a comprehensive list of the open solid waste and scrap tire dump sites in the District. In 2009, there were numerous open dumps in the District. Many of the sites were under an acre and were recurring open dump areas for general solid waste and tires. A significant number of the sites were listed because of scrap tires as provided by the District's health departments.

The following figure depicts the identified open dump sites in the District in 2009:



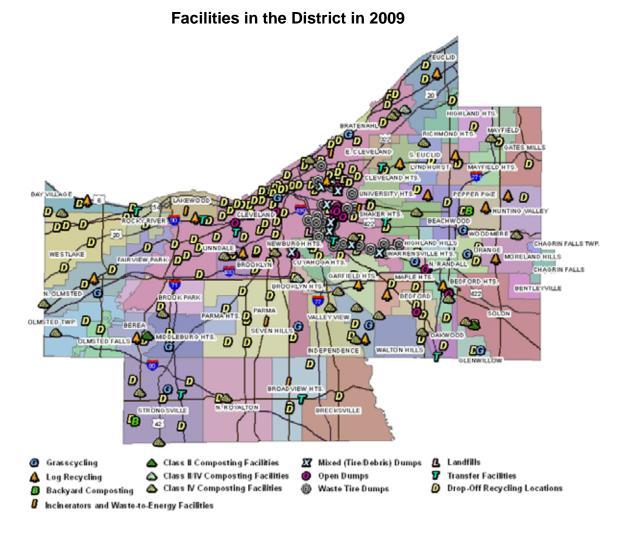
#### Open Dumps and Waste Tire Dumps in the District in 2009

#### I. Ash, Foundry Sand and Slag Disposal Sites

No ash or foundry sand disposal sites were identified.

#### J. Map of Facilities and Sites

Maps of facilities and site locations have been included below. A larger map of facilities is included in Appendix E.



#### K. Existing Collection Systems – Haulers

During the previous Plan Update, the District reported numerous changes in ownership and several new companies entering the competitive market place for hauling contracts. The District continued to see changes in collection service options.

Twenty-seven Cuyahoga County communities had municipally-operated solid waste collection programs in 2009. These communities collected approximately 452,382 tons in 2009. The three largest were the City of Cleveland (235,866 tons) followed by the City of Cleveland Heights (37,138 tons) and the City of Lakewood (33,090 tons). The other twenty-two communities contracted out their solid waste collection to a private hauler.

Thirty private haulers responded to the District's survey. In 2009, these haulers collected 459,233 tons of waste. The three largest private haulers that supplied data to the District were Waste Management (206,341 tons) followed by Gateway Recycling (55,500 tons) and Landmark Disposal (40,874 tons). In addition, there were approximately 170 other haulers

that the District assumes were in business in 2009 but did not supply data. Republic Waste Services, a national waste hauling firm, did not return a survey and is not reported on Table III-10, although they are a known and major hauler providing residential and commercial waste collection services within the District.

In total, the haulers reported collecting 911,615 tons of waste in 2009.

The following figure depicts the service area by provider (public sector and private companies) in 2009:

#### **Residential Solid Waste Collection in 2009**

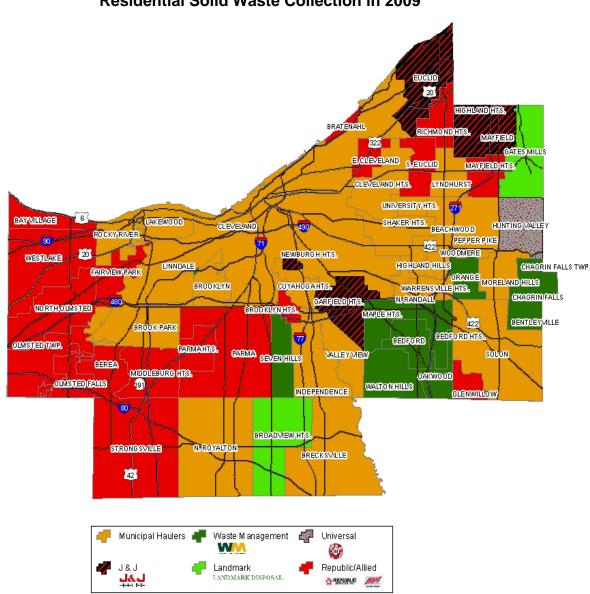


Table III-1
Landfills Used by the District

		Location	,	Waste F	Received from	m the SWMD	(TPY)
Facility Name	Type of	Location	1	Residential			
racinty Name	Landfill	County	ST	Commercial	Industrial	Exempt	Total
In-District Facilities						<del>-</del>	
City of Brooklyn	PA, GO	Cuyahoga	H	3,743	0	0	3,743
Arcelor Mittal	РО	Cuyahoga	Н	0	8,187	0	8,187
Out-of-District Facilities							
American	PA, PO	Stark	ОН	262	75,733	0	75,996
Athens Hocking	PA, PO	Athens	ОН	0	1,992	0	1,992
Carbon Limestone	PA, PO	Mahoning	Н	19	942	0	962
Central Waste	PA, PO	Mahoning	Н	1,580	10,865	1,022	13,468
County Environmental	PA, PO	Wyandot	Н	0	583	0	583
Countywide	PA, PO	Stark	Н	854	13,663	36,213	50,730
Evergreen	PA, PO	Wood	Н	2	4	0	6
Geneva	PA, PO	Ashtabula	ОН	37	1,491	215	1,743
Kimble	PA, PO	Tuscarawas	ОН	6,298	702	483	7,484
Lake County	PA, GO	Lake	Н	2,298	0	0	2,298
Lorain County	PA, PO	Lorain	Н	159,333	39,992	3,470	202,795
Mahoning County	PA, PO	Mahoning	Н	0	4	0	4
Noble Road	PA, PO	Richland	ОН	14,026	70	67	14,163
Ottawa County	PA, PO	Ottawa	ОН	472	5,307	0	5,779
Out-of State Facilities							
Caldwell Landfill	PA, PO	N/A	IN	0	1	0	1
7	Totals		·	188,925	159,538	41,471	389,934

PA = publicly available, PO = privately operated, GO = government operated

#### Source:

Annual Operational Reports for Landfills 2009

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

				Waste	Waste Received from the SWMD (TPY)	from the	SWM	(TPY)	
Facility Name	Type of	Location	Z.	Ma	Waste Incinerated	ated		Bypass Waste	Total Ash
	Facility			Residential/	0:10:10:10:10:10:10:10:10:10:10:10:10:10		Total	Received	Produced (TPY)
		County	ST	ST Commercial	ındustriai	Exempt	O[a	(TPY)	
In-District Facilities									
Day-Glo Color Corporation	Э	Cuyahoga	ОН	0	62.5	0	62.5	191.6	20.00
Richard Hilliard House	Э	Cuyahoga OH	ОН	2.75	0	0	2.75	0	0.88
Orban's Flowers	Э	Cuyahoga OH	ОН	2.7	0	0	7.5	2.4	2.4
Pinecrest Condominium	Э	Cuyahoga	ОН	0.25	0	0	0.25	0	0.08
Holy Family Home	Э	Cuyahoga	ОН	28.6	0	0	28.6	0	9.15
Out-of-District Facilities									
Stericycle, Inc.	Э	Geauga	НО	ε	0	0	3	0	3.00
Out-of-State Facilities									
Indianapolis Resource	DQ AQ	Marion	Z	C	C	186	186	U	186
Recovery Facility	- ', -	Nail Oil	-			5	2.		2.0.
Totals	als			42.1	62.5	18.6	123	194	54.11

PA = Publicly Available; C = Captive; GO = Government-Owned; PO = Privately Owned; PD = In-district Facilities w/ Public Debt

## Source:

The District worked with the local air regulatory agencies to identify registered incinerators and surveyed registered incinerators. The incinerators processing animal and human remains are not listed.

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

	Tune of		-	40	Waste F	Waste Received from the SWMD (TPY)	the SWMD (	TPY)	Recyclables I	Recyclables Processed (TPY)
Facility Name	l ype or	Operator	LOCATION	TION	Residential/	lciatonloal	Fyomor	Total	Recovered	Total
	racilly		County	State	Commercial	IIIQUƏLLIAI	Evellipt	ı Otal	from Waste	I Otal
In-District										
Broadview Heights T.S.	ΡA	Norton	Cuyahoga	HO	104,292	249	0	104,841		
Cleveland Heights T.S.	ΡA	Cleveland Heights	Cuyahoga	HO	17,667	0	0	14,667		
Oakwood (WM) T.S.	ΡA	Waste Management	Cuyahoga	НО	162,809	25,136	0	187,945		
Glenwillow (Republic) T.S.	ΡA	Republic Waste	Cuyahoga	HO	182,577	0	2,896	188,473		
Harvard Road T.S.	ΡA	Republic Waste	Cuyahoga	HO	227,095	284	17,909	245,288		
Ridge Road T.S.	ΡA	Cleveland	Cuyahoga	HO	222,250	0	0	222,250		
Rocky River T.S.	ΡA	Rocky River	Cuyahoga	НО	1,781	0	0	1,781		
Shaker Heights T.S.	ΡA	Shaker Heights	Cuyahoga	HO	10,086	0	0	10,086		
Strongsville T.S.	PA	Strongsville	Cuyahoga	ᆼ	70,170	0	5,823	75,993		
Out-of-District										
Akron Central Transfer	ΡA	Waste Management	Summit	HO	2	0	0	9	0	0
Kimble-Canton T.S.	ΡA	Kimble	Stark	HO	11	0	0	11	0	0
Kimble-Twinsburg T.S	ΡA	Kimble	Summit	HO	24,996	0	0	24,996	0	0
Medina County CPF	ΡA	Medina County	Medina	HO	18	0	0	81	6,139	6,139
Richland County T.S.	ΡA	Rumpke	Richland	OH	2	0	0	7	0	0
Totals					1,023,888	25,969	29,628	1,079,485	6,139	6,139

PA = publicly available

**Source:** Annual Operating Reports for 2009

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

Curbside Recycling	•	# of		Average # of		Service Area						•									:
Name	Type of	Households	Frequency of	Households		Townships/					Š	esot	Mate	Types of Materials Accepted	Accep	ted				~ `	Recyclables Processed
Address/Phone	Curpside	Served	Collection	Participating	County	Cities	AC	3C GI	L P	ONP	ဗ္ဗ	Mag	JHP I	MXP.	瓦	AC SC GL PL ONP OCC Mag OffP MXP TEX C LAB HHB Oi  T WG Oth	HB	TIIO	WG		Trom the SWIMD (1PT)
Subscription and Non-Subscription	ubscription																				
Bay Village	NS	6,442	Weekly	NA	Cuyahoga	Cuyahoga Bay Village	×	×	×	×									×		934.72
Beachwood	NS	2,966	Weekly	NA	Cuyahoga	Cuyahoga Beachwood	×	×	×	×	×	×	×	×		×		X	×	×	473.87
Bedford	SN	4,700	Weekly	NA	Cuyahoga	Bedford	×	XX	X	Χ	×	×	X	X					×		310.35
Bedford Heights	SN	2,705	Weekly	NA	Cuyahoga	Bedford Heights	×	X	×					×					×		297.00
Bentleyville	SN	336	Weekly	NA	Cuyahoga	Bentleyville	×	X	×					×	$\widehat{}$	X		X	×		109.00
Berea	SN	7,000	Weekly	NA	Cuyahoga	Berea	×	X	X	Χ			×	×	×	X		X	×		1,356.84
Bratenahl	SN	191	Weekly	NA	Cuyahoga Bratenahl	Bratenahl	×	X	×	Χ	X	×	×	×	$\widehat{}$	X		X	X	X	91.54
Brecksville	SN	7,054	Bi-Monthly	NA	Cuyahoga	Cuyahoga Brecksville	Χ	X	×	Χ	X	×	×	×		Χ		X	×	×	969.51
Broadview Heights	SN	6,826	Weekly	NA	Cuyahoga	Cuyahoga Broadview Heights	Χ	X	×	Χ	X	×	×	X					X		1,082.70
Brook Park	SN	8,370	Bi-Monthly	NA	Cuyahoga	Cuyahoga Brook Park	X	X	×	Χ	X	×	×	X						×	508.56
Brooklyn	SN	4,000	Weekly	NA	Cuyahoga Brooklyn	Brooklyn	×	X	×	X	×	×	×	×	$\widehat{}$	X		X	×	×	676.63
Brooklyn Heights	SN	617	Weekly	NA	Cuyahoga	Brooklyn Heights	×	X	X					X		X			X		179.83
Chagrin Falls Township	SN	42	Weekly	NA	Cuyahoga	Chagrin Falls Township	×	X	×		×			×							13.10
Chagrin Falls Village	NS	1,613	Weekly	NA	Cuyahoga	Chagrin Falls Village	×	X	×		×			×							358.99
Cleveland	SNW	13,000	Weekly	NA	Cuyahoga	Cleveland	X	X	×	Χ	×	×	×	X				Χ	×		2,748.87
Cleveland Heights	NS	15,815	Weekly	NA	Cuyahoga	Cleveland Heights	×	X	×	×	×	×	×	×	$\widehat{}$	X		X	×		2,677.09
Cuyahoga Heights	SN	280	Weekly	NA	Cuyahoga	Cuyahoga   Cuyahoga Heights	×	×	×	×	×			×	×	X		X	×	×	40.50
East Cleveland	SN	13,491	Weekly	NA	Cuyahoga	Cuyahoga   East Cleveland	×	X	×	X									×		65.83
Euclid	SN	17,500	Weekly	NA	Cuyahoga Euclid	Euclid	×	X	×	×				×					×		189.00
Fairview Park	SN	7,856	Weekly	NA	Cuyahoga	Cuyahoga   Fairview Park	×	X	×	X	×	×	×	×		×		X	×	×	1,103.50
Garfield Heights	SN	11,867	Weekly	NA	Cuyahoga	Garfield Heights	×	×	×	×	×			×					×		665.48
Gates Mills	NS	1,000	Weekly	NA	Cuyahoga	Gates Mills	×	×	×	×	×	×	×	×							205.08
Glenwillow	NS	217	Weekly	NA	Cuyahoga	Glenwillow	×	×	×	×				×					×		30.21
Highland Heights	NS	3,301	Weekly	NA	Cuyahoga	Highland Heights	×	X	×	×	×			×					×		457.36
Highland Hills	NS	152	Weekly	NA	Cuyahoga	Highland Hills	×	×	×		×	×		×							12.46
Hunting Valley	NS	300	Weekly	NA	Cuyahoga	Hunting Valley	×	×	×	×	×	×	×	×	$\widehat{}$	X			×		164.30
Independence	NS	2,960	Weekly	NA	Cuyahoga	Independence	×	×	×		×			×	$\widehat{}$	X		X	×		80.699
Lakewood	NS	22,172	Weekly	NA	Cuyahoga	Lakewood	×	×	×	×	×	×	×	×					×	×	4,023.85
Linndale	NS	52	Weekly	NA	Cuyahoga	Linndale	×	×	×	×											7.00
Lyndhurst	NS	5,736	Weekly	MA	Cuyahoga	Lyndhurst	×	×	×	×	×	×	×	×		×		×	×	×	1,310.10
Maple Heights	NS	10,500	Bi-Monthly	NA	Cuyahoga	Maple Heights	×	×	X	×	×		_		_	×		×	×	×	343.34

Residential Curbside Recycling Activities Used by the District Table III-4 (continued)

Curbside Recycling	Time of	# of	,	Average # of	S	Service Area					Ė	70 00	Motor	9	9	7				_	Longon Coldolone
Name	lype of	Households	rrequency or	Households	,,,,,,,	Townships/					₹	Types of Materials Accepted	Mater	lais	Cce	<u> </u>				<u>-</u>	recyclables Processed
Addre ss/Phone	onroside	Served	Collection	Participating	Couliny	Cities	AC S	AC SC GL	Ы	ONP	၁၁၀	Mag	¶∰(	IXP	EX	LAB	ONP OCC Mag OffP MXP TEX C LAB HHB Oil T WG Oth	L IIO	r WG		IIOIII IIIe aw MID (1 P.1)
	NS	1,200	Weekly	NA	Cuyahoga	Mayfield	×	×	×	×	X	×		×					×	×	179.21
Mayfield Heights	NS	5,200	Weekly	NA	Cuyahoga	Mayfield Heights	×	×	×	×									×		511.16
Middleburg Heights	NS	5,658	Weekly	NA	Cuyahoga	Cuyahoga Middleburg Heights	×	×	×	×								$\hat{}$	×		822.60
Moreland Hills	NS	1,475	Bi-Monthly	NA	Cuyahoga	Moreland Hills	×	×	×	×	×	×	×	×		×		×	×	×	427.35
Newburgh Heights	MNS	006	Weekly	NA	Cuyahoga	Newburgh Heights		×							×			$\hat{}$	×	×	11.00
North Olmsted	NS	11,659	Weekly	NA	Cuyahoga	Cuyahoga North Olmsted	X	X	X	×									×		1,053.34
North Royalton	NS	9,443	Bi-Monthly	NA	Cuyahoga	North Royalton	×	×	×	×	×	×	×	×					×	×	778.19
Oakwood	NS	1,180	Weekly	NA	Cuyahoga Oakwood	Oakwood	×	×	×	×	×								×		83.25
Olmsted Falls City	NS	3,800	Weekly	AN	Cuyahoga	Cuyahoga Olmsted Falls City	×	×	×	×									×		212.73
Olmsted Township	NS	3,000	Weekly	NA	Cuyahoga	Olmsted Township	×	×	×	×									×		397.50
	NS	1,354	Weekly	NA	Cuyahoga Orange	Orange	×	×	×	×	X	×	×	×				$\hat{}$	×		402.28
	NS	29,600	Weekly	NA	Cuyahoga Parma	Parma	×	X	×	×									×		3,819.00
Parma Heights	NS	6,140	Weekly	NA	Cuyahoga	Parma Heights	×	×	×	×	Χ	×	X	X	×				×	×	396.60
Pepper Pike	NS	2,337	Weekly	NA	Cuyahoga	Cuyahoga Pepper Pike	X	X	×		X								×		102.37
Richmond Heights	NS	5,236	Weekly	NA	Cuyahoga	Cuyahoga Richmond Heights	×	×	×					×				×	×		176.82
Rocky River	NS	10,166	Weekly	NA	Cuyahoga	Cuyahoga Rocky River	×	×	×	×						×		×	×		582.28
Seven Hills	NS	5,015	Weekly	NA	Cuyahoga	Cuyahoga Seven Hills	X	X	X	×	Χ			X				$\hat{}$	×		1,376.74
Shaker Heights	NS	10,500	Weekly	NA	Cuyahoga	Shaker Heights	×	X	X	×	X			×				×	×		1,877.60
	NS	7,400	Weekly	NA	Cuyahoga Solon	Solon	×	×	×	×	×			×	×	×		×	×	×	1,606.87
South Euclid	NS	9,900	Weekly	NA	Cuyahoga	Cuyahoga South Euclid	×	×	×	×		×	×	×		×		×	×	×	830.00
Strongsville	NS	15,680	Weekly	NA	Cuyahoga	Strongsville	×	×	×	×									×		1,119.87
University Heights	NS	4,114	Weekly	NA	Cuyahoga	Cuyahoga University Heights	×	×	×	×									×		226.01
/alley View	MNS	804	Weekly	NA	Cuyahoga	Cuyahoga Valley View										×		X	×	×	20.59
Walton Hills	NS	950	Weekly	NA	Cuyahoga	Walton Hills	×	×	×	×	×		×	×					×	×	215.10
Narrensville Heights	NS	3,510	Weekly	NA	Cuyahoga	Cuyahoga   Warrensville Heights	×	×	×										×	×	128.95
Nestlake	NS	14,752	Weekly	NA	Cuyahoga Westlake	Westlake	×	×	×	×	X							$\widehat{}$	×		1,314.40
Woodmere	NS	134	Weekly	NA	Cuyahoga Woodmere	Woodmere	×	X	×	×	×			×	×	×		X	×		17.67
				Tota	al Residentia	Total Residential Curbside Recycling															41,065.17

AC=aluminum containers; SC = steel/bi-metal containers; GL=glass containers; PL=plastic containers; ONP=newspaper; OCC=cardboard; Mag=magazines; OffP =office paper; MxP=mixed paper; TEX=clothing/fabrird/textiles; MNS=Modified Non-Subscription; NS=Non-Subscription Curbside Recycling; S=Subscription Curbside Recycling

Source: Cuyahoga County 2009 Curbside Recycling Summary (2009\_Total\_Muni\_RR.xls)

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

	Town of						T				Accep						Service Area			Recyclables	Process	ing Capac	ity (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс	sc			OffP			Арр	Oth	Other Explained	County	Townships/ Cities *	Populatio n Served	Hours Available to Public	Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Private and Public Sector Dr Abitibi Consolidated (458	op-Off Recyc	ling								F					Explanica					! 			
sites) 16065 Industrial Ln. Cleveland, OH 44135 (216) 961-3900	PA, PR, EU				×											Cuyahoga	all	461,324	24 Hours/7 Days a Week	12,382.14	100%R	DNR	DNR
Bay Village Service Center 31300 Naigle Rd. Bay Village, OH 44140	PA,DO					x			×		×					Cuyahoga	Bay Village	14,481	24 Hours/7 Days a Week		100% R	NA	NA
Bay Village Fire Department 28100 Wolf Rd. Bay Village, OH 44140	PA,DO	×														Cuyahoga	Bay Village	14,481	24 Hours/7 Days a Week	468.78	100% R	NA	NA
Bay Village Police Station 28000 Wolf Rd. Bay Village, OH 44140	PA,DO				×				×		×			x		Cuyahoga	Bay Village	14,481	24 Hours/7 Days a Week		100% R	NA	NA
Beachwood Service Department 25225 Fairmount Blvd. Beachwood, OH 44122	PA,DO	×	×	×	×		×				×					Cuyahoga	Beachwood	11,036	24 Hours/7 Days a Week	NA	100% R	NA	NA
Bedford Fire Department 165 Center Rd. Bedford, OH 44146	PA,DO	×														Cuyahoga	Bedford	12,851	24 Hours/7 Days a Week	NA NA	100% R	NA	NA
Bedford Service Center 100 Solon Rd. Bedford, OH 44146	PA,DO										×					Cuyahoga	Bedford	12,851	7:30 am - 3:30 pm M-F	NA.	100% R	NA	NA
Bedford Heights Service Garage 25401 Solon Rd. Bedford Heights, OH 44146	PA,DO						×	×				×	×	×		Cuyahoga	Bedford Heights	10,441	8:00 am - 4:00 pm		100% R	NA	NA
Bedford Heights Fire Station at City Hall 5661 Perkins Rd. Bedford Heights, OH 44146	PA,DO	×														Cuyahoga	Bedford Heights	10,441	7:00 am - 5:00 pm	22	100% R	NA	NA
Bedford Heights Jimmy Dimora Community Center 5615 Perkins Rd. Bedford Heights, OH 44146	PA,DO										×					Cuyahoga	Bedford Heights	10,441	8:00 am - 4:00 pm		100% R	NA	NA
Berea Fire Department 11 Berea Commons Berea, OH 44017	PA,DO	x														Cuyahoga	Berea	17,994	24 Hours/7 Days a Week	NA	100% R	NA	NA
Brecksville Service Garage 9023 Brecksville Rd. Brecksville, OH 44141	PA,DO	×	×	×	×	×	×	×	×	×	×		×	×		Cuyahoga	Brecksville	12,767	Saturdays 9am - 12 pm	NA	100% R	NA	NA
Broadview Heights Fire Station 1 3591 E. Wallings Rd. Broadview Heights, OH 44147	PA,DO	×														Cuyahoga	Broadview Heights	17,168	24 Hours/7 Days a Week		100% R	NA	NA
Broadview Heights Fire Station 2 9455 Broadview Rd. Broadview Heights, OH 44147	PA,DO	×									×					Cuyahoga	Broadview Heights	17,168	24 Hours/7 Days a Week	4	100% R	NA	NA
Broadview Heights City Hall 9543 Broadview Rd. Broadview Heights, OH 44147	PA,DO	×			×						×		×	×		Cuyahoga	Broadview Heights	17,168	7:30 am - 3:30 pm M-F		100% R	NA	NA
Brooklyn Service Garage 9400 Memphis Ave. Brooklyn, OH 44144	PA,DO				×	×		×	×	×	×			×		Cuyahoga	Brooklyn	10,316	8:00 am - 4:30 pm M-F	11.23	100% R	NA	NA
Brooklyn Heights Service Garage 233 Tuxedo Ave. Brooklyn Heights, OH 44131	PA,DO	×	×	×	×	×	×	×	×	×	×					Cuyahoga	Brooklyn Heights	1,443	8:00 am - 4:30 pm M-F	NA	100% R	NA	NA
Brook Park Service Department 19065 Holland Rd. Brook Park, OH 44142	PA,DO	×	×	×	×	×	×	×	×	×	×	×		×		Cuyahoga	Brook Park	19,053	7:00 am - 3:00 pm M-F	8.75	100% R	NA	NA
Cleveland Clark Metro Development Corporation 2511 Clark Ave. Cleveland, OH 44109	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland City Hall W. Third St. Entrance Cleveland, OH 44114	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Cleveland Foundation 1422 Euclid Ave. Cleveland, OH 44115	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Cleveland Medical Devices 4415 Euclid Ave. Cleveland, OH 44103	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Cleveland Municipal Parking Lot 1501 S. Marginal Rd. Cleveland, OH	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week	4018.64	100% R	NA	NA
Cleveland Convenient Food Mart 4701 Storer Ave. Cleveland, OH 44102	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland CVS Drug Store 13215 Shaker Sq. Cleveland, OH 44120	PA,DO	x	×	×	x	×	x				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Dave's Supermarket 13130 Shaker Sq. Cleveland, OH 44120	PA,DO	x	×	×	x	×	x				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Detroit Shoreway 6516 Detroit Ave. Cleveland, OH 44102	PA,DO	x	×	×	x	×	x				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Drug Mart 4170 Fulton Rd. Cleveland, OH 44144	PA,DO	×	×	×	×	×	×				×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA

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

															Service Area				Process	ing Capaci	ty (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс	SC	Mate	MxP	d ST	Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Cleveland Earle B. Turner Recreation Center 11300 Miles Ave. Cleveland, OH 43219	PA,DO	x	x	x	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Edgewater Park (upper and lower) 8701 Lakeshore Blvd., NE Cleveland, OH 44108	PA,DO	x	x	×	х	x	x		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Euclid Euclid Beach Park 16301 Lake Shore Blvd. Cleveland, OH 44108	PA,DO	х	x	×	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Fire Station No. 6 17210 Harvard Ave. Cleveland, OH 44128	PA,DO	x	x	×	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Gordon Park Cleveland, OH 44103	PA,DO	х	x	x	x	x	х		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Humphrey Park 207 E 161st St Cleveland, OH 44110	PA,DO	x	x	×	х	x	х		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland John Adarns High School 3817 Martin Luther King Jr. Blvd. Cleveland, OH 44105	PA,DO	x	x	×	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Lexington Bell Community Center 7724 Lexington Ave. Cleveland, OH 44103	PA,DO	x	x	×	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Collinwood Public Library 856 E. 152nd St. Cleveland, OH 44110	PA,DO	х	х	×	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Liquid Planet 11002 Clifton Blvd. Cleveland, OH 44102	PA,DO	x	×	×	х	×	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Memorial/Nottingham Library 17109 Lakeshore Blvd. Cleveland, OH 44110	PA,DO	x	×	×	х	×	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Nautica Parking Lot Center St. Cleveland, OH 44113	PA,DO	x	×	×	х	×	×		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Old Brooklyn Community School 4430 State Rd. Cleveland, OH 44109	PA,DO	х	x	×	х	x	x		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week	Included in Cleveland total on	100% R	NA	NA
Cleveland Pilgrim Congregational United Church of Christ 2592 W. 14th St. Cleveland, OH 44113	PA,DO	х	x	×	х	x	х		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week	previous page.	100% R	NA	NA
Cleveland Glenville Recreation Center 680 E. 113th St. Cleveland, OH 44108	PA,DO	х	х	x	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Cudell Recreation Center 1910 West Blvd. Cleveland, OH 44102	PA,DO	х	х	×	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Zelma W. George Recreation Center 3165 Martin Luther King Jr. Dr. Cleveland, OH 44104	PA,DO	x	x	x	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Arab American Community Center 3550 W. 117th St. Cleveland, OH 44111	PA,DO	х	х	×	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Recreation Center 4125 Fulton Rd. Cleveland, OH 44144	PA,DO	х	х	×	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Recreation Center 4391 W. 168th St. Cleveland, OH 44135	PA,DO	х	х	x	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Michael J. Zone Recreation Center 6301 Lorain Ave. Cleveland, OH	PA,DO	х	x	×	х	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Recreation Center 8611 Hough Ave. Cleveland, OH 44106	PA,DO	х	x	×	х	x	х		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Rhodes High School at Harper Elementary School 5515 Ira Ave. Cleveland, OH 44144	PA,DO	х	х	x	х	x	х		х					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Rock Bottom Restaurant 200 Sycamore St. Cleveland, OH 44113	PA,DO	x	x	×	х	x	х		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland St. Procop Church 3181 W. 41st St. Cleveland, OH 44109	PA,DO	х	x	×	x	x	x		x					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland The Harp Restaurant 4408 Detroit Ave. Cleveland, OH 44113	PA,DO	x	x	×	х	x	х		×					Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA

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

															Service Area				Process	ing Capaci	ity (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс		pes of	OffP		Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Cleveland Trinity United Church of Christ 3525 W. 25th St. Cleveland, OH 44109	PA,DO	x	x	x	x	x	x			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Union Elementary School 6701 Union Ave. Cleveland, OH 44105	PA,DO	x	x	x	x	×	x			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland West Side Market 1979 W. 25th St. Cleveland, OH 44113	PA,DO	x	х	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Whisky Island Marina 2800 Whiskey Island Cleveland, OH 44102	PA,DO	x	x	x	х	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Benedictine High School 2900 Martin Luther King Jr. Blvd. Cleveland, OH 44104	PA,DO	x	x	x	x	x	×			×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland University Circle, Inc. 10831 Magnolia Dr. Cleveland, OH 44106	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Goodrich Gannett 1400 E. 55th St. Cleveland, OH 44103	PA,DO	x	х	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Beachland Ballroom 15711 Waterloo Rd. Cleveland, OH 44110	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Burton Bell Carr 7201 Kinsman Ave. Cleveland, OH 44104	PA,DO	x	x	x	x	x	×			×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Carl & Louis Stokes School 4225 Central Ave. Cleveland, OH 44115	PA,DO	x	x	x	x	x	x			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Cleveland Central Catholic High School 6550 Baxter Ave. Cleveland, OH 44105	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Daniel E. Morgan School 8912 Morris Ct. Cleveland, OH 44106	PA,DO	x	х	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Fire Restaurant 13220 Shaker Sq. Cleveland, OH 44120	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Helping Hands Day Care 798 E. 85th St. Cleveland, OH 44119	PA,DO	x	x	х	х	x	x			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Kindercare 1891 E. 93rd St. Cleveland, OH 44105	PA,DO	х	х	х	x	x	x			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Martin L. King School 1651 E. 71st St. Cleveland, OH 44103	PA,DO	x	х	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Ronald McDonald House 10415 Euclid Ave. Cleveland, OH 44106	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland St. Martin Deporres High School 6111 Lausche Ave. Cleveland, OH 44103	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland University Circle E. 105th & Euclid Ave. Cleveland, OH 44106	PA,DO	x	x	x	x	x	x			×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland University Circle Ford Dr. & E. 115th St. Cleveland, OH 44106	PA,DO	x	x	x	x	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Villa Angela-St. Joseph High School 1601 E. 85th St.	PA,DO	x	x	x	x	x	×			×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland, OH 44106  Cleveland  Nautica Queen 1151 Main Ave. Cleveland, OH 44113	PA,DO	х	x	х	x	x	×			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Bingham Apartments 1278 W. 9th St. Cleveland, OH 44113	PA,DO	x	x	х	×	x	x			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Harry Buffalo 2120 E. 4th St. Cleveland, OH 44115	PA,DO	х	x	х	×	x	×			x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Ritz Carlton Hotel 1515 W. 3rd St. Cleveland, OH 44113	PA,DO	x	x	х	x	x	×			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Spice of Life Catering 3901 Lakeside Ave. Cleveland, OH 44114	PA,DO	x	x	x	x	x	×			х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA

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

																Service Area				Process	ing Capaci	ty (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс	sc	pes of	Mate	_	MxP	Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Cleveland Sutton Hardware 3848 Prospect Ave. Cleveland, OH 44115	PA,DO	x	x	x	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Trinity Cathedral 2230 Euclid Ave. Cleveland, OH 44115	PA,DO	x	x	×	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Kamm's Corners 17407 Lorain Ave. Cleveland, OH 44111	PA,DO	x	×	×	×	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Planet Aid 13810 Enterprise Ave. Cleveland, OH 44135	PA,DO	x	x	×	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Luxe Kitchen 6695 Detroit Ave. Cleveland, OH 44102	PA,DO	x	x	x	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland 78th Street Studio 1305 W. 80th St. Cleveland, OH 44102	PA,DO	x	x	×	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Don's Lighthouse 8905 Lake Ave. Cleveland, OH 44102	PA,DO	x	x	×	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Habitat For Humanity 2110 W. 110th St. Cleveland, OH 44102 (216) 429-3631	PA,DO	x									х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland John Marshall High School 3952 W. 140th St. Cleveland, OH 44111	PA,DO	x	x	x	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Murray's Auto Parts 3750 W. 25th St. Cleveland, OH 44109	PA,DO	x	x	x	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Ohio City Near West Development 2525 Market Ave. Cleveland, OH 44113	PA,DO	х	x	×	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Patrolman's Association 1303 W. 58th St. Cleveland, OH 44102	PA,DO	×	x	×	x	х	х				х				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Puritas RTA Depot W. 154th St. Cleveland, OH 44135	PA,DO	x	x	x	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland St. Coleman's Church 2027 W. 65th St. Cleveland, OH 44102	PA,DO	x	x	x	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Stonebridge Apartments 1500 Detroit Ave. Cleveland, OH 44113	PA,DO	x	x	x	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Rear of Charles V. Carr Center Service Facility 5600 Cedar Ave. Cleveland, OH 44103	PA,DO	x	x	×	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Stamps Service Facility 4150 S. Marginal Rd. Cleveland, OH 44114	PA,DO	x	x	x	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Lorain Service Facility 14550 Lorain Ave. Cleveland, OH 44111	PA,DO	x	x	x	x	x	x				x				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Ridge Road Transfer Station 3727 Ridge Rd. Cleveland, OH 44144	PA,DO	x	x	x	x	x	x				×				Cuyahoga	Cleveland	431,363	24 Hours/7 Days a Week		100% R	NA	NA
Cleveland Heights Cleveland Heights Service Center 14200 Superior Rd. Cleveland Heights, OH 44118	PA,DO										x				Cuyahoga	Cleveland Heights	45,414	24 Hours/7 Days a Week	NA	100% R	NA	NA
Cuyahoga Heights Fire Department 5480 Grant Ave. Cuyahoga Heights, OH 44125	PA,DO	x													Cuyahoga	Cuyahoga Heights	529	8:00 am - 4:00 pm M-F	450	100% R	NA	NA
Cuyahoga Heights Service Garage 7201 Canal Rd. Cuyahoga Heights, OH 44125	PA,DO	×			x		х	x			x		x		Cuyahoga	Cuyahoga Heights	529	8:00 am - 4:00 pm M-F	4.50	100% R	NA	NA
Euclid Fire Station 1 775 E. 222nd St. Euclid, OH 44123	PA,DO	x			x				x	х	х				Cuyahoga	Euclid	46,998	24 Hours/7 Days a Week		100% R	NA	NA
Euclid Fire Station 2 1500 Chardon Rd. Euclid, OH 44123	PA,DO	x			x				x	х	х				Cuyahoga	Euclid	46,998	24 Hours/7 Days a Week	388.26	100% R	NA	NA
Euclid Fire Station 3 25970 E. 260th St. Euclid, OH 44123	PA,DO	x							x	x	x				Cuyahoga	Euclid	46,998	24 Hours/7 Days a Week		100% R	NA	NA
Fairview Park Fire Department 20777 Lorain Rd. Fairview Park, OH 44126	PA,DO	x									x				Cuyahoga	Fairview Park	15,622	24 Hours/7 Days a Week	3.00	100% R	NA	NA

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

																	Service Area				Process	ing Capaci	ty (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс	Ty SC	pes of	Mate	rials A	MxP	st	Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Garfield Heights Service Department 13600 McCracken Rd. Garfield Heights, OH 44125	PA,DO							x	x		x			x		Cuyahoga	Garfield Heights	27,479	NA	. NA	100% R	NA	NA
Garfield Heights Fire Department 5115 Turney Rd. Garfield Heights, OH 44125	PA,DO	x														Cuyahoga	Garfield Heights	27,479	NA		100% R	NA	NA
Gates Mills Town Hall 1470 Chagrin River Rd. Gates Mills, OH 44040	PA,DO		x	x	x	x			x	x	x					Cuyahoga	Gates Mills	2,259	8:00 am - 4:00 pm	NA	100% R	NA	NA
Glenwillow Village Service Garage 29555 Pettibone Rd. Glenwillow, OH 44139	PA,DO							x				x		x		Cuyahoga	Glenwillow	615	8:00 am - 5:00 pm M-F	1.51	100% R	NA	NA
Highland Heights Highland Heights Service Department 5827 Highland Rd. Highland Heights, OH 44143	PA,DO									x	x					Cuyahoga	Highland Heights	8,633	24 Hours/7 Days a Week	7.50	100% R	NA	NA
Hunting Valley Hunting Valley Service Department 38251 Fairmount Blvd. Hunting Valley, OH 44022	PA,DO							x				×		х		Cuyahoga	Hunting Valley	3,758	8:00 am - 4:00 pm M-F	1.51	100% R	NA	NA
Lakewood Service Department 12920 Berea Rd. Lakewood, OH 44111	PA,DO	x	x	x	х	x	x	x	x	x	x	x	×	x		Cuyahoga	Lakewood	50,251	7:00am - 3:00pm M-F 8:00 am - 12 pm Sat	15.42	100% R	NA	NA
Lyndhurst Fire Station 5301 Mayfield Rd. Lyndhurst, OH 44124	PA,DO	х														Cuyahoga	Lyndhurst	13,728	24 Hours/7 Days a Week	5.40	100% R	NA	NA
Lyndhurst Service Garage 5301 Mayfield Rd. Lyndhurst, OH 44124	PA,DO											x		х		Cuyahoga	Lyndhurst	13,728	11:30 am - 3:30 pm Sat - Sun	5.40	100% R	NA	NA
Maple Heights Fire Department 5520 Warrensville Center Rd. Maple Heights, OH 44137	PA,DO	x									x					Cuyahoga	Maple Heights	23,485	24 Hours/7 Days a Week	. NA	100% R	NA	NA
Maple Heights Service Department 5501 Dunham Rd. Maple Heights, OH 44137	PA,DO										x			х		Cuyahoga	Maple Heights	23,485	24 Hours/7 Days a Week		100% R	NA	NA
Mayfield Village Service Department 6621 Wilson Mills Rd. Mayfield Village, OH 44143	PA,DO										x			х		Cuyahoga	Mayfield Village	3,098	7:00 am - 3:00 pm M-F 9:00 am - 1 pm Sat	NA	100% R	NA	NA
Middleburg Heights Fire Department 15800 Bagley Rd. Middleburg Heights, OH 44130	PA,DO	x														Cuyahoga	Middleburg Heights	14,812	24 Hours/7 Days a Week	105.87	100% R	NA	NA
Middleburg Heights Service Department 7375 Engle Rd. Middleburg Heights, OH 44130	PA,DO					×										Cuyahoga	Middleburg Heights	14,812	24 Hours/7 Days a Week		100% R	NA	NA
Newburgh Heights Municipal Center 4000 Washington Park Blvd. Newburgh Heights, OH 44105	PA,DO										x					Cuyahoga	Newburgh Heights	2,111	24 Hours/7 Days a Week	NA NA	100% R	NA	NA
Newburgh Heights Newburgh Heights Service Garage 4071 E. 49th St. Newburgh Heights, OH 44105	PA,DO											x		х		Cuyahoga	Newburgh Heights	2,111	8:00 am - 4:30 pm M-F		100% R	NA	NA
North Olmsted Service Garage 5200 Dover Center Rd. North Olmsted, OH 44070	PA,DO								×	x	x			х		Cuyahoga	North Olmsted	31,053	Dawn - Dusk	165.47	100% R	NA	NA
North Olmsted North Olmsted Fire Department 24291 Lorain Rd. North Olmsted, OH 44070	PA,DO	х														Cuyahoga	North Olmsted	31,053	24 Hours/7 Days a Week	105.47	100% R	NA	NA
North Randall Fire Department 21937 Miles Rd. North Randall, OH 44128	PA,DO	х														Cuyahoga	North Randall	823	24 Hours/7 Days a Week	NA	100% R	NA	NA
North Royalton Service Garage 10789 Royalton Rd. North Royalton, OH 44133	PA,DO	x	x	x	x	x	x	x	x	x	x	x	×	x		Cuyahoga	North Royalton	29,220	9:00 am - 12:00 pm M,W,F 12:00pm - 3:00 pm T, Th 8:00 am - 3:00 pm Sat	144.43	100% R	NA	NA
Oakwood Fire Department 24800 Broadway Ave. Oakwood, OH 44146	PA,DO	x														Cuyahoga	Oakwood	3,703	24 Hours/7 Days a Week	4.25	100% R	NA	NA
Oakwood Service Department 19800 W. Kirk Rd. Oakwood, OH 44146	PA,DO							x						x		Cuyahoga	Oakwood	3,703	Varies	7.23	100% R	NA	NA
Olmsted Falls Service Department 8061 Brookside Dr. Olmsted Falls, OH 44138	PA,DO										x	x		x		Cuyahoga	Olmsted Falls	8,104	NA	NA	100% R	NA	NA
Olmsted Township Town Hall 26900 Cook Rd. Olmsted Twp., OH 44138	PA,DO	х	x	x	х	x		x		x	x	x		x		Cuyahoga	Olmsted Falls	12,945	24 Hours/7 Days a Week	8.75	100% R	NA	NA
Orange Fire Department 4600 Lander Rd. Orange, OH 44022	PA,DO	х								×				x		Cuyahoga	Orange	3,240	24 Hours/7 Days a Week 7:00 am - 3:00 pm M-F	7.89	100% R	NA	NA
Orange Service Department 4160 Lander Rd. Orange, OH 44022	PA,DO	x										x		x		Cuyahoga	Orange	3,240	7:00 am - 3:00 pm M-F		100% R	NA	NA

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

	Tuno of																Service Area			Recyclables	Process	sing Capacit	y (tons)
Facility/Activity Name, Address, Phone	Type of Facility or							ypes o								County	Townships/	Population	Hours Available to Public	Processed from	% of Material	Daily	Annual
Parma Fire Station 6655 Ridge Rd. Parma, OH 44129	Activity PA,DO	AC x	GL	PL	ONP	OCC	SC	LAB	Mag	OffP	MxP x	ST	Арр	Oth	Other Explained	Cuyahoga	Cities *	77,274	24 Hours/7 Days a Week	the SWMD (TPY)	from Sector: 100% R	(TPD) NA	(TPY)
Parma Fire Station #2 Parma, OH 44129	PA,DO	x									х					Cuyahoga	Parma	77,274	24 Hours/7 Days a Week		100% R	NA	NA
Parma Fire Station #3 Parma, OH 44129	PA,DO	x									x					Cuyahoga	Parma	77,274	24 Hours/7 Days a Week	1529.99	100% R	NA	NA
Parma Fire Station #4 Parma, OH 44129	PA,DO	х									x					Cuyahoga	Parma	77,274	24 Hours/7 Days a Week	1323.55	100% R	NA	NA
Parma Fire Station #5 Parma, OH 44129	PA,DO	x									х					Cuyahoga	Parma	77,274	24 Hours/7 Days a Week		100% R	NA	NA
Parma Ridgewood Golf Course 6506 Ridge Rd. Parma, OH 44129	PA,DO	х									x					Cuyahoga	Parma	77,274	24 Hours/7 Days a Week		100% R	NA	NA
Parma Heights Parma Heights Fire Department 6184 Pearl Rd. Parma Heights, OH 44130	PA,DO	x														Cuyahoga	Parma Heights	19,586	24 Hours/7 Days a Week	1.47	100% R	NA	NA.
Parma Heights Parma Heights Service Garage 6200 Pearl Rd. Parma Heights, OH 44130	PA,DO	х		x							x			x		Cuyahoga	Parma Heights	19,586	7:00 am - 3:00 pm M-F	1.40	100% R	NA	NA
Pepper Pike City Hall Complex 28000 Shaker Blvd. Pepper Pike, OH 44124	PA,DO	x	x	x	x	x	x		x	x	x			x		Cuyahoga	Pepper Pike	5,711	24 Hours/7 Days a Week	574.05	100% R	NA	NA
Richmond Heights Service Department 26260 Chardonview Dr. Richmond Heights, OH 44143	PA,DO	x	×	x	x	×	x	x	x	×	x		×	x		Cuyahoga	Richmond Heights	10,147	8:00 am - 4:00 pm M-F	NA	100% R	NA	NA
Rocky River City Hall 21012 Hilliard Blvd Rocky River, OH 44116	PA,DO	x									х					Cuyahoga	Rocky River	18,735	7:00 am - 3:30 pm M-F		100% R	NA	NA.
Rocky River Service Department 22401 Lake Rd. Rocky River, OH 44116	PA,DO	x	×	x	х	x	x	x	х	x	х	х	×	х		Cuyahoga	Rocky River	18,735	7:00 am - 3:30 pm M-F	188.69	100% R	NA	NA
Rocky River Transfer Station 22401 Lake Rd. Rocky River, OH 44116	PA,DO	х	×	x	х	x	x	х	x	х	х	х	×	х		Cuyahoga	Rocky River	18,735	7:00 am - 3:30 pm M-F		100% R	NA	NA
Seven Hills City Hall 7325 Summitview Dr. Seven Hils, OH 44131	PA,DO								x	×	x	x		x		Cuyahoga	Seven Hills	11,538	24 Hours/7 Days a Week 8:00 am - 6:00pm	7.50	100% R	NA	NA NA
Shaker Heights Service Department 15600 Chagrin Blvd. Shaker Heights, OH 44120	PA,DO	x	×	x	х	×	x			×	x		×	x		Cuyahoga	Shaker Heights	26,214	8:00 am - 4:00 pm Sat-Sun	NA	100% R	NA	NA
Solon Service Department 6600 Cochran Rd. Solon, OH 44139	PA,DO	x	×	x	x	x	x		x	×	x	x		x		Cuyahoga	Solon	21,883	24 Hours/7 Days a Week 7:15 am - 3:45 pm M-F	NA.	100% R	NA	NA
South Euclid Fire Department 1349 S. Green Rd. South Euclid, OH 44121	PA,DO	×														Cuyahoga	South Euclid	21,031	24 Hours/7 Days a Week	NA	100% R	NA	NA
Strongsville Fire Station #1 11297 Webster Rd. Strongsville, OH 44136	PA,DO	х									x					Cuyahoga	Strongsville	42,378	24 Hours/7 Days a Week		100% R	NA	NA
Strongsville Fire Station #2 15939 Drake Rd. Strongsville, OH 44136	PA,DO	x									x					Cuyahoga	Strongsville	42,378	24 Hours/7 Days a Week		100% R	NA	NA
Strongsville Fire Station #3 22000 Albion Rd. Strongsville, OH 44149	PA,DO	x									x					Cuyahoga	Strongsville	42,378	24 Hours/7 Days a Week	2548.31	100% R	NA	NA
Strongsville Fire Station #5 18600 Royalton Rd. Strongsville, OH 44136	PA,DO	х									x					Cuyahoga	Strongsville	42,378	24 Hours/7 Days a Week		100% R	NA	NA
Strongsville Service Center 16099 Foltz Pkwy. Strongsville, OH 44149	PA,DO	х	x	x	х	x	х	х	х	x	х	х	x	х		Cuyahoga	Strongsville	42,378	8:00am - 6:00pm M-F 8:00 am 2:00 pm Sat 12:00 pm - 5:00 pm Sun		100% R	NA	NA
University Heights Service Department 2300 Warrensville Center Rd. University Heights, OH 44118	PA,DO				х	x		х	х		х	х		х		Cuyahoga	University Heights	12,571	7:30 am - 4:00 pm	103.04	100% R	NA	NA
Valley View City Hall 6832 Hathaway Rd. Valley View, OH 44125	PA,DO										х					Cuyahoga	Valley View	13,520	24 Hours/7 Days a Week	NA NA	100% R	NA	NA
Warrensville Heights Fire Station 4301 Warrensville Center Rd. Warrensville Heights, OH 44128	PA,DO	x									x					Cuyahoga	Warrensville Heights	30,331	24 Hours/7 Days a Week	NA	100% R	NA	NA
Westlake Community Services Center 29694 Center Ridge Rd. Westlake, OH 44145	PA,DO	x	×	x	x											Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week	NA NA	100% R	NA	NA
Westlake Crossings Village Apartments 1630 Crossings Parkway Westlake, OH 44145	PA,DO	х	×	x	х											Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week		100% R	NA	NA

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

																Service Area				Process	ing Capac	city (tons)
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONF	осс	SC	LAB	 	MxP		Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
Westlake King James Condominium 800 Brick Mill Run Westlake, OH 44145	PA,DO	x	×	×	x										Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week		100% R	NA	NA
Westlake Schneider's Trailer Park 26741 Center Ridge Rd. Westlake, OH 44145	PA,DO	×	×	x	×										Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week		100% R	NA	NA
Westlake Sturbridge Square Apartments 1500 Westford Circle Westlake, OH 44145	PA,DO	×	×	x	×										Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week	NA NA	100% R	NA	NA
Westlake Village in the Park Apartments 27433 Detroit Rd. Westlake, OH 44140	PA,DO	x	×	×	x										Cuyahoga	Westlake	30,331	24 Hours/7 Days a Week		100% R	NA	NA
Special Collections Household Hazardous Waste																! 						
Collection Tire Sweep	PA PA										×		х		Cuyahoga	All	1,364,031	Varies Varies	314.11 N/A	100%R 100%R	NA NA	NA NA
Tire Roundup	PA PA										X				Cuyahoga	All All	1,364,031	Varies Varies	209.51 699.30	100%R 100%R 70%R;30%C	NA NA	NA NA
Electronics Collections Mercury Collection	PA PA												x		Cuyahoga	All	1,364,031	Varies	Included in HHW	100%R	NA	NA
Phone Book Recycling Processors	PA												х		Cuyahoga	All	1,364,031	Varies	416.75	100%R	NA	NA
Aardvark Industries 8401 Almira Ave. Cleveland, OH 44102 (216) 825-3085	PR,Pro												х	Wood pallets (amounts unknown)	Cuyahoga	10,11,15,16,20 21,27,28,29,48	461,324	NA	DNR	50%C 50%I	DNR	DNR
Able Alloy 3500 W. 140th St. Cleveland, OH 44111 (216) 251-6110	PA,SY	х											x	Copper (150 tons)	Cuyahoga	15 28 39 41 42 44 45 58	461,324	8:00am-4:30pm M-F 8:00am-noon Sat	340.00	40%R 30%C 30%I	5	1,300
Akron-Canton Waste Oil Co. 1701 Sherric Rd. SE Canton, OH 44707 (330) 455-7940	PR,Pro												х	Used oil (4160 tons); used antifreeze (240 tons)	Cuyahoga	all	461,324	NA	4,400.00	100%C	17.25	4,400
Alloy Exchange 300 Rockford Park Dr. NE Rockford, MI 49341 (616) 863-0640	PR			х										•	Cuyahoga	15	461,324	NA	501.98	100%I	38.00	9,880
All Scrap Salvage 3550 W. 140th St. Cleveland, OH 44111 (216) 941-7100	PA,Pro,SY	x					х						х	Copper (417.5 tons); other non ferrous metals (287 tons); catalytic converters (3.12	Cuyahoga	9 15 28 45 48	461,324	7:30am-5:00pm M-F 7:30am-noon Sat	7,193.62	10%R 80%C 10%I	100	30,000
Aluminum Cans For Burned Children 3100 E. 45th St., Suite 214 Cleveland, OH 44127 (216) 883-6633	PA,BR	х												tons)	Cuyahoga	1,2,3,4,6,9,10,11 15,17,18,19,20,21 24,27,28,30,31,34 37,39,41,44,46,47 48,52,53,54,55,57	461,324	DNR	DNR	DNR	DNR	DNR
American Metal Recycling 13170 York Rd. N. Royalton, OH 44133 (440) 237-1500	PA,Pro,SY	х					х						х	Copper, other non-ferrous metals, bi-metal/tin cans, white goods, other ferrous (amounts not given)	Cuyahoga	DNR	461,324	8:00am-4:30pm M-F 8:00am-1:00pm Sat	DNR	85%R 15%C	DNR	DNR
Amware Recycling 19100 Holland Rd. Brook Park, OH 44142 (440) 234-4081	PA,BR,Pro, DO			х		х							x	White goods (300 tons)	Cuyahoga	3,4,6,9,10,15, 21,24,27,28, 30,31,33,34,37, 39,53,57,58	461,324	6:30am-4:30pm M-F	21,100.00	50%C 50%I	200	50,000
Battery Empire 13049 Triskett Rd. Cleveland, OH 44111 (216) 252-4666	PA,O							x							Cuyahoga	15	461,324	8:30am-5:00pm M-F 10am-3pm Sat	25.03	25%R 50%C 25%I	DNR	DNR
BBN Oil Recycling 6442 J. Metro Ct. Bedford Heights, OH 44146 (216) 786-1888	PR, O												x	Used oils, antifreeze, oily waters (96 tons total - could not break it down)	Cuyahoga	All except 5 and 29	461,324	NA	96.00	1%R 10%C 89%I	DNR	DNR
Bulldog Battery 37646 Vine St. Willoughby, OH 44094 (440) 942-2555	PA,BB							х							Cuyahoga	all	461,324	8:00am-6:00pm M-F 9:00am-5:00pm Sat	1,300.00	10%R 40%C 50%I	DNR	2,600
Caraustar Recycling 3400 Vega Ave. Cleveland, OH 44113 (216) 961-5060	PA,BR,Pro BB,DO	x		х	×	х				х					Cuyahoga	35,36,42,45,53,56	461,324	7:00am-3:30pm M-F	37,060.00	13.5%R 61%C 25.5%I	140	37,500
Cell Phones For Cancer 30275 Bainbridge Rd., Suite 3A Solon, OH 44139 (216) 970-0177	PA,BR,BB	x	x	x	x	x							х	Copper (1 ton) other batteries (0.15 tons) computers/elec tronics (6 tons)	Cuyahoga	2,3,4,5,6,11,13,14, 15 16,19,22,24,26,30 32,33,34,35,43,46 47,48,49,50,51,52, 54,57,58	461,324	9:00am-5:00pm M-F 9:00am-1:00pm Sat	22.43	25%R 75%C	1	313
City Barrel & Drum 2881 East 91st St. Cleveland, OH 44104 (216) 791-5777	PR,O						х								Cuyahoga	15 51	461,324	NA	39.60	100%l	DNR	DNR
Cleveland Furniture Bank 6610 Biddulph Rd. Cleveland, OH 44144 (216) 459-2265	PA, DO												x	White goods (21 tons) fumiture (435 tons) clothes (18 tons) housewares (42 tons)	Cuyahoga	60	461,324	9:00am-8:00pm M-F 9:00am-7:00pm Sat	516.00	90%R 10%C	3.3	1,000
Computers Assisting People 3150 Payne Ave. Cleveland, OH 44114 (216) 781-4131	PR,O												х	Computers/elec tronics (amounts not given)	Cuyahoga	DNR	461,324		DNR	DNR	DNR	DNR
Federal Metal Co. 7250 Division St. Oakwood Village, OH 44146 (216) 232-8700	PR,Pro,MRF												x	Brass, bronze, copper (amounts unknown)	Cuyahoga	DNR	461,324	NA	DNR	unknown	100	26,000
Ferrous Processing & Trading 8550 Aetna Rd. Cleveland, OH 44105 (216) 441-3800	PA,BR,Pro	x					х	х							Cuyahoga	All except 7,26, 29,32,38	461,324	7:00am-4:00pm M-F 7:00am-noon Sat	258,498.24	75%C 25%I	56000	672,000

#### Table III-5 (continued) Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities and HHW Collection Used by the District

						Service Area				Processing Capacity (tons)											
Facility/Activity Name, Address, Phone	Type of Facility or Activity	AC	GL	PL	ONP	осс	SC	pes of	offP	MxP	App	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material	Daily (TPD)	Annual (TPY)
Gateway Recycling 4133 E. 49th St. Cuyahoga Heights, OH 44125 (216) 341-8777	PR,Pro				х	х				х				Cuyahoga	8 16 27 37 53	461,324	NA	55,297.00	8%R 40%C 52%l	DNR	DNR
Goodwill Industries 2295 E. 55th St. Cleveland, OH 44103 (216) 431-8300	PR,Pro						х					х	Computers/electorics (1.5 tons); cloth/fabric (900 tons)	Cuyahoga	15 21 34 37 46	461,324	NA	902.50	95%R 5%C	4.4	910
Greater Cleveland Habitat For Humanity 2110 W. 110th St. Cleveland, OH 44102 (216) 429-1299	PA,O											х	Furniture (167.22 tons) computers/electronics (1.225 tons) long list of other items such as ceiling fans, ceramic tiles, etc.	Cuyahoga	all	461,324	10:00am-4:00pm Wed 9:00am-3:00pm Sat	563.74	80%R 15%C 5%I	6.3	1,250
Horwitz & Pintis Co. 1604 Tracy St. Toledo, OH 43605 (419) 666-2220	PR,Pro						х							Cuyahoga	15	461,324	NA	110.00	100%l	15.4	4,000
I. Schuman Co. 22500 Alexander Rd. Bedford, OH 44146 (440) 439-2300	PR,Pro											х	Other non- ferrous metals (500 tons)	Cuyahoga	15	461,324	NA	500.00	100%C	208	50,000
Infoshred.net 23800 Corbin Dr. Bedford Heights, OH 44128 (216) 663-8910	PR								х					Cuyahoga	all	461,324	NA	1,200.00	100%C&I	18	4,500
Jack M. Levine & Sons, Inc. 3360 E. 79th St. Cleveland, OH 44127 (216) 641-3485	PA, BR, EU, Pro,SY,ABP	х						х				х	copper, other nor ferrous metals, white goods (no freon), other ferrous (no amounts given)	Cuyahoga	2,3,4,6,9,10,11,12,15 16,17,18,19,21,29,30 31,32,33,34,36,40,43 44,45,46,47,50,51,52 54,57,59	461,324	9:00am-5:00pm M-F 9:00am-1:00pm Sat	DNR	60%R 20%C 20%l	DNR	DNR
Kimble Transfer & Recycling 2295 Bolivar Rd. SW Canton, OH 44706 (330) 343-1226	PA,MRF		x	х		х			х			х	Other ferrous metals (1,083.96 tons) other non-ferrous metals (337.51 tons)	Cuyahoga	24,32	461,324	6:00am-4:00pm M-F 7:00am-noon Sat	1,587.01	80%R 19%C 1%I	250	91,250
KJ Plastics 415 N. Broad St. Lansdale, PA 19446 (215) 361-8222	PR,BR,Pro			х										Cuyahoga	DNR	461,324	NA	50.00	100%l	75	18,750
Lorain County Resource Recovery Complex Republic Waste 43650 Oberlin-Elyria Rd. Oberlin, OH 44074 (440) 774-3100	PA, MRF, DO	x	x	х	x	х	х					х	Yard Waste = 3649 tons (from Rocky River)	Cuyahoga	15 20 44 48 53	461,324	8:00 am - 4:00 pm M-F 8:00 am - 12 noon Sat	11,455.00	92%R 6%C 2%I	400	104,000
Metallic Resources 2116 Enterprise Pkwy. Twinsburg, OH 44087 (330) 425-3155	PR,Pro											×	Copper (21 tons) other non-ferrous metals (6 tons)	Cuyahoga	3 15	461,324	NA	27.00	100%l	5063.49	1,276,000
Metalico Annaco, Inc. 943 Hazel St. Akron, OH 44309 (330) 376-1400	PA,SY											x	Other non- ferrous metals (688 tons) other ferrous metals (1299 tons)	Cuyahoga	4 10 15 19 24 39 57 58	461,324	8:00am-4:30pm M-F 8:00am-11:30am Sat	1,987.00	100%C	600	135,000
Medina Mulch 7000 Norwalk Rd. Medina, OH 44258 (330) 722-3880	PA,DO											х	Wood pallets (1666.67 tons)	Cuyahoga	10 15 16 44 45 53	461,324	8:00am-4:00pm M-F	1,666.67	2%R 98%C	DNR	DNR
Middlefield Pallet Inc. 15940 Burton Windsor Rd. Middlefield, OH 44062 (440) 632-0553 Mondo Polymer	PA,EU,Pro					х						х	Wood pallets (4225 tons)	Cuyahoga	15 19 39	461,324	7:00am-3:00pm M-F	4,417.00	100%l	20	5,200
P.O. Box 250 27620 SR 7 Reno, OH 45773 (740) 376-9396	PR,EU			х										Cuyahoga	1 15 28 48 58	461,324	24hours/day M-F As needed Sat & Sun	10.00	100%C	25	6,000
Niles Iron & Metal 700 S. Main St. Niles, OH 44446 (330) 652-2262	PA,Pro, SY	х				х								Cuyahoga	3 15 51	461,324	7:30am-4:30pm M-F 7:30am-noon Sat	196.00	100%l	127	40,000
Northcoast Inc. Recycling Specialists 1305 Lloyd Rd. Wickiffle, 0H 44092 (440) 943-6968	PA,MRF			х		х				х		x	Computers/electronics (9.85 tons) x-rays (0.443 tons) foam (51.8475 tons) carpet pad (4.8145 tons) casting paper (2.25 tons)	Cuyahoga	10%C 90%l	461,324	DNR	1,136.70	10%C 90%l	60	15,000
Painesville Recycling 83 Stage Ave. Painesville, OH 44077 (440) 354-5700	PA,Pro,SY, BB,DO	х					х	х						Cuyahoga	1,2,3,6,8,9,10,11,13,15,16,18,19,20,21,24,27,2,8,30,31,33,34,37,39,41,44,47,48,49,50,51,53,54,55,57,58		7:00am-4:30pm M-F 7:00am-noon Sat	170.00	80%R 10%C 10%l	20	6,240
Ponz Recycling Industries 4130 Bradley Rd. Cleveland, OH 44109 (216) 661-8999	PR, BR, Pro,MRF			х		х	х							Cuyahoga	3,4,8,10,11,15,17,21,2 7 31,34,49,53,57	461,324	NA	955.00	20%C 80%l	DNR	1,000
Procex, Inc. 880 Cherry St. Kent, OH 44240 (330) 673-1114	PR,BR,MRF											х	Rubber (60 tons)	Cuyahoga	15,39	461,324	NA NA	60.00	100%C	2	630
PSC Metals 701 W. Hopocan Ave. Barberton, OH 44203 (330) 745-4437	PA, SY						х					х	Note: amounts anknown copper, auto radiators, lead, zinc, stainless	Cuyahoga	3 9 11 21 27 28 39 44	461,324	8:00 am - 4:30 pm M-F 8:00 am - 11:30 am Sat	28,064.00	DNR	DNR	DNR

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

Drop-offs, Buybacks, Hauler Collection, Other Recyclin						Service Area					Processing Capacity (tons		ity (tons)									
Type of Facility or Activity	AC	GL	PL	ONP	осс							Арр	Oth	Other Explained	County	Townships/ Cities *	Population Served	Hours Available to Public	Recyclables Processed from the SWMD (TPY)	% of Material from Sector:	Daily (TPD)	Annual (TPY)
PA,DO	x					х	x						x	Copper (18.61 tons) other non-ferrous metals (1.63 tons) bi-metal/tin cans (0.95 tons) other ferrous (5.03 tons)	Cuyahoga	1 8 10 11 12 37 41 42 58	461,324	9:00am-5:00pm M-F 9:00am-1:00pm Sat	977.92	99%R 1%C	9.6	2,928
PA,Pro,DO					х										Cuyahoga	2 15 21 51	461,324	7:00am-3:00pm M-F	53.09	10%R 40%C 50%I	150	37,200
PA,Pro,DO													х	Computers/electr onics (931.548 tons)	Cuyahoga	all except 5,14,23,36, 38,40,43,55,57,59	461,324	8:00am-3:30pm M-F	931.55	55%R 45%C	4.5	1,170
PR,BR,Pro	х														Cuyahoga	3 15	461,324	NA	9,178.00	100%l	41	10,198
PA,BR,Pro, SY,BB,MRF, DO	х	×	x	х	х	x				x			x	Bi-metal/tin cans (10 tons) computers/electr onics (10 tons) comingled containers (2,700 tons)	Cuyahoga	2,3,4,6,8,9,10,11,12,13 15,16,17,18,19,20 21,23,24,27,28,30,31 32,33,43,73,9,44,45 47,48,49,50,51,52,53 54,55,57,58,59	461,324	7:00am-5:00pm M-F	49,140.00	15%R 45%C 40%I	500	125,000
PA,DO													x	Furniture (258.9 tons) computers/electr onics (547.5 tons) cloth/fabric (2190 tons)	Cuyahoga	all	461,324	7:30am-4:00pm M-F 8:00am-4:30pm Sat	2,996.40	DNR	DNR	DNR
PR,MRF													х	Wood pallets (835 tons)	Cuyahoga	15	461,324	NA	835.00	10%C 90%I	15	3,510
PA,Pro					х					х					Cuyahoga	All except 5,26,29,59	461,324	8:30am-2:30pm M-F	2,700.00	1%R 99%C	37	9,600
PA, Pro						х									Cuyahoga	15	461,324	NA	42,719.00	100%l	500	180,000
PR,EU													х	Other wood (169 tons) biomass fuel (388 tons)	Cuyahoga	DNR	461,324	NA	557.00	100%C	DNR	DNR
PR, MRF		х													Cuyahoga	6,9,14,22,33,40,56,59	461,324	NA	36,000.00	50%R 25%C 25%I	175	63,000
PA, O													х	Cloth/fabric (206.395 tons)	Cuyahoga	all	461,324	M-F	206.40	90%R 10%C	DNR	DNR
PA,DO													х	Used motor oil (34.78 tons)	Cuyahoga	all	461,324	8:30am-5:30pm M-F 8:00am-5:00pm Sat	34.78	100%R	12	3,600
PR,BR,Pro			х												Cuyahoga	15	461,324	NA	295.00	2%C 98%I	65	23,725
PA,Pro	×					×									Cuyahoga	15 17 21 31 36	461,324	9:00am-6:00pm M-F 9:00am-3:00pm Sat	DNR	90%R 10%C	DNR	DNR
PR, BR, Pro,SY	×					×							×	tons) other non-ferrous metal (72.307 tons)	Cuyahoga	15 44	461,324	NA	1,296.90	100%l	30	7,650
PR,MRF	×	х	x	х	х	x				х					Cuyahoga	Materials designated by county not communities	461,324	NA	4,730.00	83%R 17%C	300	78,000
PR, Pro										х						15	461,324	NA	14.00	100%C	NA	NA
PA,BR,Pro,S Y	x					x							x	Copper (90 tons) other non-ferrous metals (160 tons) white goods (175 tons)	Cuyahoga	2,3,4,15,18,21,31,33 35,38,39,43,57	461,324	7:30am-4:30pm M-F 9am-1pm Sat & Sun	4,162.50	20%R 60%C 20%I	20	7,000
PR, Pro						х							х	Copper (25 tons) other non-ferrous metals (2500 tons)	Cuyahoga	3 6 15 17 28	461,324	NA	4,525.00	100%l	DNR	DNR
PA,Pro,SY	x												x	Copper (5.6 tons) other non-ferrous metals (20.16 tons) white goods (103.04 tons) other ferrous metals (4284 tons)	Cuyahoga	3 4 8 10 15 19 30 31 33 47 55	461,324	7:30am-4:00pm M-F	4,454.24	37.87%R 29.96%C 32.17%l	115	28,800
N/A	x	×	×	×	x	×	х	×	x	×	x	х	×	N/A	Cuyahoga	All	461,324	NA	26,731.40	Varies	DNR	DNR
	PADO PAPODO PAPODO PAPODO PAPODO PAPODO PARREPO PADO PADO PREU PADO PREU PADO PREU PADO PREU PADO PADO PREU PADO PADO PREU PADO PADO PREU PADO PADO PADO PADO PADO PADO PADO PADO	PA.DO	PALDO	PADO	PALDO	Facility	Facility   AC   GL   PL   ONP   OCC   SC	PALDO	PALDO	PALDO	PALDO	PALDO	PALPIOL   PALP	PALPICAD   National Palpica   National Palpica	PADO	PALPO	Facility or   Activity   Activi	Package   Pack	Part	Part	Part	Part

Notes: PA = Publicly Available; PR = Private Company

DO = Drop off; BR = Broker, Pro = Processor; BB = Buy Back Recycling Center; MRF = Materials Recovery Facility; EU = End User; SY = Scrap Yard; CD = Construction/Demolition Debris Recycler; ABP = Auto Body Processor; O = Other

R = Residential; C = Commercial; I = Industrial

AC = Aluminum Containers; GL = Glass Containers; PL = Plastic Containers; ONP = Old Newspaper; OCC = Corrugated Cardboard; SC = Steel Containers; LAB = Lead Acid Batteries; Mag=Magazines; OffP=Office Paper, MxP=Mixed Paper; ST=Scrap Tires; App=Appliances; Oth=Other (e.g., Nicad Batteries, Used Oil, Household Batteries, Wood)

<sup>\*</sup> Key for political subdivisions included after this table

Source(s) of information: Recycling Surveys completed Sept/Oct 2010

Table III-5 (continued)
Drop-offs, Buybacks, Hauler Collection, Other Recycling Activities and HHW Collection Used by the District Service Area – \*Townships/Cities

Number	Community Name
1	Bay Village
2	Beachwood
3	Bedford
4	Bedford Heights
5	Bentleyville
6	Berea
7	Bratenahl
8	Brecksville
9	Broadview Heights
10	Brook Park
11	Brooklyn
12	Brooklyn Heights
13	
14	Chagrin Falls Village
	Chagrin Falls Township
15	Cleveland
16	Cleveland Heights
17	Cuyahoga Heights
18	East Cleveland
19	Euclid
20	Fairview Park
21	Garfield Heights
22	Gates Mills
23	Glenwillow
24	Highland Heights
25	Highland Hills
26	Hunting Valley
27	Independence
28	Lakewood
29	Linndale
30	Lyndhurst
31	Maple Heights
32	Mayfield Village
33	Mayfield Heights
34	Middleburg Heights
35	
36	Moreland Hills Newburgh Heights
37	North Olmsted
38	
	North Randall
39	North Royalton
40	Oakwood
41	Olmsted Falls City
42	Olmsted Township
43	Orange
44	Parma
45	Parma Heights
46	Pepper Pike
47	Richmond Heights
48	Rocky River
49	Seven Hills
50	Shaker Heights
51	Solon
52	South Euclid
53	Strongsville
54	University Heights
55	Valley View
56	Walton Hills
57	Warrensville Heights
58	Westlake
59	Woodmere
60	All
50	, vii

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

Facility Name	Facility		Location	Waste Received from the SWMD	Plan	Process	ing Capacity	Non-compostables	Compost
or Activity	Туре	County	Address/Phone	Type	Amount (tons)	Daily (TPD)	Annual (TPY)	Landfilled (TPY)	Produced (TPY)
OI FOUTE)	1,700	County	Padi Coar Horic	In-District Facilities	Allount (tons)	Daily (11 D)	Pallida (11 1)	Lunamica (11 1)	Troducca (11 1)
	T		17000 St. Clair Ave.	III DIGITION I GOILLIGO					
Aljon LLC	C4	Cuyahoga	Cleveland, OH 44110 (216) 870-6288	DNR	DNR	NA	NA	NA	NA
All Ohio Landscaping Inc.	C4	Cuyahoga	10801 Meech Ave. Cleveland, OH 44105 (216) 701-0318	DNR	DNR	NA	NA	NA NA	NA.
Baldwin-Wallace College	C2	Cuyahoga	120 E. Grand St. Berea, OH 44017 (440) 826-2414/(440) 826-2412	Leaves Wood Chips Food Waste	25.0	0.0	11.2	0.0	11.2
Bedford Compost Facility	C4	Cuyahoga	West Krick Rd. Bedford, OH 44146 (440) 735-6581	Leaves Brush	1,687.0	DNR	DNR	142.0	1,687.0
Boyas Excavating Inc.	C4	Cuyahoga	11311 Rockside Rd. Valley View, OH 44125 (216) 524-3620	Yard Waste	377.0	NA	5,000.0	0.0	2,655.2
Bridgeview (Kurtz Brothers)	C4	Cuyahoga	5603 Canal Rd. Valley View, OH 44125 (330) 966-0958	Mixed Yard Waste Leaves Wood Chips Pallets/Wood Once Ground Yardwaste	25,703.0	83.3	33,333.3	NA NA	1,833.3
Brooklyn Compost City of	C4	Cuyahoga	9400 Memphis Ave. Brooklyn, OH 44144 (216) 635-4232	Grass Leaves Brush Other (Christmas Trees/logs)	178.0	NA	NA	NA NA	534.4
City of Beachwood - Public Service Dept.	C4	Cuyahoga	2700 Richmond Rd. Beachwood, OH 44122 (216) 292-1480	Grass Leaves Brush	4,153.0	NA	18,000.0	0.0	926.8
City of Westlake, Compost facility	C4	Cuyahoga	27700 Hiliard Blvd. Westlake, OH 44145 (440) 871-3300	Leaves Brush	25,785.0	166.7	3,602.7	300.0	1,621.9
Cleveland Metroparks Compost	C4	Cuyahoga	3900 Wildlife Way Cleveland, OH 44109 (216) 661-6500 x4508	Animal Manure and Bedding	292.0	2.0	166.67*	0.0	49.3
Cuyahoga Compost Facility	C2	Cuyahoga	6640 Cochran Road Solon, OH 44139 (440) 498-5700	Yard Waste Food Waste	961.0	0.5	500.0	50.0	78.0
Cuyahoga Heights Service Dept.	C4	Cuyahoga	7201 Canal Rd. Cuyahoga Heights, OH 44125 (216) 641-3505	Grass Leaves Brush	37.0	0.5	500.0	50.0	78.0
Independence Compost Facility	C4	Cuyahoga	7423 Old Rockside Road Independence, OH 44131 (216) 524-9191	Grass Leaves Brush	3,200.0	NA	5,000.0	0.0	3,200.0
Kurtz Bros' Cloverleaf Compost Facility	C4	Cuyahoga	7400 Granger Rd. Independence, OH 44131 (216) 214-3300	Leaves	5.1	33.3	3,333.3	NA NA	NA
Landmark Lawn & Garden	C4	Cuyahoga	21079 Westwood Dr. Strongsville, OH 44149 (440) 238-3900	Leaves	2,333.3	33.3	2,333.3	0.0	1,621.9
Madden Bros. Inc./B&B Properties	C4	Cuyahoga	66 Pearl Rd. Brunswick Hills, OH 44212 (330) 220-1886	DNR	DNR	NA	NA	NA NA	NA NA
Maple Heights Compost	C4	Cuyahoga	5353 Lee Rd. Maple Heights, OH 44137 (216) 587-9013	Brush	435.0	DNR	DNR	DNR	DNR
Mayfield Village Service Dept.	C4	Cuyahoga	610 SOM Center Rd. Mayfield Village, OH 44143 (440) 442-5506	Leaves	1,567.0	NA	1,666.7	1,253.3	1,089.0
Middleburg Heights City Compost	C4	Cuyahoga	15700 E. Bagley Rd. Middleburg Heights, OH 44130 (440) 234-2216	Grass Leaves Brush Other (Christmas Trees)	2,421.0	20.0	4,800.0	0.0	2,445.8
Miracle Stone	C4	Cuyahoga	27265 Bagley Rd. Olmsted Twp., OH 44138 (440) 235-4890	Leaves	3.3	6.7	166.7	0.0	3.3
N. Olmsted Compost Facility	C4	Cuyahoga	5200 Dover Center Rd. North Olmsted, OH 44070 (440) 777-8000	Leaves Brush Wood Chips	7,051.0	NA	6,000.0	0.0	1,158.5

Table III-6 (continued)

Composting/Yard Waste Management Activities Used by the District

Facility Name	Facility		Location	Waste Received from the SWMD	Plan	Processi	ng Capacity	Non-compostables	Compost
or Activity	Туре	County	Address/Phone	Туре	Amount (tons)	Daily (TPD)	Annual (TPY)	Landfilled (TPY)	Produced (TPY)
N. Royalton Regional Compost (Kurtz Brothers	C4	Cuyahoga	10789 Royalton Rd. North Royalton, OH 44133 (440) 582-3002	Mixed Yard Waste	4,510.0	166.7	11,666.7	0.0	1,457.7
Orange Village Compost	C4	Cuyahoga	4160 Lander Rd. Orange Village, OH 44022 (440) 498-4403	Leaves	1,147.0	50.0	1,147.0	0.0	203.0
Rosby Resource Recovery	C2,C4	Cuyahoga	54 East Schaaf Rd. Brooklyn Heights, OH 44131 (216) 661-6102	Leaves Brush Other (plant material, sod, stumps, wood chips, logs)	6,655.0	333.3	16,666.7	NA	1,472.7
Sansai Environmental	C2, C4	Cuyahoga	1455 E. 185th St. Cleveland, OH 44110 (216) 531-5374	Yard Waste Food Waste Cardboard	7,694.0	600.0	25,000.0	0.0	13,849.0
Shaker Hts. Ecology Center	C4	Cuyahoga	601 Columbus Rd. Bedford, OH 44146 (216) 491-3291/(216) 491-1490	DNR	65.0	NA	NA	NA	NA
Solon Compost	C4	Cuyahoga	6600 Cochran Rd. Solon, OH 44139 (440) 248-5384/(216) 695-6842	Grass Leaves Brush	7,439.0	NA	5,643.6	94.1	1,307.6
Tree Master Supply	C4	Cuyahoga	4501 Lakeside Ave. E Cleveland, OH 44114 (216) 241-6744	Brush Wood Chips Logs	3,285.0	17.0	Unlimited	0.0	3,000.0
Utilities Supply Co.	C4	Cuyahoga	645 S. Green Road South Euclid, OH 44143 (216) 381-8100	Leaves Brush	4,055.0	266.7	8,333.3	0.0	5,792.4
Utilities Supply Co.	C4	Cuyahoga	16569 St Clair Avenue Cleveland, OH (216)	Leaves Brush	25,815.0	266.7	8,333.3	0.0	5,792.4
		_	I	Out-of-District Facilities					
Barnes Composting Facility	C2	Erie	3511 W. Cleveland Rd. Huron, OH 44839 (419) 433-5525	Food Waste	51.1	100.0	36,500.0	DNR	0.0
TRC Landscape Service	C4	Geauga	11220 Kinsman Road Newbury, OH 44065 (440) 564-1290	Leaves Brush	5,333.3	66.7	17,333.3	0.0	4,000.0
Ohio Mulch Supply	C4	Lake	1291 East 289th St. Wickliffe, OH 44092 (440) 943-4322	Leaves	441.3	116.7	28,333.3	0.0	333.3
Lorain County Resource Recovery Complex	C4	Lorain	43650 Oberlin-Elyria Rd. Oberlin, OH 44074 (440) 774-3100	Leaves Brush	3,649.0	DNR	DNR	DNR	DNR
Smith Brothers	C4	Medina	3087 Marks Rd. Medina, OH 44256 (330) 723-5556	Leaves Brush	5,151.9	333.3	106,666.7	0.0	3,243.7
		ı	T	Non-Facility Compost Activities					ı
Back Yard Composting	N/A	Cuyahoga	Pepper Pike, Strongsville	Leaves Brush	5,628.2	NA	NA	0.0	0.0
Grass Cycling	N/A	Cuyahoga	Bratenahl, Cleveland, Glenwillow, Middleburg Heights, Olmsted Twp, Orange, Seven Hills, Strongsville, Valley View, Warrensville Heights, Woodmere		6,348.9	NA	NA	0.0	0.0
Log Recycling	N/A	Cuyahoga	Bay Village, Bedford Heights, Berea, Brooklyn, Cleveland, Cleveland Heights, Euclid, Garfield Heights, Hunting Valley, Lakewood, Lyndhurst, Maple Heights, Moreland Hills, North Olmsted, Orange, University Heights, Valley View tals	Logs	3,996.3	NA NA	NA NA 240 974	0.0	0.0
		10	wio		167,479	2,663	349,871	1,889	59,445

C2=Class 2 Compost Facility; C3=Class 3 Compost Facility; C4=Class 4 Compost Facility; DNR=Did Not Report; NA=Not Available

#### Source(s) of information:

Compost Surveys and Cuyahoga County Community Recycling Report Card (Yard Waste by Muni.xls). All double counting was eliminated by reviewing which compost facilities communities identified using.

OEPA Registered Class III and Class IV Composting Facilities, 2009

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

Facility Name	Facility Mailing	Facility Owner	Facility Operator	Tons
Type of Facility	Address/Phone	Address/Phone	Address/Phone	Received
Action Box	6207 North Houston Rosslyn Rd. Houston, TX 77091 713-869-7701	Same as Facility	Same as Facility	49
Alloy Exchange	300 Rockford Park Dr. NE Rockford, MI 49341 (616) 863-0640	Same as Facility	Same as Facility	501.98
Caledonian Alloys	3190 Riverside Drive Huntington, WV 25705 304-526-5136	Same as Facility	Same as Facility	200
Caldwell Landfill	11380 N City Road 300E Morristown, IN 46161 765-763-1238	Same as Facility	Same as Facility	1
Enersys	2366 Bernville Road Reading, PA 19605 610-372-8457	Same as Facility	Same as Facility	2
Heritage Environmental Services, LLC	7901 W Morris Street Indianapolis, IN 46231 317-243-0811	Same as Facility	Same as Facility	4
Indianapolis Drum	3619 Terrace Avenue Indianapolis, IN 46203 317-357-9853	Same as Facility	Same as Facility	16.5
Indianapolis Resource Recovery Facility	2320 S Harding St. Indianapolis, IN 46202	Covanta Indianapolis, Inc.	Same as Facility	18.6
KJ Plastics	415 North Broad Street Lansdale, PA 19446 215-361-8222	Same as Facility	Same as Facility	120
MAX Environmental Technologies	1815 Washington Road Pittsburg, PA 15241 412-343-4900	Same as Facility	Same as Facility	598
Mid America Paper	3865 West 41st Street Chicago, IL 60632 773-890-5454	Same as Facility	Same as Facility	935
Mueller Brass	2199 Lapeer Avenue Port Huron, MI 48060 810-987-7770	Same as Facility	Same as Facility	307
Oak Leaf Waste	800 Connecticut Blvd East Hartford, CT 06108 888-625-5323	Same as Facility	Same as Facility	492
Packaging Corp of America	1900 West Field Court Lake Forest, IL 60045 800-456-4725	Same as Facility	Same as Facility	18
Plasticycle	5801 Centennial Blvd Nashville, TN 37209	Same as Facility	Same as Facility	80
Pollution Control Industries	4343 Kennedy Ave East Chicago, IN 46312 219-397-3951	Same as Facility	Same as Facility	6.85
Retrofit Recycling	2156 S Lyndhurst Dr. Indianapolis, IN 46241 317-381-0628	Same as Facility	Same as Facility	1
The Pallet Man	6300 St. Louis Avenue St. Louis, MO 63121 314-383-8200	Same as Facility	Same as Facility	5.5
	Totals			3,356.43

Source(s) of information: Indiana Department of Environmental Management; Quarterly Reports; Recycling Survey Data

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

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	2009 Hadate
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	
Open Dump Sites 24500 Solon Road, Bedford Heights	41 23 07	-81 30 21	Heights Building Co. 24500 Solon Road Bedford Heights. OH 44146	Solid Waste	2.75	1994-95	Not Cleveland
13702 Miles Avenue, Cleveland	41 26 43	-81 35 13	NA Leonard M. Susman 23900 Shaker Blvd. Cleveland, 0444122	Tires	1.65	1994-95	No current dumping
13528 Miles Avenue, Cleveland	41 26 43	-81 35 13	Leonard M. Susman 23900 Shaker Blvd. Cleveland, OH 44122 (216) 751-7560	Tires	0.37	1985-95	No current dumping
14114 Miles Avenue, Cleveland	41 26 42	-81 35 01	Lester R. Cohen, et al 9 Hydre Park Cleveland, OH 44122 (216) 591-1982	Tires, Solid Waste	1.73	2003	No current dumping
4325 Pershing Avenue, Cleveland	41 28 14	-81 39 43	John P. Cuperdo 19003 Bridge Path Place Strongsville, OH 44136 (216) 572-5855	Tires	0.10	2003	Operating Tire Shop
3210 East 65th Street, Cleveland	41 28 11	-81 38 42	Richard M. Berg, et al 3210 East 65th Street Cleveland, OH 44127 NA	Tires	3.93	2003	No current dumping
7902 Bessemer Avenue, Cleveland	41 28 01	-81 38 42	Helen Salkovitch 7902 Bessemer Avenue Cleveland, OH 44127 NA	Tires	1.2.1	2003	Operating auto scrap yard
5506 Dolloff Road, Cleveland	41 28 05	-81 37 57	Gary Meadows 5506 Dolloff Road Cleveland, OH 44127 NA	Tires	1.23	2003	Operating tire Shop
2884 Woodhill Road, Cleveland	41 28 49	-81 37 09	Ralph Craig, et al 3655 East 112th Street Cleveland, OH 44105 (216) 561-0864	Tires	0.27	2003	No current dumping
6408 Broadway Avenue, Cleveland	41 27 46	-81 38 45	Greystone Group Broadway 30050 Chagrin Blvd. #360 Pepper Pike, OH 44124 (216) 232-4645	Tires, Auto Parts	96.0	2003	No current dumping
North of 3570 East 71st Street, Cleveland	41 27 62	-81 38 32	George W. Booker, Jr. 25411 Tryon Road Oakwood, OH 44146 (216) 232-4645	Tires	1.32	1992-95	Vacant lots with tires and debris
7723 Harvard Avenue, Cleveland	41 26 56	-81 37 56	John Reed 7723 Harvard Avenue Cleveland, OH 44105 (216) 429-3034	Tires	0.18	2003	Operating Tire Shop
5703 Fleet Avenue, Cleveland	41 27 21	-81 39 00	Gerald Rudowsky 5554 Miller Road Brecksville, OH 44141 NA	Tires	0.18	2003	Operating Auto Repair
6207 Hawthorne Avenue, Cleveland	41 29 50	-81 38 49	Josephine Walker 2304 East 89th Street Cleveland, OH 44106 (216) 421-2517	Tires, Auto Parts	0.10	1991-95	No current dumping
4085 East 104th Street, Cleveland	41 26 44	-81 36 44	Kurtis Vaughn 13728 Eaglesmere Avenue Cleveland, OH 44110 (216) 268-5007	Tires	0.17	2003	No current dumping

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location Latitut (describe briefly) minute 4060 East 116th Street, Cleveland 4 10012 Meech Street, Cleveland 4	Latitude (degrees,	Longitude (degrees.					
		(200,600)	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	2009 Undate
	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	
	41 26 55	-81 36 10	McQueen's Towing, Inc. 4060 East 116th Street Cleveland, OH 44105 NA	Tires	1.69	2003	Operating Auto Salvage yard
	41 27 03	-81 41 19	Alroy Gibson, et al 10012 Meech Avenue Cleveland, OH 44105 NA	Tires, Auto Parts, Solid Waste	0.36	1992-95	No current dumping
3118 West 11th Street, Cleveland 4	41 28 10	-81 41 19	Randy Nichols 3118 West 11th Street Cleveland, OH 44109 NA	Tires	0.10	2003	No current dumping
2500 West 27th Street, Cleveland 4	41 28 40	-81 42 02	W E Davis Co. 5400 Newport Drive Rolling Meadows, OH (216) 781-6158	Tires	2.01	2003	vacant lots with debris
2320 Mulberry Avenue, Cleveland 4	41 29 40	-81 42 29	Mary Zalenski 5907 Westbrook Drive Brookpark, OH 44142 NA	Tires	0.42	1993-95	No current dumping
5936 Ackley Road, Cleveland 4	41 27 47	-81 38 47	James Kotecki 5936 Ackley Road Cleveland, OH 44105 NA	Tires	0.61	2003	No current dumping
7307 Cedar Avenue, Cleveland 4	41 30 01	-81 38 16	Phyllis M. Gamble P.O. Box 912 Shaker Heights, OH 44120 NA	Tires	0.15	1990-95	No current dumping
7605 Crowell Avenue, Cleveland 4	41 28 52	-81 38 08	Beatrice Sledge 1218 Tutwiler Avenue Memphis, TN 38107 NA	Tires	0.26	2003	No current dumping
8400 Buckeye Road, Cleveland 4	41 29 16	-81 37 42	Murray Farkas 3224 Yorkshire Road Cleveland Heights, OH 44118 (216) 321-1101	Tires	0.46	2003	No current dumping
3021 East 82nd Street, Cleveland 4	41 28 35	-81 37 47	City of Cleveland 601 Lakeside Avenue Cleveland, OH 44114 (216) 241-1459	Tires	0.05	2003	No current dumping
3038 East 84th Street, Cleveland 4	41 28 33	-81 37 40	City of Cleveland 601 Lakeside Avenue Cleveland, OH 44114 (216) 241-1459	Tires	0.10	2003	Tires & debris
2974 East 84th Street, Cleveland 4	41 28 40	-81 37 40	City of Cleveland 601 Lakeside Avenue Cleveland, OH 44114 (216) 241-1459	Tires	0.23	2003	Debris
8207 Glade Avenue, Cleveland 4	41 28 33	-81 37 47	Grover L. Smith, et al 10218 Park Heights Road Cleveland, OH 44104 (216) 341-2016	Tires	0.05	2003	No current dumping
13818 Miles Avenue, Cleveland 4	41 26 43	-81 35 15	Donald Singer 13618 Miles Road Cleveland, OH 44105 NA	Tires	0.21	2003	No current dumping

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	Z009 U pdate
9400 Meech Avenue, Cleveland	41 27 06	-81 37 12	Marc Terkel, et al 14901 Broadway Avenue Maple Heights, OH 44137 NA	Tires	0.46	2003	No current dumping
3967 East 93rd Street, Cleveland	41 27 02	-81 37 17	M. Weingold & Co. 3920 East 91st Street Cleveland, OH 44105 (216) 883-6635	Tires	1.04	2003	Operating Auto Repair shop
7202 Union Avenue, Cleveland	41 27 47	-81 38 14	Gary Gaj 9257 Windswept Drive Brecksville, OH 44141 NA	Tires	0.16	2003	Operating Auto repair shop
14501 Kinsman Road, Cleveland	41 27 52	-81 34 51	Joseph Gilleylen 3124 Sebor Road Shaker Heights, OH 44120 (216) 752-5564	Tires	0.29	2003	No current dumping
3154 West 94th Street, Cleveland	41 28 03	-81 44 52	Duel Santiago 3154 West 94th Street Cleveland, OH 44120 NA	Tires	0.10	2003	Vacant lot with debris
15612 Miles Avenue, Cleveland	41 26 30	-81 34 17	Jannie Boddy 15324 Oakdale Avenue Cleveland, OH 44128 (216) 921-5051	Tires	0.13	2003	Operating auto repair
2948 East 81st Street, Cleveland	41 28 42	-81 37 52	Elaine Tigner 10508 Norman Avenue Cleveland, OH 44106 NA	Tires	0.22	1999-2003	No current dumping
6927 Kinsman Road, Cleveland	41 28 51	-81 38 27	Walter L. Mangham 2499 East 57th Street Cleveland, OH 44104 (216) 429-1646	Tires	0.18	2003	No current dumping
3106 East 65th Street, Cleveland	41 28 26	-81 38 43	Delbert C. Stevens 3106 East 65th Street Cleveland, OH 44127 (216) 271-5573	Tires	0.09	2003	No current dumping
8905 Dickens Avenue, Cleveland	41 28 27	-81 37 23	Gina Porch 8905 Dickens Avenue Cleveland, OH 44101 (216) 721-1321	Tires	0.29	1997-2003	Tires
3145 East 79th Street, Cleveland	41 28 20	-81 37 57	John Fort 975 East 130th Street Cleveland, OH 44108 (216) 761-2693	Tires	1.08	2003	Debris
9210 Holton Avenue, Cleveland	41 28 54	-81 37 22	Alton Johnson, et al 9210 Holton Avenue Cleveland, OH 44104 NA	Tires	0.68	2003	No current dumping
2880 Woodhill Road, Cleveland	41 28 49	-81 37 09	Joe Collica, Jr. 6625 Stone Road Streetsboro, OH 44241 (216) 791-1179	Tires	0.48	2003	No current dumping
9106 Manor Avenue, Cleveland	41 28 30	-81 37 25	Nathaniel Brownies 9106 Manor Avenue Cleveland, OH 44104 NA	Tires	0.14	2003	No current dumping

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	2009 Undate
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	
3215 East 90th Street, Cleveland	41 28 20	-81 37 26	George Adams 3215 East 90th Street Cleveland, OH 44101 NA	Tires	0.46	2003	No current dumping
3560 East 93rd Street, Cleveland	41 27 42	-81 37 17	John Pekarek 5075 East Sprague Road Independence, OH 44131 (216) 271-3820	Tires	0.40	2003	No current dumping
2908 East 116th Street, Cleveland	41 28 47	-81 36 11	Steve Benkovits 2908 East 116th Street Cleveland, OH 44120 NA	Tires	0.18	2003	No current dumping
11106 Buckeye Road, Cleveland	41 28 53	-81 36 30	St. Mark's Baptist Church 11123 Buckeye Road Cleveland, OH 44104 (216) 231-5722	Tires	0.17	2003	Operating auto repair shop
3291 East 65th Street, Cleveland	41 28 08	-81 38 42	Fred Pesek 9068 Highland Drive Brecksville, OH 44141 (216) 526-3894	Tires	0.17	2003	Operating auto towing
3000 East 82nd Street, Cleveland	41 28 33	-81 37 48	Jacob Israel, et al 8510 Bessemer Avenue Cleveland, OH 44127 (216) 341-6605	Tires	0.23	2003	Operating auto salvage
12101 Berea Avenue, Cleveland	41 28 21	-81 46 18	Fretter Appliance Co. NA Brighton, MI 48116 NA	Tires	1.50	2003	No current dumping
9015 Harvard Avenue, Cleveland	41 26 56	-81 37 29	Gillota Fuel Products, Inc. 9015 Harvard Avenue Streetsboro, OH 44105 (216) 271-6670	Tires	0.74	2003	No current dumping
6103 Superior Avenue, Cleveland	41 31 06	-81 38 50	Sam Wormsley 6103 Superior Avenue Cleveland, OH 44105 NA	Tires	0.27	2003	Operating tire shop
9511 Reno Avenue, Cleveland	41 31 06	-81 37 10	Mildred Dixon 10805 Reno Avenue Cleveland, OH 44105 NA	Tires	0.12	2003	No current dumping
9401 Sandusky Avenue, Cleveland	41 27 26	-81 37 11	Duncan Fuller & King, Inc. 9323 Sandusky Avenue Cleveland, OH 44105 (216) 341-2555	Tires	0.42	2003	No current dumping
17521 Harvard Avenue, Cleveland	41 26 59	-81 33 24	James Fluellen 17517 Tarkington Avenue Cleveland, OH 44128 (216) 991-0128	Tires	0.33	2003	Tires
8701 Buckeye Road, Cleveland	41 29 12	-81 37 33	Buckeye Super Service 8701 Buckeye Road Cleveland, OH 44104 (216) 231-5220	Tires	0.08	2003	No current dumping
2831 East 83rd Street, Cleveland	41 28 54	-81 37 44	Amelia Rodgers 4100 East 87th Street #124 Cleveland, OH 44122 (216) 431-9272	Tires	0.07	2003	Debris

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	Z009 Opdate
3204 East 79th Street, Cleveland	41 28 11	-81 37 58	Wenham, Inc. P.O. Box 65540 Cleveland, OH 44105 NA	Tires	0.19	2003	No current dumping
3732 Broadway Avenue, Cleveland	41 28 43	-81 39 49	Daniel Bradbury 25404 Lake Road Cleveland, OH 44140 (216) 835-3822	Tires	0.13	2003	Operating tire shop
9820 Elwell Avenue, Cleveland	41 28 50	-81 36 59	Churchill Lezama P.O. Box 302 Twinsburg, OH 44087 (216) 791-5905	Tires	0.09	2003	No current dumping
6140 Broadway Avenue, Cleveland	41 27 50	-81 38 50	Margaret Columbo 6140 Broadway Avenue #1 Cleveland, OH 44127 NA	Tires	0.40	2003	No current dumping
7550 Bessemer Avenue, Cleveland	41 28 03	-81 38 06	Evelyn Silver 7550 Bessemer Avenue Cleveland, OH 44127 NA	Tires	0.14	2003	Debris
6900 Grand Avenue, Cleveland	41 29 01	-81 38 27	Inner City Wrecking Co. 6900 Grand Avenue Cleveland, OH 44104 NA	Tires	0.15	2003	Debris, tires
3079 East 55th Street, Cleveland	41 28 541	-81 39 079	NA	Tires	0.13	2003	Operating scrap yard
7600 Bessemer Avenue, Cleveland	41 28 35	-81 38 51	NA	Tires	6.0	2003	Debris
5937 Ackley Road, Cleveland	41 27 75	-81 38 86	NA	Tires	0.2	2003	No current dumping
2768 Commercial Road, Cleveland	41 29 40	-81 41 14	NA	Tires	1.25	2003	No current dumping
9006 Harvard Avenue, Cleveland	41 26 74	-81 37 47	Ralph Bresak	Tires	0.97	2003	No current dumping
Northside of Mumford & Broadway Avenues Cleveland	41 28 12	-81 39 16	NA	Tires	2.09	1994-95	Operating auto repair
5703 East 57th Street, Cleveland	ΥN	ΥN	NA	Tires	1.75	2003	Unable to locate
2100 Scranton Avenue, Cleveland	41 29 32	-81 41 67	NA	Tires, Auto Parts	0.55	2003	No current dumping
2320 West 15th Street, Cleveland	41 28 77	-81 41 54	NA	Tires	0.45	2003	No current dumping
6212 Quincy Avenue, Cleveland	41 29 611	-81 38 833	Howard Ross 6212 Quincy Avenue Cleveland, OH 44104 NA	Tires	0.15	1990-95	No current dumping
2667 East 71st Street, Cleveland	41 29 04	-81 36 35	NA	Tires	1.98	2003	No current dumping
6916 Grand Avenue, Cleveland	41 29 04	-81 38 42	NA	Tires, Auto Parts Solid Waste	2.1	2003	Tires debris
3022 East 84th Street, Cleveland	41 28 55	-81 37 73	NA	Tires	1.25	2003	Debris
3010 East 84th Street, Cleveland	41 28 49	-81 37 66	John Robinson	Tires	1.21	1998-2004	Debris
2984 East 84th Street, Cleveland	41 28 59	-81 37 73	NA	Tires	0.78	1997	Debris

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of Time Period Site	Time Period Site	2000 Undate
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	zoos opuate
4054 East 116th Street, Cleveland	41 26 95	-81 36 17	NA	Tires	6.0	2003	Operating auto shop
3850 East 116th Street, Cleveland	41 27 21	-81 36 18	NA	Tires	96.0	2003	No current dumping
13404 Miles Avenue, Cleveland	41 26 72	-81 35 34	NA	Tires	1.05	2003	Operating tire shop
16050 Miles Avenue, Cleveland	41 26 48	-81 34 15	NA	Tires	0.97	2003	No current dumping
Southeast Corner of Lee & Deforest Roads Cleveland	41 26 63	-81 33 86	NA	Tires	1.98	2003	Operating tire shop
8805 Buckeye Road, Cleveland	41 29 189	-81 37 152	NA	Tires	1.89	2003	No current dumping
3188 East 79th Street, Cleveland	41 28 33	-81 37 98	NA	Tires	1.54	1995	No current dumping
3170 East 79th Street, Cleveland	41 28 31	-81 37 98	NA	Tires	1.22	2003	No current dumping
3186 East 79th Street, Cleveland	41 28 32	-81 37 99	NA	Tires	1.98	1995	No current dumping
3180 East 79th Street, Cleveland	41 28 32	-81 37 99	NA	Tires	1.76	1995-2003	No current dumping
2626 East 78th Street, Cleveland	41 29 20	-81 29 20	NA	Tires	1.09	2003	Unable to locate
Northwest Corner of East 146th St. & Caine Cleveland	41 26 54	-81 34 80	NA	Tires	1.75	2003	Tires & debris
9100 Kinsman Road, Cleveland	41 28 323	-81 37 350	Larry Tate	Tires	96.0	2003	No current dumping
3160 East 79th Street, Cleveland	41 28 35	-81 37 98	H R Powell	Tires	1.33	2003	No current dumping
2761 East 98th Street, Cleveland	41 29 14	-81 37 01	NA	Tires	1.65	2003	Unable to locate
Next to 7500 Bessemer Avenue, Cleveland	41 28 47	-81 38 12	NA	Tires	0.76	2003	Debris
3153 East 93rd Street, Cleveland	41 28 38	-81 37 29	Joe Calli	Tires	0.75	2003	Debris
Next to 3340 East 93rd Street, Cleveland	41 28 07	-81 37 29	NA	Tires	2.05	2003	No current dumping
5422 Fleet Avenue, Cleveland	41 27 35	-81 39 10	Tom Wilson	Tires	0.95	2003	No current dumping
14210 Miles Road, Cleveland	41 26 68	-81 34 97	George Cornell	Tires	1.55	2003	Debris
SW Corner of East 153rd St. & Harvard Ave. Cleveland	41 26 63	-81 33 86	NA	Tires	0.65	2003	Operating auto shop
2908 Barber Avenue, Cleveland	41 28 31	-81 42 05	Delmar Staten, et al 3273 West 46th Street Cleveland, OH 44102 (216) 281-4946	Tires	0.55	2003	No current dumping
5200 Train Avenue, Cleveland	41 27 66	-81 38 33	NA NA	Tires	0.45	2003	No current dumping
2175 Ashland Road, Cleveland	41 29 56	-81 38 48	Lucious Coffer 2275 Ashland Road Cleveland, OH 44103 NA	Tires	2.19	1995	Tires & debris
4300 Bradley Road, Cleveland	41 26 300	-81 40 532	William B Baumann Jennings (Rear) Road Cleveland, OH 44109 (216) 661-4818	Tires	3.00	1995	Debris

Table III-8 (continued)
Open Dumps and Waste Tire Dumps Located in the District

Site Location	Latitude (degrees,	Longitude (degrees,	Land Owner Mailing	Description of	Approximate Size of	Time Period Site	
(describe briefly)	minutes, seconds)	minutes, seconds)	Address/Phone	Materials Dumped	Site (in acres)	has Existed	2009 Update
6401 Grand Avenue, Cleveland	41 29 2	-81 38 42	A C Bates 3440 Virginia Road Woodmere, OH 44122 NA	Tires	1.58	1995	Operating auto salvage
4130 Bradley Road, Cleveland	41 26 32	-81 40 55	DLH Building Corp. 4380 Brecksville Road Richfield, OH 44286 NA	Tires	1.29	1995	Tires & debris
6504 Carnegie Avenue, Cleveland	41 30 5	-81 38 45	Paul Sperk 6504 Carnegie Avenue Cleveland, OH 44103 NA	Tires	0.22	1995	No current dumping
Colfax Road, Cleveland	41 28 51	-81 38 17	City of Cleveland Colfax Road Cleveland, OH 44104 NA	Tires	0.45	1995	Debris
2421 East 87th Street, Cleveland	41 29 57	-81 37 64	City of Cleveland 601 Lakeside Avenue Cleveland, OH (216) 664-2000	Tires	0.96	1995	No current dumping
9400 Quincy, Cleveland	41 29 35	-81 37 18	Emest Stern 4336 Medina Road Akron, OH 44321 NA	Tires	6.29	1995	No current dumping
6116 Broadway Avenue, Cleveland	41 27 50	-81 38 51	Premier Enterprises 336 N. Gaffey Street San Pedro, CA 90731 NA	Tires	2.61	1995	No current dumping
4906 Praha Avenue, Cleveland	41 28 43	-81 39 24	AI Nayman 3720 Rockside Road Seven Hills, OH 44131 (216) 749-1393	Tires	0.91	1995	No current dumping
2366 Woodhill Road, Cleveland	41 29 37	-81 36 41	Thomas C. Norton 2366 Woodhill Road Cleveland, OH 44106 (216) 791-2100	Tires	1.34	1955	Operating auto scrap
3301 Monroe Avenue, Cleveland	41 28 42	-81 42 25	Brandon Partners 5801 Train Avenue Cleveland, OH 44102 NA	Tires	2.10	1995	No current dumping
2933 E. 83rd Street, Cleveland	A/N	N/A	ABC Construction 2904 Woodhill R0 Cleveland: OH 44104	Cⅅ debris 2010	A/A	A/N	New
E. 83 & Higbee, Cleveland	N/A	A/N	Cleveland Waste Inc. 9405 Sandusky Ave. Cleve., OH 44105	Cⅅ debris 2011	N/A	N/A	New
10801 Meech, Cleveland	N/A	N/A	Bencin Disposal 2636 Brecksville Rd. Richfield, OH 44286	Cⅅ debris 2009- 2010	N/A	N/A	New
7415 Bessemer, Cleveland	A/N	N/A	N/A	Cⅅ debris, tires	N/A	N/A	New
10201 Harvard, Cleveland	N/A	N/A	Truly Blessed Trucking Co. 13900 Miles Rd. Cleve., OH 44105	Cⅅ debris, tires 2010	N/A	N/A	New
Mr. T. Painting 123 Bedford Glens Bedford, Oh 44146	N/A	N/A	N/A	Sand from sand blasting	N/A	N/A	New

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

Site Location (describe briefly)	Land Owner Mailing Address/Phone	Description of Materials Dumped	Approximate Size of Site (in acres)	Time Period Site has Existed
None.	N/A	N/A	N/A	N/A

Table III-10
Solid Waste Haulers Operating in the District

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
			Municipal Haulers		
City of Beachwood Alison Hirsch	2700 Richmond Rd. Beachwood, OH 44122 (216) 292-1922	Beachwood	Solid Waste Recyclables Yard Waste Bulk	13,826	BFI - Glenwillow Transfer Station City of Beachwood Shaker Yard Waste Management
City of Berea	11 Berea Commons Berea, OH 44017 (216) 826-5816	Berea	DNR	DNR	DNR
City of Brecksville Bill Soucie	9069 Brecksville Rd. Brecksville, OH 44141 (216) 526-4351	Brecksville	Solid Waste Recyclables Yard Waste Bulk	8,174	Norton Transfer Station Waste Management Boyas American Metals Recycling Bulldog Batteries PSC Metals, Inc Flourescent Recycling Accu-Medical Waste Cuyahoga County Solid Waste bistrict
City of Brook Park Larry Hess	19065 Holland Rd. Brook Park, OH 44142 (216) 433-7192	Brook Park	Solid Waste Recyclables Yard Waste	10,852	Lorain County Landfill Kurtz Brothers Strongsville Transfer Station
City of Brooklyn John Verba	9400 Memphis Ave. Brooklyn, OH 44144 (216) 635-4232	Brooklyn	Solid Waste Recyclables Yard Waste Bulk	4,954	City of Brooklyn Waste Management Royal Oak Recycling
Village of Brooklyn Heights Donna Tesar	345 Tuxedo Ave. Brooklyn Heights, OH 44131 (216) 351-0131	Brooklyn Heights	Recyclables Yard Waste	627	Kurtz Brothers West Side Metals Caraustar
City of Cleveland Ron Owens	5600 Carnegie Ave. Cleveland, OH 44103 (216) 664-3711	Cleveland	Solid Waste Recyclables Yard Waste C&D	235,866	County Wide Recycling Disposal Lorain County Landfill Noble Road Landfill Ridge Road Transfer Station Rosby Resource Waste Management Ohio Bulk Transfer Co Kurtz Brothers
City of Cleveland Heights Linda Dulik	40 Severance Circle Cleveland Heights, OH 44118 (216) 691-7311	Cleveland Heights	Solid Waste Recyclables Yard Waste	37,138	Centra Waste Kimble - Dover Rumpke - Shiloh Kimple - Twinsburg Cleveland Ridge Road Transfer Station Utilities Equipment & Supply Royal Oak Gateway Caraustar Waste Management
City of Fairview Park Thomas Lenahan	20777 Lorain Rd. Fairview Park, OH 44126 (216) 356-4449	Fairview Park	Solid Waste Recyclables Yard Waste Bulk	10,528	BFI
City of Independence Tim Tomko	6800 Brecksville Road Independence, OH 44131 (216) 524-9191	Independence	Solid Waste Recyclables Yard Waste Bulk	7,106	Norton Transfer Station City of Independence Green Recovery Waste Management Gateway Boyas
City of Lakewood Carol Rothgery	12920 Berea Rd. Lakewood, OH 44111 (216) 252-4322	Lakewood	Solid Waste Recyclables Yard Waste Bulk C&D	33,090	Cleveland Ridge Road Transfer Station Royas Excavating Caraustar All Scrap Royal Oak Recycling Kurtz Brothers
City of Lyndhurst Rick Glady	5301 Mayfield Rd. Lyndhurst, OH 44124 (216) 473-5100	Lyndhurst	Solid Waste Recyclables Yard Waste Bulk	10,946	Republic Transfer Station Waste Management GRG Utilities Supply Boyas Excavating
City of North Royalton Nick Suhodolsky	11545 Royalton Rd. North Royalton, OH 44133 (216) 582-3002	North Royalton	Solid Waste Recyclables Yard Waste Bulk	13,771	Norton Transfer Station Republic - Strongsville Transfer Station Kurtz Brothers Reycling Systems North Regional Compost Facility American Metals Recycling Environmental Specialists, Inc. Ohio Energy Source RET3 Landmark Disposal Caraustar Norton Environme
City of Parma Heights Michelle Teresi	6281 Pearl Rd. Parma Heights, OH 44130 (216) 884-9607	Parma Heights	Recyclables	1,920	Royal Oak Recycling
City of Pepper Pike Bob Girardi	28000 Shaker Blvd. Pepper Pike, OH 44124 (216) 896-6149	Pepper Pike	Solid Waste Recyclables Yard Waste Bulk C&D	7,711	Glenwillow Transfer Station Boyas Excavating City of Beachwood Village of Orange Waste Management Caraustar Shredding Network FPT - Cleveland
City of Richmond Heights Mary Beth / Don Lazar	26789 Highland Road Richmond Heights, OH 44143 (216) 383-6311	Richmond Heights	Solid Waste Recyclables Yard Waste Bulk	5,330	Aljon, LLC Utilities Republic Caraustar Willoughby Scrap Metal Demilta
City of Rocky River	21012 Hilliard Blvd. Rocky River, OH 44116 (216) 331-0600	Rocky River	DNR	DNR	DNR

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
City of Shaker Heights	3400 Lee Rd. Shaker Heights, OH 44120 (216) 491-1490	Shaker Heights	DNR	DNR	DNR
City of Solon Scott Jakosh	6600 Cochran Road Solon, OH 44139 (216) 248-5834	Solon	Solid Waste Recyclables Yard Waste Bulk C&D	15,393	Waste Management Cleveland Transfer Station Solon Composting Facility Bedford Metal Recycling Bulldog Battery Northcoast Recycling Abitibi Recycling Heritage Environmental Services Homan Oil Waste Management Cuyahoga Regional Landfill
City of South Euclid Patti Schill	1349 S. Green Rd. South Euclid, OH 44121 (216) 381-0402	South Euclid	Solid Waste Recyclables Yard Waste Bulk	21,787	Lorain County Landfill Glenwillow Transfer Station Aljohn Waste Management
City of University Heights	2300 Warrensville Center Rd. University Heights, OH 44118 (216) 932-7800	University Heights	DNR	DNR	DNR
City of Warrensville Heights A. C. Williams	4301 Warrensville Center Rd. Warrensville Heights, OH 44128 (216) 587-6570	Warrensville Heights	Solid Waste Recyclables Yard Waste Bulk	6,158	Glenwillow Transfer Station Boyas Excavating
Village of Cuyahoga Heights Scott Waldemarson	4863 East 71st St. Cuyahoga Heights, OH 44125 (216) 641-3505	Cuyahoga Heights	Solid Waste Recyclables Yard Waste	632	Rumpke Transfer Station Rosby Waste Management
Village of Highland Hills Jordan Edwards	3700 Northfield Rd. Highland Hills, OH 44122 (216) 283-3000	Highland Hills	Solid Waste Recyclables Yard Waste	335	Waste Management Transfer Station Waste Management composting
Village of Moreland Hills Ted DeWater	4350 SOM Center Rd. Moreland Hills, OH 44022 (216) 248-1188	Moreland Hills	Solid Waste Recyclables Yard Waste	3,057	Allied Waste City of Solon Recycle Midwest Waste Management RET3
Village of Valley View Donald Harter	6848 Hathaway Rd. Valley View, OH 44125 (216) 524-1087	Valley View	Solid Waste Recyclables Yard Waste Bulk C&D	2,569	Waste Management Boyas Abitibi BBN Oil
Village of Woodmere Jim Fisher	27899 Chagrin Blvd. Woodmere, OH 44122 (216) 292-4101	Woodmere	Solid Waste Recyclables Yard Waste	613	BFI TRC Boyas Excavating Bedford Metals Caraustar
		Private Sec	tor Haulers - Reporting Data		
123 Disposal, Inc. George Arsic	3623 Durham Rd. Norton, OH 44203 (330) 848-8171	2, 3, 4, 6, 8, 9, 10 15, 16, 20, 21, 27 28, 34, 39, 44, 45 47, 53, 54, 55, 58	Solid Waste Recyclables	1,100	Rumpke Noble Road Landfill Republic Countywide Landfill Central Waste Landfill Medina County Transfer Station Harvard Road Transfer Station Medina County Solid Waste Processing
All Points Rubbish Disposal LLC Linda Kukoleck	32825 Nimrod W. Street Solon, OH 44139 (216) 441-7090	3, 4, 6, 10, 11, 15 16, 18, 19, 20, 21 27, 31, 32, 33, 34 37, 44, 46, 51, 53 54, 55	Solid Waste C&D	739	Central Waste, Inc.
All Refuse Systems Randy Crawford	866 Addison Rd. Cleveland, OH 44103 (216) 391-5200	3, 7, 15, 16, 17 18, 19, 21, 31, 52	Solid Waste Recyclables Yard Waste Bulk C&D	4,206	Waste Management Rmpke Transfer Station Kurtz Brothers FTP A&W Metals C&J brick/stone recycling
Amware Recycling Chris Schwind	19100 Holland Rd. Brook Park, OH 44142 (440) 234-4081	3, 4, 6, 10, 15, 21 24, 27, 30, 33, 37 39, 44, 47, 48, 51 53, 57, 58	Recyclables	23,000	Temple Inland (Mill) Solvay (Mill) Smurfit (Mill)
Associated Paper Stock Michael E. Aey, Jr.	P.O. Box 710 N. Lima, OH 44452 (330) 549-5311	60	Recyclables	10,061	Fiber Corr Greif Brothers Associated Paper Stock
Baumann Enterprises William Baumann	4801 Chaincraft Rd. Cleveland, OH 44125 (216) 823-2244	6, 15, 21, 27, 39 44, 52	C&D	20,000	Waste Management Kurtz Brothers
Baur Hauling Joe Balog	5411 Hillside Rd. Independence, OH 44131 (216) 346-5800	9	Solid Waste	2	Broadview Heights Transfer Station
Bencin Disposal Services Mark Malbin	2636 Brecksville Rd. Richfield, OH 44286 (330) 659-2556	all except 1,5,6,7,13, 14,19,20,24,25,26	Solid Waste Recyclables Yard Waste Bulk C&D	11,823	Central Waste, Inc. Waste Management Lake County Landfill Republic Waste Harvard Ave. Transfer Station All Ohio Landscaping All Ohio Recycling Gateway Recycling Petty Group Indy Recycling Rosby JBT Scrap FPT Scrap Weingold Bedford Metals

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
Caraustar Rich Ryan	3400 Vega Ave. Cleveland, OH 44113 (216) 961-5060	1,2,12,15,16,28, 30,35, 39,46,47,48, 50,51,52,54,59	Recyclables	30,010	Graphic Pkg Temple-Inland Kimberly Clark Fox Fiber Pratt Ind.
Dave's Hauling Dave Reid	4320 MLK Jr. Dr. Cleveland, OH 44105 (216) 883-2198	8, 10, 12, 13, 14 15, 16, 19, 21, 22 28, 30, 31, 33, 35 37, 40, 43, 44, 45 48, 49, 50, 51, 53 54, 57, 58	Solid Waste Recyclables Yard Waste Bulk C&D	115	Waste Management Lakeside Metals Eastside Metals
Fabrizi Disposal Inc. Michele Eggert	389 Columbia Rd. Valley City, OH 44280 330-273-2784	7, 13, 4, 22, 23, 29 33, 35, 36, 46, 56	Solid Waste C&D	10543	Boyas Excavating Central Waste Inc. Kurtz Brothers Rosby Resource Recovery Waste Management Zollinger Sand & Gravel Co. City of Cleveland Republic Waste Strongsville
Gateway Recycling Antoinette Starkey	4223 E. 49th St. Cleveland, OH 44125 (216) 341-8777	8, 16, 27, 37, 53	Recyclables	55,500	DNR
Granger Trucking, Inc. Frank Bianchi	8001 Old Granger Rd. Garfield Heights, OH 44125 (216) 641-5015	15	Solid Waste	12,600	Noble Road Landfill City of Cleveland Ridge Road Transfer Station
Graphic Packaging International, Inc Eric Lance	6385 Cochran Rd. Solon, OH 44139 (440) 248-4370	51	Solid Waste	240	Allied Waste
Great Eastern Metals Meghan D'Angelo	18901 Euclid Ave. Upper Valley Drive Cleveland, OH 44117 (216) 481-4043	19	Recyclables	0	Great Eastern Metals
Haul Away Container Service Bart Carmichael	P.O. Box 374 Richfield, OH 44286 330-659-6775	60	Solid Waste Recyclables Yard Waste C&D	7,400	Waste Management Norton Environmental Boyas Excavating Gateway Recycling PSC Metals Able Alloys Rosby Resources Wastetran Services
Jasar Recycling Maude Ciardi	183 Edgeworth Ave. E. Palestine, OH 44413 (330) 426-2538	13, 15, 31, 33, 34 51, 57	Recyclables	3,686	Recycled inhouse then sold to paper mills, plastic broker and glass brokers (DNR specific names)
Landmark Disposal Bo Veverka	9100 Market Pl. Broadview Heights, OH 44147 (216) 447-0070	All	Solid Waste Recyclables Yard Waste Bulk C&D	40,874	American Landfill Central Waste, Inc. Broadview Heights Recycling Center BFI Glenwillow Transfer Station Republic - Strongsville Transfer Station Boyas Excavating Rosby Resource Recovery Sagamore Soils Compost Medina County CPF Gateway Recycling FPT Cuyah
Lynne Neyman	6858 Wilson Mills Rd. Gates Mills, OH 44040 (440) 646-9013	60	Solid Waste Recyclables Yard Waste Bulk C&D	6,389	Waste Management Cleveland - Ridge Road Transfer Station Kurtz Brothers
Ohio Bulk Transfer Co. Steve Rizzo	3203 Harvard Ave. Cleveland, OH 44105 (216) 883-7200	all	C&D	5,200	American Landfill Cuyahoga Regional Landfill Geneva Landfill Countywide Landfill Cleveland Transfer Station Cleveland Transfer Station
Pete & Pete Container Service, Inc. Lisa Ristagno	4830 Warner Rd. Garfield Heights, OH 44125 (216) 441-4422	all	Solid Waste Recyclables Yard Waste Bulk C&D	can't estimate	Cuyahoga Regional Rosby Resource Kurtz Brothers Rumpke Republic Services Glenwillow Independence Recycling
Ponz Recycling Industries John Ponyicky	4130 Bradley Rd. Cleveland, OH 44109 (216) 661-8999	3,4,8,10,15,16,17 34,39,51	Solid Waste C&D	675	Exports materials outside USA
R & J Trucking, Inc. Mark A. Carrocce	8063 Southern Blvd. Youngstown, OH 44512 1-800-262-9365	9, 15, 23, 50	Haul from transfer stations to landfills	DNR	Rumpke Noble Road Landfill Republic Oberlin Landfill Republic Countywide Landfill Republic Glenwillow Transfer Station Rumpke Harvard Road Transfer Station City of Cleveland Transfer Station Broadview Heights Transfer Station Shaker Heights Transfer Stati
S. Slesnick Co., Inc. Jen Alder	700 3rd St. SE Canton, OH 44707 (330) 454-5101	2, 3, 6, 10, 11, 15 16, 21, 33, 34, 37 40, 44, 47, 48, 50 51, 53, 58	Recyclables	1,461	Countywide Landfill Greif Fibercorr Smurt it Stone SBC Mondo

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
Shredding Network Dana R. Mueller	29325 Clayton Road Wickliffe, OH 44092 (440) 944-8819	all except 5 and 29	Recyclables	200	Bay West Paper Mill
Universal Disposal Sheryl Clemson	9954 Old State Rd. Chardon, OH 44024 (440) 286-3153	2, 5, 13, 14, 22 24, 26, 30, 32, 33 35, 46, 47, 51, 52 57, 59	Solid Waste Recyclables Bulk	1,771	Central Waste Lake County Bales Geneva Landfill Glenwillow Transfer Station Caraustar
Victor Metals Paul Varga	P.O. Box 280 Wickliffe, OH 44092 (440) 585-5959	15, 44	Recyclables	1,297	I. Schumann & Co. Imperial Zinc Metallic Recovery Group Wilkoff & Sons Willoughby Iron & Waste North Coast Ferrous Supply Electralloy
Waste Management of Ohio Rob Fuller	6705 Richmond Rd. Glenwillow, OH 44139 (440) 201-1207	60	Solid Waste Recyclables C&D	206,341	American Landfill Cuyahoga Regional Landfill Akron Transfer Station Cleveland Transfer Station Rumpke Harvard Road Transfer Station Akron Transfer Station Oakwood Transfer Station Norton Environmental Rosby Resource
Wastetran Disposal Services Inc. Bart Carmichael	7415 Bessemer Ave Cleveland, OH 44127 (216) 341-0042	60	C&D	4,000	Rosby Resources LaFarge Notton Environmental Madden Brothers Gateway Recycling Abic Alloys PSC Metals
Woodstock Products Terry Dunay	2914 Broadway Ave. Cleveland, OH 44115 (216) 641-3811	11, 15, 19, 23, 31 36, 53	Recyclables	DNR	Kurtz Brothers
	· · · · · · · · · · · · · · · · · · ·	Private Secto	or Haulers - Not Reporting Data		
1-800-GOT-JUNK?	34104 Euclid Ave #112 Willoughby, OH 44094 1-800-468-5865	DNR	DNR	DNR	DNR
A & D Contracting Inc.	3620 Pearl Rd. Cleveland, OH 44109 (216) 749-8600	DNR	DNR	DNR	DNR
A & H Trucking	8500 Clinton Building I Brooklyn, OH 44144 (216) 281-4442	DNR	DNR	DNR	DNR
ACD Disposal, Inc.	P.O. Box 30067 Middleburg Heights, OH 44130 (216) 572-9933	DNR	DNR	DNR	DNR
ACDC Logistics Inc	20549 First Ave. Cleveland, Ohio 44130 (440) 260-0957	DNR	DNR	DNR	DNR
Ace Disposal	4217 Glenn Highway Cambridge, OH 43725 (740) 439-5500	DNR	DNR	DNR	DNR
Affordable Roll-Off, Inc.	7701 Stocking Rd. Madison, OH 44057 (216) 298-1497	DNR	DNR	DNR	DNR
AgHog	420 Ashwood Rd. Darlington, PA 16115 (724) 827-2187	DNR	DNR	DNR	DNR
Alcoa, Inc	1600 Harvard Ave. Cleveland, OH 44105 (216) 641-4375	DNR	DNR	DNR	DNR
All American Waste Management	7639 King Memorial Rd. Mentor, OH 44060 (440) 479-2427	DNR	DNR	DNR	DNR
All Ohio Secure Shred	14250 South Industrial Ave. Maple Heights, OH 44137 (216) 332-9850	DNR	DNR	DNR	DNR
All Wood Disposal	P.O. Box 698 Mantua, OH 44255 (216) 274-2371	DNR	DNR	DNR	DNR
Allison Brothers, Inc.	P.O. Box 198 Ellsworth, OH 44416 (330) 538-0768	DNR	DNR	DNR	DNR
American General Waste Management	14915 Woodworth Rd. Cleveland, OH 44110 (216) 268-2880	DNR	DNR	DNR	DNR
American Rubbish Removal	1270 E. 53rd St. Cleveland, OH 44114 (216) 271-9001	DNR	DNR	DNR	DNR
Any-Time Any Place Cartage	12110 Parkview Ave. Cleveland, OH 44120 (216) 799-9911	DNR	DNR	DNR	DNR
Any-Time Any Place Cartage	4222 Okalona Rd. South Euclid, OH 44121 (216) 799-9911	DNR	DNR	DNR	DNR
Artemis Industries	2550 Gilchrist Rd. Akron, OH 44305 (330) 798-8991	DNR	DNR	DNR	DNR

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
Atlas Lederer	9515 Woodland Ave. Cleveland, OH 44104 (216) 231-2430	DNR	DNR	DNR	DNR
Autumn Industries	518 Perkins-Jones Rd. NE Akron, OH 44483 (330) 372-5002	DNR	DNR	DNR	DNR
Baker & Son Trucking	3479 E. 154th St. Cleveland, OH 44120 (216) 991-9511	DNR	DNR	DNR	DNR
Battles Trucking Express	16084 Acacia Dr. Strongsville, OH 44136 (440) 572-1205	DNR	DNR	DNR	DNR
BBN Oil Recycling	6442 J. Metro Court Bedford Heights, OH 44146 (216) 786-1888	DNR	DNR	DNR	DNR
Beck Aluminum	300 Allen Bradley Dr. Mayfield Heights, OH 44124 1-800-255-2325	DNR	DNR	DNR	DNR
Bestway Hauling	P.O. Box 2514 Alliance, OH 44601 (216) 821-4285	DNR	DNR	DNR	DNR
Brunswick Disposal	P.O. Box 87 Brunswick, OH 44212 (216) 225-4430	DNR	DNR	DNR	DNR
Budget Dumpster Rental	15408 Edolyn Ave. Cleveland, OH 44111 (216) 258-0014	DNR	DNR	DNR	DNR
Budget Dumpster Rental	24660 Clareshire Dr. North Olmsted, OH 44070 (440) 606-2171	DNR	DNR	DNR	DNR
Bufford Pallet Removal Service	1959 E. 59th St. Cleveland, OH 44103 (216) 881-8845	DNR	DNR	DNR	DNR
C & J Rubbish Removal	9416 Miles Ave. Cleveland, OH 44105 (216) 341-6020	DNR	DNR	DNR	DNR
Cans Plus Recycling	2604 Walton Rd. Cleveland, OH 44113 (216) 781-4611	DNR	DNR	DNR	DNR
Cardinal Cartage	13518 Enterprise Ave. Cleveland, OH 44135 (216) 267-1660	DNR	DNR	DNR	DNR
CBS Transportation, Inc.	1701 E 12th St. #14 Cleveland, OH 44114 (216) 292-6339	DNR	DNR	DNR	DNR
Central Disposal	471 Newell St. Painesville, OH 44070 (216) 946-6766	DNR	DNR	DNR	DNR
Central Ohio Oil	795 Marion Rd. Columbus, OH 43207 (614) 443-9728	DNR	DNR	DNR	DNR
Century Transportation	6707 Bessemer Ave. Cleveland, OH 44127 (216) 271-7100	DNR	DNR	DNR	DNR
Century Waste Disposal, Inc.	29906 Lakeland Blvd. Wickliffe, OH 44092 (216) 944-8732	DNR	DNR	DNR	DNR
Certified Document Destruction	300 W. Chestnut St. Wasean, OH 43567 (419) 337-5899	DNR	DNR	DNR	DNR
Charles Consolidated	P.O. Box 53 Wadsworth, OH 44282 (440) 476-8903	DNR	DNR	DNR	DNR
Chet's Salvage, Inc.	6751 Wall St. Ravenna, OH 44266 (330) 296-8312	DNR	DNR	DNR	DNR
Cimino Box & Pallet	8500 Clinton Rd. #J Cleveland, OH 44144 (216) 961-7377	DNR	DNR	DNR	DNR
City Scrap & Salvage	611 West Wilbeth Rd. Akron, OH 44314 (330) 753-5051	DNR	DNR	DNR	DNR
Cleveland Container Recycling	9520 Richmond Rd. Cleveland, OH 44105 (216) 271-5700	DNR	DNR	DNR	DNR
Cleveland Containers	3905 Jennings Rd. Cleveland, OH 44109 (440) 666-6964	DNR	DNR	DNR	DNR
Cleveland Industrial Drum	2716 E. 51st St. Cleveland, OH 44104 (216) 431-5346	DNR	DNR	DNR	DNR
Cleveland Junk Removal and Hauling	2945 East 82nd St. Cleveland, OH 44105 (440) 941-4285	DNR	DNR	DNR	DNR
Cleveland Scrap	3018 East 55th St. Cleveland, OH 44127 (216) 271-5825	DNR	DNR	DNR	DNR
Colonial Metals	P.O. Box 726 Triumph Industrial Park Elkton, MD 21622 (410) 398-7200	DNR	DNR	DNR	DNR

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
Compliance Technologies	4510 East 71st St. Cleveland, OH 44105 (216) 341-1800	DNR	DNR	DNR	DNR
Consolidated Rail Corporation	1717 Arch St., Suite 3210 Philadelphia, PA 19103 (215) 209-2000	DNR	DNR	DNR	DNR
Consolidated Recycling Technologies	P.O. Box 239 Bridgewater, MA 02324 (508) 697-1860	DNR	DNR	DNR	DNR
Continental Paper	1623 Lumber St. Chicago, IL 60616 (312) 226-2010	DNR	DNR	DNR	DNR
Conversion Resources	8295 Bavaria Dr. East Macedonia, OH 44056 (330) 405-0474	DNR	DNR	DNR	DNR
Cooper Disposal LLC	34250 Mills Rd. Avon, OH 44011 (440) 327-5602	DNR	DNR	DNR	DNR
Cooper Disposal LLC	4645 Jaycox Rd. Avon, OH 44011 (440) 250-9800	DNR	DNR	DNR	DNR
Cordell Hauling, Inc.	7018 Clark Ave. Cleveland, OH 44102 (216) 651-4285	DNR	DNR	DNR	DNR
Counts Container Inc.	5137 West 161st St. Cleveland, OH 44142 (216) 433-4336	DNR	DNR	DNR	DNR
CS Transport	6106 Greene Dr. Cleveland, OH 44142 (216) 898-1107	DNR	DNR	DNR	DNR
Curtis Disposal, Inc.	550 Johnson Rd. Wadsworth, OH 44281 (216) 336-4222	DNR	DNR	DNR	DNR
Cuyahoga Metropolitan Housing Authority	1441 W. 25th St.	DNR	DNR	DNR	DNR
D. Cohen & Sons Corp.	2670 East 37th St. Cleveland, OH 44115 (216) 391-0404	DNR	DNR	DNR	DNR
Dailey Refuse Service	P.O. Box 77 Wellsville, OH 43968 (216) 532-4667	DNR	DNR	DNR	DNR
Dana Industrial Scrap	30150 Lakeland Blvd. Wickliffe, OH 44092 (440) 944-1353	DNR	DNR	DNR	DNR
Dart Trucking	61 Railroad St. Canfield, OH 44406 (330) 533-9841	DNR	DNR	DNR	DNR
Dartron Corp.	900 Fairport Nursery Rd. Painesville, OH 44077 (216) 951-5237	DNR	DNR	DNR	DNR
De Milta Iron & Metal	3900 Ben Hur Ave. Willoughby, OH 44094 (216) 946-7478	DNR	DNR	DNR	DNR
Decco Alloys	2050 Midway Dr. Twinsburg, OH 44087 (330) 405-5454	DNR	DNR	DNR	DNR
DeMilta Iron & Metal	3950 Ben Hur Ave. Willoughby, OH 44094	DNR	DNR	DNR	DNR
Descenzos Rubbish Removal	(440) 946-7478 4140 Trent Ave. Cleveland, OH 44109	DNR	DNR	DNR	DNR
Dick'll Do It	(216) 631-0022 P.O. Box 1456 Stow, OH 44224 (330) 668-3773	DNR	DNR	DNR	DNR
Diversified Disposal	P.O. Box 1772 Medina, OH 44258 (330) 723-3500	DNR	DNR	DNR	DNR
Dominick's Hauling	2645 East 111th St. Cleveland, OH 44104 (216) 215-3699	DNR	DNR	DNR	DNR
Dominics Dumping	3250 Cedarbrook Rd. Cleveland Heights, OH 44118 (216) 215-3699	DNR	DNR	DNR	DNR
Do-Mor Refuse Service	State Rte. 39 Dover, OH 44622 (216) 364-6115	DNR	DNR	DNR	DNR
Double Jacks Transport	8649 Ravenna Rd. Chardon, OH 44024 (440) 478-5278	DNR	DNR	DNR	DNR
Dumpster Nationwide - Cleveland	16783 Chagrin Blvd. Cleveland, OH 44120 (216) 916-8745	DNR	DNR	DNR	DNR
Dumpsters Inc.	5921 Fawn Ln. Brecksville, OH 44141 (440) 740-2190	DNR	DNR	DNR	DNR
Dustie's Trucking, Inc.	16692 Walnut Creek Dr. Strongsville, OH 44136 (216) 846-0822	DNR	DNR	DNR	DNR

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
E Z Way Disposal	142 Arbor Rd. NW Minerva, OH 44657 (216) 868-7033	DNR	DNR	DNR	DNR
Envirite Ohio	2050 Central Ave. SE Canton, OH 44707 (330) 456-6238	DNR	DNR	DNR	DNR
Erie-Vu Disposal	38303 Airport Parkway Willoughby, OH 44094 (440) 942-7300	DNR	DNR	DNR	DNR
Expedited Transportation Services	93 Willis St. Bedford, OH 44146 (440) 232-5468	DNR	DNR	DNR	DNR
Express Lane Transportation	6835 Cochran Rd., Suite C Solon, OH 44139 (440) 248-9180	DNR	DNR	DNR	DNR
E-ZE Hauling	1922 Snow Rd., Suite 188 Parma, OH 44134 (216) 749-5483	DNR	DNR	DNR	DNR
Farmer Hauling	1554 E. 34th St. Cleveland, OH 44114 (216) 881-8083	DNR	DNR	DNR	DNR
Farris Disposal	390 Morgan Ave. Akron, OH 44311 (330) 665-1663	DNR	DNR	DNR	DNR
Fay W H Steel Hauling	3020 Quigley Rd. Cleveland, OH 44113 (216) 861-4232	DNR	DNR	DNR	DNR
Ferrous Processing & Trading	8550 Aetna Rd. Cleveland, OH 44105 (216) 441-3800	DNR	DNR	DNR	DNR
Frato & Sons Salvage & Dumpster Service	3867 Lakeside Ave. E Cleveland, OH 44114 (216) 432-1100	DNR	DNR	DNR	DNR
Frato & Sons Salvage & Opentop Dumpster Service	2070 East 61st St. Cleveland, OH 44103 (216) 432-1100	DNR	DNR	DNR	DNR
Frato Trucking, Inc.	P.O. Box 21220 S. Euclid, OH 44121 (216) 421-8889	DNR	DNR	DNR	DNR
Fruth Sanitation	P.O. Box 1734 Stow, OH 44224 (216) 688-2432	DNR	DNR	DNR	DNR
Fruth Trucking	700 McCauley Rd. Stow, OH 44224 (330) 686-8000	DNR	DNR	DNR	DNR
G & M Pallet Company	4201 Lakeside Ave. Cleveland, OH 44114 (216) 881-1414	DNR	DNR	DNR	DNR
G & W Transport	939 E. 67th St. Cleveland, OH 44103 (216) 432-0707	DNR	DNR	DNR	DNR
Genesis Transportation	7515 Pearl Rd. Cleveland, OH 44130 (440) 243-8066	DNR	DNR	DNR	DNR
Global Waste	3601 S. Green Rd., Ste. 310 Beachwood, OH 44122 (216) 595-9680	DNR	DNR	DNR	DNR
Good Service Hauling	2715 Brookpark Rd. Parma, OH 44134 (216) 541-0567	DNR	DNR	DNR	DNR
Grant's Trucking Co.	1186 Carolyn Rd. E. Cleveland, OH 44112 (216) 541-0567	DNR	DNR	DNR	DNR
Greenstar Recycling	4100 Grand Ave. Pittsburgh, PA 15225 (412) 475-0826	DNR	DNR	DNR	DNR
GRG Trucking	4700 Train Ave. Cleveland, OH 44102 (216) 651-8898	DNR	DNR	DNR	DNR
Hanna Pallet Co.	5604 Cedar Ave. Cleveland, OH 44103 (216) 391-5000	DNR	DNR	DNR	DNR
Hans Laugesen Building Company, Inc.	2176 Ridge Rd. Hinckley, OH 44233 (216) 225-4914	DNR	DNR	DNR	DNR
Harrington Hauling	3600 Wyoga Lake Rd. Cuyahoga Falls, OH 44224 (330) 945-7442	DNR	DNR	DNR	DNR
Harter Enterprises	12800 Brookpark Rd. Cleveland, OH 44130 (216) 267-4114	DNR	DNR	DNR	DNR
Harvard Refuse Inc.	7720 Harvard Ave. Cleveland, OH 44105 (216) 883-8155	DNR	DNR	DNR	DNR
Hauling A C K	3313 E. 80th St. Cleveland, OH 44127 (216) 441-6357	DNR	DNR	DNR	DNR
Hawk Enterprises	3600 Ridge Rd. Cleveland, OH 44102 (216) 631-7009	DNR	DNR	DNR	DNR

Facility/Activity Name	Mailing Address			Tons Collected from			
Contact Person	City, State, Zip, Phone 555 Morgan Ave.	City/Twp./Village	Materials Collected	the District	Name of Facility Used by Hauler		
HB Rubbish & Hauling	Akron, OH 44311 (216) 773-4939	DNR	DNR	DNR	DNR		
Heritage Environmental Services, Inc.	1250 St. George St. E. Liverpool, OH 43920 (330) 385-9300	DNR	DNR	DNR	DNR		
Hershey's Rubbish Service	P.O. Box 616 Cuyahoga Falls, OH 44222 (216) 836-4520	DNR	DNR	DNR	DNR		
HHH Rubbish Removal	3600 W. 69th St. Cleveland, OH 44102 (216) 961-9401	DNR	DNR	DNR	DNR		
HS Rubbish Service	6600 Denison Ave. Cleveland, OH 44102 (216) 651-1390	DNR	DNR	DNR	DNR		
Infoshred.net	23800 Corbin Dr. Cleveland, OH 44128 (216) 663-8910	DNR	DNR	DNR	DNR		
Iron Mountain	9011 Freeway Dr. Macedonia, OH 44056 (440) 248-0999	DNR	DNR	DNR	DNR		
J & J Refuse, Inc.	8500 Chamberlin Rd. Twinsburg, OH 44087 (330) 963-5493	DNR	DNR	DNR	DNR		
J Gunn Services	24725 Price Rd. Cleveland, OH 44146 (216) 322-4866	DNR	DNR	DNR	DNR		
J Miller Express	9801 Sladden Ave. Cleveland, OH 44125 (216) 440-3100	DNR	DNR	DNR	DNR		
JBI Scrap Processors	2925 E. 55th St. Cleveland, OH 44127 (216) 441-1770	DNR	DNR	DNR	DNR		
K T I Container	3566 State Rd., Suite #3 Cuyahoga Falls, OH 44223 (330)929-5842	DNR	DNR	DNR	DNR		
Karas Trucking, Inc.	16200 Brookpark Rd. Cleveland, OH 44135 (216)362) 6400	DNR	DNR	DNR	DNR		
Keep It Green Recycling	4611 W. 193rd St. Cleveland, OH 44135 (216) 267-7790	DNR	DNR	DNR	DNR		
Kendrik Environmental	P.O. Box 400 Windham, OH 44288 1-888-750-3909	DNR	DNR	DNR	DNR		
Major Waste Disposal	6430 Vrooman Rd. Painesville, OH 44077 (440) 254-4929	DNR	DNR	DNR	DNR		
Marine Transport	17877 St. Clair Ave., Suite 10 Cleveland, OH 44110 (216) 481-5700	DNR	DNR	DNR	DNR		
Medina Paper Recycling, Inc.	370 Lake Rd. Medina, OH 44256 (330) 723-4334	DNR	DNR	DNR	DNR		
Metro Disposal	8101 Union Ave. Cleveland, OH 44105 1-888-473-7330	DNR	DNR	DNR	DNR		
Middlefield Pallet Inc.	15940 Burton Windsor Rd. Middlefield, OH 44062 (440) 632-0553	DNR	DNR	DNR	DNR		
Miles Disposal, Inc.	13800 Miles Ave. Cleveland, OH 44105 (216) 295-1677	DNR	DNR	DNR	DNR		
Millwood, Inc.	3708 International Blvd. Vienna, OH 44473 (330) 393-4400	DNR	DNR	DNR	DNR		
MW Dumster Rental	1142 Main Ave. Cleveland, OH 44113 (216) 367-9659	DNR	DNR	DNR	DNR		
North Coast Ferrous Supply Inc.	4200 East 71st St., Suite 2 Cleveland, OH 44105 (216) 341-1588	DNR	DNR	DNR	DNR		
Northcoast, Inc.	1331 Lloyd Rd. Wickliffe, OH 44092 (216) 943-6968	DNR	DNR	DNR	DNR		
Norton Environmental	9191 Postal Dr. Broadview Heights, OH 44147 (440) 740-0145	DNR	DNR	DNR	DNR		
Oak Leaf Waste	800 Conneticut Blvd. East Hartford, CT 06108 1-888-625-5323	DNR	DNR	DNR	DNR		
Ohio By Products	1001 Belt Line St. Cleveland, OH 44109 (216) 661-2755	DNR	DNR	DNR	DNR		
Omni Source	7575 West Jefferson Blvd. Fort Wayne, IN 46804 (260) 422-5541	DNR	DNR	DNR	DNR		
Peerless Oil	P.O. Box 173 North Olmsted, OH 44070 (440) 777-6629	DNR	DNR	DNR	DNR		

Facility/Activity Name Contact Person	Mailing Address City, State, Zip, Phone	City/Twp./Village	Materials Collected	Tons Collected from the District	Name of Facility Used by Hauler
Primewood Craft	8619 Rainbow Highway West Salem, OH 44287 (419) 853-1111	DNR	DNR	DNR	DNR
R & B Hauling	24726 Price Rd. Bedford Heights, OH 44146 (216) 439-7080	DNR	DNR	DNR	DNR
R & R Sanitation	1447 Martin Rd. Mogadore, OH 44260 (216) 628-9609	DNR	DNR	DNR	DNR
Ramey's Rubbish Hauling	2931 Millvale Ave. NE Canton, OH 44705 (216) 452-1220	DNR	DNR	DNR	DNR
Ramos Trucking Corp.	3841 West 132nd St. Cleveland, OH 44111 (216) 337-0859	DNR	DNR	DNR	DNR
Rays Light Hauling	12012 Saywell Ave. Cleveland, OH 44108 (216) 681-8512	DNR	DNR	DNR	DNR
RC Miller Refuse Service, Inc.	1800 9th St. NE Canton, OH 44705 (216) 452-5059	DNR	DNR	DNR	DNR
Recycle Midwest Inc.	16419 St. Clair Ave. Cleveland, OH 44110 (216) 481-9490	DNR	DNR	DNR	DNR
Refuse Transfer Systems, Inc.	7140 Krick Rd. Cleveland, OH 44146 (440) 786-1314	DNR	DNR	DNR	DNR
Republic Waste Services	8123 Jones Rd. Cleveland, OH 44105 (216) 441-6300	DNR	DNR	DNR	DNR
RG Dine Refuse Service, Inc.	1921 Clarendon Ave. NW Canton, OH 44708 (216) 455-7793	DNR	DNR	DNR	DNR
Rob-Ryan Inc. Metal Processing	5141 Richmond Rd. Bedford Heights, OH 44146 (216) 595-1980	DNR	DNR	DNR	DNR
Royal Oak Recycling	16065 Industrial Ln. Cleveland, OH 44135 (216) 325-1500	DNR	DNR	DNR	DNR
Rumpke	621 Newman St. Mansfield, OH 44902 (419) 895-0058	DNR	DNR	DNR	DNR
Rupodi Rubbish Removal	3017 E. 83rd St. Cleveland, OH 44104 (216) 341-1575	DNR	DNR	DNR	DNR
Shoreline Trucking	924 Richmond Rd. Painesville, OH 44077 (216) 951-8886	DNR	DNR	DNR	DNR
Shredding Solutions	5905 Harper Rd., Suite C Solon, OH 44139 (216) 248-1997	DNR	DNR	DNR	DNR
Shred-It	5480 Cloverleaf Parkway, Suite 7 Valley View, OH 44125 (440) 243-8500	DNR	DNR	DNR	DNR
Simplified Waste Systems	3705 Oak Park Ave. Cleveland, OH 44109 (216) 459-0103	DNR	DNR	DNR	DNR
T & D Refuse	2949 Southway St. SW Massillon, OH 44646 (216) 832-8482	DNR	DNR	DNR	DNR
TDI Waste Services	4140 Trent Ave. Cleveland, OH 44109 (216) 214-4193	DNR	DNR	DNR	DNR
TH Hauling	3689 Shelton Dr. Cleveland, OH 44110 (216) 469-8192	DNR	DNR	DNR	DNR
Valley Trucking & Recycling	5895 Main St. Peninsula, OH 44264 (330) 657-2849	DNR	DNR	DNR	DNR
Weingold	3455 Campbell Rd. Cleveland, OH 44105 (216) 341-3787	DNR	DNR	DNR	DNR
Weingold Rubbish Co	3915 East 91st. St. Cleveland, OH 44105 (216) 883-6635	DNR	DNR	DNR	DNR
World Waste	9405 Sandusky Ave. Cleveland, OH 44105 (216) 441-3640	DNR	DNR	DNR	DNR
World Waste Concepts Inc.	3969 Congress Parkway Richfield, OH 44286 (330) 659-2200	DNR	DNR	DNR	DNR
	Totals			911,615.31	

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

## A. Reference Year Population and Residential/Commercial Waste Generation

Table IV-1 "Reference Year Population and Residential/Commercial Generation" includes an estimate of the District's 2009 population. Population was based on population estimates from the Ohio Department of Development Office of Strategic Research. The 2009 population estimate for the District was 1,275,709. The District will utilize the new census data for 2010 and base future projections on the 2010 data.

The 2009 population estimate included population from outside Cuyahoga County (150). The Village of Hunting Valley population included residents in Geauga County. The Geauga County population of Hunting Valley was added into the District's population total because more than 50% of the political subdivision's population was in Cuyahoga County. The total adjusted population in 2009 was 1,275,859.

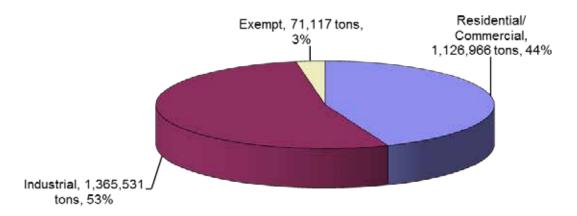
The District projected residential/commercial waste using Ohio EPA's September 4, 2002, recommendations for estimating per capita residential/commercial waste generation. For 2009, the per capita residential/commercial waste generation estimate was 4.84 pounds per Table IV-1 shows the formula for projecting the person per day. residential/commercial waste generation using the "national projections" that were adjusted by Ohio EPA. This method estimated the District's residential/commercial waste generation as 1,126,966 tons in 2009. This estimate is significantly lower than the residential/commercial waste generation of 1,731,395 tons recorded by landfills, transfer stations and incinerators for 2009 (1,212,855 tons) plus reported recycling and source reduction activities for 2009 (518,540 tons). For further discussion on reconciling the waste generation values see Section IV.H of this Plan Update.

#### B. Industrial Waste Generation

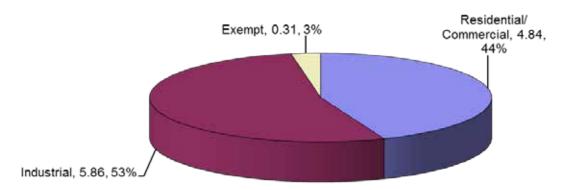
Table IV-2 summarizes the response of 478 industries representing 29,773 employees. This includes industries that the District followed up through multiple mailings or additional phone calls. This is a 57% (478 responses/839 surveys) response rate. The survey respondents represented approximately 14% of the District's industries (478 responses/3,443 industries) and approximately 27% of the industrial employees (29,773 represented employees/108,619 total industrial employment).

The following figures depict the above statistics.

2009 Waste Generation Based on National Averages – Method 1



2009 Generation Rate Based on National Averages - Method 1



The survey responses reported 676,354 tons of solid waste generated. For those industries that did not respond, the District used the generation rate from Appendix JJ of the Ohio EPA Plan Format to estimate industrial waste generated. Using this method, total industrial waste generation was projected to be 1,365,531 tons for 2009. This was 616,561 tons (45%) greater than the 748,970 tons industrial waste generation recorded using landfill data for 2009 (185,569 tons) and reported industrial recycling and waste reduction for 2009 (563,401 tons). For further discussion on reconciling the waste generation values, see Section IV.H of this *Plan Update*.

#### C. Exempt Waste

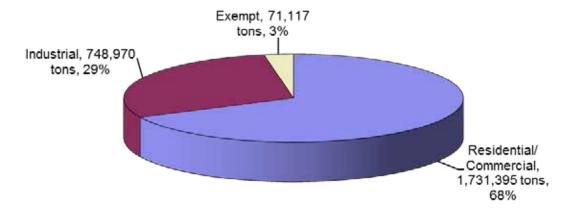
Exempt waste is material such as construction and demolition debris, fly ash and foundry sand which is not defined as a solid waste. Exempt wastes may be managed in landfills that have different and often less stringent environmental control requirements. Table IV-3 shows the total

exempt waste generated by the District was 71,117 tons. This includes the exempt waste reported by the landfills receiving the District's waste in Table III-1 and from transfer stations in Table III-3 and material that was incinerated at an Indiana facility (Table III-2).

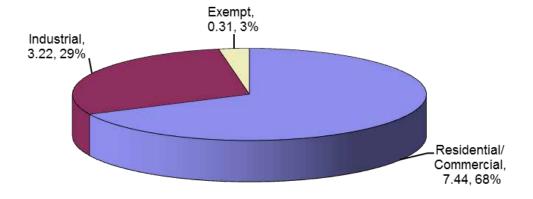
#### D. Total Waste Generation

Table IV-4 presents the total waste generated using national and industrial projections (Method 1). Using the national averages adjusted by Ohio EPA, the District projected 2,563,615 tons of waste was generated in 2009. This included residential/commercial waste generation of 1,126,966 tons (Table IV-1) and 1,365,531 tons (Table IV-2) projected industrial waste and 71,117 tons of exempt waste (Table IV-3). This was 12,132 tons more than the 2,551,482 tons of waste generation calculated using landfill, transfer station and incineration data (1,469,542 tons) and reported recycling and waste reduction, including incinerated exempt waste (1,081,941 tons). For further discussion on reconciling the waste generation values, see Section IV.H of this *Plan Update*. The following charts depict the waste generation and generation rate by sector using national and industrial projections:

2009 Waste Generation Based on Actual Reported Date – Method 2



2009 Generation Rate Based on Actual Reported Data – Method 2



#### E. Reference Year Waste Reduction

The difference between the 2009 Annual Report and the waste reduction information provided in this *Plan Update* is a result of the effort to obtain additional recycling information directly from companies and communities. The data and information presented in the *Plan Update* includes more recent information and additional data collected from political subdivisions, businesses, industry and other sources. When comparing the two documents (ADR and *Plan Update*), this *Plan Update* should be considered more current and used as the authoritative reference year guide.

The following section summarizes the waste reduction credit methodology used by the District for the reference year (2009) for the residential/commercial and industrial sectors.

### **Residential Survey Methodology**

The District prepares an annual residential recycling report and has a comprehensive understanding of the individual communities' waste reduction and recycling programs. Communities report to the District residential recycling, including curbside and drop-off collections. The District also maintains records of material recycled through District programs such as the household hazardous waste collection, scrap tire collection, electronics collection and other programs.

Residential recycling in 2009 totaled 65,437 tons from 41,065 tons of curbside recycling, 22,732 tons of drop-off recycling, and 1,640 tons from special collection events.

#### Commercial/Institutional Survey Methodology

The District is challenged with obtaining recycling and waste reduction data from over 40,000 commercial and institutional generators. For this reason, the District has chosen a unique but highly effective surveying methodology for this sector. For the commercial/institutional survey, data was collected over a three year period consisting of reference years 2007, 2008 and 2009. Over that three year period, a total of 1,909 commercial/institutional companies were mailed a survey which resulted in a 19.7% completion rate. The samples for each survey year were derived by using three different types of sampling methodologies. First, the primary subsample of commercial and institutional companies for each year was compiled using the *Harris Directory*. Second, the top commercial and institutional recyclers from the 2004 Cuyahoga County Solid Waste District Survey were identified and a third of these companies

were mailed the survey each year. Third, the District identified commercial and institutional companies located in Cuyahoga County that they viewed as potential high recyclers.

For reference years 2008 and 2009, a fourth sampling methodology was implemented. In 2008, all the companies responding to the survey in 2007 were once again surveyed in 2008. And, in 2009, any companies that responded in 2007 or 2008 were again included in the sample for 2009. The primary reason for surveying these companies again was to try to get updated information regarding their recycling efforts. Note: if a company completed the survey more than once over the three year period, only their most recent recycling and/or solid waste disposal numbers were included in the summary for the *Plan Update*.

In 2009, the commercial/institutional survey respondents reported recycling 49,671 tons.

#### **Processors Survey Methodology**

The District developed a list of 299 companies that were identified as a processor. These companies were mailed a survey in 2010 asking them to provide numbers for reference year 2009 only. A total of 62 companies responded to and provided data that could be included in the *Plan Update* resulting in a 21% completion rate.

Most mail surveys have a response rate ranging from a low of 5% up to 15%, on average. The 20% response rates received for the District's surveys are higher than average.

In 2009, the processor survey respondents reported recycling 329,230 tons.

#### Survey Follow-up Calls

The District and its consultants conducted a targeted phone/email survey for commercial/institutional entities that either responded to the 2004 survey but not the 2007-2009 survey, or were sent a survey in 2007-2009 and did not respond.

In 2009, the follow-up calls yielded 7,000 tons of additional recycling.

#### **Scrap-Yard Survey**

The District developed a scrap yard survey designed to capture only creditable materials from a targeted list of facilities in the County. The District emailed 55 surveys and received back 4 responses or a 7.2%

response rate yielding just over 2,000 tons of materials. During this survey, the District learned that two large facilities were the main "bottom of the funnel" scrap yards that handle most of the ferrous and non-ferrous scrap metal in the County. The District visited these facilities in early 2011 to discuss their survey responses. The District requested that both facilities revise their survey responses to only include in-District materials and to exclude CDD and other non-creditable materials such as auto bodies. Both facilities were able to accomplish this task as they are well versed on their source materials and District infrastructure of scrap yards and material flow. Their initial surveys reported approximately 260,000 tons of materials. After their internal review based on the District's requirements, totals were reduced to 150,000 tons.

#### **Incinerator Survey Methodology**

The District surveyed facilities operating licensed incinerators to obtain accurate information regarding the amount of District material diverted from the landfill and managed through incineration. The residential/commercial waste incinerated, ash produced and net incineration values (waste incinerated minus ash produced) presented in Table IV-5 is from Table III-2. The industrial waste incinerated, ash produced and net incineration values (waste incinerated minus ash produced) presented in Table IV-6 is from Table III-2.

In 2009, the total tons incinerated was 123 with 54 tons of ash produced resulting in a total waste reduction of 69 tons. For the residential/commercial sector, 42 tons of solid waste was incinerated with 16 tons of ash produced resulting in a waste reduction of 27 tons. For the industrial sector, 63 tons of solid waste was incinerated with 20 tons of ash produced resulting in a waste reduction of 43 tons. For exempt, 19 tons of solid waste was incinerated with 19 tons of ash produced resulting in a waste reduction of 0 tons.

In 2009, the incinerator survey respondents reported waste reduction of 69 tons.

#### **Compost Facility Survey Methodology**

The District surveyed registered compost facilities to obtain accurate information regarding the amount of material diverted from the landfill and managed through composting. The District's overall yard waste recycling data came from four sources; direct survey of compost facilities, generators who reported using compost facilities, communities that conducted yard waste management programs and Ohio EPA facility data reports.

#### In-District Compost Facilities

The District's methodology for counting yard waste data from the compost facilities was to use Ohio EPA facility data report information for all in-District facilities unless data was not submitted to Ohio EPA. In this case, the District used direct survey data submitted by the compost facility to the District. There is one exception to this methodology which relates to the Bridgeview Compost Facility operated by Kurtz Brothers. This facility reported 25,703 tons to the District and 5,357 tons to Ohio EPA. The difference in the reports relates to this facility's pallet business which produces mulch products. The pallet data was not reported to Ohio EPA as it is not a category on the report form. Thus, the District chose to count the additional tonnage from this facility. The total tonnage from all in-District compost facilities for 2009 was 136,879.

#### **Out-Of-District Compost Facilities**

The District also received data from 5 out-of-District compost facilities totaling 14,627 tons. These facilities did not report tonnage to Ohio EPA on their facility data reports.

#### Non-Facility Compost Activities

In 2009, there were two communities in Cuyahoga County that surveyed their residents in regards to their backyard composting and/or Grasscycling activities in order to calculate the amount of backyard composting and/or Grasscycling which had taken place for that year. The City of Pepper Pike, who has been conducting residential yard waste surveys since 2002, had reported 4,174.86 tons of backyard compost, and the City of Strongsville had reported 1,453.32 tons of backyard compost and 3,543 tons of Grasscycling. These surveys are mailed to all residents and then those that are participating in managing their organics on-site are encouraged to complete it themselves or by their landscaper, if the landscaping service does not haul the organics to an off-site facility.

The survey consists of a series of questions pertaining to backyard do-it-yourself activities. After asking for general information regarding each household, such as the resident's name, address and size of the lot, the resident or landscaper is asked if they compost in the backyard. If so, they are asked for the size of the compost bin/area and the percentage full that the bin/area was at the end of the year. They are then asked if they leave the grass clippings on the lawn and if they use a mulching mower. If a mulching mower was used, they are asked how many times they would have filled a standard 32 gallon trash can each time they mowed, the number of times per month that the grass was cut and how many months that they cut their grass in that year.

Backyard compost totals were calculated by taking the size of the bin/area in cubic yards and multiplying by the percent full to get the volume of the compost. The compost volume in cubic yards was then multiplied by 416.67 pounds/cubic yard to get the compost weight, which was then converted to tons by dividing by 2,000 pounds.

Grasscycling totals were calculated first by taking the number of times that a 32 gallon trash container would be filled with grass and multiplying it by .17 cubic yards to establish the volume per cut. Then, the total cubic yards per cut were multiplied by the number of times per month that the grass was cut in order to figure the monthly volume. Annual volume of Grasscycling was then calculated by multiplying the cubic yards monthly by the number of months that the grass was cut. Finally, the annual volume in cubic yards was multiplied by 400 pounds per cubic yard, which was then converted to tons by dividing by 2,000 pounds.

The District was careful to avoid double counting by reviewing each community's yard waste collection services and reported composting facility with the responding compost surveys. The material composted, residuals and net compost (material composted minus residuals) reported in Table IV-5 is from Table III-6.

In 2009, these yard waste activities recycled 15,973 tons of materials.

In 2009, the total yard waste activities recycled 167,479 tons of materials.

### **Industrial Survey Methodology**

The District is challenged with obtaining recycling and waste reduction data from over 3,000 industrial generators. For this reason, the District has chosen a unique but highly effective surveying methodology for this sector. For 2009, three different sampling methodologies were used.

1. The primary sample methodology used to derive the list of industrial companies was compiled using the Harris Directory as of March 2008. Overall, the SIC codes of 20 and 22 through 39 were included. These industrial companies were then divided into nine groups based on SIC code and number of employees. Each of these nine groups were then randomized and divided into three samples, one each for years 2007, 2008 and 2009. However, for years 2008 and 2009, two of the groups were not included in the sample. These included SIC 26, 27, 28, 35 with less than 25 employees and SIC 20, 23, 24, 25, 29, 30 and 36 through 39 with less than 25 employees. These groups were not included this year due to the low response rate in 2007 among these groups. With this change, a total of 398 industrial companies from the Harris Directory were included in the sample for 2009.

- 2. For year 2009, the District identified industrial companies located in Cuyahoga County that they viewed as potential high recyclers. This list is referred to as "2009 District Boost" in the table below and included 10 companies.
- 3. All industrial companies that responded to the surveys conducted in 2007 and 2008 were emailed or mailed the survey again in 2009. There were a total of 431 companies on these lists. These respondents are shown below and labeled "2007/2008 survey respondents".

2009 INDUSTRIAL SAMP	LING SUMMARY							
Description	Number of Companies in Sample							
Harris Directory								
SIC 22, 31, 32,	33, 34							
75+ Employees	30							
25 to 74 Employees	47							
Less than 25 Employees	142							
SIC 26, 27, 2	8, 35							
75+ Employees	34							
25 to 74 Employees	65							
Less than 25 Employees	NA							
SIC 20, 23, 24, 25, 29, 3	0, 36, 37, 38, 39							
75+ Employees	32							
25 to 74 Employees	48							
Less than 25 Employees	NA							
2009 District Boost	10							
2007 Survey Respondents	236							
2008 Survey Respondents	195							
Total	839							

Note: The numbers of listings noted above are pre-mailing numbers and do not account for any companies that are no longer in business, have moved out of the county, or have moved and left no forwarding address. In addition, there were a number of companies that appeared on both the 2007 and 2008 survey respondent lists provided by the Solid Waste District. These duplicate companies are included in the numbers above.

In 2009, the industrial survey respondents reported recycling 563,401 tons.

#### Residential/Commercial Waste Reduction Credit Analysis

Because the District has over 40,000 commercial businesses and only 5% of these businesses were surveyed, a significant reliance on processor data was required to properly demonstrate the true level of recycling that occurs in the District. The District demonstrates compliance with Goal #2 of the 1995 and the 2001 State Plans for this new *Plan Update* (2013-2028 Plan).

Based on the data collected and the methodologies described above, the District employed the same double counting procedure used in the last Plan Update that meshed processor and generator data together by commodity. The procedure used is as follows:

The District was careful to avoid double counting material by reviewing each survey. The highest value of either: (1) the returned processor survey plus the returned commercial surveys that specifically reported using a processor that did not respond to the survey, or (2) the returned commercial survey, excluding all processor surveys was used for each commodity.

The following tables summarize which data was used to demonstrate the residential/commercial waste reduction for the reference year (2009). The tonnage by commodity that is highlighted (in yellow) was the final data credited to the overall amount of 518,540 tons reported as waste reduction for the residential/commercial sector for 2009.

	Paper						
Description	Newspaper	Cardboard	Other Paper				
Processor Surveyed Data	42,548	53,465	23,894				
Commercial Using Processors Not Surveyed	4	12,124	1,210				
Total Processor Data plus Commercials Using Other Processors Not Surveyed	42,552	65,589	25,104				
Total Commercial Surveyed Data	354	25,759	6,152				
Total for Plan	42,552	65,589	25,104				

For the above table, all data from the processors plus commercial generators using other processors not surveyed was used for newspaper, cardboard and other paper. This data totals 133,245 tons.

				Metals				
Description	Aluminum Cans	Aluminum Scrap	Copper	Other Non Ferrous Metals	Brass	Scrap Metal	White Goods	All Other Ferrous Metals
Processor Surveyed Data	170	1,328	2,082	6,546	21	60,388	76,685	4,794
Commercial Using Processors Not Surveyed	46	858	119	948	0	3,076	0	773
Total Processor Data plus Commercials Using Other Processors Not Surveyed	216	2,186	2,201	7,494	21	63,464	76,685	5,567
Total Commercial Surveyed Data	81	1,178	180	1,186	0	4,066	161	816
Total for Plan	216	2,186	2,201	7,494	21	63,464	76,685	5,567

For the above table, all data from the processors plus commercial generators using other processors not surveyed was used for aluminum cans, aluminum scrap, copper, other non-ferrous metals, brass, scrap metal, white goods and all other ferrous metals. This data totals 157,835 tons.

	Plastics							
Description	#1	#2	#3	#4	#5	#6		
Processor Surveyed Data	369	891	623	7	11	27		
Commercial Using Processors Not Surveyed	15	17	0	104	9	14		
Total Processor Data plus Commercials Using Other Processors Not Surveyed	383	908	623	112	20	40		
Total Commercial Surveyed Data	61	49	0	106	13	182		
Total for Plan	383	908	623	112	20	182		

For the above table, all data from the processors plus commercial generators using other processors not surveyed was used for #1, #2, #3, #4, and #5 plastics. Commercial generator data was used for #6 plastics. This data totals approximately 2,230 tons.

Description	Glass	Tires	Other Rubber	Wood Pallets	Other Wood	Furniture	Other Batt.	Clothing/ Textiles
Processor Surveyed Data	30,214	10,198	60	1,752	557	861	0	3,314
Commercial Using Processors Not Surveyed	6	279	0	1,676	0	0	2	81

		Other/Miscellaneous Categories								
Description	Glass	Tires	Other Rubber	Wood Pallets	Other Wood	Furniture	Other Batt.	Clothing/ Textiles		
Total Processor Data plus Commercials Using Other Processors Not Surveyed	30,220	10,477	60	3,428	557	861	3	3,395		
Total Commercial Surveyed Data	40	1,804	0	1,880	135	56	16	157		
Total for Plan	30,221	10,477	60	3,428	557	861	16	3,395		

	Other/Miscellaneous Categories (continued)								
Description	Litho Photo Film	Food	Yard Waste	Stone, Clay, Sand	E- Waste	HHW	Other		
Processor Surveyed Data	0	0	3,649	0	0	0	4,776		
Commercial Using Processors Not Surveyed	0	300	0	0	0	0	2,150		
Total Processor Data plus Commercials Using Other Processors Not Surveyed	0	300	3,649	0	0	0	6,926		
Total Commercial Surveyed Data	31	741	11	0.3	699	314	3,422		
Total for Plan	31	741	3,649	0.3	699	314	6,926		

For the above tables, all data from the processors plus commercial generators using other processors not surveyed was used for glass, tires, other rubber, wood pallets, other wood, furniture, clothing/textiles, yard waste and other. Commercial generator data was used for other batteries, litho photo film, food, stone/clay/sand, e-waste and HHW. This data totals 61,375 tons.

Notes: Processor "Tires" Total is taken from Ohio EPA Scrap Tire Totals and inserted in processor line. Reporting companies were B&L Tire, Campbell, C-N-C Wholesale, Enviro Tire, Genesis Concepts, Landmark, Liberty, Lightner, Nichy, R Willing Tire Dist., Republic Waste Services, Waste Management and Kurtz Bros. Although one of the companies previously mentioned may not have responded to the Cuyahoga County recycling survey, businesses that reported using an aforementioned company for tire recycling were placed on the "Commercial Using Processors Surveyed" tab.

Commercial electronics were not included in this analysis. Only residential electronics were counted.

Only non-C&D sources of stone, clay, and sand were counted.

Residential recycling from curbside and drop-off programs was not included in this analysis as the processors that managed the recyclables were previously counted.

The following table summarizes the waste reduction credit for the residential/commercial sector in 2009:

Description	Total Tons Recycled
Processor Surveyed Data	329,230
Commercial Using Processors Not Surveyed	23,814
Total Processor Data plus Commercials Using Other Processors Not Surveyed	353,043
Total Commercial Surveyed Data	49,671
Total for Plan	354,683
Total Minus Commercial YW	351,034
Yard Waste from Table III-6	167,479
Net Incineration	27
Total	518,540

The materials with the highest tonnage recycled in 2009 were yard waste at 32% (167,479 tons), white goods at 15% (76,685 tons), ferrous metals at 13% (69,031 tons), cardboard at 13% (65,589 tons) and newspaper at 8% (42,552 tons). The District also recycled plastic, glass, rubber and other materials. "Other" includes such things as oil, oil filters, antifreeze, books, lead wheel weights, and fluorescent light bulbs or materials not specifically identified on commercial/institutional surveys.

The following chart depicts the residential/commercial sector waste reduction for 2009:

#### Newspaper Net Incineration Cardboard 8.21% 0.01% Composting 12.65% 32.30% All Other Paper Litho/Photo Film. 4.84% 0.01% Ferrous Metals Other. 13.31% 1.34% HHW Non-Ferrous Metals 0.06% Plastics 2.34% Electronics. 0.43% White Goods 0.13% 14.79% Glass Rubber Stone, Clay, Sand. 5.83% 2.03% <0.01% Durables Food Waste 0.17% 0.14% Textiles .Wood 0.65% 0.77%

#### Residential/Commercial Waste Reduction in the District

#### **Industrial Waste Reduction Credit Analysis**

Batteries 0.0031%

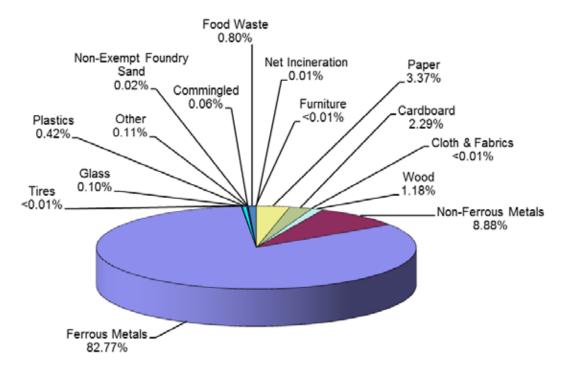
Table IV-6 summarizes the industrial waste reduction activities that occurred during the reference year. The District surveyed industrial facilities to obtain information on recycling activities. The recycling survey was part of the waste generation survey. Please see the discussion in Section IV.B for more information on the survey process.

Industrial facilities reported recycling 563,401 tons of material in 2009. No processor/broker data was used for this tonnage demonstration.

The materials with the highest tonnage recycled in 2009 were ferrous metals at 83% (466,331 tons), non-ferrous metals at 9% (50,040 tons), paper at 3% (18,970 tons) and cardboard at 2% (12,927 tons). The District also recycled wood, food waste, plastic, glass, and other materials.

The following figure summarizes the reference year waste reduction totals for the industrial sector.

#### **Industrial Waste Reduction in the District**



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

The following section summarizes the reference year residential, commercial and industrial programs and initiatives for the District. This section is quite extensive and reflects the District's commitment to reducing solid waste disposal at landfills. The following is a list of the District's reference year programs.

Program	Description		
CCSWD-1	Non-Subscription Recycling Programs		
CCSWD-2	Drop-Off Recycling		
CCSWD-3	Yard Waste Management		
CCSWD-4	Household Hazardous Waste Collection		
CCSWD-5	Computer Recycling		
CCSWD-6	Scrap Tire Recycling		
CCSWD-7	Litter Collection		
CCSWD-8	Mercury Collection Program		
CCSWD-9	Phone Book Recycling Campaign		
CCSWD-10	Special Waste Convenience Center		
CCSWD-11	Local Government Outreach and Assistance		
	<ul> <li>Contracting Consortiums and Assistance</li> </ul>		
	Residential Recycling Report		
	Trash Talk Seminars		

Program	Description			
	Trash Oscars			
	<ul> <li>Waste Management Advisories</li> </ul>			
	Children's Education Program			
	<ul> <li>School Presentations</li> </ul>			
CCSWD-12	<ul> <li>School Assemblies</li> </ul>			
	<ul> <li>Teacher Workshops</li> </ul>			
	<ul> <li>Student and Teacher Publications</li> </ul>			
	<ul> <li>School Contests</li> </ul>			
	<ul> <li>Scout/Youth Organizations</li> </ul>			
CCSWD-13	General Public Education and Outreach			
	<ul> <li>Publications</li> </ul>			
	<ul> <li>Media Promotions and Advertising</li> </ul>			
	· Web Site			
	Hotline			
	<ul> <li>Technical Assistance</li> </ul>			
	<ul> <li>Presentations</li> </ul>			
	Commercial, Institutional and Industrial Recycling			
CCSWD-14	Assistance			
	Waste Assessments			
	Technical Assistance and Presentations			
	Recycling Market Development			
CCSWD-15	ODNR Market Development Grants			
	Recycling and Sustainable Business			
	Project Support			
	District Grant Programs			
CCSWD-16	Community Recycling Awareness Grant			
	School Recycling Mini Grant  Beautier Container Container Brofit			
	<ul> <li>Recycling Container Grant for Non-Profit Agencies</li> </ul>			
CCSWD-17	Solid Waste Code Enforcement			
CCSWD-18	Securing Landfill Disposal Capacity			
CCSWD-19	Solid Waste Management Planning			
CCSWD-20	District Wide Contracting for Service			

The District evaluated each of the above programs for their strengths and weaknesses/challenges. In addition, the District created a specific program objective which guided the review process. The results of this programmatic review process provided guidance for the District when developing new strategies, initiatives and programs for the new planning period (Section V).

In addition, the District surveyed its stakeholders to collect additional feedback on District programs and services. The following stakeholder groups were surveyed using a separate survey instrument for each group.

These stakeholders were those entities that have received District services. The survey instrument and results can be found in Appendix H.

- Municipal officials including mayors, council presidents and service department personnel
- Businesses and Institutions
- Educators
- General Public

The following is a summary of the on-line survey process:

#### **Political Subdivisions in Cuyahoga County**

The Solid Waste District emailed a total of 222 public officials in Cuyahoga County and invited them to complete a survey online. This list of public officials included, but was not limited to, mayors, city managers, township trustees, council presidents, council members, service department directors and employees. Of these 222 public officials, a total of 72 completed the online survey. Another 8 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 34% (72 out of 214), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

#### **Targeted Commercial and Industrial Businesses**

The Solid Waste District emailed a total of 180 businesses in Cuyahoga County that have had contact with the District and invited them to complete a survey online. Of these 180 businesses, a total of 40 completed the online survey. Another 16 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 24% (40 out of 164), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

#### **Targeted Institutions**

The Solid Waste District emailed a total of 546 educators in Cuyahoga County and invited them to complete a survey online. This list of educators included, but was not limited to, teachers, principals, other school staff members, parent or school volunteers, youth group leaders and environmental educators. Of these 546 educators, a total of 114 completed the online survey. Another 63 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 24% (114 out of 483), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

#### **Targeted Residents**

The Solid Waste District emailed a total of 589 residents in Cuyahoga County who have had contact with the District and invited them to complete a survey online. Of these 589 residents, a total of 201 completed the online survey. Another 14 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 35% (201 out of 575), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

A copy of the survey instruments are included in Appendix H. The results of the survey are included after each program, where applicable, in the following section.

## CCSWD-1 – NON-SUBSCRIPTION CURBSIDE RECYCLING PROGRAMS (Traditional Curbside Recycling Programs)

In 2009, 55 political subdivisions operated traditional non-subscription curbside recycling programs. Non-subscription means that all residents have access to a curbside recycling program. Payment for the program is made either directly by the residents or by the political subdivision on behalf of those residents. The political subdivision provides this collection service to their residents themselves or through a contracted waste hauler. Each of the communities collects a minimum of 5 materials. Most communities collect aluminum, steel and bimetal cans, glass, mixed paper and plastics 1-2. Some communities are able to recycle 1-7 plastics through their vendor. Some also recycle cardboard. See Table III-4 for details.

#### **Modified Curbside Recycling Programs**

In 2009, there were 2 communities (Newburgh Heights and Valley View) that collected non-traditional materials at the curb such as lead acid batteries, used oil, tires, white goods and other materials. See Table III-4 for details.

The City of Cleveland currently has a pilot automated curbside recycling program that served 13,000 households in 2009. The City plans to expand this program to all households beginning in 2011 by adding 25,000 homes per year until all households are included.

The Village of North Randall did not have curbside recycling in 2009.

In 2009, Cuyahoga County communities collected approximately 41,065 tons of recyclable materials. The following table summarizes the non-subscription curbside programs for 2009:

Political Subdivision Name	Type of Curbside	Operator	Frequency of Collection
Bay Village	NS	Republic	Weekly
Beachwood	NS	Beachwood	Weekly
Bedford	NS	Waste Management	Weekly
Bedford Heights	NS	Waste Management	Weekly
Bentleyville	NS	Waste Management	Weekly
Berea	NS	Republic	Weekly
Bratenahl	NS	Republic	Weekly
Brecksville	NS	Brecksville	Bi-Monthly
Broadview Heights	NS	Landmark	Weekly
Brook Park	NS	Brook Park	Bi-Monthly
Brooklyn	NS	Brooklyn	Weekly
Brooklyn Heights	NS	Brooklyn Heights	Weekly
Chagrin Falls Township	NS	Waste Management	Weekly
Chagrin Falls Village	NS	Waste Management	Weekly
Cleveland	MNS	Cleveland	Weekly
Cleveland Heights	NS	Cleveland Heights	Weekly
Cuyahoga Heights	NS	Cuyahoga Heights	Weekly
East Cleveland	NS	Republic	Weekly
Euclid	NS	Republic	Weekly
Fairview Park	NS	Fairview Park	Weekly
Garfield Heights	NS	J and J	Weekly
Gates Mills	NS	Landmark	Weekly
Glenwillow	NS	Republic	Weekly
Highland Heights	NS	J and J	Weekly
Highland Hills	NS	Highland Heights	Weekly
Hunting Valley	NS	Universal Disposal	Weekly
Independence	NS	Independence	Weekly
Lakewood	NS	Lakewood	Weekly
Linndale	NS	Metro Disposal	Weekly
Lyndhurst	NS	Lyndhurst	Weekly
Maple Heights	NS	Waste Management	Bi-Monthly
Mayfield	NS	J and J	Weekly
Mayfield Heights	NS	Republic	Weekly
Middleburg Heights	NS	Republic	Weekly
Moreland Hills	NS	Recycle Midwest	Bi-Monthly
Newburgh Heights	MNS	Republic	Weekly
North Olmsted	NS	Republic	Weekly
North Randall	None	None	NA
North Royalton	NS	North Royalton	Bi-Monthly
Oakwood	NS	Waste Management	Weekly
Olmsted Falls City	NS	Republic	Weekly
Olmsted Township	NS	Republic	Weekly
Orange	NS	Waste Management	Weekly
Parma	NS	Republic	Weekly

Political Subdivision Name	Type of Curbside	Operator	Frequency of Collection
Parma Heights	NS	Parma Heights	Weekly
Pepper Pike	NS	Pepper Pike	Weekly
Richmond Heights	NS	Richmond Heights	Weekly
Rocky River	NS	Rocky River	Weekly
Seven Hills	NS	Waste Management	Weekly
Shaker Heights	NS	Shaker Heights	Weekly
Solon	NS	Solon	Weekly
South Euclid	NS	South Euclid	Weekly
Strongsville	NS	Republic	Weekly
University Heights	NS	University Heights	Weekly
Valley View	MNS	Valley View	Weekly
Walton Hills	NS	Waste Management	Weekly
Warrensville Heights	NS	Republic	Weekly
Westlake	NS	Republic	Weekly
Woodmere	NS	Woodmere	Weekly

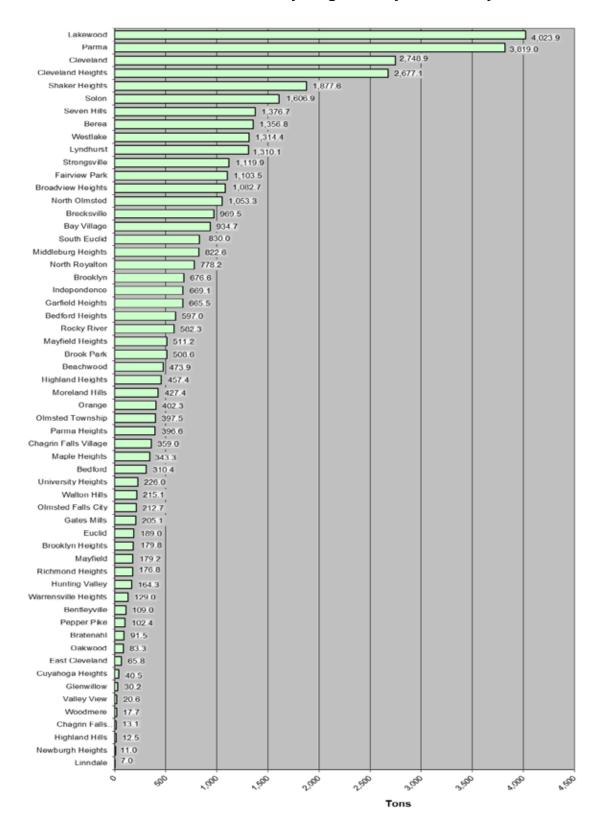
Legend: NS=Non-Subscription, MNS=Modified Non-Subscription

The following table lists curbside recycling service providers in 2009:

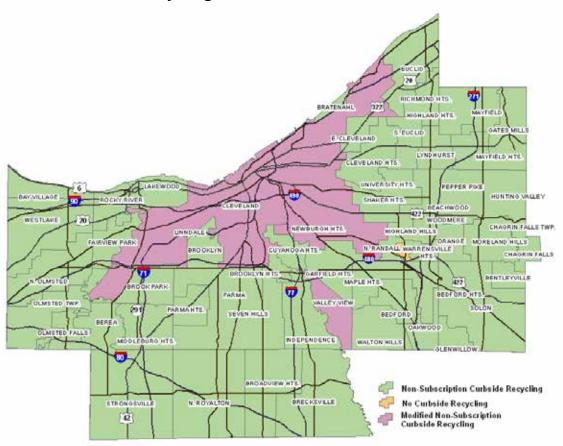
Operator	Number of Political Subdivisions
Municipal Collection	24
Republic	16
Waste Management	10
Landmark	2
J and J	3
Universal Disposal	1
Recycle Midwest	1
Metro Disposal	1

The following chart depicts the recycling performance of each community:

# 2009 District Curbside Recycling Tons by Community



# **Curbside Recycling Activities in the District in 2009**



CCSWD-1 Program Summary: Non-Subscription Curbside Recycling		
Description	Details	
District Budget Number	CCSWD-1	
EPA Program Number from ADR	5975-5988; 7111; 5990-5998; 7035; 5999-6032	
Entity Responsible for Maintaining Program	Political Subdivisions	
Service Area for Program	58 of 59 Cities, Villages, and Townships in Cuyahoga County	
Materials Reduced/Recycled	Aluminum, steel and bimetal cans, glass, mixed paper, and plastics. Most municipalities recycle leaves and cardboard. See Table III-4 for details.	
2009 Recycled Tonnage	41,065	
2009 Annual Program Costs	None	

CCSWD-1 Program Summary: Non-Subscription Curbside Recycling		
Description	Description Details	
Program Operator/Contractor	Multiple public/private haulers	

Provide the residents of Cuyahoga County a cost effective, convenient, easy to use system for residents to recycle materials at the curb.

## Program Strengths:

- Over 90% of the political subdivisions offer curbside recycling to their residents. These services are provided to all single and two family households and are paid for by the community out of its general fund (there are no subscription-based curbside recycling programs in the District). District survey responses indicated that 75% of people participate in curbside recycling and 79% feel it is very valuable.
- There is a well developed infrastructure for providing curbside recycling services in Cuyahoga County. Several haulers provide curbside collection services to those communities that contract out collection to the private sector. In addition, there are 4 material recovery facilities available to receive and process recyclables collected by communities that handle their own collection.
- Municipal curbside recycling services do not rely on District funding.

#### Program Weaknesses/Challenges:

- While the District works to promote curbside recycling, it does not control the activities of local governments and the private contracted waste haulers. Since communities fund curbside recycling out of their general fund, tight municipal budgets may threaten these programs.
- Some communities do not always explain to their residents about how to participate in curbside recycling and why that is important. This can limit participation.
- Since municipal curbside recycling procedures vary, it is difficult for the District to promote curbside recycling on a county-wide basis.

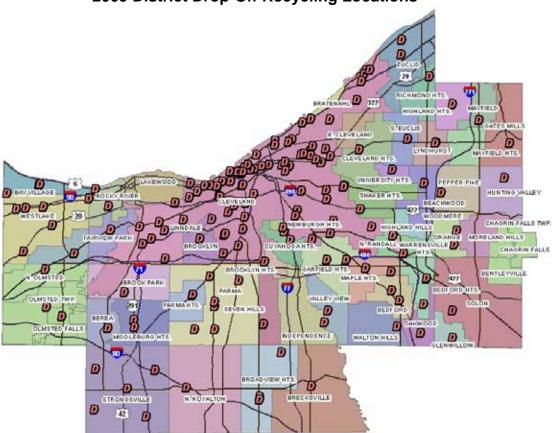
- Municipal curbside recycling programs do not cover residents living in apartments and condos so these residents have limited access to recycling.
- Some District survey respondents suggested they would like to recycle more items curbside like 3-7 plastics if their community does not offer; would like more information regarding their community's recycling program; and would like to receive automated curbside collection using carts.

#### CCSWD-2 - DROP-OFF RECYCLING

In 2009, there were 620 recycling drop-off locations within the District that were serviced by either the public or private sectors. Of the total drop-off sites in the District in 2009, 458 were operated by Abitibi Bowater which collects mixed paper; and 162 were operated by a mix of municipal and private sector entities. Each operator was responsible for the development and implementation of the drop-offs. Ninety-nine of the 161 drop-off centers collected, at a minimum, aluminum, steel and bi-metal cans, glass, plastics and mixed paper. Some sites also collected cardboard, office paper and other materials.

In 2009, the drop-offs collected approximately 22,732 tons of recyclable materials. Table III-5 details each program including the materials accepted and other operating details. The following figure depicts the location of all drop-off centers in Cuyahoga County (except the Abitibi locations):

# 2009 District Drop-Off Recycling Locations



Drop-Off Recycling Locations

CCSWD-2 Program Summary: Drop-Off Recycling		
Description	Details	
District Budget Number	CCSWD-2	
	6033-6038; 7036-7042;	
	7044-7110; 6662-6676;	
EDA Program Number from ADP	6068; 6063-6066; 6053;	
EPA Program Number from ADR	6049; 7535; 6041; 6054-	
	6061; 6050; 6047; 6067;	
	6071-6081	
Entity Responsible for Maintaining Program	Political subdivisions	
Service Area for Program	District	
	Clothing, household goods,	
	aluminum, steel and bimetal	
Materials Reduced/Recycled	cans, glass, mixed paper,	
	plastics and cardboard. See	
	Table III-5 for details.	
2009 Recycled Tonnage	22,732	

CCSWD-2 Program Summary: Drop-Off Recycling		
Description Details		
2009 Annual Program Costs	None	
Program Operator/Contractor	Private sector and municipalities	

To offer the residents, small businesses, non-profit organizations, and schools in Cuyahoga County with a cost effective, convenient, system to recycle when curbside is not available.

## **Program Strengths:**

- There were 620 publicly available recycling drop-off locations throughout the District operated by public and private entities.
   These drop-offs do not rely on District funding.
- District survey respondents showed that 79% of those surveyed use a drop-off location located in the District.
- Recycling drop-off locations increase recycling access to residents that live in apartment buildings and to small business owners. These drop-offs provide opportunities to recycle items not collected through curbside recycling programs like cardboard, phone books, clothing and household goods for reuse.

#### Program Weaknesses/Challenges:

- Recycling drop-offs are less convenient than curbside recycling.
- With so many drop-off sites staged throughout the county, it is difficult for the District to maintain an up to date database of locations for purposes of promoting to residents. Of those surveyed, 21% said they did not use a drop-off location because they did not know where they were located or they were not convenient.

#### CCSWD-3 - YARD WASTE MANAGEMENT

In 2009, the District had an extensive yard waste management system including 30 in-District facilities, 5 out-of-District facilities, 2 backyard composting programs, 11 grass cycling programs and 3 programs that managed yard waste in Cuyahoga County.

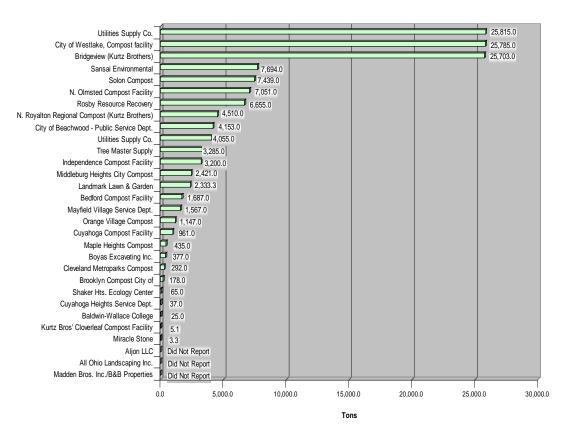
# Registered/Licensed Facilities

The registered in-District facilities included 28 Class IV facilities, four Class II facilities, and two facilities registered and licensed as both Class II and Class IV. The out-of-District facilities included four Class IV facilities and one Class II facility. These yard waste compost facilities were both private and public facility operations. The yard waste compost facilities owned by political subdivisions typically provided municipal leaf collection services to their residents. Private sector compost facilities provided yard waste management services to customers throughout the District. Private sector compost facilities were not limited by political subdivision boundaries. The following graphic depicts the registered/licensed compost facilities in the District in 2009:

# 2009 District Compost Facilities and Activities 10 CHAGRIN FALLS TWP 0 MORELAND HILLS CHAGRIN FALLS ROOKLY DENTLEYVILLE BRECKSVILLE 42 Grasscycling Class II Composting Facilities Log Recycling Class II/IV Composting Facilities Backyard Composting 💩 Class IV Composting Facilities

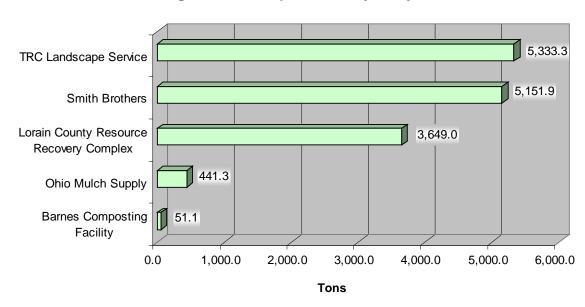
The following chart summarizes the registered in-District compost sites performance in 2009:

# In-District Registered Compost Facility Recycled Tons in 2009



The following chart summarizes the registered out-of-District compost sites that managed District yard waste in 2009:

# **Out-of-District Registered Compost Facility Recycled Tons in 2009**



#### Non-Registered/Licensed Facilities/Programs

There were 26 community programs that operated non-registered yard waste activities such as backyard composting, grass cycling and log recycling programs. The District could not ascertain whether they had applied to obtain registrations for their yard waste management locations. The District worked carefully with each community to determine if yard waste collected and processed in one community was shipped to a registered compost facility or another community also on the list. The District was careful to not double count yard waste. Annual compost generation changes were based on annual precipitation. For example, clean-up of debris from storms would increase the composting value.

The following chart summarizes the non-registered yard waste management activities in 2009:

# Grass Cycling Backyard Composting Log Recycling 0.0 1,000.0 2,000.0 3,000.0 4,000.0 5,000.0 6,000.0 7,000.0 Tons

# **District Non-Registered Compost Facility Recycled Tons in 2009**

In 2009, the combination of registered/licensed in-District and out-of-District facilities and non-registered/licensed facilities/programs recycled 167,479 tons of yard waste materials.

CCSWD-3 Program Summary: Yard Waste Management		
Description Details		
District Budget Number	CCSWD-3	
EPA Program Number from ADR	6084, 6085	
Entity Responsible for Maintaining Program  District		

CCSWD-3 Program Summary: Yard Waste Management		
Description Details		
Service Area for Program	Political Subdivisions	
Materials Reduced/Recycled	Leaves, brush	
2009 Recycled Tonnage 167,479		
2009 Annual Program Costs \$25,321		
Program Operator/Contractor Private sector; municipalities		

To promote the use of existing compost facilities and yard waste management programs to the residents and businesses of Cuyahoga County to increase separated yard waste materials from the waste stream in a manner that promotes increased, sustainable participation and preserves landfill capacity.

# Program Strengths:

- Sufficient infrastructure for yard waste management in Cuyahoga County. Composting facilities are operated by both public and private entities and do not rely on District funding.
- New Class II composting facilities operating in the District provide opportunities to expand composting to include food waste generated by large institutions and businesses.
- 167,479 tons of yard waste material was diverted from landfill disposal in 2009 through municipal composting, mulching programs and grass-cycling programs.

#### Program Weaknesses/Challenges:

- While the District strived to promote composting, but the District has no control over the activities of government agencies and private enterprises.
- Municipal yard waste management programs involve an additional collection that requires labor and equipment and is an extra cost to the communities. Budget cut backs may threaten some yard waste collection programs.
- Many municipal yard waste management programs rely on the availability of composting facilities that are located close to the community. Closure of a compost facility that a community relies on may threaten a collection program.

 Many survey respondents said there was a need to increase awareness and participation in backyard composting. Thirty-nine percent of survey respondents indicated they compost their yard waste but 19% put in the trash.

#### CCSWD-4 - HOUSEHOLD HAZARDOUS WASTE COLLECTION

The District's Household Hazardous Waste (HHW) strategy has been to conduct a collection event where communities and residents participate collectively. In 2009, the District held two HHW collections: May 5-7 and October 8-10 where communities and residents delivered HHW to the county fairgrounds.



Each participating community conducted their own HHW collection prior to the District's event then consolidated the HHW according to packing methodologies prescribed by the District's HHW contractor. The consolidated HHW was then delivered to the county fairgrounds on a scheduled basis. Communities that did not host a HHW collection event instructed residents to turn in materials directly to the District's HHW collection at the fairgrounds. The following community collections occurred in 2009.

Community	Spring HHW Collection	Fall HHW Collection
Bay Village	April 20-May 1	September 21-October 2,
za, rmage	31300 Naigle Road	31300 Naigle Road
Beachwood	April 27-May 4	Sept. 25-October 7
Deachwood	2700 Richmond Road	2700 Richmond Road
Bedford	April 1-30,	September 1-30,
Dedioid	100 Solon Road	100 Solon Road
Bedford	April 20-May 1	September 21-October 2
Heights	25401 Solon Road	25401 Solon Road
Bentleyville Collection at city service		None
(Village)	department	140110
Brecksville	Saturday collection	Saturday collection
DIECKSVIIIE	at service department	at service department
Broadview	April 20-May 1	Sept. 21-Oct. 2
Heights	9543 Broadview Rd.	9543 Broadview Rd.
Brook Park	Year-round drop-off	Year-round drop-off
DIOUK Falk	19065 Holland Road	19065 Holland Road

Community	Spring HHW Collection	Fall HHW Collection
Brooklyn Heights	Year-round curbside collection on Tuesdays	Year-round curbside collection on Tuesdays
Chagrin Falls	None	September 21-October 9, 240 Solon Road
Cleveland	April 28-May 3 5600 Carnegie Avenue and 3727 Ridge Road.	September 28-October 3 5600 Carnegie Avenue and 3727 Ridge Road.
Cleveland Heights	Year-round curbside collection or special pick-up	Year-round curbside collection or special pick-up
Cuyahoga Heights	Year-round curbside collection on Tuesdays	Year-round curbside collection on Tuesdays
East Cleveland	Drop-off May 1-6	Drop-of October 1-7
Garfield Heights	Drop-off April 20-25 and April 27-May 1	Drop-off August 21-26 and August 28-September 2
Glenwillow	Drop-off Solon Service Department	Drop-off Solon Service Department
Highland Heights	Drop-off April 20-May 2 5827 Highland Road	Drop-off September 21- October 3 5827 Highland Road
Hunting Valley	Collection at city service department	Collection at city service department
Independence	Special curbside collection on Fridays	Special curbside collection on Fridays
Lakewood	Year-round drop-off 12920 Berea Road	Year-round drop-off 12920 Berea Road
Lyndhurst	Collection at city service department	Collection at city service department
Maple Heights	April 27-May 1 5353 Lee Road	September 28-October 2 5353 Lee Road
Mayfield Village	April 18-May 2 610 SOM Center Road	August 22-September 5 610 SOM Center Road
Moreland Hills	April 20-May 1, 4350 SOM Center Road	September 21-October 2 4350 SOM Center Road
North Olmsted	April 20-May 3 5200 Dover Center Road	September 21-October 4 5200 Dover Center Road
North Royalton	March 30-May 2, 10789 Royalton Road	August 31-Oct. 3 10789 Royalton Road
Olmsted Falls	April 1-May 6 8045 Brookside Drive	September 1-October 7 8045 Brookside Drive

Community	Spring HHW Collection	Fall HHW Collection
Olmsted	Year-round drop-off	Year-round drop-off
(Township)	26960 Cook Rd.	26960 Cook Rd.
Orange	May 1	October 4
Village	4160 Lander Road	4160 Lander Road
Parma	May 2	October 3
T dillia	5680 Chevrolet Boulevard	5680 Chevrolet Boulevard
Pepper Pike	April 6-May 7	September 1-October 7
Richmond Heights	April 25, 28 and May 2, 5 26260 Chardonview Road	Tuesdays and Saturdays 26260 Chardonview Road
Cayon Lilla	May 4	October 5
Seven Hills	City Hall	City Hall
Shaker Heights	April 25-26 & May 2-3	Sept. 26-27 & Oct. 3-4
Solon	Weekly curbside collection	Weekly curbside collection
	April 27-May 2	September 28-October 7
South Euclid	1349 S. Green Road	1349 S. Green Road
Ctrop goville	April 27-May 7	September 28-October 8
Strongsville	16099 Foltz Parkway	16099 Foltz Parkway
University	Year-round drop-off,	Year-round drop-off,
•	2300 Warrensville Center	2300 Warrensville Center
Heights	Road	Road
Walton Hills	April 27-May 1	N/A
vvailuii milis	6800 Dunham Road	IN/A
Westlake	April 27-May 2	September 21-26
	741 Bassett Road	741 Bassett Road
Woodmere	Curbside collection on	Curbside collection on
vvoodiliele	Mondays and Fridays	Mondays and Fridays

The District only accepted waste categorized as Household Hazardous Waste including the following:

# **HHW Materials Accepted**

- Oil or solvent-based paint, sealers, primers, or coatings (aerosols or liquids)
- · Varnishes, polyurethanes, shellacs
- Paint thinner, mineral spirits, turpentine
- · Pesticides, herbicides, fungicides
- Caustic household cleaners
- Pool chemicals
- Automotive fluids, motor oil, car batteries

- Adhesives, roof tar, driveway sealer
- Kerosene, gasoline, lighter fluid
- Mercury, fluorescent bulbs

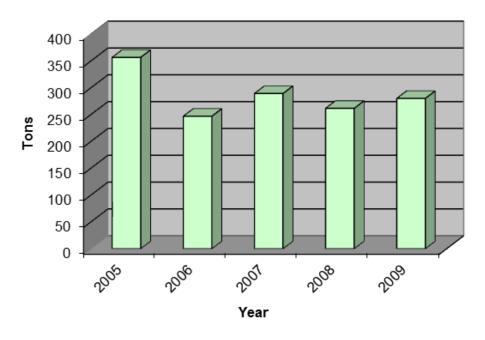
## **Materials Not Accepted**

- Latex paint (the District stopped accepting latex pain in 2003 as a cost-saving measure)
- Explosives, gun powder, ammunition, flares
- Medical waste, pharmaceuticals, medicine, sharps
- Radioactive waste (i.e., smoke detectors)
- Materials from businesses

The District's HHW contractor was solicited through the Northeast Ohio HHW Cooperative, consisting of nine Solid Waste Management Districts. The District was instrumental in forming this cooperative in 1997.

In 2009, two three-day collection events were held in the District that collected 280 tons of HHW from 3,017 cars. Since the program's inception in 1995, 4,235 tons of HHW have been collected and safely disposed or recycled. Over 40 municipalities participated. In 2011, a year-round special waste convenience center will replace the seasonal events. The following chart presents the tonnage collected from the HHW Round-Up from 2005 – 2009.

# 2005 - 2009 HHW Collection



CCSWD-4 Program Summary: Household Hazardous Waste Collection		
Description	Details	
District Budget Number	CCSWD-4	
EPA Program Number from ADR	6087	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Oil or solvent-based paint, sealers, primers, or coatings (aerosols or liquids), varnishes, polyurethanes, shellacs, paint thinner, mineral spirits, turpentine, pesticides, herbicides, fungicides, caustic household cleaners, pool chemicals, automotive fluids, motor oil, car batteries, adhesives, roof tar, driveway sealer, kerosene, gasoline, lighter fluid	
2009 Recycled Tonnage	280 tons	
2009 Annual Program Costs	\$286,726	
Program Operator/Contractor	District, EEI	

To offer Cuyahoga County residents a cost effective, convenient, easy to use outlet to responsibly dispose of products that contains hazardous constituents from the waste stream.

# Program Strengths:

- Provides the only free and safe disposal option for hazardous materials generated by county households.
- This program is popular with residents and communities. District surveys indicate this program has a high level of participation and perceived importance. Of those surveyed, 88% said they participate and 96% said it was an important program.
- The program helped residents to maintain safe homes by removing hazards and poisonous materials.

#### Program Weaknesses/Challenges:

 Program is expensive offer. Disposal and/or recycling of HHW, including labor and transportation, cost over \$800 per ton.

- Location of collection site at county fairgrounds was not convenient for many residents.
- Two collections a year were too infrequent to serve the County and its 59 cities.
- Limited manpower and storm water regulators may reduce municipal collection of HHW.
- There is a need to increase awareness of the HHW program. Of the District's survey respondents, 53% said they participate in the HHW program but 6% did not know about the program and place HHW in the trash.

#### **CCSWD-5 – COMPUTER RECYCLING**

The District sponsored two Recycle Your Computer Month events in April and August of 2009. With the District handling the county-wide promotion, communities conducted computer collection events for residents. The following table shows the community collections held for the April and August events:

Community	Spring Computer Collection Events April 1-30, 2009	Summer Computer Collection Events August 1-31, 2009	
Bay Village	April 6-17	August 10-21	
, ,	31300 Naigle Road	31300 Naigle Road	
Beachwood	Year-round drop-off	Year-round drop-off	
Boadinvood	2700 Richmond Road	2700 Richmond Road	
Bedford	July 1-31	July 1-31	
Dedioid	100 Solon Road	100 Solon Road	
Bedford	April 1-30	August 1-31	
Heights	25401 Solon Road	25401 Solon Road	
Bentleyville	Year-round collection	Year-round collection	
I Brockevillo I ' '	Saturday drop-off	Saturday drop-off	
	at service department	at service department	
Broadview	Year-round drop-off at	Year-round drop-off at	
Heights	9543 Broadview Rd.	9543 Broadview Rd.	
Prook Bork	Year-round drop-off	Year-round drop-off	
Brook Park	19065 Holland Road	19065 Holland Road	
Brooklyn	Year-round drop-off at city	Year-round drop-off at city	
Brooklyn	service department	service department	
Brooklyn	Year-round drop-off at city	Year-round drop-off at city	
Heights	service department	service department	
Chagrin Falls	April 1-30	None	
Chagrin Falls	240 Solon Road	INOTIE	

Community	Spring Computer Collection Events April 1-30, 2009	Summer Computer Collection Events August 1-31, 2009
Cleveland	April 1-30, 5600 Carnegie Avenue and 3727 Ridge Road.	August 1-31, 5600 Carnegie Avenue and 3727 Ridge Road.
Cleveland Heights	Year-round curbside collection or special pick- up	Year-round curbside collection or special pick- up
Cuyahoga Heights	Curbside collection on Tuesdays	Curbside collection on Tuesdays
East Cleveland	April 1-30	August 1-31
Euclid	April 1-30 25500 Lakeland Boulevard	August 1-31 25500 Lakeland Boulevard
Fairview Park	April 25 & 26 20777 Lorain Road	August 8 & 9 20777 Lorain Road
Glenwillow	Year-round drop-off 29555 Pettibone Road	Year-round drop-off 29555 Pettibone Road
Highland Heights	April 1-30, 5827 Highland Road, M-F 8:00-3:30	August 1-31, 5827 Highland Road, M-F 8:00-3:30
Highland Hills	Drop-off at service department	Drop-off at service department
Hunting Valley	Drop-off at service department	Drop-off at service department
Independence	Special curbside collection on Fridays	Special curbside collection on Fridays
Lakewood	Year-round drop-off 12920 Berea Road	Year-round drop-off 12920 Berea Road
Linndale	April 1-30 4016 West 119 Street	August 1-31 4016 West 119 Street
Lyndhurst	Year-round curbside collection	Year-round curbside collection
Maple Heights	None	August 3-7 5353 Lee Road
Mayfield Village	Drop-off April 18-May 2 610 SOM Center Road	August 22-September 5 610 SOM Center Road
Middleburg Heights	April 1-September 30	April 1-September 30
Moreland Hills	Year-round drop-off, 4350 SOM Center Road	Year-round drop-off, 4350 SOM Center Road
North Olmsted	Year-round drop-off 5200 Dover Center Rd	Year-round drop-off 5200 Dover Center Rd
North	Year-round drop-off	Year-round drop-off

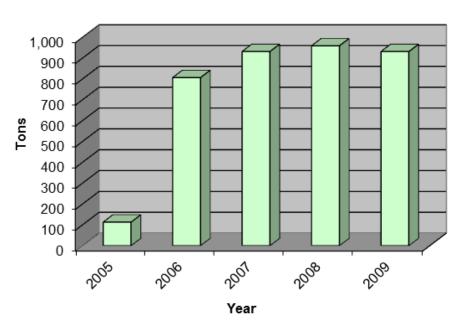
Community	Spring Computer Collection Events April 1-30, 2009	Summer Computer Collection Events August 1-31, 2009
Royalton	10789 Royalton Road	10789 Royalton Road
Olmsted Falls	April 1-30 8045 Brookside Drive	August 1-31 8045 Brookside Drive
Olmsted Township	Year-round drop-off 26900 Cook Road	Year-round drop-off 26900 Cook Road
Orange Village	April 1-30 4160 Lander Road	August 1-31 4160 Lander Road
Parma	April 11, 5680 Chevrolet Boulevard	August 22 5680 Chevrolet Boulevard
Pepper Pike	April 1-30	August 1-31
Richmond Heights	April Tuesdays & Saturdays 26260 Chardonview Road	August Tuesdays & Saturdays 26260 Chardonview Road
Rocky River	Curbside collection April 1-30	Curbside collection August 1-31
Seven Hills	May 4 @ City Hall	October @ City Hall
Shaker Heights	April 18-19 & 25-26	August 15-16 & 22-23
Solon	Weekly curbside collection	Weekly curbside collection
South Euclid	April 6-10 and April 13 1349 S. Green Road	August 3-14 1349 S. Green Road
Strongsville	Year-round drop-off 16099 Foltz Parkway	Year-round drop-off 16099 Foltz Parkway
University Heights	Year-round drop-off, 2300 Warrensville Center Road	Year-round drop-off, 2300 Warrensville Center Road
Walton Hills	April 13-24 6800 Dunham Road	None
Westlake	April 13-18 741 Bassett Road	August 17-22 741 Bassett Road
Woodmere	Curbside collection on Mondays and Fridays	Curbside collection on Mondays and Fridays

Computers turned in during this event were recycled by RET3 job corp., a not-for-profit computer recycler located in Cleveland. RET3 job corp. partnered with OneCommunity, another local not-for-profit broadband provider that works to give students technology skills for the workplace and, in turn, drive economic development in the region. RET3 job corp. and the OneCommunity Green Computing Program have a goal of putting 50,000 computers in Northeast Ohio schools over the next five years.

All computer hard drives received by RET3 were erased of all data using U.S. Department of Defense specifications. This secure system eradicates all the information stored on the computer and protects confidentiality. After the hard drives were cleaned, usable computer systems were remanufactured.

Un-repairable equipment was completely deconstructed. RET3 job corp. recycled the equipment in a process that was fully compliant with EPA standards and offered a 100% no-landfill guarantee. Raw materials were sold, and revenues benefit the OneCommunity Green Computing Program.

In 2009, the District recycled over 932 tons of CPU's, monitors, keyboards, mice, printers, terminals, modems, cables, software, and ink printer cartridges. Cell phones and their accessories were also accepted. Since the program was created in 2000, over 5,580 tons of computers have been collected. The following graph depicts the program performance from the previous planning period 2005-2009:



2005 – 2009 Computer Recycling

CCSWD-5 Program Summary: Computer Recycling		
Description Details		
District Budget Number	CCSWD-5	
EPA Program Number from ADR	6102	
Entity Responsible for Maintaining	Political Subdivisions;	
Program	District	

CCSWD-5 Program Summary: Computer Recycling		
Description	Details	
Service Area for Program	District	
Materials Reduced/Recycled	Computers, monitors, mice, printers, modems, cables, software, ink printer cartridges, cell phones, and cell phone accessories	
2009 Recycled Tonnage	932	
2009 Annual Program Costs	\$23,020	
Program Operator/Contractor	District; municipalities; RET3	

To offer Cuyahoga County residents and small businesses convenient opportunities to recycle electronics and computer equipment.

# Program Strengths:

- Program created county-wide collection of computers generated by households and small businesses through collection events hosted by local municipalities and promoted by the District.
- District surveys indicated that this program has a high level of participation and perceived importance by public officials. Of the respondents, 85% said they participate and 87% said it was an important program.
- In addition to the District's contractor, there are a number of private sector e-waste or e-scrap recyclers located in the county.
- The program increased awareness of why and how residents and business could recycle e-waste.

The program resulted in the placement of refurbished computers in area schools.

# Program Weaknesses/Challenges:

 There is a need to increase awareness of e-waste recycling opportunities but the high cost of advertising in the local media can limit outreach efforts. Of those surveyed, 55% said they recycle their e-waste but 9% said they did not know how and put these in the trash.

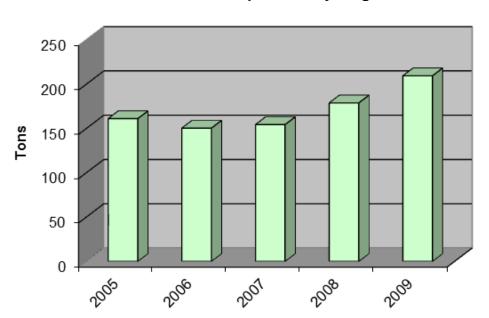
#### **CCSWD-6 – SCRAP TIRE RECYCLING**

The District conducted its annual Scrap Tire Round-Up for communities in September. Communities partnered with the District by hosting scrap tire collections. The District's contractor collected the tires from the cities. This Round-Up was created in 1998 to provide scrap tire recycling opportunities and reduce illegal dumping. The following is the schedule of community scrap tire collections that occurred in 2009:

Community	Scrap Tire Collections
	September, 2009
Bay Village	August 24-September 4, 31300 Naigle Road
Beachwood	Year-round drop-off, 2700 Richmond Road
Bedford Heights	September 1-25, 25401 Solon Road
Bentleyville	Drop-off at city service department
Berea	Drop-off at city service department
Brecksville	Drop-off at city service department
Broadview Heights	August 17-28, 9543 Broadview Rd.
Brook Park	Year-round drop-off, 19065 Holland Road
Brooklyn	Year-round drop-off, City service department
Brooklyn Heights	Year-round drop-off, City service department
Chagrin Falls	September 1-11, 240 Solon Road, M-F7:00-3:30
Cleveland	Four tires collected per household
Cleveland Heights	Drop-off at city service department
Cuyahoga Heights	Curbside collection on Tuesdays
East Cleveland	Drop-off at city service department
Glenwillow	Year-round drop-off, 29555 Pettibone Road
Independence	Special curbside collection on Fridays
Lakewood	Year-round drop-off, 12920 Berea Road
Maple Heights	September 8-11, 5353 Lee Road
Mayfield Village	August 22-September 5, 610 SOM Center Road
Moreland Hills	August 24-September 4, 4350 SOM Center Road
North Olmsted	August 24-September 4, 5200 Dover Center Road
North Royalton	June 1-August 29, 10789 Royalton Road
Olmsted Falls	Year-round drop-off, 8045 Brookside Drive
Olmsted Township	Year round drop-off, 26960 Cook Rd
Orange Village	August 24-September 4, 4160 Lander Road
Parma	September 12, 5680 Chevrolet Boulevard
Pepper Pike	August 3-September 7
Richmond Heights	August, 6260 Chardonview Road

Community	Scrap Tire Collections September, 2009
Rocky River	Year-round curbside collection
Shaker Heights	Year-round drop-off, 15600 Chagrin Blvd.
South Euclid	August 31-September 4, 1349 S. Green Road
Strongsville	Year-round drop-off, 16099 Foltz Parkway
Westlake	Drop-off at city service department
Woodmere	Curbside collection on Mondays and Fridays

In 2009, the District collected 209.51 tons of scrap tires. Since the program was created in 1998, the District has collected over 4,550 tons of tires. The following chart depicts the tonnage collected from 2005 - 2009.



2005 - 2009 Scrap Tire Recycling

CCSWD-6 Program Summary: Scrap Tire Recycling		
Description	Details	
District Budget Number	CCSWD-6	
EPA Program Number from ADR	6108	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Scrap tires	
2009 Recycled Tonnage	210	
2009 Annual Program Costs	\$22,543.92	

Year

CCSWD-6 Program Summary: Scrap Tire Recycling		
Description Details		
Program Operator/Contractor	District and Court Community Service, Inc., local health depts., communities, Genesis Concepts Unlimited	

To offer Cuyahoga County communities a no-cost way to recycle tires they collect from residents and to reduce illegal dumping by making scrap tire collection programs available to residents.

## **Program Strengths:**

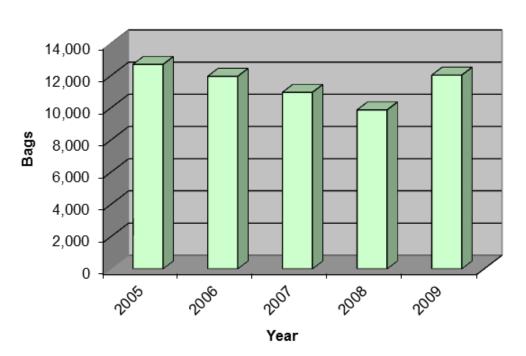
- The District provided municipalities with an annual scrap tire collection service which made it cost-effective for communities to collect tires from their residents.
- The District forged an effective partnership with Court Community Service, local health departments and communities to identify and clean up tire dumping locations.
- This program has a high level of participation and perceived importance by public officials. Of those surveyed, 75% said they participate and 83% said they feel it is an important program.

#### Program Weaknesses/Challenges:

- The once per year program and Infrequent collection events did not offer convenient opportunities for residents to recycle tires in the District.
- There is a need to make residents more responsible for recycling tires through their tire dealer when new tires are purchased.
- There is a need to increase awareness of this program. Of those surveyed, just 16% participate and 45% were not familiar with the Scrap Tire Round-Up.
- Cuyahoga County does not have an in-District recycling facility available to handle scrap tires plus there are limited tire recycling markets. There are just two companies that serve Cuyahoga County waste generators.

# **CCSWD-7 – LITTER COLLECTION PROGRAM**

The District funded a program to remove litter from roadways and public properties in 2009. Collection occurred year-round in 54 participating communities and was implemented by Court Community Service, Inc. using two crews of court offenders. In 2009, the District-sponsored program collected over 12,037 bags of litter and debris. Since the beginning of the program in 1990, 213,000 bags of litter have been collected. The following graph presents the bags of litter collected from 2005 – 2009.



2005 - 2009 Litter Collection

CCSWD-7 Program Summary:  Litter Collection Program		
Description	Details	
District Budget Number	CCSWD-7	
EPA Program Number from ADR	6111	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Debris, scrap tires	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs	\$84,108	
Program Operator/Contractor	District; Court Community Service, Inc.	

To assist local communities in the collection of litter, illegally dumped materials and scrap tires from along the roadside and public properties.

# **Program Strengths:**

- This program supplemented the litter collection efforts of communities with supervised community service workers.
- The program was very popular with community officials.
- In addition to litter collection, CCS crews assist with the Scrap Tire Round-Up and provide help to city recycling operations during the winter.
- The program is a good value.
- In 2009, 54 cities participated in the program and received 21,214 free man hours of labor.
- Cuyahoga County was cleaner and safer because of this program.

#### Program Weaknesses/Challenges:

- Enforcement of local litter ordinances is not a priority for law enforcement.
- The cost to provide this service increases about 3% per year, although it is a good value. Occasional capital costs are needed to replace the litter collection vans.

#### CCSWD-8 - MERCURY COLLECTION PROGRAM

The District conducted a free year-round mercury collection program in 2009. The collection accepted mercury thermometers, thermostats, switches found in appliances, and liquid mercury. The program was established in 1999. Residents were able to drop-off acceptable mercury containing items at the following locations:

#### **Beachwood Fire Station**

2700 Richmond Road, Beachwood 44122

Info: Drop-off Monday-Saturday, 9:00 a.m. - 4:00 p.m.

# **Cuyahoga County Board of Health**

5550 Venture Drive, Parma, OH 44130

Info: Drop-off: Monday-Friday, 8:30 a.m. - 4:30 p.m.

# **North Royalton Fire Station**

7000 Royalton Road, North Royalton, 44133

Info: Drop-off Monday-Friday, 8:00 a.m. - 4:30 p.m.

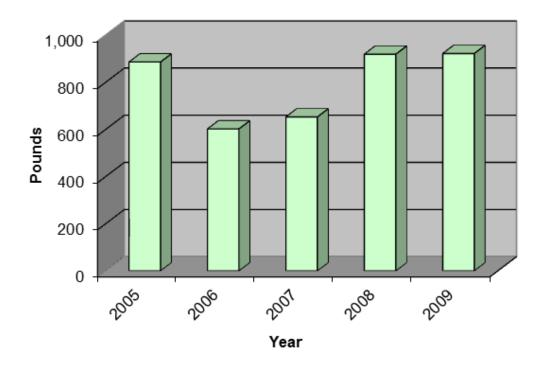
# **Northeast Ohio Regional Sewer District**

4747 East 49 Street, Cuyahoga Heights 44125

Info: Drop-off Monday-Friday, 9:00 a.m. - 4:00 p.m.

The District promoted this program through the web site, press releases and local community newsletters. In 2009, a total of 922 pounds of mercury containing items were collected and recycled. The following graph presents the pounds of mercury collected by the District from 2005 – 2009.

# 2005 – 2009 Mercury Collection



CCSWD-8 Program Summary: Mercury Collection Program	
Description	Details
District Budget Number	CCSWD-8
EPA Program Number from ADR	6088

CCSWD-8 Program Summary: Mercury Collection Program		
Description	Details	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Mercury and mercury containing items including thermometers, thermostats, and switches.	
2009 Recycled Tonnage	922 pounds	
2009 Annual Program Costs	Included in HHW costs	
Program Operator/Contractor	District, participating community partners	

Cuyahoga County residents are offered a free and convenient way to responsibly dispose of mercury containing products.

# **Program Strengths:**

- The program provided free year round recycling and safe disposal options for District residents at locations located throughout the county.
- The program helped residents to maintain safe homes by removing mercury containing materials.
- The District has forged an effective partnership with local fire departments, the Northeast Ohio Regional Sewer District, and the Cuyahoga County Board of Health.
- Inexpensive program

# Program Weaknesses/Challenges:

- Concern over the potential for mercury spills.
- There is a reduced need for this separate collection program now that the District's expanded HHW collection program is in place.
- There is a need to increase residents' awareness of the need to properly dispose mercury-containing items.

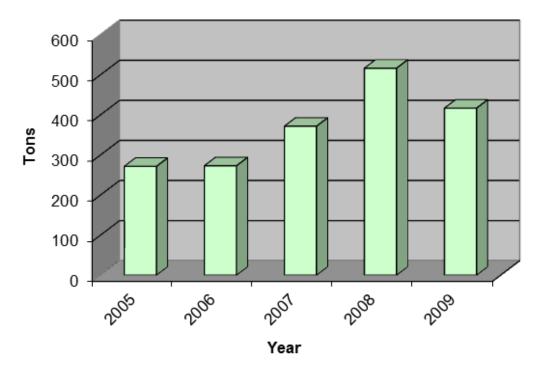
#### CCSWD-9 – PHONE BOOK RECYCLING CAMPAIGN

The District conducted an annual telephone book recycling campaign. The campaign ran from June through September, concurrently, with distribution of the new phone books. The general public, businesses. industries and institutions recycled old phone books at multiple drop-offs throughout the county, including the following Cleveland Metroparks locations.



- Bedford Reservation, Bedford
- Big Creek Reservation, Parma Heights
- Brecksville Reservation, Brecksville
- · Cleveland Metroparks Zoo, Cleveland
- Euclid Creek Reservation, South Euclid
- Garfield Park Reservation, Garfield Heights
- Huntington Reservation, Bay Village
- Mill Stream Run Reservation, Strongsville
- North Chagrin Reservation, Mayfield Village
- Ohio & Erie Canal Reservation, Cuyahoga Heights
- Rocky River Reservation, North Olmsted
- South Chagrin Reservation, Bentleyville

In 2009, this program recycled 416.75 tons of phone books. Since the program was created in 1993, the District has collected and recycled over 7,200 tons of unwanted phonebooks. The following graph presents the phone book tonnage collected from 2005 - 2009.



2005 - 2009 Phone Book Recycling

CCSWD-9 Program Summary:						
Phone Book Recycling Campaign						
Description	Details					
District Budget Number	CCSWD-9					
EPA Program Number from ADR	6083					
Entity Responsible for Maintaining Program	District					
Service Area for Program	District					
Materials Reduced/Recycled	Phone books					
2009 Recycled Tonnage	416.75					
2009 Annual Program Costs	\$25,741					
Program Operator/Contractor	District					

To offer Cuyahoga County residents a convenient and environmentally responsible means to recycle unwanted phonebooks.

# **Program Strengths:**

- · This program is very well known and popular with the public.
- The District receives revenue from the sale of phone books.

- The District recycles approximately 350-400 tons of phone books annually through this program, although the tonnages have been decreasing.
- This program also provides businesses with the opportunity to recycle their phone books.

## Program Weaknesses/Challenges:

 There is a reduced need for this program since AT&T stopped printing its White Pages and since phone books can now be recycled through community recycling programs along with other mixed paper.

# CCSWD-10 - SPECIAL WASTE CONVENIENCE CENTER (SWCC)

The District consulted with professionals to develop an appropriate convenience center where Cuyahoga County communities could bring HHW and other hard to recycle materials throughout the year. Development for the Center began in 2007. In 2009, the District issued an RFP to identify a building in which to



locate the center. In 2010, the District signed a five-year lease on a 34,000 sq. ft. building, completed renovations and moved its offices into the Center. The Center began receiving materials in April 2011. The following table summarizes the program details:

CCSWD-10 Program Summary: Special Waste Convenience Center						
Description	Details					
District Budget Number	CCSWD-10					
EPA Program Number from ADR	6113 District					
Entity Responsible for Maintaining Program						
Service Area for Program	District					
Materials Reduced/Recycled	Oil or solvent-based paint, sealers, primers, or coatings (aerosols or liquids), varnishes, polyurethanes, shellacs, paint thinner, mineral spirits, turpentine,					

CCSWD-10 Program Summary: Special Waste Convenience Center					
Description	Details				
	pesticides, herbicides, fungicides, caustic household cleaners, pool chemicals, automotive fluids, motor oil, car batteries, adhesives, roof tar, driveway sealer, kerosene, gasoline, mercury, fluorescent bulbs				
2009 Recycled Tonnage	N/A				
2009 Annual Program Costs	None				
Program Operator/Contractor	District				

To provide Cuyahoga County residents and communities with more convenient opportunities to recycle household hazardous waste, electronics and other hard to recycle items and protect the environment.

#### **Program Strengths:**

- SWCC will give District the ability to collect more HHW and better serve local governments.
- The center incorporates a large training room that allows the District to conduct on-site recycling and composting programs.
- The center can also be used to collect additional items for recycling and reuse. Municipal survey respondents indicated they would be interested in being able to bring the following items to the center: rigid plastic items, plastic bags, used bicycles, and polystyrene foam packaging.

#### Program Weaknesses/Challenges:

 Increased cost to operate in the new facility and to dispose of the additional tonnage of materials collected.

# CCSWD-11 - LOCAL GOVERNMENT OUTREACH AND ASSISTANCE PROGRAMS

The District provided solid waste and recycling market information, industry data, contracting assistance, and program efficiency assistance to

the county's 59 cities, villages and townships including the following initiatives:

## **Initiative 1 - Contracting Consortiums and Assistance**

The District facilitated and coordinated several cooperative contracting consortiums among Cuyahoga County communities for recycling and waste disposal services in 2009.

In 1993, the District established a marketing cooperative for newspaper. In 2003, residential mixed paper was added. The paper was collected for recycling by participating communities. In 2009, 15 communities participated in this program. Participating communities delivered 2,803 tons of newspaper and residential mixed paper to Caraustar Recycling. The District contracted with Caraustar for these services on behalf of the participating communities. Caraustar paid the participating communities directly. In July of 2009, on behalf of the participating communities, the District renewed a five year contract with Caraustar.

In 2008, the District established a Municipal Waste Disposal Cooperative. The contracting consortium reduced the cost of waste transfer and disposal for the 9 participating communities.

In 2009, the District began planning to develop a Municipal Recycling Consortium. This was completed in 2010. The contracting consortium enabled the 12 participating communities to receive a revenue generating contract for the recyclables they collect.

# Initiative 2 - Residential Recycling Report

The District published an annual Residential Recycling Report that documented the residential recycling rates of each of the 59 communities within Cuyahoga County. The Residential Recycling report was established in 2000 to annually review the progress and activities of 59 Cuyahoga County communities in reducing the amount of waste sent to landfills. The Residential Recycling Report was also established to encourage communities to maintain accurate recycling data. The increased competition between cities has contributed to increasing recycling rates in certain communities. In 2009, the report revealed a 28 percent recycling rate as shown below.

2000 R	Residential RECYCLING REPORT					
<b>2009</b>		denilati	2009	2009	2009	2008
			Solid Waste Disposed (tons)	Materials Recycled (tons)	Materials Recycled (%)	Materials Recycled (%)
			0.317.00	0.506.73	51.01%	50.050
		Bay Village Beachwood	9,217.00 3,933.62	9,596.72 9,979.92	71.73%	50.06% 68.99%
	:	Bedford	4,849.60	3,468.21	41.70%	40.94%
	6	Bedford Heights	2,952.00	2,775.19	48.46%	52.56%
Dear Residents	:-	Bentleyville Berea	586.20 8.081.76	222.01 3.033.53	27.47% 27.29%	26.06% 25.61%
and Local Officials	Ē	Bratenahl	344.51	339.54	49.64%	0.00%
Each year, the Cuyahoga County Solid Waste	i.	Brecksville	5,130.00	3,836.86	42.79%	42.34%
District publishes this Residential Recycling		Broadview Heights	7,040.07	2,630.25 1,370.25	27.20%	28.01% 28.74%
Report to document the progress of Cuyahoga County communities and residents in reducing	: -	Brooklyn Brooklyn Heights	3,743.17 1.050.00	407.16	26.80% 27.94%	28.74%
the amount of waste sent to landfills.	Ē	Brook Park	9,633.88	5,255.55	35.30%	33.12%
	÷	Chagrin Falls Township	50.40	13.10	20.63%	20.63%
In 2009, the 59 communities in Cuyahoga	:	Chagrin Falls Village	1,794.00	777.55	30.24%	36.29% 8.69%
County kept a record 213,191 tons of waste out of landfills. This saved taxpayers over	: -	Cleveland Cleveland Heights	175,784.00 17.667.42	16,347.74 19.474.10	8.51% 52.43%	8.69% 48.11%
\$7.4 million in landfill tipping fees, while	ě	Cuyahoga Heights	550.00	158.28	22.35%	32.31%
conserving valuable natural resources.	:	East Cleveland	7,709.53	77.28	0.99%	0.84%
	:	Eudid	18,025.00	2,859.55	13.69%	9.05%
Our county leads Ohio when it comes to waste	÷ –	Fairview Park Garfield Heights	8,203.00 13,554.54	3,300.87 1,715.62	28.69% 11.24%	26.48% 13.74%
reduction, recycling and composting. By reducing our residential waste nearly 28% last year, we		Gates Mills	1,452.00	359.91	19.86%	20.85%
surpassed Ohio's 25% recycling goal and we	:	Glenwillow	225.50	148.11	39.64%	37.31%
have the momentum to achieve more. The more		Highland Heights	4,548.00	2,129.93	31.90%	27.91%
we recycle, the more money we save, the more		Highland Hills	206.18 510.43	23.48 179.68	10.22% 26.04%	7.79% 27.31%
jobs we create, and the more natural resources and energy we conserve for future generations.		Hunting Valley Independence	3,304.00	3,916.78	54.24%	51.53%
and energy we conserve for future generations.	:	Lakewood	17,010.00	14,886.96	46.67%	44.08%
Thank you to all the mayors, councilpersons,	ē	Linndale	65.00	7.63	10.51%	12.87%
township trustees, and service department	:_	Lyndhurst	7,428.00 10,206.00	3,768.93 1,330.19	33.66% 11.53%	29.98% 12.51%
personnel for providing comprehensive recycling services to your residents. And thank	:	Maple Heights Mayfield	1,632,00	1,330.19	43.91%	38.61%
you to all the conscientious residents for		Mayfield Heights	7,713.82	1,262.80	14.07%	15.04%
participating in these programs. Together,		Middleburg Heights	6,122.40	3,979.24	39.39%	43.32%
we are making a difference.	: _	Moreland Hills	1,464.68	1,017.62	41.00%	41.14%
	Ē	Newburgh Heights North Olmsted	1,350.00 14,931.00	35.00 5.835.51	2.53% 28.10%	19.77% 23.99%
Environmental Benefits		North Randall	115.98	2.56	2.16%	0.00%
of Recycling		North Royalton	9,891.00	4,394.22	30.76%	30.04%
In 2009, residential recycling programs in	:_	Oakwood	1,447.00	855.29	37.15%	35.74%
Cuyahoga County:	-	Olmsted Falls City Olmsted Township	3,650.00 4,176.00	1,051.20 972.23	22.36% 18.88%	17.90% 23.50%
Diverted 213,191 tons of solid waste	:	Orange	1,212,20	1.326.09	18.88% 52.24%	46,55%
from landfills.	:	Parma	42,488.00	7,367.39	14.78%	17.16%
Recovered 27.94% of all household	ě _	Parma Heights	8,221.77	1,919.66	18.93%	22.97%
waste for recycling and composting.	:	Pepper Pike	2,764.26	4,953.94	64.19%	64.23%
Conserved 5,572 tons of non-renewable natural resources.	:	Richmond Heights Rocky River	3,615.11 9,093.00	1,730.57 5,078.08	32.37% 35.83%	16.80% 35.71%
• Conserved 733.227 trees.	ź	Seven Hills	5,907.40	3,304.40	35.87%	32.61%
Saved over 1,190,620 million Btu's of	-	Shaker Heights	10,086.00	12,520.08	55.38%	49.78%
energy - enough to power 11,788 homes	: -	Solon South FreeEd	8,147.00	7,536.45	48.05%	44.79%
for one year.	:	South Euclid Strongsville	12,000.00 21,902.00	8,803.07 10,132.53	42.32% 31.63%	45.80% 20.85%
Reduced air emissions by 76,190 tons.     Reduced greenhouse gas emissions	•	University Heights	5,354.42	2,285.91	29.92%	29.39%
by 56,698 tons.	:	Valley View	1,006.00	679.59	40.32%	42.53%
	: -	Walton Hills	913.00	1,379.77	60.18%	58.97%
These statistics were derived using the Environmental Benefits Calculator developed by the National Recycling	ě	Warrensville Heights Westlake	4,404.56 15,120.50	805.53 8,077.37	15.46% 34.82%	15.21% 36.52%
Coalition.	Ė	Woodmere	15,120.50	216.59	55.03%	68.50%
	:	Community Totals	549,760.91	213,191.37	27.94%	26.28%
			2 12/1 00/2 1	210/12/10/	27.5170	2012070

#### **Initiative 3 - Trash Talk Seminars**

The District began offering educational seminars in 2001 for municipal service directors and recycling coordinators. During 2009, the District held 3 seminars for representatives of 26 communities to provide learning and networking opportunities. In 2009, Trash Talk Seminar topics included automated and semi-automated collection trends, household hazardous waste handling procedures, electronics recycling and more.

#### **Initiative 4 - Trash Oscars**

The District commenced an awards program in 2004 to recognize outstanding recycling programs in a creative and fun manner. The District uses information compiled by the Residential Recycling Report determine award recipients. In 2009, the District honored the following cities and individuals for their recycling achievements:



#### Lead Community in a Recycling Role - City of Beachwood

The City was recognized for being the top recycling community in Cuyahoga County. In 2008, residents in this environmentally conscious community recycled 69% of their waste through city recycling and composting programs.

## Lead Producers in a Curbside Recycling Program - Village of Bentleyville

The Village was recognized for having the most productive recyclers. In this environmentally conscious community, each household recycles over 18 pounds of paper, cans, glass and plastic every week.

#### Most Improved Recycling Producers - City of Brook Park

This city was recognized for increasing their recycling rate more than 10% from 2007 to 2008, the most improved recycling rate in Cuyahoga County in 2008. The result was 1,266 additional tons of material recycled and a cleaner, greener community.

#### Best Director in a Leading Role - Chris Vild, City of University Heights

This individual was recognized for his dedication and service to the residents of University Heights and his commitment to recycling, composting and the environment.

# Best Supporting Man in a Recycling Role - Jim Carbone, City of North Olmsted

This individual was recognized for his dedication and service to the students of the North Olmsted schools and his commitment to the environment.

# Best Supporting Woman in a Recycling Role - Linda Dulik, City of Cleveland Heights

This individual was recognized for her dedication and service to the residents of Cleveland Heights and the Cleveland Heights Service Department and her commitment to the environment.

# Best Student Director - Esther D'Mello Brecksville-Broadview High School

This individual was recognized for her leadership and dedication to the environment by implementing a recycling program for cans and plastics in the Brecksville-Broadview Heights School District and her service to the Cuyahoga County Solid Waste District.

## Best Supporting Cast - Bay Village Green Team

This dedicated group of Bay Village residents was recognized for helping to "green" the city by implementing programs to increase recycling and sustainability practices and educating residents about the environment.

# Best Adaptation of a Waste Management Program - City of Lakewood

This city was recognized for automating their waste collection service and implementing mandatory recycling in order to improve efficiency, increase recycling and save taxpayer dollars.

#### <u>Lead Performance in Business Recycling - Cleveland Clinic</u>

This organization was recognized for being a leader in the business community for its recycling, composting and sustainability practices.

#### Best Live Action Video - City of Brecksville

This community was recognized for coming up with a new way to educate its residents about the city's recycling program. Through a well produced video, the city shows residents how to participate in the variety of outstanding recycling programs offered by the City of Brecksville.

#### **Initiative 5 - Waste Management Advisories**

The District periodically provided Waste Management Advisory bulletins to mayors, service directors, recycling coordinators, industry representatives and others regarding important developing solid waste issues and solid waste events associated with source reduction, recycling, reuse, composting and yard waste management, scrap tire and HHW

management, restricted waste management and other miscellaneous solid waste issues in 2009.

CCSWD-11 Program Summary: Local Government Outreach and Assistance		
Description Details		
District Budget Number	CCSWD-11	
EPA Program Number from ADR	6082, 6117, 6181, 6127, 6128, 6126	
Entity Responsible for Maintaining Program	District	
Service Area for Program	Cuyahoga County	
Materials Reduced/Recycled	Various	
2009 Recycled Tonnage	2,083	
2009 Annual Program Costs	\$2,566	
Program Operator/Contractor	District	

#### **Program Objective**

To offer communities technical assistance in developing cost effective and efficient solid waste management collection, disposal and recycling programs; to offer recognition for programmatic excellence; and to provide solid waste management information and data to better their programs.

#### Program Strengths:

- Established the District as an authority on waste management issues and was an effective communication and educational tool. Promotes the District as an authority on contracting and increases visibility of the District. Of the public officials surveyed, 91% were aware of the service, and 90% think it is valuable.
- Cooperative members generally receive more favorable contract terms the District developed four consortiums to date. More are planned.
- The Residential Recycling Report and Trash Talk seminars increased awareness of community recycling efforts that resulted in new programming. About 59% of the public officials surveyed, indicated they thought the Trash Talk seminars were valuable.
- Increased communication and information sharing between the District, local officials, service directors and recycling coordinators.

#### Program Weaknesses/Challenges:

- Municipal officials (especially council members) change frequently and it is expensive to send written communication to the over 300 council member's county-wide.
- There is a need to increase participation in the contracting consulting services the District provides. While public officials agreed the service is valuable, only 36% have used the service.

#### CCSWD-12 - CHILDREN'S EDUCATION PROGRAM

In an effort to achieve the District's goals and objectives and fulfill its mission, the District provided education and awareness programs designed for school age audiences with the intention of introducing the concepts of waste reduction, recycling and re-use to children at an early age. Other District education programs provided educators with technical assistance, workshops and access to reference materials so that they could incorporate solid waste education and awareness into their curriculum. The following details the program initiatives:

#### **Initiative 1 - School Presentations**

The District's Education Specialist 412 presentations conducted 45.433 students about the environment in 2009. Presentations were designed meet science indicators were also integrated into social studies, mathematics and language arts requirements. curriculum Longer presentations were hands-on and shorter ones sometimes included a worksheet, story, craft or game. Each presentation was geared to a specific



grade. The following classroom presentations were offered in 2009:

#### Climate Change

- Putting on Pollutant Pounds
- Focus on Carbon Grades
- The Big Three Greenhouse Gases

#### Compost

- Worms
- Compost/Decomposi tion
- Edible Compost
- Compost and Soils
- Composting Organics

#### Cycles

- Nature & Human Cycles
- · Econo-Puzzle

#### Energy

- Energy Bills
- Energy Wheel
- · Far Out Fossil Fuels

#### Forestry Resources

Town Meeting

## Household Hazardous Waste

- Harmful Home
- · Home, Safe Home
- Haz Envirochallenge

#### Landfills

 What's In the School Trash

- Building an Edible Landfill
- Finer Liner

#### Litter Prevention

- Wartville Wizard
- Fishing for Litter
- Map Out Litter
- Lasting Litter
   Timeline

#### **Pollution**

- The Costly Thing
- Pollution on the Move

#### Natural Resources

- Resource Tree
- Puzzling Plastics
- Follow That Bottle
- Resource Bingo
- Mining Expedition
- The Paper Factory
- Plastics
- Dwindling Resources

#### Recycling

- Michael Recycles
- Trash Went Out to Play
- Where From? Where Go?
- · The 3 Rs
- Sir Johnny Recycling Adventure
- Mini-MRF
- Recycling Basics
- · Recycle the World

#### Trash

- Making A Garbage
   Pie Secrets in a
   Garbage Can
- Trash for Around the World
- Garbage Games

#### Waste Reduction

- Packing Zero
- A Pig's Tale
- Pass on the Plastic Bag
- Environmental Shopping

#### **Initiative 2 - School Assemblies**

The District brings in theatrical groups to conduct recycling related shows for large school assemblies.

#### **Initiative 3 - Teacher Workshops**

Hands-on interdisciplinary workshops were available for K-12 teachers. Most workshops were held at no cost to the teacher. Most workshops were associated with partner organizations such as NEOEA, CRCST and other agencies. There were no expenses for workshop materials, trainer's time and some of the workshop guidebooks. The following workshops are offered:

- Air to Earth, Grades 5-8
- CSI: Compost Science Investigation, Grades K-3
- Environmental Experiences for Early Childhood, Grades PreK-3
- Food, Land and People, Grades PreK-12
- Growing Up WILD, Grades PreK-3
- Leopold Education Project, Grades 6-12
- Make the Connection to Climate Change, Grades 6-8
- Project WET (Water Education for Teachers), Grades K-12
- Project WILD, Grades K-12
- Science and Civics, Grades 9-12
- Talkin' Trash with Aluminum Beverage Cans, Grades 6-9
- Windows On Waste (WOW), Grades 3-6
- · Workshop on Wheels, Grades K-12









#### Initiative 4 - Student and Teacher Publications

- Compost Science Investigation
- Don't Throw That Out
- Green Teen Survival Guide
- Reduce Reuse Recycle Scouting Patch Guide
- Start Students Recycling
- Teaching the Loop
- · Teachin' Trash Teacher Guide
- Tracking Trash
- · Trash Talk Newsletter

#### Give-A-Ways

- Recycle Bumper Stickers
- Make it a Habit...Reduce, Reuse, Recycle! Static Window Cling
- Recycle the World Poster
- · Last Stop for Trash Landfill Poster







#### **Initiative 5 - School Contests**

In 2009, the District conducted a number of contests designed to engage students in environmental education. The five contests conducted in 2009 included:

- Zero Waste Lunch Challenge
- Earth Day Poster Contest
- · Poetree Contest
- We've Got Plans for your Cans Contest
- · Plant Pride Not Litter

#### Initiative 6 - Scout/Youth Organizations

Reduce, Reuse, Recycle Patch Program

Through simple activities the Reduce, Reuse, Recycle Patch Program taught scouts and other children how to reduce, reuse and recycle. The program involved easy activities and projects that encouraged kids to take an active role as stewards for the earth.

CCSWD-12 Program Summary: Children's Education Program		
Description	Details	
District Budget Number	CCSWD-12	
EPA Program Number from ADR	6119	
Entity Responsible for Maintaining Program District		
Service Area for Program	Cuyahoga County	
Materials Reduced/Recycled	Various	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs	\$42,598	
Program Operator/Contractor District		

#### **Program Objective**

To offer the residents of Cuyahoga County a multifaceted education and awareness program that promotes proper solid waste management in the County while directly and indirectly affecting long-term behavior of the generators in the County to achieve continued reduced reliance on landfills for the management of solid waste.

#### Program Strengths:

- Provided educators with the tools needed to teach waste reduction and recycling to students. This helped expand the reach of the District's one educational specialist by training teachers to teach about the subject of recycling.
- Engaged students and encourages schools to become active. Of the educators surveyed, 85% said District's programs and services have been helpful in increasing students' awareness and participation in recycling and waste reduction activities.
- Classroom presentations were designed to meet state educational indicators. Of the educators surveyed, 41% thought highly of the presentation.
- Partnerships with other organizations helped to provide educational programs and teacher workshops.
- Raised awareness and increased District visibility.
- Publications for teachers and students provided comprehensive recycling education to public and schools.

Program Weaknesses/Challenges:

- With over 600 schools in county, it is difficult to market District services to all schools. Of the educators surveyed, 40% said they were unaware off all the resources the District makes available.
- State curriculum guidelines can limit the access to various student populations.
- Program must include other environmental issues to be considered in the curriculum.
- Hard for teachers to take time from school to participate in workshops. Need to provide substitute teacher pay in some instances.
- Printed materials are expensive to produce and time consuming to keep up to date.
- With so many initiatives offered under one program, the District may be spreading its resources too thin. Educator surveys indicated some offerings were more valuable than others. The District will need to evaluate which programs and services offer the most value.

#### CCSWD-13 – GENERAL PUBLIC EDUCATION AND AWARENESS

Community outreach efforts and programs were designed for broader audiences and position the District as the community resource for solid waste management as well as solid waste reduction, recycling and re-use. Education and community outreach efforts in place during 2009 included the following main strategies and initiatives:

#### **Initiative 1 - Publications**

The District published and distributed printed materials containing information on source reduction, recycling, reuse, composting, yard waste management, scrap tire and HHW management, restricted waste management and other miscellaneous solid waste issues. Publications were distributed through libraries, mailings, special events, businesses, industries, and civic/community organizations

Publications were also available via the District's website and could be ordered through the District's brochure request line. The District determined the frequency and quantity of the publications during 2009. The District updated each of its nine publications and sent out over 9,900

outreach publications and over 39,623 children publications in 2009. The following is a list of publications available in 2009:

- Annual Report and Residential Recycling Report
- Guide to Backyard Composting
- Guide to Community Recycling Programs
- · Guide to Recycling in the Workplace
- How to Dispose of Hazardous Household Products
- How to Stop Unwanted Mail
- Pass It On: A Resource-Full Guide to Donating Usable Stuff
- · Recycling Directory for Business and Industry
- Summary of the Solid Waste Plan for Cuyahoga County

#### **Initiative 2 - Media Promotions and Advertising**

The District utilized various print, broadcast, electronic, and social media to promote special events and campaigns, as well as source reduction, recycling, reuse, composting, yard waste management, scrap tire recycling, and HHW management in 2009. Advertising was used semi-annually to promote events. Additionally, the District distributed over 2,125 program and event fliers in 2009.

#### **Initiative 3 - District Website**

The District maintained a website to provide the public and businesses with county-wide recycling information and information on District programs, events. Web information covers source reduction, recycling, reuse, composting, yard waste management, scrap tire recycling, and HHW disposal and other solid waste issues. In 2009, the District's website had over 190,622 document views. An electronic newsletter was also distributed on a bi-weekly basis to 518 residents.

#### **Initiative 4 - Telephone Hotline**

The District answered telephone inquiries daily on source reduction, recycling, reuse, composting, and yard waste management, scrap tire and HHW management, restricted waste management and other miscellaneous solid waste issues in 2009. The District displayed the hotline number in local directories, publications and advertisements. In 2009, the District received 3,597 calls for answers to solid waste management concerns.

#### **Initiative 5 - Technical Assistance**

The District assisted and provided educational materials, advice and technical assistance on waste management issues, source reduction,



recycling, reuse, composting, yard waste management, scrap tires and HHW management, other restricted waste programs and the marketing of recyclables collected to communities and commercial, institutional and civic organizations. The frequency of assistance was determined by the frequency of requests.

#### **Initiative 6 - Presentations**

In 2009, the District conducted 76 presentations with over 2,511 attendees. Presentations were conducted for businesses, community organizations, schools, garden clubs, etc. Content varied depending on the audience, but focused mainly on recycling, backyard composting, recycling in the workplace, and sustainability.

CCSWD-13 Program Summary General Public Education and Outreach		
Description	Details	
District Budget Number	CCSWD-13	
EPA Program Number from ADR	6127	
Entity Responsible for Maintaining Program	District	
Service Area for Program	Cuyahoga County	
Materials Reduced/Recycled	Various	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs	\$5,843	
Program Operator/Contractor	District	

#### **Program Objective**

To educate the general public about the need and opportunities to participate in recycling, composting and waste reduction in Cuyahoga County.

#### Program Strengths:

- Increased awareness of recycling opportunities in Cuyahoga County by providing comprehensive recycling resources for the public.
- District publications provided comprehensive recycling education to the public and were available on the web site. Printed copies are available on request. Ninety-four percent of those surveyed said that the District's information helped them increase participation in recycling and waste reduction.

- The website was very popular and well-visited. Of those surveyed, 84% have visited the District's website and 73% said it is very useful. In addition, 82% hear about events, programs and services through e-newsletter.
- The District provided a main source for comprehensive recycling information and assistance in the county through web, recycling hotline and brochure request line.

#### Program Weaknesses/Challenges:

- Many survey respondents suggested that the District provide more information/education on the ease and importance of recycling, as well as what items can be recycled particularly HHW, household items, tires. Since all this information is on the District's website there is a need for a general PR effort to direct citizens to the website.
- Printed materials were costly to produce and can become out of date quickly as market conditions and programs change.
- Amount of staff time needed to update the multitude of District publications.
- Advertising is expensive free PSA advertising is very limited.

### CCSWD-14 - COMMERCIAL, INSTITUTIONAL AND INDUSTRIAL RECYCLING ASSISTANCE

The District assisted businesses, institutions, and industries with innovative waste management strategies that could reduce solid waste materials, reduce business costs for waste management and the reliance on landfills. The following section summarizes the initiatives conducted in 2009:

#### **Initiative 1 - Waste Assessments**

In 2009, the District offered waste assessments on an as requested basis. The waste assessments focused on the solid waste management techniques of the business and where efficiencies and cost effective alternatives may provide value to the business. In 2009, the Business Recycling Specialist completed five waste audits.

#### **Initiative 2 - Technical Assistance and Presentations**

Technical assistance was provided to businesses, institutions and manufacturers by the District. The District employs a full-time Business Recycling Specialist to assist with developing workplace waste reduction, recycling, and food waste composting programs. Services offered included presentations, brochures, e-newsletter, and recycling market information. In 2009, the District helped 126 businesses establish recycling programs. In addition to assisting in the establishment of new recycling programs, the District also initiated a pilot food waste composting project around downtown businesses.

CCSWD-14 Program Summary Commercial, Institutional and Industrial Recycling Assistance		
Description	Details	
District Budget Number	CCSWD-14	
EPA Program Number from ADR	6118, 6183	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Various	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs	\$8,616	
Program Operator/Contractor	District	

#### **Program Objective**

To assist local businesses, institutions and industries to reduce waste and increase recycling.

#### Program Strengths:

- Educated business owners and property managers about ways to begin or expand workplace recycling. Of the businesses surveyed that have received a presentation from the District, 86% strongly agreed the presentation was professional, informational and met their organizations' needs and 78% said the District helped their company implement or expand its waste reduction or recycling activities.
- Walk-through waste assessments identified waste streams that could be reduced and the cost benefits of waste reduction.
- Increased recycling and developed methods to track commercial recycling data.

- Technical Assistance that the District offers creates value for the local businesses and is appreciated. Of the businesses surveyed, 78% said the District helped their company implement or expand its waste reduction or recycling activities.
- District promotion of food waste composting has resulted in an increase in interest in starting a food waste composting program.

#### Program Weaknesses/Challenges:

- Large number of commercial businesses and manufacturers makes it difficult to have a large impact.
- Many manufacturing companies in Cuyahoga County are small, employing 50 or fewer employees. Recycling was more challenging and expensive for these smaller companies due to lack of volume.
- District has limited time to support all requests.

#### CCSWD-15 - RECYCLING MARKET DEVELOPMENT

The District offers a variety of initiatives to support and increase recycling markets in the District. The following describes the initiatives included in this program:

#### **Initiative 1 - ODNR Market Development Grants**

The District applied for ODNR Recycling Market Development Grants as needed to support local recycling business development projects. Grants received were administered by the District at no cost. In 2009, the District assisted with the successful application by the City of Cleveland to develop a food waste composting project at the West Side Market.

#### Initiative 2 - Recycling and Sustainable Business Project Support

The District worked with local partners such as the Entrepreneurs for Sustainability, Cleveland Green Building Coalition, and recycling based businesses to increase awareness of sustainable business practices.

The District worked with local partners to develop local markets, to increase the recycling infrastructure and increase the local manufacture of recycled products.

The District was a participant in Zero Waste NEO, an educational program of Entrepreneurs for Sustainability (E4S). The program encouraged

businesses to establish and work towards a zero waste goal. A website, quarterly workshops, and peer learning opportunities are services provided by the initiative.

CCSWD-15 Program Summary: Recycling Market Development		
Description	Details	
District Budget Number	CCSWD-15	
EPA Program Number from ADR	6185, 6178	
Entity Responsible for Maintaining Program District		
Service Area for Program	Cuyahoga County	
Materials Reduced/Recycled	Various	
2009 Recycled Tonnage N/A		
2009 Annual Program Costs \$0		
Program Operator/Contractor District		

#### **Program Objective**

To develop local markets, increase the recycling infrastructure, and increase the local manufacture of recycled products within the District.

#### **Program Strengths:**

- The program has resulted in creative partnerships and innovative programs that support local recycling market development and sustainability initiatives.
- Market development assistance, either through grants and or loans, assists businesses to grow and prosper while preserving natural resources and landfill capacity.
- The program assisted in building partnerships throughout the business community. The partnership with E4S is beneficial and leverages the District's staff time.

#### Program Weaknesses:

- Difficult for the District to directly impact the development of local recycling based businesses.
- Most recyclables leave the region to be made into new goods. No local manufacturing service for recycled products is available in the District.

#### **CCSWD-16 – DISTRICT GRANT PROGRAMS**

The District offers three grant programs designed to increase recycling awareness and collection in 2009 as described below:

#### **Initiative 1 - Community Recycling Awareness Grants**

The Community Recycling Awareness Grant is provided to cities to help them promote their recycling programs to residents. In 2009, the District awarded 21 communities grants totaling \$69,000. Funds were used to produce brochures, videos, signage, calendars, and other awareness materials. In 2009, the following grants were awarded:

City	Project	Grant Award
Bay Village	Refrigerator magnets and brochure	\$3,500
Bedford	Awareness materials for children; reusable mugs	\$3,500
Bratenahl	Mailers for residents	\$3,500
Brecksville	Reusable tote bags to distribute to residents	\$3,500
Broadview Heights	Literature to residents	\$3,500
Cleveland	Awareness materials for expanded curbside recycling program	\$3,500
Cleveland Heights	Refrigerator magnets for residents	\$3,500
Fairview Park	Brochure for residents	\$3,500
Independence	Web page and brochure	\$3,200
Lakewood	New recycling guide for residents	\$3,305
Linndale	Fliers and recycling yard signs	\$898
Maple Heights	Reusable tote bags to distribute to residents	\$3,500
Moreland Hills	Recycling calendar for residents	\$3,500
North Olmsted	Reusable tote bags to distribute to residents	\$3,500
North Royalton	Recycling brochure	\$3,500
Oakwood Village	Funding to create a recycling web page	\$3,500
Orange Village	Recycling video	\$3,500
Parma	Reusable tote bags to distribute to residents	\$3,125
Parma Heights	Recycling brochure	\$3,493
Pepper Pike	Video streaming services on website; reusable water bottles	\$3,300
Richmond Heights	Recycling signage for trucks, recycling bags and fliers	\$2,878
Total		

#### **Initiative 2 - School Recycling Mini Grant**

This grant program was designed to assist Cuyahoga County schools with funding student-centered school recycling projects. The District supported projects that involved students in establishing or expanding a school recycling program. In 2009, \$7,500 in Recycling Mini Grants was provided by the District to ten schools. This grant helped schools purchase recycling containers

#### **Initiative 3 - Recycling Container Grant for Non-Profit Agencies**

The Recycling Container Grant for Non-Profit Agencies was developed in 2009 to help small non-profits purchase recycling containers. The program will be implemented in 2010.

CCSWD-16 Program Summary: Community Recycling Awareness Grants		
Description	Details	
District Budget Number	CCSWD-16	
EPA Program Number from ADR	6173	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Varies	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs	\$67,366	
Program Operator/Contractor District		

#### **Program Objective**

To assist communities promote recycling to residents and to help non-profits purchase of recycling containers to increase recycling and waste diversion.

The strengths of this program were:

- Communities appreciated the funding which helps them promote their own services.
- Helped save the District money in promoting local programs.
- Helped non-profit agencies and schools implement recycling programs.

The Weaknesses/Challenges of the program were:

- Demand for grants exceeds funding available.
- Small amount of money per grant.
- Some non-profits could afford to buy the containers without grant assistance.

#### CCSWD-17 - SOLID WASTE CODE ENFORCEMENT

The District contracted with the Cuyahoga County Board of Health and the Cleveland Department of Public Health to conduct solid waste facility inspections and other duties associated with the Ohio EPA code enforcement program in 2009. This support represented approximately 23% of the District's overall expenditures. The District conducted a detailed analysis of the services provided by the two health departments in the County (City of Cleveland and Cuyahoga County). The following section summarizes the analysis.

#### **Solid Waste Facility Inspections**

The District receives reports from both departments' on a quarterly basis which provides some level of detail as to the activities conducted including inspections. The following section summarizes each department's 2009 activities:

#### **Cuyahoga County Board of Health**

2009 Health Department Activities	# of Solid Waste Facilities Responsible For	Total # of Inspections Conducted	Avg/ Facility	Average Frequency of Inspection	Minimum Frequency Required by ORC
Operating Solid Waste Landfills	2	12	6	> Quarterly	Quarterly
Solid Waste Transfer Stations	9	182	20	> Monthly	Quarterly
Closed Solid Waste Landfills	20	101	5	> Quarterly	Quarterly
CDD Landfills	4	163	41	> Bi- Weekly	Quarterly
Closed CDD Landfills	14	0	0	As Needed	Quarterly
Compost Sites	21	169	8	> Quarterly	Quarterly
Open Dump Sites	unknown	0	0	Not Reported	N/A
Scrap Tire Sites	unknown	0	0	Not Reported	Quarterly
Nuisance Complaints	13	13	1	As Needed	N/A
Other: methane monitoring	9	39	4	Quarterly	N/A
Other: infectious waste treatment	2	8	4	Quarterly	Quarterly
Total	70*	687			

#### **Cleveland Department of Public Health**

2009 Health Dept. Activities	# of Solid Waste Facilities Responsible For	Total # of Inspections Conducted	Average/ Facility	Frequency of Inspection	Minimum Frequency Required by ORC
Operating Solid Waste Landfills	1	8	8	> Quarterly	Quarterly
Solid Waste Transfer Stations	1	40	40	> Monthly	Quarterly
Closed Solid Waste Landfills	1	4	4	Quarterly	Quarterly
CDD Landfills	0	0	0	None	Quarterly
Closed CDD Landfills	2	88	44	> Monthly	Quarterly
Compost Sites	8	68	8	> Quarterly	Quarterly
Open Dumps	125	125	1	As Needed	N/A
Scrap Tire Sites	0	0	0	None	Quarterly
Nuisance Complaints	89	89	1	As Needed	N/A
Other: CH4 Monitoring	4	96	24	Bi-Monthly	N/A
Other: Autoclaves	6	24	4	Quarterly	Quarterly
Total	13 Facilities *	542			

#### **Summary of 2009 Health Department Services**

2009 Health Department Activities	# of Solid Waste Facilities Responsible For	Total # of Inspections Conducted
Operating Solid Waste Landfills	3	20
Solid Waste Transfer Stations	10	222
Closed Solid Waste Landfills	21	105
CDD Landfills	4	163
Closed CDD Landfills	16	88
Compost Sites	30	237
Open Dump Sites	125	125
Scrap Tire Sites	0	0
Nuisance Complaints	102	102
Other: Methane (CH4) Monitoring	13	135
Other: Autoclaves	6	24
Other: Infectious Waste Treatment	2	8
Total	84 Facilities *	1,229

#### **Program Expenses and Analysis**

The following table summarizes the expenses for health department programs for the District in 2009.

#### 2009 Health Department Budget

Description	Total Budgeted Funding	% of District Expenses
Cuyahoga County Board of Health	\$334,000	18.8%
Cleveland Department of Public Health	\$80,314	4.5%
Totals	\$414,314	23.4%

CCSWD-17 Program Summary: Health Department Funding		
<b>Description Details</b>		
District Budget Number	CC-25	
EPA Program Number from ADR	6179	
Entity Responsible for Maintaining Program	District	
Service Area for Program	District	
Materials Reduced/Recycled	Scrap tires and debris	
2009 Recycled Tonnage	N/A	
2009 Annual Program Costs (actual)	\$452,893	
Program Operator/Contractor	District	

#### **Program Objective**

To provide local health department with funding to conduct solid waste facility inspections and other duties associated with the Ohio EPA code enforcement program.

#### **Program Strengths:**

 This program helps protect public health and the environment to assure solid waste facilities are in compliance with Ohio EPA rules governing operation.

#### Program Weaknesses/Challenges:

- Current funding amounts for boards of health cannot be guaranteed unless new sources of revenue are identified.
- Program does not help the District meet its statutory obligations required of solid waste districts in Ohio. Program's high costs means less money for other District programs and services that are statutorily required.
- It is difficult to determine appropriate funding level for this service.

#### CCSWD-18 - SECURING LANDFILL DISPOSAL CAPACITY

As will be demonstrated in Section VI, the District has access to adequate disposal capacity throughout the sixteen-year planning period. However, to assure that disposal capacity remains affordable and available to Cuyahoga County residents, businesses and municipalities, the District reserved the right to facilitate cooperative disposal contracts amongst Cuyahoga County municipalities/townships and explore and implement other contracts that increase revenues or decrease costs. Based on the availability and the cost associated with the disposal of solid waste generated within the District, the Board reserved the right to direct the Executive Director to evaluate and provide a report of recommendations to the Board, with input from the Policy Committee, of the costs, benefits and risks associated with the purchase or use of an existing solid waste disposal facility or the construction or use of a new solid waste disposal facility for solid waste generated within the District. The Board reserved the full and complete authority provided by Chapter 343 of the Ohio Revised Code to accept, modify and implement the recommendations contained in the report. The District did assist communities with disposal contracts in 2009 which is summarized in Program CCSDW-11.

#### **CCSWD-19 – SOLID WASTE MANAGEMENT PLANNING**

The District annually surveys communities and businesses to obtain up to date waste reduction data that is used for planning purposes and to report to Ohio EPA in its annual district report. A consultant assists the District with the annual data gathering process and the data is entered and updated using Re-TRAC. In 2009, the District surveyed 59 communities plus 790 commercial and industrial businesses to gather waste reduction data.

#### **Program Strengths:**

 Annual Surveying helps the District track progress in meeting waste reduction goals.

#### Program Weaknesses

- Since there are so many commercial and industrial waste generators in Cuyahoga County, it is not possible to survey all entities annually so a representative sample is surveyed and added to each year. This process does not capture all waste reduction data available.
- Annual surveying is costly and time consuming. It would be easier and less expensive to obtain the information from recyclers but they

are not required to report this information to the District and some consider it proprietary information.

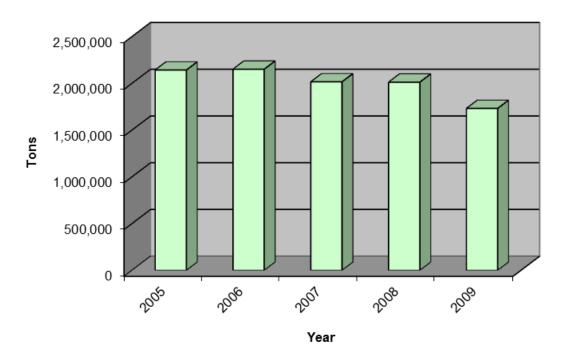
#### CCSWD-20 - DISTRICT WIDE CONTRACTING FOR SERVICES

The District may contract for collection, transportation and/or disposal or processing of solid waste and recyclable materials District-wide from the residential, as well as the industrial/commercial sectors, as the Board determined to be in the best interest of the District. This program did include providing funding for technical and legal assistance for local communities desiring to contract for collection, transportation and/or disposal or processing services, or may include the District's provision of services directly to these communities or sectors within the District which is covered in Program CCSWD-11.

#### G. Total Waste Generation: Historical Trends Plus Waste Reduction

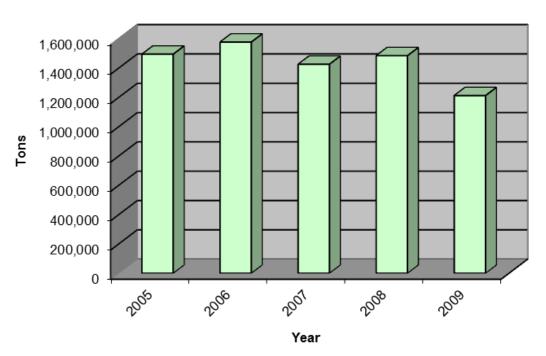
Table IV-7, "Total Waste Generation Based Upon Disposal Plus Waste Reduction", presents total waste generation based upon recycling and source reduction plus yard waste/composting plus incineration and disposal. In 2009, the District generated 2,551,482 tons of waste based on landfill disposal, incineration, yard waste composting and recycling data. Historically, the District generated a high of 3,504,695 tons in 2005 and a low of 2,551,482 tons in 2009. Waste generation has gradually decreased over the past five years as depicted by the following graph.

#### **District Historical Waste Generation**



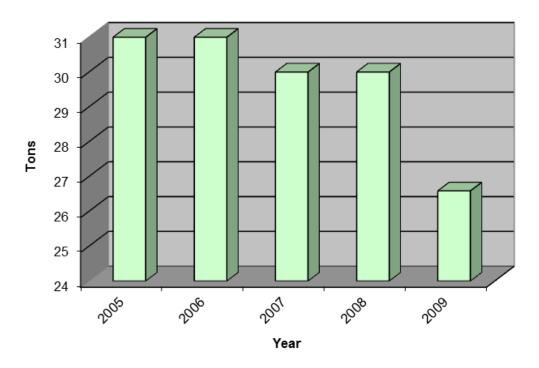
Landfilled waste tonnage has remained steady from 2005-2006 with a slight drop in 2007-2008. Then in 2009, the District realized a significant decrease. This is the result of many factors including the recession and population decreases. Landfilled waste has ranged from a high of 2,063,677 in 2006 to a low of 1,469,418 in 2009. The following graph depicts the historical landfill totals from 2005-2009.

#### **District Historical Landfill Disposal**



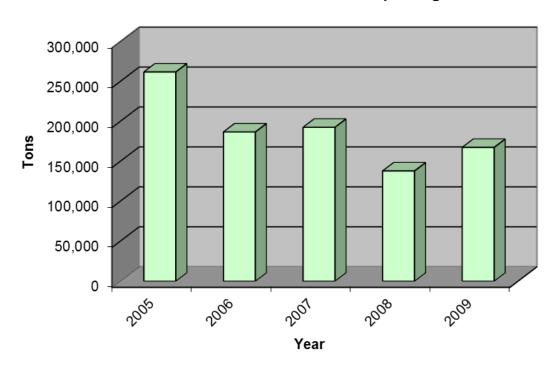
Incineration has remained steady from 2005-2008 and then dropped in 2009 as depicted in the following graph showing historical totals from 2005-2009.

#### **District Historical Incineration**



Yard waste also steadily declined from 2005-2009. Yard waste has ranged from a low in 2008 of 138,002 tons to a high of 261,910 in 2005. The following graph depicts the historical yard waste totals from 2005-2009.

#### **District Historical Yard Waste/Composting**



Waste reduction has remained steady from 2005-2008. The drop in 2009 was primarily caused by a shut down in the Arcelor Mittal steel plant in 2009. Waste reduction has ranged from a low in 2009 of 914,462, tons to a high of 1,305,060 in 2007. The following graph depicts the historical waste reduction totals from 2005-2009.

## 400,000 390,000 370,000 360,000 340,000 320,000 Year

#### **District Historical Source Reduction and Recycling**

#### H. Reconciliation of Waste Generation

The District calculated waste generation using two methods. The first method outlined in Part D of this Section uses national projections for residential/commercial waste generation and statewide numbers for industrial waste generation projections. Exempt waste was obtained from landfill and transfer station operating reports. Using this methodology, the District projected 2,563,615 tons of solid waste was generated in 2009. This included 1,126,966 tons of residential/commercial waste generation, 1,365,531 tons of industrial waste generation and 71,117 tons of exempt waste generated. This methodology results in a generation rate of 11.01 pounds per person per day, considering the District population and the total waste generated. This data is presented in Table IV-4.

The second method uses landfill and transfer station operating reports plus reported recycling to calculate solid waste generation. Exempt waste was reported from landfills and transfer station operating reports, as in Method 1. Residential and Commercial waste generation was 1,731,395 tons including 1,212,855 tons landfilled (see Tables III-1, 2 and 3) and

518,540 tons recycled, including incineration and composting (see Table IV-5). Based on the District population, this is 7.44 pounds per person per day of residential/commercial waste generation.

Industrial waste generation was 748,970 tons. This includes 185,569 tons landfilled (see Tables III-1, 2 and 3) and 563,401 tons recycled, including source reduction and incineration (see Table IV-6). Based on the District population, this is 3.22 pounds per person per day of industrial waste generation.

Method 1 resulted in a much smaller waste generation rate (604,429 tons) for the residential/commercial sector. The total waste generation calculated using Method 1 is less than the actual waste landfilled as reported by landfills accepting district waste. Method 1 estimated a much higher value for industrial waste generation than Method 2. The following table summarizes the differences in waste generation methods for the residential/commercial sector:

F	Residential/C	ommercial :	Sector	
<b>Waste Generation</b>	Waste	Reported	Total	Generation
Method	Generated	Recycling	Disposed	Rate
1	1,126,966	518,540	604,429	4.84
2	1,731,395	518,540	1,212,855	7.44

Note: In Method 1, the total waste generated is calculated based on the state averages and the waste landfilled is calculated as the total waste generated minus the reported recycling. In Method 2, the total waste generated is calculated as the sum of the total reported recycling and the total waste landfilled as reported to by landfills and transfer stations.

Method 1 resulted in a larger waste generation rate (616,561 tons) for the industrial sector. The following table summarizes the differences in waste generation methods for the industrial sector:

	Inc	dustrial Sect	or	
Waste Generation Method	Waste Generated	Reported Recycling	Total Disposed	Generation Rate
1	1,365,531	563,543	801,988	5.86
2	748,970	563,543	185,569	3.22

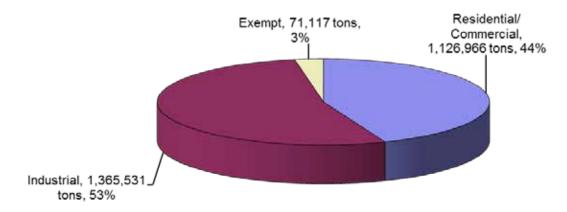
Note: In Method 1, the total waste generated is calculated based on the state averages and the waste landfilled is calculated as the total waste generated minus the reported recycling. In Method 2, the total waste generated is calculated as the sum of the total reported recycling and the total waste landfilled as reported to by landfills and transfer stations.

The national averages used in Method 1 may not be accurate, as national averages do not always represent the District. However, the landfill data used in Method 2 may not be accurate because often times waste is mischaracterized at these facilities, *i.e.*, residential/commercial waste is considered industrial waste. When total waste generation, residential/commercial, industrial and exempt waste, is reviewed the differences between the two methods is significantly reduced. Method 1 results in total waste generation of 2,563,615 tons. Method 2 results in total waste generation of 2,551,563 tons a difference of only 12,052 tons.

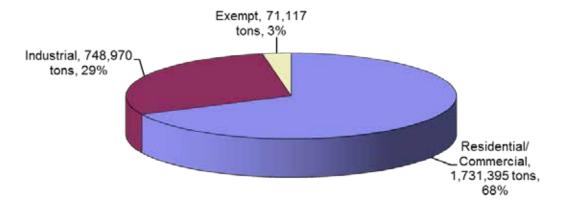
N	laste Genera	ation Method	l Compariso	on
Waste Type		ion Rate erson/Day	Tons Wa	ste Generated
	Method 1	Method 2	Method 1	Method 2
Residential/ Commercial	4.84	7.44	1,126,966	1,731,395
Industrial	5.86	3.22	1,365,531	748,970
Exempt	0.31	0.31	71,117	71,117
Total	11.01	10.96	2,563,615	2,551,482
Differences	0.	05		12,132

The following charts depict the data above:

#### 2009 Waste Generation Based on National Averages – Method 1



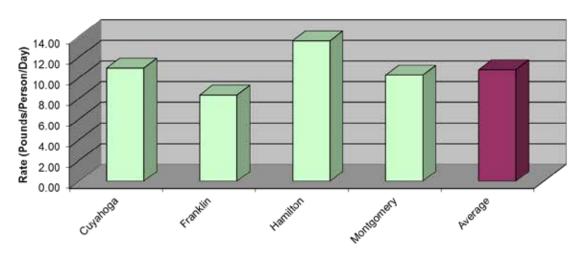
2009 Waste Generation Based on Actual Reported Date – Method 2



The District determined that Method 2 was the more accurate method of projecting waste generation. This uses the data reported to Ohio EPA by solid waste facilities and recycling reported through the District surveying efforts. This method distributes the total waste generated between the residential/commercial sector and in the industrial sector. The District reviewed Plans for other urban areas in Ohio and determined that the generation rate of 10.96 pounds/person/day is within the average of the other Districts (10.79 pounds/person/day). The following table and graph depict the larger solid waste districts in Ohio and their respective generation rates:

District	Generation Rate (Pounds/Person/Day)
Cuyahoga	10.96
Franklin	8.35
Hamilton	13.59
Montgomery	10.27
Average	10.79

#### **Generation Rate by Major Solid Waste Districts**



#### I. Waste Composition

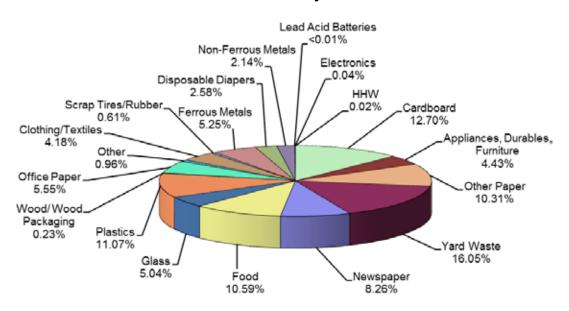
Table IV-9 estimates the composition of the District's residential/commercial waste stream. The main purpose of reviewing the waste composition is to review the types of materials generated and determine if programs are adequate to manage the diversion of the largest components of the waste stream.

The District used two methods to review the waste composition. The first method uses the Ohio Department of Natural Resources' State of Ohio Waste Characterization Study. The waste characterization study was completed at several Ohio landfills during calendar year 2003 and a report of the study results was printed in April 2004. The District used the percent of material by category for the statewide Ohio profile presented on Table 17.19 of the report. The ODNR study was a sample of landfilled waste, to evaluate the total waste generation; the District added the reported residential and commercial recycling from Table IV-5.

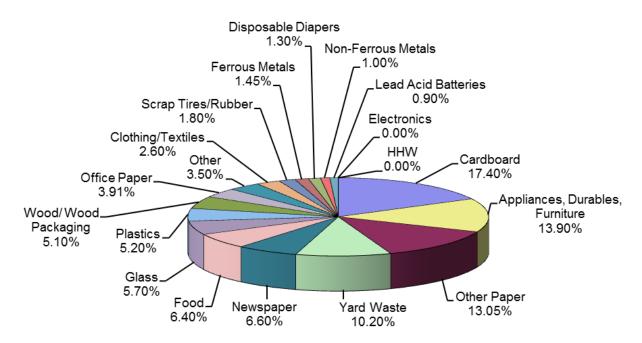
This methodology identified yard waste as the largest component of the waste stream at 16%. The District's current programs reported recycling 60% of yard waste generated (167,479 tons yard waste recycled / 277,838 tons yard waste generated). Another large component of the waste stream was cardboard. The District's cardboard programs reported 30% of the District's cardboard as being recycled (65,589 tons material recycled/219,849 tons of cardboard generated). Another large component of the waste stream was other paper. The District's other paper programs reported 14% of the District's other paper as being recycled (25,104 tons material recycled/178,515 tons of other paper generated). The District's current infrastructure is addressing the material.

The second methodology uses waste composition percentages presented in Appendix KK of the Plan Format. These waste composition percentages are estimated by Franklin and Associates and based on national averages. The values presented in Appendix KK were published in 1994. Using this methodology, 17.4% of the waste stream is other cardboard, 13.9% is appliance, durables and furniture, and 13.1% is other paper. Most of the non-subscription curbside solid waste programs collect cardboard and paper. The District's current programs reported 22% of the District's cardboards as being recycled (65,589 tons material recycled /301,250 tons of cardboard generated) and 11% of the District's other paper as being recycled (25,104 tons material recycled/225,938 tons of other paper generated). In 2009, the District's reported recycling values for appliances, durables and furniture was less than 1%.

## Estimated Residential/Commercial Waste Stream Composition – ODNR Study

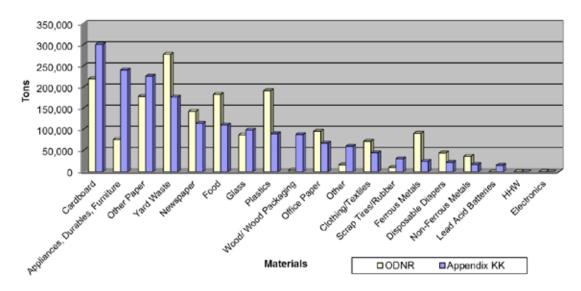


## Estimated Residential/Commercial Waste Stream Composition – Appendix KK Format



The following chart compares the two waste composition results:

Waste Composition Comparison: ODNR Study vs. Appendix FF Format

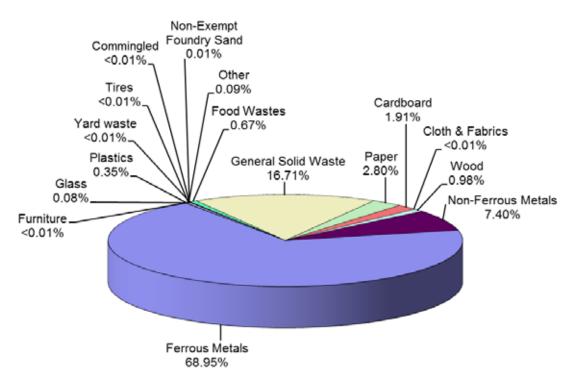


With either methodology, the District's current programs successfully addressed the major components of the residential/commercial waste stream.

Similar to the residential/commercial waste stream, the purpose for reviewing the industrial waste stream is to determine what types of materials comprise the largest volumes and the programs that are in place to manage these materials.

Industrial waste composition includes the waste that was landfilled and recycled. Information for recycling was obtained from the generators directly. In 2009, the largest component of the District industrial solid waste stream was ferrous metals at 69% or 516,398 tons followed by general solid waste at 17% or 125,127 tons. Non-ferrous metals, paper, cardboard and food waste are also large components of the industrial waste stream. Traditionally, ferrous and non-ferrous metals have been recycled by industrial facilities and new programs to manage industrial scrap metals were not necessary. The following chart depicts the 2009 industrial waste composition:

#### **Industrial Waste Stream Composition**



The District's industrial generators are well positioned to manage and reduce the amount of solid waste being generated in the District.

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

	2009 Population	ulation	2000 Ceneration Pate	2009 District Residential/
County Name	Before Adjustment	Adjustment After Adjustment	(lbs/person/day)	Commercial Generation (Tons)
Cuyahoga	1,275,709			
Hunting Valley (Geauga County)		150	4.84	1,126,966
Total	1,275,709	1,275,859		

County Population obtained from Ohio 2009 Population Estimates for Ohio Counties, Cities and Villages: Ohio Department of Development

2009 Generation Rate (lb/person/day) from Ohio EPA Recommendations (September 4, 2002)

population is subtracted. More than 50% of Hunting Valley is in Cuyahoga County. Therefore, the population of Hunting Valley that is Note: There is one community that has population outside of the District. If more than 50% of the community is outside the District, in Geauga County is added to the District total.

## Sample calculation:

District Waste Generation:

Residential/Commercial Waste Generation (tons) = Population x National Generation Rate x 365 days/year 2,000 pounds/ton

 $1,126,966 = \frac{1,275,859 \times 4.84 \times 365}{2,000}$ 

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

Standard		Survey R	espondents		Amounts	Based Upon S	Amounts Based Upon Secondary Data (Unreported)	'Unreported)	Total Industrial
Industrial	# of	# of	Tons of	Generation	# of	# of	Generation	Tons of Waste	Waste
Classification	Industries	Employees	Waste	Rate	Industries	Employees	Rate	Generated	Generated
20	17	753	13,063	17.35	88	2,011	13.92	27,993.12	41,056
22	1	14	42	3.01	41	517	66.6	5,164.83	5,207
23	9	173	528	3.05	84	1,338	2.80	3,746.40	4,274
24	2	64	1,612	25.19	84	402	51.62	20,751.24	22,363
25	10	260	2,941	11.31	61	719	1.79	1,287.01	4,228
26	11	629	15,230	23.11	47	2,722	17.50	47,635.00	62,865
27	30	4,429	17,867	4.03	488	8,700	02'9	58,290.00	76,157
28	34	3,211	14,276	4.45	190	6,771	12.43	84,163.53	98,439
29	2	25	928	34.23	28	312	7.33	2,286.96	3,143
30	15	202	3,698	5.24	06	2,914	7.29	21,243.06	24,941
31	2	12	3	0.28	4	20	3.41	68.20	72
32	11	376	22,846	92'09	88	1,410	10.55	14,875.50	37,721
33	30	2,318	354,599	152.98	107	3,058	26.93	112,931.94	467,531
34	159	5,989	190,184	31.76	338	13,558	11.16	151,307.28	341,492
35	28	5,007	19,144	3.82	299	13,134	5.72	75,126.48	94,270
36	26	1,576	4,115	2.61	189	7,561	2.98	22,531.78	26,647
37	9	493	2,761	2.60	71	9,920	3.21	31,843.20	34,604
38	16	1,239	2,714	2.19	176	3,308	1.74	5,755.92	8,470
39	39	2,470	9,876	4.00	192	471	4.62	2,176.02	12,052
Total	478	29,773	676,354	22.72	2,965	78,846	26.59	689,177	1,365,531

Reported - Industrial Survey Results

Unreported - Selectory (database) Unreported Generation Rate - Ohio EPA Plan Format Table JJ-2

Sample calculations:

Survey Respondents (SIC Code 20):

Tons of Waste Generated Number of Employees Generation Rate (tons/employee) =

13,063 753 17.35

Non-Respondents (SIC Code 20):

Tons of Waste Generated (Tons) = Waste Generation Rate (tons/employee) x Number of Employees

 $27,993.12 = 13.92 \times 2,011$ 

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

Type of Waste Stream	Generation Rate (lb/person/day)	Total Exempt Waste Generation (TPY)
C&D Waste	0.31	71,117
Total	0.31	71,117

Tables, III-1, III-2 and III-3

#### Sample calculation:

Exempt Generation Rate Waste Generated (tons) x 2,000 (pounds/ton)

(lb/person/day) = 
$$365 \text{ (days/year)} \times \text{Population}$$

$$0.31 = \frac{71,117 \times 2,000}{365 \times 1,275,859}$$

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

	Generation Rate	
Type of Waste	(lbs/person/day)	Tons/Year
Residential/Commercial	4.84	1,126,966
Industrial	5.86	1,365,531
Exempt	0.31	71,117
<b>Total Waste Generation</b>	11.01	2,563,615

#### Source(s) of information:

Residential/Commercial- Table IV-1 Industrial- Table IV-2 Exempt- Table IV-3

#### Sample calculation:

Industrial Generation Rate Waste Generated (tons) x 2,000 (pounds/ton)

(lb/person/day) = 
$$365 \text{ (days/year)} \times \text{Population}$$

$$5.86 = \frac{1,365,531 \times 2,000}{365 \times 1,275,859}$$

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

Type of Waste		Type of Waste		Incineration,	Composting, Reso	ource Recovery
Source Reduced	TPY	Recycled	TPY	Total Waste Received	Residual Landfilled	Net Waste Reduced
None	0	Newspaper	42,552	Incineration	Ash	Net Incineration
		Cardboard	65,589	42	16	27
		All Other Paper	25,104	Composting	Residuals	Net Compost
		Ferrous Metals	69,031	167,479	0	167,479
		Non-Ferrous Metals	12,120	Resource	Ash	Net Resource
				Recovery		Recovery
		White Goods	76,685	0	0	0
		Plastics	2,227			
		Glass	30,221			
		Rubber	10,537			
		Wood	3,985			
		Durables	861			
		Batteries	16			
		Textiles	3,395			
		Litho/Photo Film	31			
		Food Waste	741			
		Stone, Clay, Sand	0.25			
_		Electronics	699			
		HHW	314			
		Other	6,926			
Subtotal	0		351,034	167,521	16	167,505
					Grand Total	518,540

Incineration - Table III-2

Composting - Table III-6 and Table IV-6

Residential Recycling (community curbside, drop-off and special collections) - Table III-5

Commercial Recycling is from the returned commercial surveys and the returned processor surveys. Double counting was eliminated. The highest value of (1) the returned processor survey plus the returned commercial surveys that reported using a broker that did not respond to the survey or (2) the returned commercial surveys is used for each material.

#### Note:

Other includes mainly commingled recyclables; other tonnage included in 'Other' comes from books, commingled recyclables, ink/printer cartridges, ballasts, and lead wheel weights.

Residential/Commercial Recycling does not directly match the 2009 ADR. A more recent commercial survey was completed for the Plan Update.

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

Type of				Incineration,	Composting, Reso	ource Recovery
Waste	TPY	Type of Waste Recycled	TPY	Total Waste	Residual	Net Waste Processed
Source				Received	Landfilled	
None	0	Paper	18,970	Incineration	Ash	Net Incineration
		Cardboard	12,927	63	20	43
		Cloth & Fabrics	4	Resource Recovery	Ash	Net Resource
		Wood	6,652	0	0	0
		Non-Ferrous Metals	50,040	Composting	Residuals	Net Composted
		Ferrous Metals	466,331	5	0	5
		Glass	537			
		Plastics	2,354			
		Tires	1			
		Other	609			
		Commingled	316			
		Non-Exempt Foundry Sand	100			
		Food Waste	4,513			
		Furniture	1			
Subtotal	0		563,354	67	20	47
					Grand Total	563,401

#### Source:

Incineration from Table III-2.

Industrial Source Reduction and Recycling is from the returned industrial surveys.

#### Notes:

"Other" includes material such as film, stone/clay/sand, ink cartridges, non-LAB batteries, and composites.

Industrial Recycling does not directly match the 2009 ADR. A more recent industrial survey was completed for the Plan Update.

Table IV-7

Total Waste Generation Based Upon Disposal Plus Waste Reduction

			Management N	Management Method Used (TPY)	PY)		
Year	Source Reduction & Recycling	Yard Waste Composting	Yard Waste Land Application	Incineration	MSW Composting	Landfill Disposal	Total Waste Generation (T)
2005	1,207,914	261,910	0	194	0	2,034,677	3,504,695
2006	1,207,964	186,817	0	194	0	2,063,677	3,458,652
2007	1,305,060	192,611	0	194	0	1,841,737	3,339,602
2008	1,281,667	138,002	0	194	0	1,883,152	3,303,015
2009	914,462	167,479	0	123	0	1,469,419	2,551,482

## Source:

2000-2008- Cuyahoga County Solid Management District data 2009 Solid Waste Management Plan- Reference Year

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

Type of Waste	Generation Rate (lbs/person/day)	Total Waste Generated (tons/year)
Residential/Commercial	7.44	1,731,395
Industrial	3.22	748,970
Exempt	0.31	71,117
Total Waste Generation	10.96	2,551,482

Residential/Commercial- Tables III-1, III-2, III-3, and IV-5 Industrial- Tables III-1, III-2, III-3, and IV-6 Exempt- Tables III-1, III-2, and III-3 Population- IV-1

#### Sample calculation (Residential/Commercial):

Generation Rate = Total Waste Generated x 2,000 (pounds/ton)
365 (days/year) x Total Population

 $7.44 = \frac{1,731,395 \times 2,000}{365 \times 1,275,859}$ 

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

Waste Stream	ODNR State	te of Ohio Wa	ste Characteri	of Ohio Waste Characterization Study Table 17.19	able 17.19	Appendix KK of the District Solid Waste Management Format (1996)	the District Solid ent Format (1996)
Туре	Percentage of Waste Landfilled	Tons Landfilled	Tons Reported Recycled	Total Tons Generated	Percentage of the Waste Stream	Percentage of the Waste Stream	Total Tons Generated
Cardboard	12.7%	154,260	62,289	219,849	12.70%	17.4%	301,250
Appliances, Durables, Furniture	N/A	W/A	76,685	76,685	4.43%	13.9%	240,654
Other Paper	12.7%	153,411	25,104	178,515	10.31%	13.1%	225,938
Yard Waste	9.1%	110,359	167,479	277,838	16.05%	10.2%	176,595
Newspaper	8.3%	100,536	42,552	143,087	8.26%	%9:9	114,267
Food	15.1%	182,638	741	183,379	10.59%	6.4%	110,805
Glass	4.7%	56,998	30,221	87,219	5.04%	5.7%	98,685
Plastics	15.6%	189,429	2,227	191,656	11.07%	5.2%	90,029
Wood/ Wood Packaging	N/A	N/A	3,985	3,985	0.23%	5.1%	88,297
Office Paper	7.9%	96,048	N/A	96,048	2.55%	3.9%	67,643
Other	0.7%	8,732	7,819	16,551	%96.0	3.5%	969'09
Clothing/Textiles	2.7%	69,005	3,395	72,400	4.18%	2.6%	45,014
Scrap Tires/Rubber	N/A	N/A	10,537	10,537	0.61%	1.8%	31,164
Ferrous Metals	1.8%	21,950	69,031	90,981	5.25%	1.5%	25,104
Disposable Diapers	3.7%	44,629	N/A	44,629	2.58%	1.3%	22,507
Non-Ferrous Metals	2.1%	24,861	12,120	36,981	2.14%	1.0%	17,313
Lead Acid Batteries	N/A	N/A	16	16	0.00%	0.9%	15,582
MHH	N/A	N/A	314	314	0.02%	N/A	N/A
Electronics	N/A	N/A	669	669	0.04%	N/A	N/A
Totals	100.0%	1,212,855	518,513	1,731,368	100.0%	100.0%	1,731,395

Percentage of Waste Landfilled - The State of Ohio Waste Characterization Study prepared for the Ohio Department of Natural Resources (April 21, 2004)

Tons Landfilled- Calculated- Total tons landfilled from Table III-1 multiplied by the percentage of waste landfilled Tons Reported Recycled - Table IV-5

Total Tons Generated (ODNR Study method): Tons Landfilled + Tons Reported Recycled Percentage of the Waste Stream: Tons of material divided by total tons

Percentage of the Waste Stream: Percentage of the waste stream from national averages in Appendix KK of District Solid Waste Management Plan Format (1996)

Total Tons Generated (Appendix KK method): Total tons generated multiplied by the percentage of waste stream

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

Waste Stream Type	TPY	Waste Stream Type	ТРУ	Waste Stream Type	ТРҮ
Paper	21,006 Glass	Glass	262	595 Furniture	1
Cardboard	14,315	14,315 Plastics	2,606	2,606 Yard waste	5
Cloth & Fabrics	4	4 Tires	1	1 Food Wastes	4,997
Wood	7,366 Other	Other	675	675 General Solid Waste	125,127
Non-Ferrous Metals	55,413	55,413 Commingled	349		
Ferrous Metals	516,398	516,398 Non-Exempt Foundry Sand	111		
Subtotal	614,502	Subtotal	4,337	Subtotal	130,130
		Grand Total			748,970

Adjustment factor- Tables IV-2 and IV-8

Appendix F- Amount of Industrial Waste Generated by Standard Industrial Classification (SIC) Category (Tons) As Reported on Industrial Surveys

## Adjustment Factor:

1.1

Industrial survey results were adjusted to account for non-respondents.

Adjustment factor is calculated ratio of the total tons of waste generated reported on Table IV-8 (landfill reports + survey and broker recycling and source reduction) divided by the total reported waste generated from the industrial surveys (Table IV-2).

## Sample calculation:

Adjustment Factor = <u>Total Industrial Waste Generated (TPY)</u>

Fotal Industrial Waste Reported on Surveys (TPY)

$$1.11 = \frac{748,970}{676,354}$$

Estimated Office Paper = Tons of Office Paper Reported on Surveys x Adjustment Factor

## V. Planning Period Projections and Strategies [ORC Section 3734.53(A)(5)-(6)]

#### A. Planning Period

The District has chosen a planning period that coincides with the projected year the plan will be approved by Ohio EPA. This *Plan Update* is scheduled to be completed, ratified and approved by Ohio EPA in May of 2013. Based on this information, the planning period for the *Plan Update* will be January 1, 2013 – December 31, 2028. This 16 year planning period allows for any variances in the plan approval process.

#### B. Population Projections

The District's population projections are presented in Table V-1 (located at the end of this section), "District Population Projections". The population estimate from Section IV for the 2009 reference year was 1,275,709. The following adjustment was made to the total listed above:

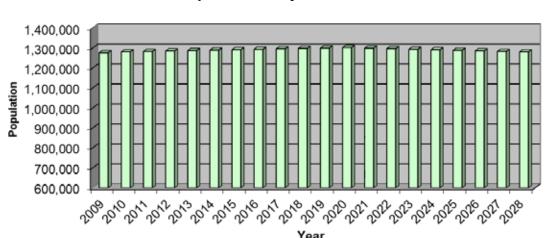
The Village of Hunting Valley had more than 50% of the population living inside Cuyahoga County and less than 50% living inside Geauga County. The population of this community in Cuyahoga County (150) was added to the District population total.

The adjusted population estimate for the 2009 reference year was 1,275,859. The 2010 U.S. Census was used for 2010. The 2010 adjusted population was 1,280,238. Projections from 2011 until 2028 were based on the Ohio Department of Development's population projections in *Ohio County Profiles* for Cuyahoga and Geauga Counties.

Population is expected to increase an average of 0.19% annually from 2009 through 2020, when population will peak during the planning period. Population will modestly decline an average of -0.21% annually from 2021 until 2028, the final year of the planning period. Predicted fluctuations in population are negligible, reflecting a 0.3% overall increase from 2009 to 2028.

The District is projected to start the planning period in 2013 with a population of 1,286,767 and end in 2028 with a total population of 1,279,725. This is a population decrease of -0.55% for the planning period (2013-2028) or -0.04% annually.

The following graph depicts the estimated total District population throughout the planning period.



#### District Population Projections 2009 – 2028

#### C. Waste Generation Projections

#### 1. Residential/Commercial Sector

The District's residential/commercial waste generation projections are presented in Table V-2, "District Residential/Commercial Waste Generation (TPY)". Waste generation is presented for the 2009 reference year and each subsequent year through 2028. The District calculated actual waste generation data for 2009 and 2010 based on actual recycling and disposal data.

For 2009, the District calculated the per capita generation rate based on Ohio EPA's Facility Data Reports for disposal and from the District's 2009 Annual District Report for recycling. The following table summarizes the data used for this calculation:

Description	Result
Disposal Tonnage	1,212,855
Waste Reduction Tonnage	518,540
Total Generation	1,731,395
Per Capita Generation Rate	7.44

For 2010, the District calculated the per capita generation rate based on Ohio EPA's Facility Data Reports for disposal and from the District's 2010 Annual District Report for recycling. The following summarizes the 2010 waste generation data:

Description	Result
Disposal Tonnage	1,181,619
Waste Reduction Tonnage	442,335
Total Generation	1,623,954
Per Capita Generation Rate	6.95

The District adjusted the per capita generation rates based on past historical data. The following table shows the past per capita waste generation analysis conducted for years 2005 – 2010.

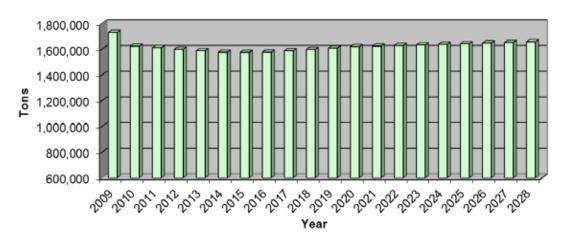
	Managem	ent Metl	hod U	sed (TPY)	Total		Per Capita	Change In
Year	Recycling	Yard Waste	Incin	Landfill Disposal	Waste Generation	Pop	Generation Rate	Generation Rate
2004	378,422	185,972	31	1,544,490	2,108,915	1,341,479	8.61	n/a
2005	384,733	261,910	31	1,495,200	2,141,874	1,323,972	8.86	2.91%
2006	386,150	186,817	31	1,577,879	2,150,877	1,305,273	9.03	1.86%
2007	397,029	192,611	30	1,426,325	2,015,995	1,293,600	8.54	-5.43%
2008*	389,304	138,002	30	1,484,988	2,012,324	1,282,880	8.60	0.65%
2009	351,034	167,479	27	1,212,813	1,731,353	1,275,859	7.44	-12.92%
2010	286,606	155,702	27	1,181,616	1,623,951	1,280,238	6.95	-19.13%
* For 200	08 recycling	data, a tl	hree av	erage of 20	05, 2006 and	2007 was	Average for Period	-5.34%
utilized s	since the Dis	strict only	report	ed 88,000 t	tons in ADR.		Annual Average	-0.89%

Based on the above analysis, the District projects that the residential/commercial waste generation will decrease 0.89% annually from 2011 through 2014. For the period 2015 – 2016, the District slowed the decrease in per capita generation to -0.25% in 2015 and -0.005% in 2016. For the period 2017 – 2028, the District projected per capita generation in accordance with Ohio EPA recommendations issued on September 4, 2002 which escalates waste generation 0.50% annually.

Waste generation is projected to increase throughout the planning period from 2013 – 2028. Beginning in 2013, the first year of the planning period, residential/commercial waste is projected to be 1,588,912 tons. This is expected to increase to 1,657,763 tons in 2028, a 4.3% increase during the planning period or 0.29% annually.

The following graph depicts the estimated residential/commercial waste generation throughout the planning period.

#### Residential/Commercial Waste Generation Projections 2009 – 2028



#### 2. Industrial Sector

The District's industrial waste generation projections are presented in Table V-3, "Projected Industrial Waste Generation". Industrial waste generation is presented by Standard Industrial Classification (SIC) code for the 2009 reference year and each year of the planning period through 2028. A description of each SIC code and the expected employment change throughout the planning period is presented in Table V-3A.

The results of the industrial waste generation survey are presented in Table IV-2; however, the adjusted industrial waste generation figure in Table IV-8 is used for future projections.

For 2009, the industrial waste generated for each SIC code is calculated based on the survey results and the total industrial waste generation. See Table V-3.

For 2010, the industrial waste generated for each SIC code is calculated as a ratio based on the 2009 distribution. The waste generation total for 2010 is based on actual recycling as reported in the District's ADR plus disposal as reported by Ohio EPA's facility data reports. See Table V-3 for an example calculation. Waste generation increased significantly in 2010 as compared to 2011 because of additional recycling data collected during the preparation of the 2010 Annual District Report.

Industrial waste generation is projected for SIC codes 20 and 22-39. The classifications are summarized in Table V-3A, "Standard Industrial Classifications". Table V-3A presents the average annual change in employment for all SIC codes. Industrial waste generation projections are based on industrial employment projections provided by the Ohio Department of Job and Family Services Job Outlook for the period 2006 - 2016 for the Cleveland-Elyria-Mentor Metropolitan Statistical Service Area (MSA) which included Cuyahoga County. Cleveland-Elyria-Mentor MSA. According to the manufacturing employment is projected to decrease 18.60% during this period (2006 - 2016).

Based on the Cleveland-Elyria-Mentor MSA estimated decrease in industrial employment, the District is projecting an annual decrease of 1.86% from 2013 – 2016. Because the State of Ohio's manufacturing employment projections end at 2016, the District has projected a conservative 0.5% annual increase beginning in 2017 until the end of the planning period (2028). The slight annual increase in industrial waste generation reflects slow economic growth. The District will update this plan two more times during this period and, therefore, more accurate data will be available for future updates.

The District projects industrial waste will increase from 890,520 tons in 2013, the first year of the planning period to 893,664 tons in 2028, the final year of the planning period.

The District did not classify materials from train boxcars, metals from demolition activities and ferrous metals resulting from salvage operations conducted by licensed motor vehicle salvage dealers. The ferrous metals that were included in the industrial waste stream were recorded from industrial survey results.

The following graph depicts the estimated industrial waste generation throughout the planning period.

### 

Industrial Waste Generation Projections 2009 – 2028

#### 3. Total Waste Generation

Total waste generation projections for the District during the planning period are presented in Table V-4, "Total Waste Generation for the District during the Planning Period (in TPY)". The total waste generation estimate for the 2009 reference year was 2,551,482 tons. This includes residential/commercial waste (1,731,395 tons), industrial waste (748,970 tons), and exempt waste (71,117 tons).

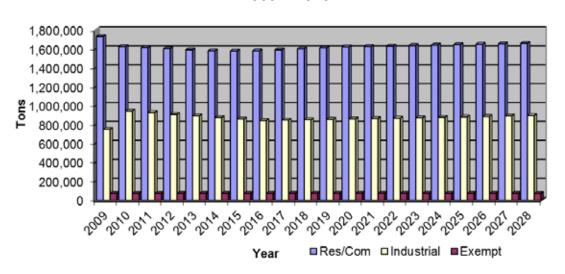
Exempt waste is projected to increase 0.19% annually from 2010 to 2020 and decrease -0.21% from 2021 – 2028, the same as the average rate of population change in Table V-1. The generation rate in pounds per person per day for the reference year was 10.96 and 11.23 in 2028, the final year of the planning period. Total waste generation is projected to increase 71,700 tons over the sixteen-year planning period (2013 – 2028) from 2,551,081 to 2,622,780 tons in 2028, a 2.8% overall increase.

The following graph depicts the total waste generation from the reference year (2009) to the final year in the planning period (2028).

3,000,000 2,500,000 1,500,000 1,000,000 500,000 1,000,000 500,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 

**Total Waste Generation Projections 2009 – 2028** 

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



Total Waste Generation Projections by Sector 2009 – 2028

#### D. Projections for Waste Stream Composition

The District does not anticipate any major changes in the composition of the waste stream during the planning period. The closure of multiple commercial and industrial facilities could reduce the industrial, as well as residential/commercial waste projections. However, the District is unaware of any proposed closure of industrial waste generators. Current solid waste projections indicate the District's residential/commercial and

industrial solid waste stream will remain stable over the sixteen-year planning period.

The District's periodic survey of industries should alert the District to any major changes in the industrial sector which are reported in the ADR.

## E. Waste Reduction and Recycling Strategies through the Planning Period

The District must continue to develop recycling and waste reduction strategies to meet the goals established in the 2009 State Plan and to pursue continuous improvement in meeting the 2009 State Plan goals.

The following goals, strategies and initiatives may be conducted throughout the planning period to improve participation and increase recycling from participating households. The District has concluded that there are many approaches, initiatives, strategies and programs to increase recycling and/or provide education, awareness and technical assistance to residents and businesses. The strategies, initiatives and programs described in this <u>Plan Update have been implemented and their strengths and weaknesses have been reviewed</u>. The District may explore and implement other initiatives, strategies and programs not described in this <u>Plan Update</u> or modify the initiatives, strategies and programs described in this <u>Plan Update</u> as part of the District's goal to continuously improve recycling, composting, education, awareness and technical assistance.

Finally, the District, before implementing any new strategies, initiatives and programs, will first assess the cost of those new initiatives, strategies and programs prior to implementation to assure that there is adequate funding and other resources to sustain those new initiatives, strategies and programs.

#### Goal 1 - Recycling Infrastructure

The District shall provide its residents and commercial businesses with access to opportunities to recycle solid waste. At a minimum, the District must provide access to recycling opportunities to 90 percent of its residential population in each county and ensure that commercial generators have access to adequate recycling opportunities.

#### Goal 2 - Waste Reduction and Recycling Rates

The District shall reduce and recycle at least 25 percent of the solid waste generated by the residential/commercial sector and at least 66 percent of the solid waste generated by the industrial sector.

#### Goal 3 - Outreach and Education

Minimum Required Programs - The District shall provide the following required programs:

- Website
- Comprehensive Resource Guide
- · Inventory of Available Infrastructure
- Speaker or Presenter

#### Goal 4 - Outreach and Education

The District shall provide education, outreach, marketing, and technical assistance regarding reduction, recycling, composting, reuse, and other waste management methods.

## Goal 5 - Restricted Solid Wastes, Household Hazardous Waste (HHW) and Electronics

The District shall provide strategies for managing scrap tires, yard waste, lead-acid batteries, HHW, and electronics.

#### **Goal 6 - Economic Incentives**

The District shall explore how to incorporate economic incentives into source reduction and recycling programs.

#### Goal 7 - Measure Greenhouse Gas Reduction

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of recycling programs on reducing greenhouse gas emissions.

#### **Goal 8 - Market Development**

The District has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.

#### Goal 9 - Reporting

The District shall report annually to Ohio EPA regarding implementation of the District's solid waste management plan.

The following table summarizes all of the District strategies for meeting the 2009 State Plan Goals:

#### 2009 State Plan Goals

_	_ "			20	09 Sta	te Pla	an Go	als		
Program	Program #	#1	#2	#3	#4	#5	#6	#7	#8	#9
Non-Subscription Curbside Recycling Programs	CCSWD-1	ü	ü					ü		
Drop-Off Recycling	CCSWD-2	ü	ü					ü		
Yard Waste Management	CCSWD-3	ü	ü					ü		
Household Hazardous Waste Collection	CCSWD-4	ü	ü			ü		ü		
Computer Recycling	CCSWD-5	ü	ü			ü		ü		
Scrap Tire Recycling	CCSWD-6	ü	ü			ü		ü		
Litter Collection	CCSWD-7									
Mercury Collection Program	CCSWD-8	ü	ü			ü		ü		
Phone Book Recycling Campaign	CCSWD-9	ü	ü					ü		
Special Waste Convenience Center	CCSWD-10		ü			ü		ü		
Local Government Outreach and Assistance	CCSWD-11			ü	ü					
Children's Education Program	CCSWD-12			ü	ü					
General Public Education and Outreach	CCSWD-13			ü	ü					
Commercial, Institutional and Industrial Recycling Assistance	CCSWD-14			ü	ü					
Recycling Market Development	CCSWD-15		ü						ü	
District Grant Programs	CCSWD-16		ü				ü	ü	ü	
Solid Waste Code Enforcement	CCSWD-17									
Securing Landfill Disposal	CCSWD-18									
Solid Waste Management Planning	CCSWD-19									ü
District Wide Contracting for Service	CCSWD-20									
Education/Awareness Branding Number of Strategies	CCSWD-21	8	11	ü 5	ü 5	5	1	10	2	1

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

The District's residential/commercial waste reduction strategies are presented in Table V-5, "Residential/Commercial Waste Reduction Strategies". The District used actual data for 2009 and 2010 and then projected future increases and decreases based on past performance and

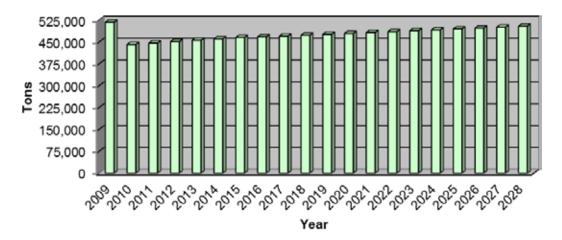
future strategies and initiatives. Residential/commercial recycling programs are projected to change per the following:

- Curbside recycling is increased 0.002% annually from 2011 2017 based on historical performance and then by 1% annually through 2028 based on the additional recycling opportunities and enhanced education and awareness as described in Section V. For years 2011 through 2015, an additional 2,500 tons is added annually based on the roll-out of the City of Cleveland's automated collections and curbside recycling program. The annual increased tonnage was calculated based on 2008 2010 performance of the pilot study program.
- Drop-Off recycling is decreased 0.32% annually from 2011 2017 and then remains flat until 2028 based on historical performance and the projected lower need for drop-off programs as a result of the City of Cleveland's curbside program and other initiatives in the Plan Update.
- Yard waste remains flat from 2010 2028 based on historical performance.
- Household Hazardous recycling is increased 3% annually from 2011 – 2028 based on historical performance.
- Computer recycling is increased 1.2% annually from 2011 2017 based on historical performance.
- Scrap tire recycling decreases in 2011 and annually thereafter by 1% based on the enhanced education and awareness initiatives as described in Section V.
- Phone book recycling remains flat at 250 tons per year from 2011 – 2015 based on historical performance; the program is eliminated from 2016 – 2028.
- Waste reduction through incineration remains flat throughout the planning period based on historical performance.
- Commercial recycling is increased 1% annually from 2010 2028 based on the additional recycling opportunities and enhanced education and awareness as described in Section V.

In 2009 and 2010, based on actual data, recycling decreased from 518,513 tons to 442,308 tons; and, total waste reduction, including incineration, decreased from 518,540 tons to 442,335 tons. This was

primarily due to the economy and secondarily to data collection inconsistencies. The District plans to increase residential/commercial recycling from 442,308 tons in 2010 to 505,144 tons by 2028 and contributing to a total waste reduction from 442,335 tons to 505,170 tons. The following graph depicts the projected waste reduction for the planning period.

#### Residential/Commercial Waste Reduction Projections 2009 – 2028



## RESIDENTIAL/COMMERCIAL RECYCLING AND COLLECTION PROGRAMS

The District's strategy for this *Plan Update* is to continue the core programs detailed in Section IV. Changes to the core programs are expected to be minor. The District is committed to maintaining these programs and to continue their success throughout the planning period.

The following section details the specific exceptions, changes, updates and new initiatives, by program, to address programs weaknesses and challenges listed in Section IV.

This section does not provide the details of how each program operates. That information is contained in Section IV. This section includes changes and updates to existing programs.

Finally, this section contains one new program that is designed to establish a District "brand" for the education and awareness efforts and programs of the District.

## 1. CCSWD-1 – Non-Subscription Curbside Recycling Program (State Plan Goals #1, #2 and #7)

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

The District's political subdivisions are committed to curbside recycling and have performed very well historically as are projected to continue this high mark of excellence. Curbside recycling is offered in 56 out of the 59 political subdivisions in the District.

The City of Cleveland's curbside recycling program is projected to be "rolled-out" to all residents from 2011 through 2015. The City plans to add 25,000 homes per year starting in 2011 until all homes are included in the program in 2015. Annually, this curbside recycling program is expected to increase recycling by 2,500 tons. The increase in recycling was based on the performance of the pilot program during 2008 – 2010. The pilot program achieved an additional 1,800 tons in residential recycling from 13,000 homes or 0.14 tons per home. Extending this average for the planned 25,000 home roll-out projects an additional 3,500 tons of recyclables annually being collected. The District has chosen to project 2,500 annually through 2015 to be conservative.

In addition, Bay Village and North Olmsted began automated collection programs with wheeled carts for recycling in 2011. These programs will also increase the tonnage collected by the District from 2011 through the end of the planning period. These increases are included in the annualized escalator used in the projections for the planning period.

Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

The District will continue to work with political subdivisions in the county to promote and support curbside recycling. The District's objective with this program is to increase curbside recycling and improve participation.

The District's plan is to maintain all existing curbside programs and focus on continuous improvement of those existing programs.

#### Strategy 1.1

The District will assist communities with education and awareness and recycling procedures for their curbside programs through the countywide education/awareness branding program (CCSWD-21) detailed later in this section.

#### Strategy 1.2

The District will work with building owners to increase recycling opportunities for residents that reside in multi-family housing units as part

of its Commercial Recycling Assistance Program. This strategy is detailed in section CCSWD-14.

Implementation Schedule: 2013

#### Strategy 1.3

The District will work with local and regional haulers and processors to encourage the collection and recycling of 3-7 plastics; to identify any barriers to recycling 3-7 plastics; and to identify opportunities to expand process capacity for 3-7 plastics.

Implementation Schedule: 2013

#### Strategy 1.4

The District will promote automated curbside collection of recyclables using carts by working with public and private sector service providers. This effort may include the following initiatives:

#### Initiative 1.4.1

Help communities evaluate how automation can benefit their community in terms of increasing recycling, saving money in collection and disposal costs over time. Help communities evaluate potential resident reaction to automation. Assist communities with bidding for automated collection in those communities that contract for this service.

Implementation Schedule: 2013

#### Initiative 1.4.2

Survey private waste haulers to identify any barriers to the widespread use of automated collection. Evaluate opportunities to address any barriers and to increase the capacity of haulers to provide this service.

Implementation Schedule: 2013

#### Strategy 1.5

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 2. CCSWD-2 – Drop-off Recycling

(State Plan Goals #1, #2 and #7)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 2.1

Enhance or create new education and awareness activities to assist residents with identifying and using drop-off recycling opportunities available in Cuyahoga County. The District will conduct a detailed inventory of all publically available and accessible recycling drop-off sites in the County and will create a searchable database for residents to use to identify drop-off sites that are convenient for them using a zip code. Information to be provided will include: location, materials accepted and not accepted, operator, and operating hours if applicable

Implementation Schedule: 2014

#### Strategy 2.2

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 3. CCSWD-3 – Yard Waste Management

(State Plan Goal #1, #2 and #7)

This program will continue (See description in Section IV) for program details. Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 3.1

The District will expand its educational efforts to teach residents how to compost their yard and food waste by partnering with communities to host a District backyard composting workshop and bin sale. In addition, the District will partner with the cooperative extension service to train local "Master Composters" to conduct these workshops in their communities on behalf of the District.

Implementation Schedule: 2013

#### Strategy 3.2

The District will evaluate the composting infrastructure to gain a better understanding of the system and to determine ways to ensure adequate facilities and service providers are available to communities that collect yard waste for composting.

#### Initiative 3.2.1

The District will research and inventory all publically available and accessible compost facilities in the County. The inventory will include the following:

- Location of facility
- Materials accepted and not accepted
- Operator
- Property owner
- · Other information as needed

Based on the results of the inventory, the District may modify existing initiatives, strategies and programs or develop new initiatives, strategies and programs, not described in this *Plan Update* to improve, maintain and increase the organic waste management infrastructure in the County. The District staff will work with the local political subdivisions in the County and facilitate discussions to determine, among other ideas, whether there is support for the creation of a consortium to increase composting.

Implementation Schedule: 2016

#### Strategy 3.3

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

## 4. CCSWD-4 – Household Hazardous Waste (HHW) Collection (State Plan Goals #1, #2, #5 and #7)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 4.1

The District expanded its collection of HHW from twice a year to twice a month when the Special Waste Convenience Center opened in 2011. During the planning period, the District will work to maximize the amount of HHW collected through this new program by partnering with all 59 communities to collect HHW from their residents more frequently and to deliver these materials to the District's Center.

#### Strategy 4.2

If municipal collections of HHW materials are reduced or eliminated because of limited manpower, the District will evaluate the option of accepting HHW directly from residents at the Special Waste Convenience Center on an appointment basis.

#### Strategy 4.3

If the rising cost of HHW management at the Special Waste Convenience Center becomes a financial drain on the District that threatens the viability of the program, the District may evaluate cost savings and new revenue options including the following:

- · Reduce the list of acceptable items
- Reduce the frequency of collection
- Implementing a fee for accepted HHW materials
- Other options as identified

#### Strategy 4.4

The District will expand its education program to improve awareness of proper HHW disposal by developing an education and awareness program to promote the proper disposal of HHW; promote the use of alternative non-hazardous substitutes; and promote project planning for the efficient use of paint and other HHW products.

Implementation Schedule: 2013-2017

#### Strategy 4.5

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 5. CCSWD-5 – Computer Recycling

(State Plan Goals #1, #2, #5 and #7)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 5.1

The District will evaluate its education, awareness and promotional programs to determine the effectiveness of these services to impact participation in the computer recycling program. This effort may include the following initiatives:

#### Initiative 5.1.1

Surveying residents at special collection events or other surveying initiatives to determine participation trends, evaluate other Districts in the state to determine their successes in promoting computer recycling programs and increasing participation.

Based on the results of the evaluation, the District may adjust, change, enhance or create new education and awareness activities or initiatives to increase participation in the curbside recycling programs throughout the planning period.

Implementation Schedule: 2013

#### Strategy 5.2

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 6. CCSWD-6 – Scrap Tire Recycling

(State Plan Goals #1, #2, #5 and #7)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 6.1

The District will evaluate its education, awareness and promotional programs to determine the effectiveness of these services to impact changing the behavior of residents regarding recycling their tires at local tire dealers. This effort may include the following initiatives:

#### Initiative 6.1.1

Surveying residents at special collection events or other surveying initiatives to determine participation trends; evaluating other Districts in the state to determine their successes in promoting behavior change in residents for recycling their tires at tire dealers or through their city.

Based on the results of the evaluation, the District may adjust, change, enhance or create new education and awareness activities or initiatives to change the behavior of residents to recycle their tires at tire dealers or through their city throughout the planning period.

Finally, the District, before implementing any new education and awareness program aimed at increasing participation, will first make sure that the initiative is cost effective and sustainable.

Implementation Schedule: 2017

#### Strategy 6.2

The District will evaluate how to expand the scrap tire recycling capacity in the County by encouraging a scrap tire recycler or processor to develop a facility in Cuyahoga County. The District will work with:

Ohio EPA, ODNR, ODOD, and other state and local government agencies to identify incentives, grants or other methods to attract scrap tire recyclers to the District.

Implementation Schedule: 2016

#### Strategy 6.3

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 7. CCSWD-7 – Litter Collection

This program will continue (see description in Section IV). Based on the review process conducted for this program, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 7.1

The District will work to identify corporate partners that may wish to sponsor clean-up crews to beautify the community to help reduce the District's annual cost of providing litter collection services.

Implementation Schedule: 2014

#### 8. CCSWD-8 – Mercury Collection Program

(State Plan Goals #1, #2, #5 and #7)

This program may be phased out gradually. The District anticipates that this program may end sometime in 2014. The opening and operation of the District's Special Waste Convenience Center reduced the need for a special mercury collection program. District residents now have more opportunities to dispose of mercury-containing items through their community's HHW program. Throughout and after the phase out, the District will continue to educate residents about the need to properly dispose of mercury containing items through community HHW collections and the District's Special Waste Convenience Center through the following strategies and initiatives:

#### Strategy 8.1

The District will promote to residents the municipal HHW collection events as the appropriate outlet for mercury containing items in an effort to reduce the need for the special mercury collection sites.

Implementation Schedule: 2013

#### Strategy 8.2

The District will provide mercury spill kits to all municipalities and conduct special mercury handling training.

Implementation Schedule: 2013

#### Strategy 8.3

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

#### 9. CCSWD-9 – Phone Book Recycling Campaign

(State Plan Goals #1, #2 and #7)

The District will evaluate the need to continue to offer a separate recycling program for phone books now that phone books can readily be recycled through curbside and drop-off recycling programs county-wide. If the District determines to stop offering this program, it will work with the Cleveland Metroparks to phase the program out in 2015. The roll-off containers owned by the District for this program will be either utilized at the Special Waste Convenience Center, donated to the Metroparks or other governmental agency(s).

#### 10. CCSWD-10 - Special Waste Convenience Center

(State Plan Goals #1, #2 and #7)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 10.1

The District will evaluate the opportunities to utilize the Special Waste Convenience Center (SWCC) to collect additional special wastes for recycling or reuse. The District surveyed communities and identified the following items that could be received and managed at SWCC:

- Books
- · Fluorescent bulbs
- Shrink wrap
- Shoes
- Bicycles
- Carpet
- Plant containers
- Styrofoam
- Small Quantity Exempt Hazardous Waste
- Electronics and TVs

In order to evaluate these opportunities, the District will develop a steering committee made up of community representatives. Based on the recommendations from the steering committee, the District may increase the type of materials recycled and or managed at the SWCC depending on the cost and staffing needed to manage these additional materials.

Depending on the recommendations from the steering committee, the District may add staff to manage the additional materials being accepted and processed at the SWCC. The District Policy Committee agrees that additional costs for staff at the SWCC may be in the best interest of the District to maximize the benefits and capabilities of the SWCC. An increase in staff at the SWCC is contemplated by this Plan and will not require an update of the District Plan.

Implementation Schedule: 2013 – 2026

#### Strategy 10.2

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: Annually

## RESIDENTIAL AND COMMERCIAL SECTOR EDUCATION AND AWARENESS PROGRAMS

## 1. CCSWD-11 – Local Government Outreach and Assistance (State Plan Goals #3 and #4)

This program will continue (see description in Section IV). The District reserves the right to adjust this program and the basic initiatives offered on an annual basis. Some initiatives may or may not be offered each year of the planning period while other new initiatives may be offered.

Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 11.1

The District will utilize electronic communications methods whenever possible to communicate with elected officials to inform them of District programs and services. This will be accomplished by developing a list-serve of email addresses for all mayors and council members in the

County. The District will also use e-mail and social media whenever possible to promote the municipal consulting services the District provides and the success stories that arise from those services.

Implementation Schedule: 2013

#### Strategy 11.2

Increase municipal participation in the District's contracting consulting services by promoting local success stories and meeting with cities not currently receiving the District's contracting consulting services. addition, the District will hold a contracting workshop for local officials on best practices for solid waste and recycling contracting.

Implementation Schedule: 2014

#### 2. CCSWD-12 – Children's Education Program

(State Plan Goals #3 and #4)

This program will continue (see description in Section IV) but some program offerings may be reduced or eliminated based on the review process conducted for this program and online survey results from District stakeholders. The following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 12.1

The District will review its methods for promoting its education services to schools and will utilize electronic communication methods and social media whenever possible to communicate with school teachers and principals to inform them of District programs.

Implementation Schedule: 2013

#### Strategy 12.2

To broaden its reach, the District will evaluate the feasibility of developing a partnership with local colleges to train student teachers to conduct District recycling presentations. The educators would conduct presentations for the District pro-bono in exchange for school credit towards their individual majors and or teacher certificates. If feasible, the District will work with each college and university to develop the requirements and procedures for the educator cooperative and promote the program at the participating colleges and universities and train the candidates.

Implementation Schedule: 2013-2018

#### Strategy 12.3

Offer environmental education presentations to schools that meet the State of Ohio curriculum requirements whenever possible by evaluating current state curriculum guidelines and redesign presentation materials and lesson plans to meet as many of the state requirements as possible.

Implementation Schedule: 2013-2016

#### Strategy 12.4

Offer environmental education services to schools that meet the needs of teachers and offer value whenever possible by evaluating the current education services to determine, based on teacher feedback from the online surveys, the necessary changes to ensure the education services meet as many of the teachers requirements as possible. Note, the District reserves the right to modify the education programs offered from those listed in Section IV based on current events, programs and policies of the District in the new planning period.

Implementation Schedule: 2013-2016

## 3. CCSWD-13 – General Public Education and Outreach (State Plan Goals #3 and #4)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 13.1

This program will continue (see description in Section IV) but will be expanded to transition current system of general public education and awareness to the new education/awareness branding initiative discussed in Program CCSWD-21.

This expanded effort was determined to be necessary based on the review process conducted for this program and online survey results from District stakeholders. Note, the District reserves the right to conduct different program promotions and initiatives than those listed in Section IV based on current events, programs and policies of the District in the new planning period.

Implementation Schedule: 2015

### COMMERCIAL, INSTITUTIONAL AND INDUSTRIAL SECTOR PROGRAMS

The District's industrial waste reduction strategies are presented in Table V-6, "Industrial Waste Reduction Strategies". The District used actual data for 2009 and 2010 and then projected future increases and decreases based on past performance and future strategies and initiatives. Industrial recycling programs are projected to change per the following:

- 2011 2016 recycling and waste reduction is calculated based on the annual projected employment presented in Table V-3A which is negative 1.86% annually.
- 2017 2028 recycling and waste reduction is projected to increase at 0.5% annually.

The District saw an increase in waste reduction from 2009 to 2010 based on actual data collected from 563,401 tons to 727,816 tons. This was primarily due to new processor data acquired during the preparation of the ADR in 2010. The District projects industrial waste reduction will decrease overall from 727,816 tons in 2010 to 690,386 tons by 2028.

## 1. CCSWD-14 – Commercial, Institutional and Industrial Recycling Assistance

(State Plan Goals #3 and #4)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 14.1

The District will work with local trade associations and chambers of commerce to increase the number of businesses that implement or improve recycling programs. The District will provide recycling information to assist members of the trade associations and chambers of commerce in the development and improvement of recycling. The District will offer to attend meetings or provide training events. The District will focus business recycling assistance efforts on selected businesses that generate large volumes of solid waste including but not limited to restaurants and institutions.

Implementation Schedule: 2013 – 2014

#### Strategy 14.2

Expand efforts to develop recycling programs in multi-family housing by educating and working with apartment owners and managers to develop recycling programs. This effort may include the following initiatives:

#### Initiative 14.2.1

Survey building owners of multi-family housing units to determine their willingness to offer recycling services to their tenants and identify any barriers that have prevented them from offering recycling to date.

Implementation Schedule: 2013 – 2014

#### Initiative 14.2.2

Develop a pilot apartment recycling program in cooperation with the local apartment owner trade association to develop a best practices model for reference and adaptation by property owners.

Implementation Schedule: 2013 – 2014

#### Strategy 14.3

The District will work with trade associations, commercial businesses, industrial parks, and large retail complexes to develop cooperative contracting for solid waste and recycling services. The purpose is to lower the cost of solid waste collection and disposal services while making recycling services more cost-effective and available, especially for small businesses.

Implementation Schedule: 2014 – 2026

### RESIDENTIAL/COMMERCIAL/INDUSTRIAL MARKET DEVELOPMENT PROGRAMS

The District will continue to promote recycling markets through a variety of education and awareness activities, grant applications and direct market support. The District does not have a specific program for market development activities and or initiatives.

#### 1. CCSWD-15 – Recycling Market Development

(State Plan Goals #2 and #8)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 15.1

Partner with local private sector recyclers and businesses to increase and/or create new markets for recycled materials. This effort may include the following initiatives:

#### Initiative 15.1.1

Develop list of private sector recyclers and businesses that have the potential to increase or create markets for recyclable materials.

Implementation Schedule: 2013

#### Initiative 15.1.2

Promote ODNR Market Development Grant to recycling services to list of private sector recyclers and businesses created in Initiative 15.1.1.

Implementation Schedule: 2013 – 2028

#### <u>Initiative 15.1.3</u>

Conduct a round table style event with the list of private sector recyclers and businesses created in Initiative 15.1.1 to brainstorm ways to create new markets in the District to process recyclable materials and identify customers who purchase products that incorporate recycled materials.

Implementation Schedule: 2014 – 2018

#### RESIDENTIAL/COMMERCIAL/INDUSTRIAL GRANT PROGRAMS

#### 1. CCSWD-16 – District Grant Programs

(State Plan Goals #2, #6, #7 and #8)

This program will continue (see description in Section IV). Based on the review process conducted for this program and online survey results from District stakeholders, the following strategies and associated initiatives will be conducted during the planning period as indicated.

#### Strategy 16.1

The District will increase funding for the grant programs for the new planning period. See Section VIII for funding amounts.

Implementation Schedule: 2013

#### Strategy 16.2

The District will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.

Implementation Schedule: 2013

#### SOLID WASTE ENFORCEMENT

#### 1. CCSWD-17 – Solid Waste Code Enforcement

This program will continue with a reduced funding level based on a review of health department funding conducted in 2010 to determine the following:

- Review existing District Health Department Programs statewide
- Review of Heath Department Funding Allowances for Solid Waste Districts
- Analysis and Comparison of Health Department Programs from Solid Waste Districts in Ohio
- Conclusions and Recommendations

Section IV contains the results of the review of the existing health department program for the District. Based on the conclusions and recommendations contained in the report, the District will make the following adjustment to its solid waste code enforcement program in the next planning period:

#### Strategy 17.1

Goal: Provide funding for solid waste code enforcement activities at a level that is financially sustainable for the District, adequate to protect public health and the environment, while allowing the District to meet its other obligations under Ohio's state solid waste management plan requirements. The District has the highest health department cost in Ohio as a percentage of its budget at nearly 19%. In order to continue to fund this program at a financially sustainable level, the District will need to reduce health department funding \$250,000 annually, or approximately

12% of expenses, starting in 2013. This will bring the District's health department funding closer in line with the averages across Ohio (approximately 7%) and with the solid waste districts with the largest population centers (approximately 9%).

Health department funding will be used to support the Cleveland Department of Public Health and the Cuyahoga County Board of Health for the following activities:

- Solid waste facility inspections at the state required inspection frequencies including open and closed solid waste landfills, open and closed solid waste transfer stations, compost facilities, C&DD facilities (solid waste issues only), open dumps, and scrap tire dumps. The District may also consider inspections of solid waste recycling facilities but not auto salvage yards or processing facilities.
- Nuisance complaints.
- Methane monitoring.
- Other services that fit the overall objectives of the District's mission as determined by the District's Policy Committee and Board including solid waste flow enforcement related to generation fee payment fraud.

Implementation Schedule: 2013-2028

#### **OTHER PROGRAMS**

#### 1. CCSWD-18 – Securing Landfill Disposal Capacity

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

#### 2. CCSWD-19 – Solid Waste Management Planning

This program will continue (see description in Section IV) but annual survey process may be modified based on a review of annual survey methodologies and effectiveness. Annual surveying process is likely to focus more on processor data rather than waste generator data due to the large number of waste generators in the county and the unreliability of their data.

#### 3. CCSWD-20 – District Wide Contracting for Service

The District will continue to evaluate whether the District or the District and political subdivisions within the District need to contract for solid waste services that may improve how the District implements the District Plan. The District reserves the right to initiate new and improve existing

contracts for the collection, transportation, disposal or processing of solid waste and recyclable materials from the residential, industrial and commercial sectors as the Board determines to be in the best interests of the District.

## 4. CCSWD-21 – Education and Awareness Branding (New Program)

During the update of the District's Solid Waste Management Plan, the District conducted a detailed on-line survey of political subdivisions, businesses, general public and educators to obtain feedback on District programs. The common message obtained from the survey results indicated that more education and awareness for recycling programs was needed. In addition, the District focus is on maintaining and improving the quality of information disseminated to residents and businesses from the District. The District will offer to coordinate the branding program with municipalities, recyclers, and waste collection companies to provide a consistent message regarding the District and its programs.

Based on the above, the District would like to create a consistent message and uniform promotion regarding recycling throughout the County. Currently, each City, Township and Village as well as the District promote recycling programs and events independently. Promotions and information sharing to the residents and businesses in the County vary substantially.

The District proposes to develop an initiative that will ensure that a common recycling message is relayed to residents and businesses. This initiative will brand the education and awareness efforts that are conducted by the District as well as the cities, townships and villages in the County. This initiative may involve the following:

- Develop a common logo and slogan that can also incorporate individual political subdivision identities.
- Develop a template for website promotion of recycling programs political subdivisions and school districts.
- Develop a template for newspaper advertisements of recycling programs.
- Develop a template for radio advertisements of recycling programs.
- Develop video vignettes on curbside recycling participation procedures.
- Develop video vignettes on drop-off recycling participation procedures.
- Develop video vignettes on classroom education presentations (various topics).
- Develop common social networking efforts.

The District reserves the right to add staff as deemed necessary to design, implement and manage this branding program. The decision to add necessary shall not constitute a material change in circumstances requiring an update of the District Plan.

#### **OTHER FACILITIES**

The District has identified one potential new development project involving solid and other types of wastes that could affect the District in the planning period. The District is aware that there are other innovative proposals for facilities that may decrease the amount of waste that is landfilled in Ohio. If a facility is developed, there may be new regulations or statutory changes that affect how solid waste is characterized when it is delivered to and processed at the facility. The District will monitor the progress of new facilities and any new statutory or regulatory changes to identify the effect of those facilities, and any new statutory or regulatory changes on the implementation of the Plan Update. If a facility is developed and a significant amount of solid waste is reduced either through recycling and/or waste reduction, the District may be affected. The District's material change in circumstance procedure should address any of these potential projects that affect the District's ability to implement this Plan Update.

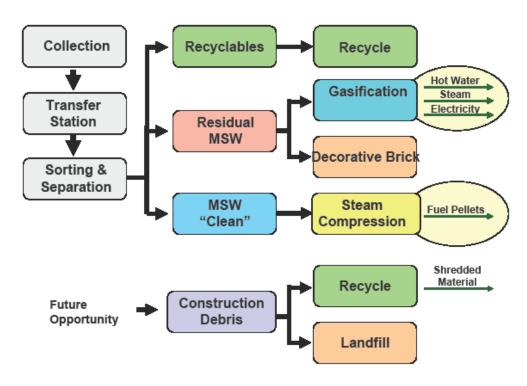
The following discusses a project, although still in the concept stage, under consideration by the City of Cleveland.

#### **City of Cleveland Proposed Gasification Facility**

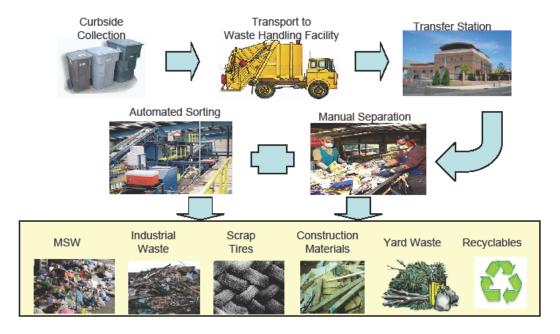
The City of Cleveland (Cleveland) is investigating the feasibility of developing a gasification facility for solid waste that is currently being managed at the Ridge Road transfer station. It is unclear at the time of this *Plan Update* on the exact amount of solid waste that would be processed at the proposed gasification facility. In 2009, the Ridge Road transfer station processed 222,250 tons of solid waste.

The following two graphics depict the proposed flow of solid waste under the proposed project.

#### **Proposed Waste Flow**



#### **Proposed Waste Flow**



This proposed project has several potential positive and negative impacts on the District including the following:

#### **Positive Impacts**

- · Increase waste reduction though recycling and gasification process.
- Green energy creation.
- Potential lower tipping fees for communities.

#### **Negative Impacts**

- Public perception concerning emissions and old paradigm of incineration.
- Potential decrease in generation fee revenue based on Ohio EPA's proposed change in the definition of solid waste currently being considered.

The District does not have enough information on the proposed facility to incorporate any of the positive and negative impacts into this *Plan Update*. The District has been and will continue to be a part of the process as the City of Cleveland continues investigating this opportunity.

If the facility becomes operational, the District may implement any of the following:

- Implement the financial funding contingency in Section VIII of this *Plan Update*.
- Adjust expenditures to assure funding to implement the Plan Update.
- Revise the plan as authorized in ORC 3734.56(E).
- Declare a material change in circumstance per the procedure set forth in Section I of this *Plan Update* and request that the District Policy Committee update the Plan.
- Other actions as deemed appropriate by the Board of Directors.

Table V-1
District Population Projections

Year	Cuyahoga County Population	Hunting Valley Population	Total District
2009	1,275,709	150	1,275,859
2010	1,280,122	116	1,280,238
2011	1,282,297	117	1,282,414
2012	1,284,472	119	1,284,590
2013	1,286,646	120	1,286,767
2014	1,288,821	122	1,288,943
2015	1,290,996	123	1,291,119
2016	1,293,171	125	1,293,295
2017	1,295,346	126	1,295,472
2018	1,297,520	127	1,297,648
2019	1,299,695	129	1,299,824
2020	1,301,870	130	1,302,000
2021	1,299,085	131	1,299,216
2022	1,296,300	131	1,296,431
2023	1,293,515	132	1,293,647
2024	1,290,730	132	1,290,862
2025	1,287,945	133	1,288,078
2026	1,285,160	133	1,285,293
2027	1,282,375	134	1,282,509
2028	1,279,590	135	1,279,725

2009 Population- Table IV-1 2010 Population- 2010 Census

Projections - Based on Ohio Department of Development Office of Strategic Research (July 2010) *Ohio County Profiles* for Cuyahoga and Geauga Counties. See Tables Below.

Community Population	Percent Change 2010-2030	Annual Percent Change
Cuyahoga County	-0.48%	-0.02%
Hunting Valley (Geauga County)	14.46%	0.72%

	Cu	yahoga Pop	ulation Proj	ections (ODC	)D)	
2000	2005	2010	2015	2020	2025	2030
1,393,978	1,356,865	1,280,122	1,290,996	1,301,870	1,287,945	1,274,020
2000	to 2030 % Ch	ange	-9.42%	-0.31%		
2010	to 2030 % Ch	ange	-0.48%	-0.02%		

	G	eauga Popu	ılation Proje	ctions (ODOI	D)	
2000	2005	2010	2015	2020	2025	2030
90,895	94,436	93,389	99,100	104,810	106,995	109,180
2000	to 2030 % Ch	ange	16.75%	0.56%		
2010	to 2030 % Ch	ange	14.46%	0.72%		

#### Sample calculation (Cuyahoga County):

2011 Population = 2010 Population + ((Projected Population in 2020 - 2010 Population)/10)

 $(2011 \ Year) \ 1,282,297 = 1,280,122 + ((1,301,870 - 1,280,122)/10)$ 

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

Year	District Population	Per Capita Generation Rate	Total Residential/Commercial Generation (TPY)
2009	1,275,859	7.44	1,731,395
2010	1,280,238	6.95	1,623,954
2011	1,282,414	6.89	1,612,106
2012	1,284,590	6.83	1,600,469
2013	1,286,767	6.77	1,588,912
2014	1,288,943	6.71	1,577,434
2015	1,291,119	6.69	1,576,147
2016	1,293,295	6.69	1,578,014
2017	1,295,472	6.72	1,588,573
2018	1,297,648	6.75	1,599,198
2019	1,299,824	6.79	1,609,889
2020	1,302,000	6.82	1,620,648
2021	1,299,216	6.85	1,625,268
2022	1,296,431	6.89	1,629,893
2023	1,293,647	6.92	1,634,525
2024	1,290,862	6.96	1,639,161
2025	1,288,078	6.99	1,643,804
2026	1,285,293	7.03	1,648,452
2027	1,282,509	7.06	1,653,105
2028	1,279,725	7.10	1,657,763

#### Source(s) of information: Ohio EPA

District Population - Table V-I

2009 Per Capita Generation Rate - Table IV-8

2010 Per Capita Generation Rate - Based on Ohio EPA disposal data and District ADR recycling data.

2011-2014 Per Capita Generation Rate - Based on historical waste generation at -0.89% annually.

2015 Per Capita Generation Rate - Calculated at -0.25% annually.

2016 Per Capita Generation Rate - Calculated at -0.005% annually.

2017-2028 Per Capita Generation Rate - Based on Ohio EPA Recommendations September 4, 2002

#### Sample calculations (for 2009):

Per Capita Generation Rate = Per Capita Generation Rate in the previous year x (1 + annual percent change)

 $6.89 = 6.95 \times 0.9911$ 

District population x Per Capita Generation Rate (lb/person/day) x 365 days/year 2000 (lbs/ton)

= Total Residential/Commercial Generation (Tons)

1,275,859 x 7.44 x 365 2000 = 1,731,395

Project Industrial Waste Generation

	25 2026 2027 2028	26,470 26,602 26,735 26,869	3,357 3,374 3,391 3,408	2,756 2,770 2,783 2,797	14,418 14,490 14,563 14,636	2,726 2,739 2,753 2,767	40,531 40,733 40,937 41,142	49,100 49,346 49,593 49,840	63,466 63,784 64,103 64,423	2,026 2,036 2,047 2,057	16,080 16,160 16,241 16,322	46 46 47 47	24,320 24,441 24,564 24,686	301,429 302,936 304,451 305,973	220,168 221,269 222,375 223,487	60,778 61,082 61,388 61,694	17,180 17,266 17,352 17,439	22,310 22,421 22,534 22,646	5,461 5,488 5,516 5,543	7,770 7,809 7,848 7,887	
	2024 2025	26,338 26	3,340	2,742 2	14,347	2,712	40,329 40	48,856 49	63,151 63	2,016 2	16,000 16	46	24,199 24	299,930 301	219,073 220	60,476 60	17,094	22,199	5,434 5	7,731	
	2023	26,207	3,324	2,728	14,275	2,699	40,128	48,613	62,836	2,006	15,920	46	24,078	298,437	217,983	60,175	17,009	22,088	5,407	7,693	
	2022	7 26,077	3,307	2,715	14,204	2,685	39,929	48,371	62,524	1,996	15,841	45	23,959	296,953	216,898	59,876	16,925	21,979	2,380	7,655	
	2021	8 25,947	3,291	8 2,701	3 14,133	9 2,672	3 39,730	1 48,130	3 62,213	3 1,986	15,762	5 45	1 23,839	5 295,475	3 215,819	1 59,578	16,841	21,869	5,353	7,617	
	2020	9 25,818	3,274	5 2,688	3 14,063	5 2,659	6 39,533	3 47,891	5 61,903	1,976	5 15,684	5 45	3 23,721	2 294,005	7 214,746	59,281	3 16,757	2 21,760	5,326	1 7,579	
Year	2019	1 25,689	3,258	1 2,675	4 13,993	2,645	39,336	6 47,653	9 61,595	7 1,967	8 15,606	5 45	5 23,603	7 292,542	4 213,677	3 58,986	16,673	4 21,652	3 5,300	3 7,541	
٨	2018	4 25,567	3,242	3 2,661	13,924	9 2,632	5 39,140	0 47,416	4 61,289	1,957	15,528	45	3 23,485	9 291,087	3 212,614	1 58,693	3 16,591	7 21,544	5,273	5 7,503	
	2017	8 25,434	3,226	5 2,648	5 13,854	3 2,619	2 38,945	5 47,180	1 60,984	1,947	15,451	44	23,368	3 289,639	4 211,556	58,401	3 16,508	1 21,437	1 5,247	9 7,466	
	2016	7 25,308	1 3,210	5 2,635	7 13,785	5 2,606	8 38,752	5 46,945	1 60,681	1,937	5 15,374	5 44	3 23,252	0 288,198	3 210,504	2 58,110	7 16,426	5 21,331	5,221	0 7,429	ļ
	2015	6 25,787	3,27	6 2,685	3 14,047	2,655	39,486	1 47,835	2 61,837	1,974	2 15,665	6 45	23,693	5 293,660	9 214,493	4 59,212	16,737	7 21,735	1 5,320	3 7,570	
	2014	4 26,276	3,332	7 2,736	14,313	7 2,706	7 40,234	5 48,741	63,002	0 2,011	5 15,962	7 46	0 24,142	7 299,225	1 218,559	7 60,334	3 17,054	7 22,147	4 5,421	9 7,713	
	2013	26,774	3,396	0 2,787	14,584	9 2,757	40,997	49,665	3 64,196	8 2,050	3 16,265	8 47	5 24,600	5 304,897	222,701	3 61,477	7 17,378	4 22,567	8 5,524	8 7,859	
	2012	9 27,282	3,460	4 2,840	14,867	3 2,809	6 41,774	909'09	3 65,413	8 2,088	7 16,573	8 48	1 25,066	3 310,675	226,922	0 62,643	3 17,707	) 22,994	5,628	8,008	
	2011	3 27,799	3,526	9 2,894	15,142	7 2,863	2 42,566	3 51,566	3 66,653	3 2,128	7 16,887	9 48	5 25,541	316,563	5 231,222	9 63,830	18,043	1 23,430	5,735	5 8,160	
	2010	328,326	3,592	2,949	15,429	2,917	43,372	52,543	67,916	2,168	17,207	49	26,025	322,563	235,605	62,039	18,384	23,874	5,844	8,315	
	2009	22,518	2,856	2,344	12,266	2,319	34,480	41,771	53,992	1,724	13,680	36	20,689	256,433	187,302	51,705	14,615	18,980	4,646	6,610	
טוט טוט	anon nie	20	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	

2009 waste generation for each SIC Category is calculated based on the values presented in Table IV-2 and the total Industrial waste generated presented in IV-8

2010 waste generation is based on actual recycling and disposal data collected.

2011-2016 waste generation for each SIC Category is calculated based on the annual projected employment presented in Table V-3A 2017-2028 waste generation for each SIC Category is projected at a 0.5% annual escalator.

# Sample calculation (SIC 20):

Total Industrial Waste Generated by SIC Code = (Table IV-2)  $\times$  Total Industrial Waste Generated (Table IV-2) Total Industrial Waste Generated (Table IV-2)

$$22,518 = 41,056 \times \frac{748,970}{1,365,531}$$

# 2010 Sample calculation:

$$20 (2010) = \frac{SIC 20 (2009)}{Total 2009} \times Total 2010$$

# 2011 Sample calculation:

Waste generated in previous year + waste generated in previous year x assumed growth rate = waste generated in estimated year 2011 SIC Code 20: (27,799) + (27,799 x - 0.9814) = 27,282 - 2012 SIC Code 20

Table V-3A Standard Industrial Classifications

SIC	Description	Percent Change 2006-2016	Annual Average Percent Change
20	Food and Kindred Products		
22	Textile Mill Products		
23	Apparel and Other Finished Products Made from Fabric		
24	Lumber and Wood Products, Except Furniture		
25	Furniture and Fixtures		
26	Paper and Allied Industries		
27	Printing, Publishing, and Allied Products		
28	Chemicals and Allied Products		
29	Petroleum Refining and Related Industries		
30	Rubber and Miscellaneous Plastic Products	-18.60%	-1.86%
31	Leather and Leather Products		
32	Stone, Clay, Glass and Concrete Products		
33	Primary Metal Industries		
34	Fabricated Metal Products, Except Machinery and Transportation		
35	Industrial and Commercial Machinery and Computer Equipment		
36	Electronic and Other Electrical Equipment and Components		
37	Transportation Equipment		
38	Measuring, Analyzing and Controlling Instruments		
39	Miscellaneous Manufacturing Industries		

The Ohio Department of Job and Family Services Job Outlook for 2006-2016 for the Cleveland-Elyria-Mentor Metropolitan Statistical Area

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

Year	Residential/ Commercial	Industrial	Exempt	Total Waste	Generation Rate (lbs/person/day)
2009	1,731,395	748,970	71,117	2,551,482	10.96
2010	1,623,954	942,118	71,250	2,637,322	11.29
2011	1,612,106	924,595	71,383	2,608,083	11.14
2012	1,600,469	907,397	71,516	2,579,382	11.00
2013	1,588,912	890,520	71,649	2,551,081	10.86
2014	1,577,434	873,956	71,782	2,523,172	10.73
2015	1,576,147	857,700	71,916	2,505,763	10.63
2016	1,578,014	841,747	72,050	2,491,811	10.56
2017	1,588,573	845,956	72,184	2,506,713	10.60
2018	1,599,198	850,186	72,319	2,521,702	10.65
2019	1,609,889	854,437	72,453	2,536,779	10.69
2020	1,620,648	858,709	72,588	2,551,944	10.74
2021	1,625,268	863,002	72,433	2,560,702	10.80
2022	1,629,893	867,317	72,277	2,569,488	10.86
2023	1,634,525	871,654	72,122	2,578,301	10.92
2024	1,639,161	876,012	71,968	2,587,141	10.98
2025	1,643,804	880,392	71,814	2,596,010	11.04
2026	1,648,452	884,794	71,660	2,604,905	11.11
2027	1,653,105	889,218	71,506	2,613,829	11.17
2028	1,657,763	893,664	71,353	2,622,780	11.23

Residential/Commercial - Table V-2

Industrial - Table V-3

Exempt 2009 - Table IV-8

Exempt 2010-2020 calculated assuming a .19% annual increase and a -.21% annual decrease 2021-2028 (the same rate of change as population growth in Table V-1).

#### Sample calculation (2012):

Exempt waste generated in previous year x 1.0019 (.19% annual increase) = Waste generated in estimated ye  $71,383 \times (1.0019) = 71,516$ 

Total Waste = Residential/Commercial + Industrial + Exempt 2,579,382 = 1,600,469 + 907,397 + 71,516

Generation Rate (lb/person/day) = Waste Generated (tons) x 2,000 (pounds/ton)

365 (days/year) x Population

 $11.00 = \frac{2,579,382 \times 2,000}{365 \times 1,284,590}$ 

Table V-5 Residential/Commercial Waste Reduction Strategies

·	Section V	Type of Material									ı											
Strategy	Program ID	Reduced		-		-	ŀ	ŀ	ŀ	ŀ		aste	_1	ŀ	ŀ	ŀ	ŀ	ŀ	ŀ	ŀ	ŀ	,
Continue of the continue of th	Number	and/or Recycled	5000	2010	2011	2012	2013	2014	2015	2016	2017	2018 2	2019 2	2020 2	2021 2	2022	2023	2024	2025 203	2026 20	2027 20	2028
Residential Sector Education and Awareness Program: Source Reduction	Awareness Progr	ram: source Reduction			ŀ	ŀ			ŀ	-	-	ŀ	-	-	-	-	-	-				ľ
Source Reduction	n/a	n/a	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Sector Technical Assistance and Education Programs: Recycling	Subtotal	tion Programe: Recycling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Subscription Recycling	CCSWD-01	Fiber, plastic, glass,	41.065	40.482	43.063	45,649	48.240	50,837	53,439	53.545	53,653	54.189	54.731	55.278	55,831	56.389	56,953	57.523	58,098	58.679	59,266	59.858
Programs	CO-CWD-02	aluminum, otner Fiber, plastic, glass,	22 732	000 00	20 023	20.856	20 789	20 723	20.656	20 590	20.524	20 524	20.524		20.524	20.524	20.524	20.524	20 524	20.524	20 524 2	20 524
Surd Management	CCSWD 03	aluminum, other	167 470		156 700	456 702	155 700						1	1							1 02	70,07
rard waste Management	CCSWD-03	rard waste	16/,4/9	155,702	155,702	199,702	155,702	707,661	155, 702	155, 702	707,661	155,702	155,702	155,702	155,702	155,702	155,702	155,702	155,702	155, 702 155,	707	155, 702
Household Hazardous Waste Collection	CCSWD-04	Household Hazardous Waste	314	269	586	604	622	640	099	629	200	721	742	765	788	811	836	861	886	913	940	696
Computer Recycling	CCSWD-05	Electronics	669	638	949	653	199	699	229	685	694	694	694	694	694	694	694	694	694	694	694	694
Scrap Tire Recycling	90-GMSCC	Scrap Tires	210	257	200	198	196	194	192	190	188	186	185	183	181	179	177	176	174	172	170	169
Litter Collection	CCSWD-07	Litter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury Collection Program	CCSWD-08	Mercury									-	Included in HHW	НW									
Phone Book Recycling Campaign	60-GMSDO	Phone Books	417	263	250	250	250	250	250	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Waste Convenience Center	CCSWD-10	е/и	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Government Outreach and Assistance	CCSWD-11	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Children's Education Program	CCSWD-12	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Public Education and Outreach	CCSWD-13	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial, Institutional and Industrial Recycling Assistance	CCSWD-14	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recycling Market Development	CCSWD-15	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District Grant Programs	CCSWD-16	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solid Waste Code Enforcement	CCSWD-17	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Securing Landfill Capacity	CCSWD-18	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solid Waste Management Planning	CCSWD-19	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District Wide Contracting for Service	CCSWD-20	e/u	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education/Awareness Branding	CCSWD-21	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Commercial Recycling	n/a	n/a	285,597	223,407	225,641	227,897	230,176	232,478	234,803	237,151	239,523	241,918 2	244,337 2	246,780 2	249,248 2	251,741 2	254,258 2	256,801 2	259,369 26	261,962 26	264,582 26	267,228
,	Subtotal		518,513	442,308	447,011	451,810	456,637	461,493	466,379	468,544	470,983	473,934 4	476,915 4	479,926 4	482,968 4	486,041 4	489,144 4	492,280 4	495,447 498	498,647 50	501,879 50	505,144
Other Waste Reduction Strategies																						
Incineration			27	27	27	22	27	27	27	27	27	27	27	27	27	27	27	27	22	27	27	22
	Subtotal		27		27	27																27
-B	Grand Totals		518,540	442,335	447,037	451,836	456,664	461,520	466,405	468,570	471,010 4	473,961 4	476,942 4	479,953 4	482,995 4	486,067	489,171 4	492,306 4	495,474 498	498,673 50	501,905 50	505,170

Note: 'Other Commercial Recycling tonnage for this line item was generated by the commercial sector, and is not associated with other programs (CCSWD-01 - CCSWD-21) listed in this table.

Source(s) of information:

Curside Recycling-Table III-4.
Drop-Off Recycling-Table III-5.
Special Collection Events-Table III-5
Composing-Table III-1.
Composing-Table III-6
Composing-Table III-6
Incheration-Table III-6
Incheration-Table III-7

<sup>2010:</sup>Curbside Recycling, Drop-Off Recycling, Special Collection Events, and Composting - ADR.
Commercial Recycling - Survey results

Non-Subscription recycling is increased. 2% annually from 2011-2017 based on historical performance and then by 1% annually through 2028 based on the additional recycling opportunities and enhanced education and awareness as described in Section V. For years 2011 through 2016, an additional 2,500 tors is added annual increased to the pilot study program. Drop-Off recycling is decreased .32% annually from 2011-2017 and then remains flat until 2028 based on historical performance and the projected lower need for drop-off programs as a result of the City of Clevaland's curbside program and other initiatives in the Plan Update. Yet developed besed on historical performance.

Foundated Hezardous recycling is increased 5% annually from 2011-2017 based on historical performance and then remains flat through 2028.

Scrap fire ecycling of secreased 5% annually from 2011-2017 based on historical performance and then remains flat through 2028.

Scrap fire ecycling decreases in 2011 and annually interposed on the enhanced clausation and available from 2016-2028.

Scrap fire ecycling clauses and a flat annually and annually from 2011-2012 based on historical performance and then the program is eliminated from 2016-2028.

Commercial recycling is increased 1% annually from 2010-2028 based on the additional recycling opportunities and enhanced education and awareness as described in Section V.

Sample calculation (2011 Non-Subscription Recycling):

<sup>(</sup>Waste recycled in previous year) x (0.2 percent) + 2,500 = Recycling in estimated year  $40,482 \times 1.002 + 2,500 = 43,063$ 

Table V-6 Industrial Waste Reduction Strategies

Type of Material Strategy Reduced/Recycled	Program #									Tons of Sc	Tons of Source Reduction/Recycling	rction/Rec	/cling					-	-	-	
האמנה		5000	2010	2011	2012	2013	2014	2012	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	5026	2027	2028
nical Assist	ndustrial Sector Technical Assistance and Education Programs: Source Red	cation Pro	grams: So	urce Reduc	luction																
NA	CCSWD-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ndustrial Sector Technical Assistance and Education Programs: Recycling	tance and Edi	cation Pro	grams: Re	cycling																	
Ferrous, Non- Ferrous Metals, Mood, Paper, OCC, CCSWD-14 Plastic, Glass, Sand, Food Waste	CCSWD-14		563,359 727,773	714,236	700,952	687,914	675,119	662,562	650,238	653,489	656,757	660,040	663,340	666,657	066'699	673,340	707,979	690,091	683,491	606,909	690,343
Subtotal		563,359	727,773	714,236	700,952	687,914	675,119	662,562	650,238	653,489	656,757	660,040	663,340	29,999	066'699	673,340	202,979	680,091	683,491	696,989	690,343
Other Waste Reduction Strategies	Si																				
N/A	CCSWD-14	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Subtotal		43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Grand Totals		563,401	563,401 727,816 714,279	714,279	700,994	956,789	675,161	662,604	650,280	653,532	626,799	660,083	663,383	999,	670,033	673,383	676,750	680,133	683,534	686,951	690,386

2009 data - Table IV-6 2010 data - ADR

2011-2016 recycling and waste reduction - Based on the annual projected employment presented in Table V-3A

2017-2028 recycling and waste reduction is projected to increase at .5% annually.

Sample calculation (2011): (Maste recycled in previous year) x 0.25 percent = Recycling in estimated year

727,816x 0.9814 = 714,279

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

#### A. District Methods for Management of Solid Waste

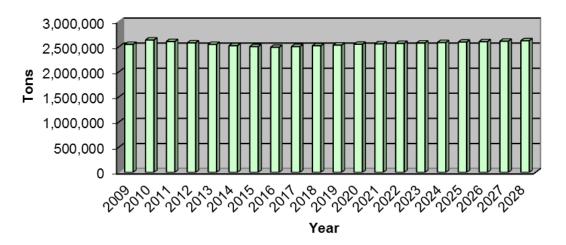
#### 1. Waste Management Methods for All Sectors

Table VI-1 presents the waste management methods used and capacity needed for each year of the planning period. This includes waste generation, waste reduction, transferred waste, composting and landfill disposal.

#### **Waste Generation**

The total waste generated by the District in 2009 was calculated to be 2,551,482 tons. Waste generation includes waste reduction tons plus disposal tons. The District projects 2,551,081 tons of solid waste will be generated in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will generate 2,622,780 tons. The following graph shows the projected total net tons to be managed by the District throughout the planning period.

## District Waste Generation Projections 2009 – 2028

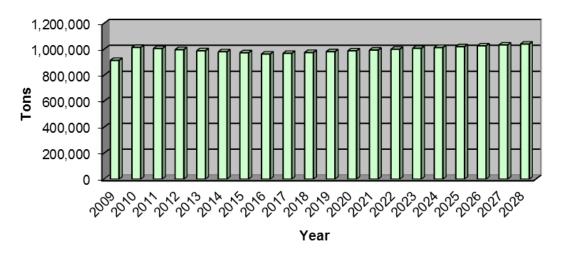


#### **Waste Reduction**

The total waste reduction by the District in 2009 was calculated to be 914,393 tons. Waste reduction includes recycling and source reduction. The District projects 988,849 tons of solid waste will be reduced in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will reduce 1,039,785 tons. Waste reduction increased from 2009 to 2010 because of increased recycling from the industrial

sector. The following graph shows the projected total waste reduction by the District throughout the planning period.

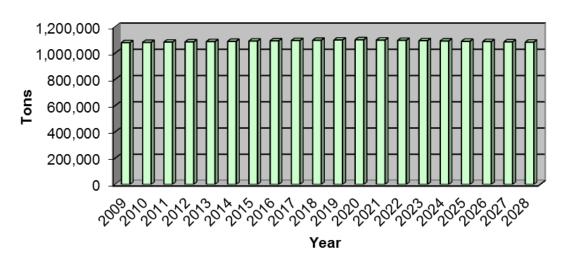
District Waste Reduction Projections 2009 – 2028



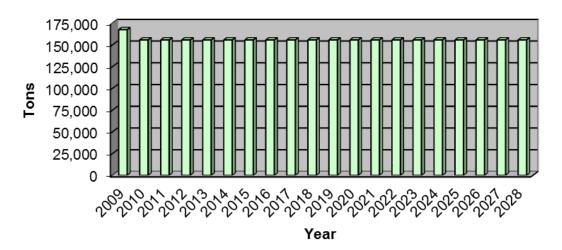
#### **Transferred Waste**

The total waste transferred by the District in 2009 was calculated to be 1,079,485 tons. Transferred waste includes all solid waste that first went to a licensed transfer station. The District projects 1,087,550 tons of solid waste will be transferred in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will transfer 1,083,060 tons. The projected fluctuation is based on projected changes in population. The following graph shows the projected transferred waste by the District throughout the planning period.

District Waste Transferred Projections 2009 – 2028

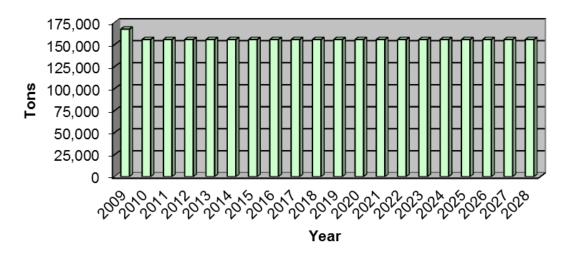


Composted Waste Projections 2009 – 2028



The total waste composted by the District in 2009 was calculated to be 167,479 tons. Composted waste includes all organic waste that first went to a licensed compost facility or is managed through other methods such as backyard composting, land application or municipal brush chipping. The District projects 155,702 tons of solid waste will be composted in 2013 and will remain flat through 2028 based on historical trends. The following graph shows the projected composted waste by the District throughout the planning period.

District Composted Waste Projections 2009 – 2028

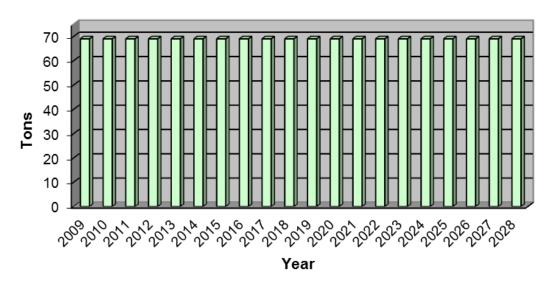


#### **Incinerated Waste**

The total waste incinerated by the District in 2009 was calculated to be 123 tons gross and 69 tons net. The District projects 69 tons of solid

waste will be reduced from the waste stream by incinerators in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to reduce 69 tons by incinerators. The following graph shows the projected total incineration tons to be managed by the District throughout the planning period.

## District Waste Incineration Projections 2009 – 2028

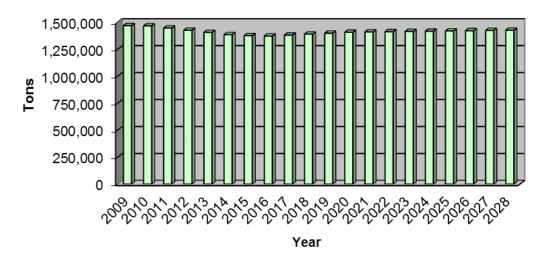


The District did not include any projections from the proposed Cleveland gasification project in the above projections. The uncertainty of the regulatory status of the proposed facility and lack of final estimated tonnages of waste to be processed prevented the District from developing projections.

#### **Landfilled Waste**

The landfill total in Table VI-1 for 2009 (1,469,542 tons) is calculated by subtracting recycling, yard waste composted and waste incinerated from the total tons to be managed by the District. The District projects 1.406.461 tons of solid waste will be disposed of in landfills in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to landfill 1,427,102 tons. The projected increase is due primarily to the anticipated increase residential/commercial waste disposal. The following graph shows the projected total landfill tons to be managed by the District throughout the planning period.

District Waste Landfilled Projections 2009 – 2028



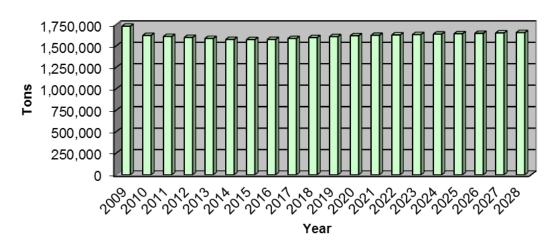
#### 2. Residential/Commercial Waste Management Methods

Table VI-2 presents a summary of waste management methods for residential/commercial solid waste generated by the District.

#### **Waste Generation**

The waste generation for the residential/commercial sector in 2009 was calculated to be 1,731,395 tons. The District projects 1,588,912 tons of solid waste will need to be managed in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to manage 1,657,763 tons. The following graph shows the projected total waste generation to be managed by the District for the residential/commercial sector throughout the planning period.

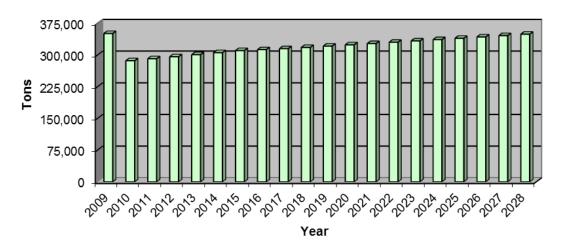
Residential/Commercial Waste Generation Projections 2009 – 2028



#### **Waste Reduction**

The total waste reduction by the District in 2009 was calculated to be 351,034 tons. Waste reduction includes recycling and source reduction. The District projects 300,935 tons of solid waste will be reduced in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will reduce 349,442 tons. The decrease from 2009 to 2010 was attributed to decreases in data collection and a reduction in yard waste composted. The following graph shows the projected total waste reduction by the District throughout the planning period:

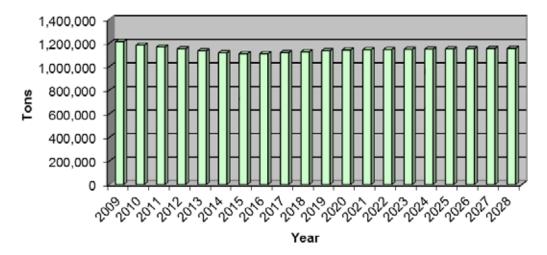
## Residential/Commercial Waste Reduction Projections 2009 – 2028



#### **Landfilled Waste**

The landfill total in Table VI-2 for 2009 (1,212,855 tons) is calculated by subtracting recycling and organic waste composted from the net tons to be managed by the District. The District projects 1,132,249 tons of solid waste will be disposed of in landfills in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to landfill 1,152,593 tons. The following graph shows the projected total landfill tons to be managed by the District throughout the planning period.

Residential/Commercial Waste Landfilled Projections 2009 – 2028



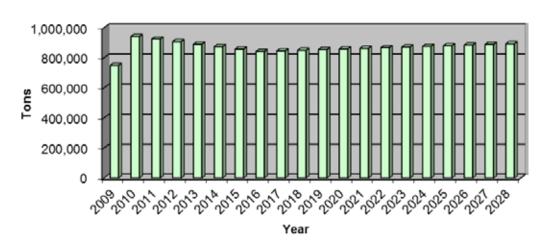
#### 3. Industrial Sector Waste Management Methods

Table VI-3 presents a summary of solid waste management methods for industrial solid waste generated in the District.

#### **Waste Generation**

The waste generation for the industrial sector in 2009 was calculated to be 748,970 tons. The District projects 890,520 tons of solid waste will need to be managed in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to manage 893,664 tons. The following graph shows the projected total waste generation to be managed by the District for the industrial sector throughout the planning period.

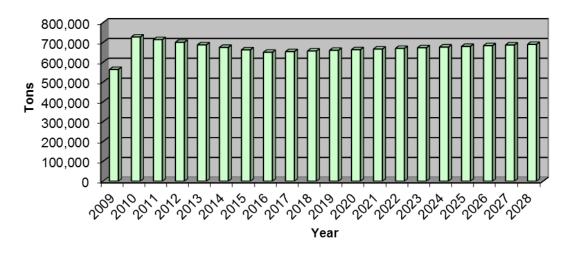
Industrial Waste Generation Projections 2009 – 2028



#### **Waste Reduction**

The total waste reduction by the District in 2009 was calculated to be 563,359 tons. Waste reduction includes recycling, composting and source reduction. The District projects 687,914 tons of solid waste will be reduced in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will reduce 690,343 tons. Waste reduction increased from 2009 to 2010 because of increased recycling from the industrial sector. The following graph shows the projected total waste reduction by the District throughout the planning period.

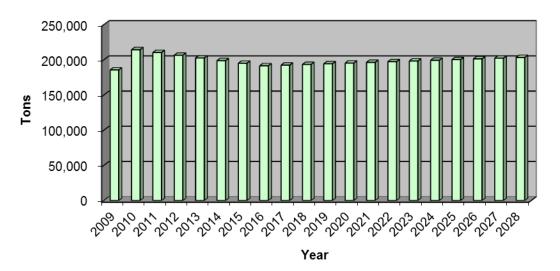
## Industrial Waste Reduction Projections 2009 – 2028



#### **Landfilled Waste**

The landfill total in Table VI-3 for 2009 (185,569 tons) is calculated by subtracting recycling from the total tons to be managed by the District. The District projects 202,563 tons of solid waste will be disposed of in landfills in 2013, the first year of the planning period, and by the end of the planning period in 2028 the District will need to landfill 203,279 tons. The following graph shows the projected total landfill tons to be managed by the District throughout the planning period.

## Industrial Waste Landfilled Projections 2009 – 2028



#### **Capacity Calculations**

Table VI-4A presents the actual landfill capacity utilization and landfill projections throughout the planning period. The District has allocated the waste landfilled at each facility in future years based on the percent of the total landfilled waste that facility received in 2009. For those facilities with remaining capacity less than the planning period, waste is allocated to the Lorain County Landfill.

Tables VI-4B, VI-4C, VI-4D and VI-4E present projections for incinerators, transfer, recycling and composting facilities. Seven incinerators reported processing Cuyahoga County Waste in 2009. The District anticipates that these incinerators will remain in operation throughout the planning period and process the same amount of waste each year. Fourteen transfer facilities processed 1,079,485 tons of District waste in 2009. The District anticipates that these transfer facilities will remain in operation throughout the planning period. The District has allocated the waste transferred to each station in future years based on the percent of the total waste transferred by that facility in 2009.

The District listed 85 recycling operations, programs, facilities and the actual material recycled as reported in survey responses on Table VI-4D. The remaining recycling is attributed to curbside programs, drop-offs and other commercial facilities. The District anticipates that these recycling operations will remain in operation throughout the planning period. The District has allocated the recycling amount in future years to each operation based on the total material recycled at that operation in 2009. Recycling is projected to increase based on increases in the participation

of District programs throughout the planning period and trends in historical program data.

There are 35 composting facilities and community composting operations in the District. The District anticipates the amount of material composted in future years at these facilities will be similar to that received in 2009. The District expects the programs outlined in Section V will help the District obtain more yard waste tonnage that is managed through these compost facilities. Composting is projected to remain flat throughout the sixteen-year planning period.

#### B. Demonstration of Access to Capacity

During the 2009 reference year, the District utilized 2 in-District, 15 out-of-District landfills and 1 out-of-state landfill for direct haul disposal. The District also used 9 in-District and 5 out-of-District transfer stations. Of these facilities, the District relied directly on landfills for 27% (389,934 tons) of the solid waste disposed by District generators and transfer stations for 73% (1,079,485 tons).

For 2009 data, the Ohio EPA tracked waste disposal tonnage by solid waste district at the first facility where waste was accepted. In order to demonstrate disposal capacity at landfills for 100% of the waste disposed by District generators, a regional capacity analysis was conducted on the landfills used by the District directly and landfills used by transfer stations that accepted District waste.

The following section summarizes the regional capacity analysis the District used to demonstrate access to capacity.

#### **Regional Capacity Analysis**

The purpose for the regional capacity analysis is to evaluate and demonstrate that the District has access to disposal capacity during the planning period. In order to conduct a landfill capacity analysis, the District first developed a list of landfills used in the reference year (2009) that generators sent their waste to directly (Table III-1). Then the District developed a list of landfills used by the transfer stations that reported District waste receipts in 2009. The District then conducted a capacity analysis for the combined list of landfills to determine their projected life expectancy based on their average daily receipts. The evaluation also determined each landfill's estimated cubic yard of air space available. Finally, the District calculated the amount of tonnage and compacted cubic yards of air space needed for the entire planning period by the District.

#### **Direct Haul Landfill Capacity Analysis**

Landfills used by the District in 2009 that received waste directly from generators have an average life expectancy of 36 years. The District, on average, consumes 0.2% of the annual capacity for each landfill listed below and over a 16 year planning period, the District would consume approximately 3% of the permitted capacity of the landfills listed below.

Using the total projected landfill air space needs of the District for the planning period (33,713,556 cubic yards), 3 of the 18 landfills listed below could manage the District's entire landfill needs for the entire planning period (2013 – 2028). The landfill that accepts the largest percentage of District waste is the Lorain County Landfill. This landfill could accept 74% of the District's waste for the entire planning period. American, Countywide and Kimble could accept the District's entire disposal tonnage for the entire planning period. These landfills have a life expectancy of 73.8, 37.7 and 77.4 years respectively.

The following table summarizes the regional capacity analysis.

Direct Haul Landfills Used by District	2009 Direct Haul Tons	2009 Direct Haul Cubic Yards	Remaining Capacity in Cubic Yards	Average Daily Waste Receipts in Tons	Average Daily Waste Receipts in CY	Years Remaining Based on Average Daily Waste Receipts	% of District Annual Usage in CY	Projected % of Usage for 16 Years
City of Brooklyn	3,743	5,615	0	0	0	0.0	0.0000%	0.00%
Arcelor Mittal	8,187	12,281	2,446,642	29	44	29.0	0.5019%	8.03%
American	75,996	113,994	84,605,983	3,275	4,913	73.8	0.1347%	2.16%
Athens Hocking	1,992	2,988	10,341,500	402	603	83.8	0.0289%	0.46%
Carbon Limestone	962	1,442	28,576,239	2,924	4,386	25.8	0.0050%	0.08%
Central Waste	13,468	20,202	4,367,097	1,220	1,830	7.5	0.4626%	7.40%
County Environmental	583	875	21,779,681	498	747	100.0	0.0040%	0.06%
Countywide	50,730	76,095	44,453,075	3,416	5,124	37.7	0.1712%	2.74%
Evergreen	6	9	9,937,044	1,063	1,595	25.0	0.0001%	0.00%
Geneva	1,743	2,615	826,608	611	917	4.6	0.3163%	5.06%
Kimble	7,484	11,226	42,390,273	1,576	2,364	77.4	0.0265%	0.42%
Lake County	2,298	3,447	3,589,720	558	837	12.4	0.0960%	1.54%
Lorain County	202,795	304,193	25,096,955	3,204	4,806	22.2	1.2121%	19.39%
Mahoning County	4	6	2,777,219	872	1,308	7.5	0.0002%	0.00%
Noble Road	14,163	21,245	13,238,300	1,754	2,631	21.9	0.1605%	2.57%
Ottawa County	5,779	8,669	9,567,619	340	510	78.2	0.0906%	1.45%
Caldwell Landfill	1	2	1,271,655	678	1,017	3.0	0.0001%	0.00%
Totals/Average	389,934	584,900	305,265,610	1,319	1,978	36	0.1916%	2.87%

#### Transfer Station Landfill Capacity Analysis from Transfer Stations

Ohio EPA provided the District with data that indicated which landfills were used by transfer stations that accepted District waste. The data provided did not indicate the amount of District waste sent to each landfill. The purpose of this part of the capacity analysis is to determine the overall capacity, on average, of the landfills used by transfer stations that accepted District waste. Of the landfills used by in-District transfer stations in 2009, the average life expectancy is 32 years.

The following table summarizes the regional capacity analysis.

Landfills Used by Transfer Stations (Consolidated)	Estimated 2009 Tons Received From Transfer Stations	Remaining Capacity in Cubic Yards	Average Daily Waste Receipts in Tons	Average Daily Waste Receipts in CY	Years Remaining Based on Average Daily Waste Receipts
American	168,427	84,605,983	3,275	4,913	73.8
Carbon Limestone	131,336	28,576,239	2,924	4,386	25.8
Central Waste	220	4,367,097	1,220	1,830	7.5
Countywide	488,480	44,453,075	3,416	5,124	37.7
Evergreen	11,378	9,937,044	1,063	1,595	25.0
Geneva	16,722	826,608	611	917	4.6
Kimble	42,740	42,390,273	1,576	2,364	77.4
Lorain County	176,436	25,096,955	3,204	4,806	22.2
Noble Road	34,298	13,238,300	1,754	2,631	21.9
Suburban	9,449	11,687,682	1,550	2,325	19.6
Totals/Average	1,079,486	265,179,256	2,059	3,089	32

Using the projected landfill air space needs of the District for transferred waste during the planning period (30,819,098 cubic yards), 3 of the 10 landfills listed above could manage the District's entire landfill needs for the entire planning period (2013 – 2028). The landfill that accepts the largest percentage of District waste is Countywide. This landfill could accept 100% of the Districts waste for the entire planning period. This landfill has a life expectancy of 37.7 years.

#### Table VI-4A Demonstration

The District also completed Table VI-4A even though Ohio EPA could not provide 100% of the landfills used by District generators. The District tracked which landfills were used by the transfer stations listed in Table III-3, specifically:

Transfer Stations Used by District	Tons Accepted at Transfer Station	Landfills Used by Transfer Stations
Broadview Heights	104,841	American Central Waste Lorain County
Cleveland Heights	17,667	Kimble
Oakwood (WM)	187,945	American Evergreen Geneva Suburban
Glenwillow (Republic)	188,473	Lorain County Carbon Limestone
Harvard Road	245,288	Countywide Lorain County Noble Road
Ridge Road	222,250	Countywide
Rocky River	1,781	Countywide
Shaker Heights	10,086	Lorain County
Strongsville	75,993	Countywide
Akron Central Transfer	5	American
Kimble-Canton	77	Kimble
Kimble-Twinsburg	24,996	Kimble
Medina County CPF	81	Noble Road
Richland County	2	Noble Road
Totals/Average	1,079,485	

The District then completed table VI-4A for the following landfills:

All Landfills Used by District (Consolidated)						
City of Brooklyn						
Arcelor Mittal						
American						
Athens-Hocking						
Carbon Limestone						
Central Waste						
Countywide						
Evergreen						
Geneva						
Kimble						
Lake County						
Lorain County						
Mahoning County						
Noble Road						
Ottawa County						
Suburban						
Caldwell Landfill						

Using the projected landfill air space needs of the District for the planning period (33,713,556 cubic yards), 3 of the 18 landfills listed above could manage the District's entire landfill needs for the entire planning period (2013 – 2028). When a landfill was projected to close before the end of the planning period, the District assumed the waste would go to the Lorain County Landfill for this demonstration. This landfill has a life expectancy of 22 years.

#### **Summary of Regional Landfill Capacity Demonstration**

Based on the above regional disposal capacity analysis and Table VI-4A analysis, the District has demonstrated that access to landfill capacity is achieved for the entire planning period. The District's assessment of regional landfill capacity demonstrates there is sufficient permitted capacity available to manage the District's solid waste until December 31, 2028.

The District anticipates new capacity in northeast Ohio will be approved by Ohio EPA during the sixteen-year planning period. The District has identified adequate capacity for the sixteen-year planning period without the approval of new facilities. However, the adequate demonstration of existing capacity can be influenced by factors outside the control of the District. Waste generated out-of-District, out-of-state, and waste from Canada, may impact capacity in future years. The District monitors the approval process for new and expanded solid waste facilities and also determines annually changes to the remaining capacity in northeast Ohio to assist with the implementation of the *Plan Update*.

The District has described an existing program that reserves the right to secure affordable landfill capacity in Section V of this *Plan Update*. The District reserves the right to facilitate cooperative disposal contracts among Cuyahoga County municipalities/townships. During the planning period, the District also reserves the right to evaluate whether it is cost effective and feasible to secure "air space" or purchasing a disposal facility. Finally, the District reserves the right to enter into joint use agreements, as identified, that are in the best interest of the District.

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

Table VI-5, "Implementation Schedule for Facilities, Strategies, Programs and Activities: Dates and Description", presents descriptions and dates of operation for each facility, program or activity presented in the *Plan Update*.

Programs for residential/commercial recycling, grants, awareness programs, and industrial technical assistance programs are presented in Table VI-5. These programs are discussed in detail in Sections IV and V.

#### D. Identification and Designation of Facilities and Recycling Activities

Table VI-6 includes the solid waste facilities identified and current designations. The District continues to support an open market for the collection, transport and disposal of solid waste. As required in Section 3734.53(A)(13)(a) of the Ohio Revised Code, the District is identifying all Ohio licensed and permitted solid waste landfill, transfer and resource recovery facilities and all licensed and permitted out-of-state landfill, transfer and resource recovery facilities. The District is also identifying recycling and composting programs and facilities that are identified in Section III Inventories.

The District is not designating any facilities in this *Plan Update*. The District reserves the right to designate one or more solid waste facilities and recycling activities to receive solid waste and recyclable materials.

#### E. Authorization Statement to Designate

The Board is authorized to establish facility designations in accordance with Section 343.013 and 343.014 of the Ohio Revised Code. In addition, facility designations, if adopted, will be supported by applicable District rules.

#### F. Waiver Process for the Use of Undesignated Facilities

The District is authorized to designate solid waste management facilities. If the Board elects to designate facilities after this *Plan Update* is approved by the Director of the Ohio EPA, the following waiver process may be followed by any person, municipal corporation, township or other entity that wishes to deliver waste to a solid waste facility not designated by the District.

In the event that any person, Municipal Corporation, township or other entity requests permission to use a facility, other than a designated facility, for the disposal of solid waste generated within the District, the entity must submit a written request for a waiver of designation to the Board. The request must contain the following information:

- 1. Identification of the persons, municipal corporation, township or other entity requesting the waiver;
- 2. Identification of the generators(s) of the solid waste for which the waiver is requested;

- 3. Identification of the type and quantity (in tons per year) of solid waste for which the waiver is requested;
- 4. Identification of the time period(s) for which the waiver is requested;
- 5. Identification of the disposal facility(s) to be used if the waiver is granted;
- 6. If the solid waste is to be disposed in an Ohio landfill, a letter from the solid waste management district where the solid waste will be disposed, acknowledging that the activity is consistent with that District's current plan;
- 7. An estimate of the financial impact to the District that would occur with issuance of the requested waiver; and
- 8. An explanation of the reason(s) for requesting the waiver.

Upon receipt of the written request containing all of the information listed above, the District staff will review it and may request additional information necessary to conduct its review. The Board shall act on a waiver request within ninety days following receipt of the request. The Board may grant the request for a waiver only if the Board determines that:

- 1. Issuance of the waiver is not inconsistent with projections contained in the District's approved *Plan Update* under Section 3734.53 (A)(6) and (A)(7) of the Ohio Revised Code:
- 2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved *Plan Update*; and
- 3. The applicant for the waiver is willing to enter into an agreement requiring the payment of a waiver fee to the District.

#### G. Siting Strategy for Facilities

Section 343.01(G)(2) authorizes the Board to adopt a rule requiring the submission of general plans and specifications to the Board for a determination by the Board that the proposed solid waste facility complies with the District Plan. The Plan Update authorizes the Board to adopt the rule authorized by section 343.01(G)(2) of the Revised Code, but the Board has not adopted a rule to implement the siting strategy included in section VI.G. In the event that the Board adopts a rule to implement the siting strategy, that rule shall comply with the following:

Submission and Review of Plans and Specifications, and

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

#### **DEFINITIONS**

For the purposes of this section, the following definitions shall apply:

- a. **Solid Waste Facilities** shall mean all solid waste, storage, disposal, transfer, recycling, processing, and resource recovery facilities as defined by Ohio EPA.
- b. **Siting Strategy** shall mean the process by which the Board of Directors shall review proposals for the construction or modification of any Solid Waste Facility and determine whether such proposal complies with the *Plan Update*.
- c. <u>General Plans and Specifications</u> shall mean that information required to be submitted to the Board for review for the construction or modification of any proposed Solid Waste Facility and includes, but is not limited to, a site plan for the proposed facility, architectural drawings or artists renderings of the proposed facility, the projected size and capacity of the proposed facility and all other information identified in this Siting Strategy.
- d. <u>Applicant</u> shall mean a person, corporation, Municipal Corporation, township or other political subdivision proposing to construct or modify a Solid Waste Facility within the District.
- e. <u>Modify</u> shall mean a significant change in the operation of an existing in-District Solid Waste Facility: (1) that requires the approval of the Director of the Ohio Environmental Protection Agency; or (2) that involves a change in the type of material, manner of operation, or activities conducted at the facility (*i.e.*, a conversion of a legitimate recycling facility to a transfer station).

#### I. PURPOSE AND OBJECTIVE

The District's Siting Strategy for Solid Waste Facilities ensures that proposals to construct a new Solid Waste Facility within the District or modify an existing Solid Waste Facility within the District are in compliance with the *Plan Update*. The Board shall not approve the General Plans and Specifications for any proposed Solid Waste Facility or the modification of any existing in-District Solid Waste Facility where the construction and operation of the proposed facility, as determined by the Board, will: (1) have significant adverse impacts upon the Board's ability to finance and

implement the *Plan Update*; (2) interfere with the Board's obligation to provide for the maximum feasible utilization of existing in-District Solid Waste Facilities; (3) materially and adversely affect the quality of life of residents within 300 feet of the proposed facility; or (4) have material adverse impacts upon the local community, including commercial businesses within 500 feet of the proposed facility and the adequacy of existing infrastructure to serve the proposed facility.

Except as otherwise provided herein, all proposed Solid Waste Facilities, whether to be sited by or on behalf of the District, or by or on behalf of any person, municipal corporation, township or other political subdivision, shall be subject to this Siting Strategy and shall comply with the requirement to submit General Plans and Specifications to the District.

#### a. Siting Procedure Limited Exemption:

Notwithstanding the foregoing requirement, existing in-District Solid Waste Facilities specifically identified in this Siting Strategy are not subject to this Siting Strategy unless the owner or operator of any such in-District Solid Waste Facility proposes a modification to the operation of the in-District Solid Waste Facility: (1) that requires the approval of the Director of the Ohio Environmental Protection Agency; or (2) that involves a change in the type of material, manner of operation or activities conducted at the facility (*i.e.*, a conversion of a legitimate recycling facility to a transfer station).

# b. <u>Maximum Feasible Utilization of Existing In-District Solid</u> <u>Waste Facilities</u>:

The Board has determined that the owners and operators of existing in-District Solid Waste Facilities rely on market factors in the determination of whether to expand or modify the facilities or current operations and activities at such existing facilities. The private corporate decisions of those owners and operators determine and establish the maximum feasible utilization of those existing in-District Solid Waste Facilities and the limited exemption for such existing in-District Solid Waste Facilities from the application of this Siting Strategy permits the owners and operators of those facilities to determine the maximum feasible utilization of those facilities. Other than the limited exemption from the application of this Siting Strategy, the Board has no additional obligation with respect to the continuing operation or modification of those existing in-District Solid Waste Facilities.

#### II. Requirements

The District requires that General Plans and Specifications for all proposals to construct any new Solid Waste Facility within the District or modify any existing in-District Solid Waste Facility be submitted for a determination by the Board of whether such General Plans and Specifications and the proposals comply with the *Plan Update*. The District may adopt a rule upon final approval of this *Plan Update* as follows:

"No person, municipal corporation, township or other political subdivision, shall construct or modify any solid waste transfer, disposal, recycling or resource recovery facility until the General Plans and Specifications for the proposed improvement have been submitted to and approved by the Board as complying with the *Plan Update*."

#### III. PROCEDURE IMPLEMENTING SITING STRATEGY

Unless otherwise provided herein, or an exemption or waiver from this requirement has been granted by the Board, the following procedure and process shall be followed in the event the construction of a new Solid Waste Facility or the modification of an existing in-District Solid Waste Facility is proposed within the District:

#### STEP 1: Submittal of Plans and Specifications

Any person, Municipal Corporation, township or other political subdivision proposing to construct a new Solid Waste Facility or modify an existing in-District Solid Waste Facility shall:

- a. Provide General Plans and Specifications of the proposed facility to the Board. Such General Plans and Specifications shall include, but may not be limited to, the following documents and information:
  - i. A site plan for the proposed Solid Waste Facility;
  - ii. Architectural drawings or artists renderings of the proposed Solid Waste Facility;
  - iii. Availability of necessary utilities;
  - iv. Projected size and capacity of the proposed Solid Waste Facility;
  - v. Hours of operation;

- vi. Anticipated source of solid waste or recyclable materials to be received at the proposed Solid Waste Facility. If recycling activities will be conducted at the proposed facility, a detailed description of the recycling activity including materials to be recycled, technology to be utilized to accomplish the separation and processing of the recyclable materials, the anticipated percentage of waste reduction anticipated from the operation of the facility and the identification of the market for the sale of the recyclable materials recovered at the facility;
- vii. Types and anticipated number of vehicles utilizing the proposed Solid Waste Facility on an hourly and daily basis;
- viii. Routes to be used by vehicles utilizing the facility and methods of ingress and egress to the facility; and
- ix. Any other information necessary for the Board to evaluate whether the proposed Solid Waste Facility complies with each of the criteria listed below.
- b. Adequately demonstrate to the Board that the construction or modification and subsequent operation of the proposed Solid Waste Facility will:
  - i. Be consistent with the goals, objectives, projections and strategies contained in the *Plan Update*;
  - ii. Not adversely affect financing for the implementation of the *Plan Update*;
  - iii. Not adversely affect the Board's obligation to provide for the maximum feasible utilization of existing in-District solid waste facilities;
  - iv. Be installed, operated and maintained to be harmonious and appropriate in appearance and use with the existing or intended character of the area;
  - v. Be adequately served by essential public facilities and services;
  - vi. Not create excessive additional requirements at public cost for public facilities or services;
  - vii. Not be detrimental to the economic welfare of the community;

- viii. Not involve the excessive production of traffic, noise, smoke, fumes or odors;
- ix. Have vehicular approaches to the property that are designed not to create an interference with traffic;
- x. Not result in the destruction, loss or damage of a natural, scenic, or historic feature of major importance; and
- xi. Not adversely affect property values within the surrounding community.
- c. The Applicant shall submit any additional information as the Board requests to establish, to the reasonable satisfaction of the Board, that the construction or modification and subsequent operation of the proposed Solid Waste Facility or proposed modification of an existing in-District Solid Waste Facility will comply with the *Plan Update*.

#### STEP 2: Board Review

The Board shall conduct a review of the information submitted for the proposed Solid Waste Facility to determine whether the Applicant has adequately demonstrated that the proposed Solid Waste Facility will be constructed or modified and subsequently operated in compliance with the *Plan Update* and demonstrated that the impacts listed in Step I do not adversely affect the District, its residents and businesses. The Board may expend District funds to employ a consultant or consultants familiar with Solid Waste Facility construction and operation, land use planning and solid waste planning to assist the Board in implementing this Siting Strategy and in its determination of whether a proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility complies with the *Plan Update*.

Within sixty days of receiving the General Plans and Specifications from an applicant, the Board shall make a determination as to whether the General Plans and Specifications submitted by the applicant contain sufficient information for the Board to complete its review of the proposal. In the event the Board determines that more information is necessary to complete its review of the proposal, the Board shall notify the Applicant of such request in writing within ten days from the date that the Board determines that additional information is required.

Within ninety days of determining that the Applicant has submitted a complete set of General Plans and Specifications, the Board shall determine whether the proposal complies with the *Plan Update* and the

criteria identified in Step 1 herein. The Board shall notify the Applicant of its decision in writing. While the Board has broad discretion regarding the approval of General Plans and Specifications for a proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility, it is the intent of this Siting Strategy that the Board shall not approve General Plans and Specifications for a proposed Solid Waste Facility unless the Board determines that the proposed Solid Waste Facility or modification of an existing in-District Solid Waste Facility complies with the *Plan Update* and the criteria identified in Step 1 herein.

#### **STEP 3: Development Agreement**

In the event the Board determines that the proposed construction or modification and subsequent operation of a Solid Waste Facility complies with the *Plan Update*, the person, municipal corporation, township or other political subdivision proposing to construct or modify the Solid Waste Facility shall enter into a development agreement with the District which memorializes the obligations that are the basis of the Board's conclusion that the General Plans and Specifications demonstrate that the proposed facility or its modification complies with the *Plan Update*. The party proposing to construct a Solid Waste Facility shall have an ongoing obligation to comply with the *Plan Update* and the development agreement.

#### IV. WAIVER

The Board reserves the right to waive application of the requirement for the submission and Board approval of General Plans and Specifications, and any portion or all of the Siting Strategy or otherwise grant exceptions to the rules of the District, or unilaterally modify or amend the Siting Strategy if the Board concludes such waiver, modification or amendment is in the best interest of the District, its residents and businesses and will assist the Board in the successful implementation of the *Plan Update* and further District goals with respect to solid waste and waste reduction activities.

A determination by the Board to construct or modify any District-owned Solid Waste Facility shall be deemed to be in compliance with the *Plan Update* and the other requirements of these rules.

#### **Waiver for Legitimate Recycling Facilities**

The Board has a strong commitment to encourage the development of recycling and waste reduction activities that are consistent with the waste reduction, reuse and recycling goals as may be required by the Ohio Revised Code, the Ohio Administrative Code, the State Solid Waste Management Plan and the *Plan Update*. Upon adequate demonstration to the Board of the likelihood of attainment of certain waste reduction goals, the Board may waive application of the Siting Strategy for any facility determined by the Board as likely to qualify as a "legitimate recycling facility" as defined in Section 3745-27-01(C)(2) of the Ohio Administrative Code.

In the event an Applicant desires a waiver from the application of the Siting Strategy for a legitimate recycling facility, the Applicant shall submit sufficient information to the Board regarding the proposed facility, the waste reduction method to be implemented, technology to be used in the operation of the facility, the source and type of waste to be received at the facility, the materials to be removed from the waste stream and the anticipated amount of waste reduction.

The Board shall review the proposal following the procedures and process in Step 2 of this Siting Strategy and determine whether the waste reduction standards required by OAC Section 3745-27-01(C)(2) are likely to be satisfied at the proposed facility. In the event the Board determines that such facility is likely to qualify as a legitimate recycling facility, the Board may grant a waiver of the application of the Siting Strategy to the proposed facility.

Such waiver may be made contingent upon the execution of a development agreement by which the proposed facility will be obligated to meet the proposed waste reduction standards on a continuing basis and such other obligations regarding operation of the facility as the Board shall require, including inspection of the facility during the operating hours of the facility; such recordkeeping and reporting requirements as may be necessary to establish compliance with the waste reduction goals. Failure to comply with the terms of any such agreement may result in the revocation of Board approval for operation of any such facility. As part of any such development agreement, the Board may require such bond or other assurances in such amounts as the Board determines, in its discretion, shall be necessary to assure that funds are available for the removal of the facility or conversion of the facility to a legal use in the event of non-compliance with waste reduction standards or other obligations as set forth in the development agreement.

#### **Development of New Solid Waste Facilities and Recycling Activities**

The District is aware of the increasing interest in the development of new solid waste facilities and recycling activities within the District, including the use of new technologies that may reduce reliance on landfills for the management of solid waste generated within the District. The District Board may expend District revenues on the feasibility and impact of any

proposed solid waste facilities, recycling activities, including the use of new solid waste management technologies. Any such expenditures shall assist the Board in implementing this *Plan Update*. Additionally, and until a specific proposal for a new solid waste facility or recycling activity within the District is likely to proceed, the use of District generation fees for the study and assessment of a proposed solid waste facility or recycling activity shall not require an update of the District Plan. The Board is authorized to negotiate a development agreement by and between the Board and the proponent of a new solid waste facility and recycling activity within the District which will define what, if any, District revenues may be used to support a proposed development.

## H. Contingencies for Capacity Assurance and District Program Implementation

The District does not anticipate any capacity assurance or program implementation problems during this planning period. Three of the landfills used by the District have ample capacity available throughout the planning period. There are several landfills in northeast Ohio with the capability to provide capacity if an emergency arose with the landfills used by the District. In addition, the District is aware of proposed landfill expansions in Northeast Ohio that would significantly increase capacity for the District.

If there is an emergency impacting the District, the Board will meet on an emergency basis and determine the appropriate actions to take to ensure compliance with this *Plan Update*. The following section defines the District's specific contingencies:

#### **Disposal Capacity**

The District is nearly 100% reliant on out-of-District landfill capacity. While District disposal capacity is assured for the duration of the planning period, aspects of management, control and pricing are real concerns to the District.

The District is prepared, if necessary and as determined by the Board, to explore the following options if landfill capacity, solid waste management or the cost of solid waste collection, transportation and disposal deteriorates to unacceptable levels:

1. The District may develop a waste disposal cooperative for the purchase or reservation of solid waste disposal capacity for solid waste generated within the District in one or more permitted and licensed landfills outside the District.

- The District may also explore other alternatives which will assure communities and other waste generators of viable solid waste disposal options. This may include the purchase of an existing solid waste facility or design, construct and operate solid waste facilities within or outside the District's boundaries.
- The District may enter into joint use agreements with other solid waste districts to either obtain new capacity or to secure better disposal options for District generators.

#### **Transfer Capacity**

The above referenced potential disposal issue also impacts the transfer of solid waste in the District. The District utilizes a network of licensed public and private transfer stations located throughout Cuyahoga County.

The District monitors the management of solid waste and governmental contracts to evaluate the cost of the transfer of solid waste out-of-District. The District may also study individual facilities' roles relative to ultimate solid waste disposal destinations, potential disposal cooperative development, as well as other actions which may be identified during the planning period.

While it is likely that the private and public sectors will continue to serve the transfer capacity needs of the District, the District reserves the right to respond to changes in the solid waste market and/or management conditions without seeking a full amendment (see material change in circumstances) of the adopted *Plan Update*.

#### **Recycling Capacity**

Recycling in the District remains strong with ample infrastructure to handle the District's current and future needs. In the unlikely event that future District residential recycling needs are not met by the private sector, the District will evaluate whether the District should provide, directly or indirectly, recycling services. The following examples are included in this *Plan Update* as potential actions that could be initiated if the District Board determines recycling processing conditions in the District have deteriorated to an unacceptable level:

- 1. Whether the District should own or operate a Material Recovery Facility (MRF);
- Whether the District should designate solid waste facilities and flow control solid waste and recyclable materials to the designated facility;

- 3. The District may issue an RFP for the design, construction and operation of a MRF. The District will evaluate whether to issue the RFP unilaterally or facilitate the issuance of an RFP with a Council of Governments (COG) or other contracting cooperative;
- The District may purchase an existing solid waste facility for the purpose of utilizing it for a MRF or a combination MRF and transfer facility;
- 5. The District may seek the establishment of a privately owned, financed and operated MRF for Cuyahoga County with support by the District.

While it is highly likely that the private sector will continue to serve the recycling processing needs of the District, the District reserves the right to respond in a timely fashion to changing market and/or management conditions without seeking an amendment of the *Plan Update*.

#### **Program Implementation**

Implementation of the District's Plan Update requires that the District receive adequate annual funding to implement the programs, and for some programs, having 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 which programs the District will provide based upon the following criteria:

- The program's impact on reducing the waste stream;
- Long-term impacts of the program;
- The availability of non-District entities to operate the program.

This report will be provided to the Board for their review and recommendations regarding modification or elimination of District programs. If, based upon this report, it is determined that elimination or modification of District programs has a substantial impact on the implementation of the District's Plan Update, the Board may consider this as a Material Change in Circumstances and amend the Plan.

#### Conclusion

The Community continues to support the programs and services offered to the Community by the District. The District has been involved in statewide issues that may have an effect on solid waste planning and management within the District. Cuyahoga County is unique among the three largest solid waste management districts within Ohio because it does not have either a publicly owned or privately owned solid waste disposal facility within the District. The District has concluded that it will be necessary to develop and present to the Board an analysis of proposed new legislative and regulatory changes in an effort to improve the value of the facilities, programs and activities that solid waste districts offer to their communities. The District has participated in all such discussions at the state legislative level and with Ohio EPA. The Board is authorized to retain the services of legislative agents, attorneys and consultants to assist the Board in assessing the impact of any new legislative and administrative proposals on the District and its residents and on the ability of the Board to implement this *Plan Update*. The Board's decision to retain the services necessary to respond to legislative and administrative changes shall not require an update of this *Plan Update*.

Waste Management Methods Used and Processing Capacity Needed for Each Year of the Planning Period Table VI-1

		Tone	Ot anoT told	Ma	ınagement №	Management Method Used and Processing Capacity Required in TPY	and Processi	ng Capacity F	Required in T	ΡY
Year	Tons of SW Generated	Source Reduced	be Managed by SWMD	Recycling	Transfer	Yard Waste YW Land Composting Application	YW Land Application	Incineration	MSW Composting	Landfilling
2009	2,551,482	0	2,551,482	914,393	1,079,485	167,479	0	69	0	1,469,542
2010	2,637,322	0	2,637,322	1,014,379	1,081,496	155,702	0	69	0	1,467,172
2011	2,608,083	0	2,608,083	1,005,545	1,083,510	155,702	0	69	0	1,446,767
2012	2,579,382	0	2,579,382	650'266	1,085,528	155,702	0	69	0	1,426,552
2013	2,551,081	0	2,551,081	988,849	1,087,550	155,702	0	69	0	1,406,461
2014	2,523,172	0	2,523,172	980,910	1,089,576	155,702	0	69	0	1,386,491
2015	2,505,763	0	2,505,763	973,238	1,091,605	155,702	0	69	0	1,376,754
2016	2,491,811	0	2,491,811	620'696	1,093,639	155,702	0	69	0	1,372,961
2017	2,506,713	0	2,506,713	968,770	1,095,676	155,702	0	69	0	1,382,172
2018	2,521,702	0	2,521,702	974,989	1,097,717	155,702	0	69	0	1,390,942
2019	2,536,779	0	2,536,779	981,253	1,099,761	155,702	0	69	0	1,399,755
2020	2,551,944	0	2,551,944	987,565	1,101,810	155,702	0	69	0	1,408,609
2021	2,560,702	0	2,560,702	993,923	1,099,448	155,702	0	69	0	1,411,008
2022	2,569,488	0	2,569,488	1,000,329	1,097,092	155,702	0	69	0	1,413,388
2023	2,578,301	0	2,578,301	1,006,783	1,094,741	155,702	0	69	0	1,415,747
2024	2,587,141	0	2,587,141	1,013,285	1,092,395	155,702	0	69	0	1,418,085
2025	2,596,010	0	2,596,010	1,019,836	1,090,053	155,702	0	69	0	1,420,403
2026	2,604,905	0	2,604,905	1,026,436	1,087,717	155,702	0	69	0	1,422,699
2027	2,613,829	0	2,613,829	1,033,085	1,085,386	155,702	0	69	0	1,424,973
2028	2,622,780	0	2,622,780	1,039,785	1,083,060	155,702	0	69	0	1,427,225

Tons of SW Generated - Table V-4

Tons Source Reduced - Table V-5 and Table V-6

Net Tons to be Managed by SW District - Calculated as Tons of SW generated - Tons of Source Reduction

Recycling- Table V-5 and Table V-6

Transfer - 2009 from Table III-3, 2010-2028 calculated based on the change in District population (0.20% annually from 2010 - 2020 and -0.21% from 2011 to 2028).

Yard Waste Composting - Table V-5

ncineration - Table V-5 and Table V-6 and III-2

# Sample calculations:

2009 Net Tons to be Managed by SWMD = Tons of SW Generated - Tons Source Reduced 2,551,482 - 0 = 2,551,482

2010 Transfer Capacity Required = 2009 tons \* Rate of Population Change  $1,081,496 = 1,079,485 + (1,079,485 \times 0.00186)$ 

2009 Landfilling Required = Net Tons to be Managed by SWMD - Recycling - Yard Waste Composting 1,469,542 = 2,551,482 - 914,393 - 167,479 - 69

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

Year	Tons Generated	Source Reduction & Recycling	Incineration	Composting	Landfilling	Ash Disposal
2009	1,731,395	351,034	27	167,479	1,212,855	16
2010	1,623,954	286,606	27	155,702	1,181,619	16
2011	1,612,106	291,309	27	155,702	1,165,068	16
2012	1,600,469	296,108	27	155,702	1,148,633	16
2013	1,588,912	300,935	27	155,702	1,132,249	16
2014	1,577,434	305,791	27	155,702	1,115,914	16
2015	1,576,147	310,677	27	155,702	1,109,742	16
2016	1,578,014	312,842	27	155,702	1,109,444	16
2017	1,588,573	315,281	27	155,702	1,117,564	16
2018	1,599,198	318,232	27	155,702	1,125,237	16
2019	1,609,889	321,213	27	155,702	1,132,948	16
2020	1,620,648	324,224	27	155,702	1,140,695	16
2021	1,625,268	327,266	27	155,702	1,142,273	16
2022	1,629,893	330,339	27	155,702	1,143,826	16
2023	1,634,525	333,442	27	155,702	1,145,354	16
2024	1,639,161	336,578	27	155,702	1,146,855	16
2025	1,643,804	339,745	27	155,702	1,148,330	16
2026	1,648,452	342,945	27	155,702	1,149,778	16
2027	1,653,105	346,177	27	155,702	1,151,199	16
2028	1,657,763	349,442	27	155,702	1,152,593	16

Tons of SW Generated -Table V-2

Tons Source Reduced and Recycled - Table V-5

Incineration - Table V-5

Yard Waste Composting - Table V-5

Landfilling Calculated as tons generated minus source reduction, incineration and composting

Ash Disposal- Table IV-5. 2010-2028 tonnage projected to remain flat like incineration.

#### Sample calculations:

2009 Landfilling = Tons Generated - Source Reduction and Recycling - Incineration - Yard Waste Composting 1,212,855 = 1,731,395 - 351,034 - 27 - 167,479

Table VI-3
Summary for Industrial Waste Management Methods

	Tons Generated	Management Method in TPY				
Year		Source Reduction & Recycling	Incineration	MSW Composting	Landfilling	Ash Disposal
2009	748,970	563,359	43	0	185,569	20
2010	942,118	727,773	43	0	214,303	20
2011	924,595	714,236	43	0	210,316	20
2012	907,397	700,952	43	0	206,403	20
2013	890,520	687,914	43	0	202,563	20
2014	873,956	675,119	43	0	198,795	20
2015	857,700	662,562	43	0	195,096	20
2016	841,747	650,238	43	0	191,467	20
2017	845,956	653,489	43	0	192,424	20
2018	850,186	656,757	43	0	193,387	20
2019	854,437	660,040	43	0	194,354	20
2020	858,709	663,340	43	0	195,326	20
2021	863,002	666,657	43	0	196,303	20
2022	867,317	669,990	43	0	197,284	20
2023	871,654	673,340	43	0	198,271	20
2024	876,012	676,707	43	0	199,262	20
2025	880,392	680,091	43	0	200,259	20
2026	884,794	683,491	43	0	201,261	20
2027	889,218	686,909	43	0	202,267	20
2028	893,664	690,343	43	0	203,279	20

Tons of SW Generated -Table V-3

Tons Source Reduced and Recycled - Table V-6

Incineration - Table V-6

Landfilling Calculated as tons generated minus source reduction, incineration and composting

Ash Disposal- Table IV-6. 2010-2028 tonnage projected to remain flat like incineration.

#### Sample calculations:

2009 Landfilling = Tons Generated - Source Reduction and Recycling - Incineration - Yard Waste Composting 185,569 = 748,970 - 563,359 - 43 - 0

Table VI-4A Waste Management Method: Landfill

	Average Daily	Remaining Capacity		Airspace (cubic yds)									Ton	s of District S	Tons of District SW Managed								
Location (County & State)	Waste (Tons) Y	Years Source	ta Gross	Net	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026 20	2027 2028
n-District Facilities																							
City of Brooklyn	0	0 Ohio EPA	EPA 0	0	3,743	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arcelor Mittal	53	29 Ohio EPA	EPA 2,446,642	2 1,223,321	8,187	8,174	8,060	7,947	7,836	7,724	7,670	7,649	7,700	7,749	7,798	7,848	7,861	7,874	7,887	2,900	7,913	7,926 7,	7,939 7,951
Out-of-District Facilities	es																						
American	3,275	73.8 Ohio EPA	EPA 84,605,983	3 42,302,992	244,423	244,029	240,634	237,272	233,930	230,608	228,989	228,358	229,890	231,349	232,815	234,287 2	234,686 23	235,082 2:	235,475 23	235,864 2:	236,249 23	236,631 237	237,009 237,384
Athens Hocking	402	83.8 Ohio EPA	EPA 14,773,500	0,386,750	1,992	1,989	1,96,1	1,934	1,906	1,879	1,866	1,861	1,874	1,885	1,897	1,909	1,913	1,916	1,919	1,922	1,925	1,928	,932 1,935
Carbon Limestone	2,924	25.8 Ohio EPA	EPA 28,576,239	14,288,120	132,298	132,084	130,247	128,427	126,618	124,820	123,944	123,602	124,431	125,221	126,014	126,812	127,028	127,242 1;	127,454 12	127,665 12	127,873	128,080 128	128,285 128,488
Central Waste	1,220	7.5 Ohio EPA	EPA 4,367,097	7 2,183,549	13,688	13,666	13,476	13,287	13,100	12,914	12,824	12,788	0	0	0	0	0	0	0	0	0	0	0
County Environmental	498	100 Ohio EPA	EPA 21,779,681	10,889,841	283	285	574	299	228	220	546	545	548	295	222	229	290	561	295	563	564	564 5	292
Countywide	3,416	37.7 Ohio EPA	EPA 44,453,075	75 22,226,538	539,210	538,340	530,853	523,435	516,062	508,734	505,161	503,769	507,149	510,368	513,601	516,850 5	517,731 5	518,604 5	519,470 52	520,328 5	521,178 52	522,021 522	522,855 523,682
Evergreen	1,063	25 Ohio EPA	EPA 9,937,044	4,968,522	11,384	11,366	11,208	11,051	10,895	10,741	10,665	10,636	10,707	10,775	10,843	10,912	10,931	10,949	10,967	10,985	11,003	11,021 11,	11,039 11,056
Geneva	611	4.59 Ohio EPA	EPA 826,608	413,304	18,465	18,435	18,179	17,925	17,672	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kimble	1,576	77.4 Ohio EPA	EPA 42,390,273	73 21,195,137	50,224	50,143	49,445	48,754	48,068	47,385	47,052	46,923	47,238	47,537	47,839	48,141	48,223 4	48,305 4	48,385 41	48,465 4	48,544 4	48,623 48,	48,701 48,777
ake County	228	12.4 Ohio EPA	EPA 3,589,720	1,794,860	2,298	2,294	2,262	2,231	2,199	2,168	2,153	2,147	2,161	2,175	2,189	2,203	2,206	0	0	0	0	0	0
orain County	3,204	22.2 Ohio EPA	EPA 25,096,955	12,548,478	379,231	382,357	377,039	371,770	366,535	378,751	376,091	375,055	390,449	392,927	395,416	397,918 3	398,596 40	401,478 40	402,148 40	402,813 40	403,471 40	404,123 404	404,769 405,409
Mahoning County	872	7.45 Ohio EPA	EPA 2,777,219	1,388,610	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
Voble Road	1,754	21.9 Ohio EPA	EPA 13,238,300	0 6,619,150	48,461	48,383	47,710	47,043	46,381	45,722	45,401	45,276	45,580	45,869	46,159	46,451	46,531 4	46,609 4	46,687 46	46,764 4	46,840 4	46,916 46,	46,991 47,065
Ottawa County	340	78.2 Ohio EPA	EPA 9,567,619	9 4,783,810	5,779	5,770	5,689	5,610	5,531	5,452	5,414	5,399	5,435	5,470	5,505	5,539	5,549	5,558	5,567 5	5,577	5,586	5,595 5,	5,604 5,613
Suburban	1,550	19.6 Ohio EPA	EPA 11,687,682	5,843,841	9,449	9,434	9,303	9,173	9,043	8,915	8,852	8,828	8,887	8,944	000'6	9,057	9,073	880'6	9,103	9,118	9,133	9,148 9,	9,162 9,177
Out-of-State Facilities	S																						
Caldwell Landfill	8/9	3 IDEM	M 1,271,655	5 635,828	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alata Tagas	7 000	-	****																				

# Sample calculation:

Total Waste Landfilled Arcelor Mittal 2009 waste = Arcelor Mittal 2010 waste received in 2010 x Total Waste Landfilled in 2009

 $1,467,049 \times \frac{8,187}{1,469,419} = 8,174$ 

Average "Jaliy Waste received, remaining years and atspace is provided from Ohio EPA 2009 Waste Received by Landfill - Table III-1 and III-3 2010 Waste Received by Landfill is calculated based on the percentage of waste received the previous year. When a landfill used the previous year is out of space, the waste that would have been allocated to this landfill is allocated to Lorain Courty Landfill.

Table VI-4B Waste Management Method: Incinerator

Facilities Used by District Name and								ĭ	ons of [	Tons of District SW Managed	SW Mar	aged								
Location (County & State)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
In-District Facilities			-	-	_	_	_						_	-	_			-	-	
Day-Glo Color Corporation	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
Richard Hilliard House	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Orban's Flowers	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Pinecrest Condominium	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Holy Family Home	29	29	29	29	58	53	59	29	53	50	29	59	29	29	29	29	59	53	59	29
Out-of-District Facilities																				
Stericycle, Inc.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Out-of-State Facilities																				
Indianapolis Resource Recovery Facility	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Total	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123

2009 Tonnage from Table III-2

The total waste incinerated 2010 - 2028 is from Table VI-1.

Projections are based on percentage managed per facility during the reference year.

Sample calculation:

2010 Day-Glo Color Corp. tonnage = 2009 Day-Glo Color Corp. tonnage x 2010 total tons (2009 total tons)

$$63 = \frac{63}{123} \times 123$$

Table VI-4C Waste Management Method: Transfer

Facilities Used by District	Average Daily										Tons of Distr	Tons of District SW Managed	pə								
	Waste (Tons)	5003	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
In-District																					
Broadview Heights T.S.	N/A	104,841	105,036	105,232	105,428	105,624	105,821	106,018	106,216	106,413	106,612	106,810	107,009	106,780	106,551	106,323	106,095	253,859	254,728	105,414	105,188
Cleveland Heights T.S.	N/A	17,667	17,700	17,733	17,766	17,799	17,832	17,865	17,899	17,932	17,965	17,999	18,032	17,994	17,955	17,917	17,878	42,778	42,925	17,764	17,726
Oakwood (WM) T.S.	N/A	187,945	188,295	188,646	188,997	189,349	189,702	190,055	190,409	190,764	191,119	191,475	191,832	191,421	191,011	190,601	190,193	455,084	456,642	188,972	188,567
Glenwillow (Republic) T.S.	N/A	188,473	188,824	189,176	189,528	189,881	190,235	190,589	190,944	191,300	191,656	192,013	192,371	191,959	191,547	191,137	190,727	456,362	457,925	189,503	189,097
Hanard Road T.S.	N/A	245,288	245,745	246,203	246,661	247,121	247,581	248,042	248,504	248,967	249,431	249,895	250,361	249,824	249,289	248,755	248,221	593,932	595,966	246,629	246,100
Ridge Road T.S.	N/A	222,250	222,664	223,079	223,494	223,911	224,328	224,745	225,164	225,583	226,004	226,425	226,846	226,360	225,875	225,391	224,908	538,149	539,992	223,465	222,986
Rocky River T.S.	N/A	1,781	1,784	1,788	1,791	1,794	1,798	1,801	1,804	1,808	1,811	1,814	1,818	1,814	1,810	1,806	1,802	4,312	4,327	1,791	1,787
Shaker Heights T.S.	N/A	10,086	10,105	10,124	10,142	10,161	10,180	10,199	10,218	10,237	10,256	10,275	10,295	10,273	10,251	10,229	10,207	24,422	24,506	10,141	10,119
Strongsville T.S.	N/A	75,993	76,135	76,276	76,418	76,561	76,703	76,846	76,989	77,133	77,276	77,420	77,565	77,398	77,232	77,067	76,902	184,007	184,637	76,408	76,245
Out-of-District																					
Akron Central Transfer	N/A	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	12	12	5	5
Kimble-Canton T.S.	N/A	11	71	77	71	78	78	78	78	78	78	78	79	78	78	78	78	186	187	71	11
Kimble-Twinsburg T.S	N/A	24,996	25,043	25,089	25,136	25,183	25,230	25,277	25,324	25,371	25,418	25,466	25,513	25,458	25,404	25,349	25,295	60,524	60,732	25,133	25,079
Medina County CPF	N/A	18	84	84	81	82	83	82	82	82	82	83	83	82	82	82	82	196	197	18	84
Richland County T.S.	N/A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5	5	2	2
Totals		1,079,485 1,081,496		1,083,510	1,085,528	1,087,550	1,089,576 1,091,605	1,091,605	1,093,639	1,095,676	1,097,717	1,099,761	1,101,810	1,099,448	1,097,092	1,094,741	1,092,395	2,613,829	2,622,780	1,085,386	1,083,060

The actual waste transferred in 2009 is from Table III-3.

The total waste transferred 2010 - 2028 is from Table VI-1.

Projections are based on percentage managed per facility during the reference year.

Sample calculation:

Cleveland Heights Transfer Cleveland Height Transfer Station 2009 x Total 2010 Station 2010 = Total 2009

x 1,081,496

1,079,485

17,700=

Facilities Used by District Name and									1	Tons of Dis	trict SW M	anaged								
Location (County & State)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Abitibi Consolidated (458 sites)	12,382	13,736	13,616	13,502	13,390	13,283	13,179	13,041	13,118	13,203	13,288	13,373	13,459	13,546	13,633	13,721	13,989	14,213	13,989	14,374
Bay Village	469	520	516	511	507	503	499	494	497	500	503	506	510	513	516	519	530	538	530	544
Bedford Heights Broadview Heights	22 4	24 4	24	24 4	24 4	24 4	23	23 4	23 4	23 4	24 4	24	24 4	24 4	24 4	24	25 5	25 5	25 5	26 5
Brooklyn	11.23	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13
Brook Park	8.75	10	10	10	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10
Cleveland	4018.64	4,458	4,419	4,382	4,346	4,311	4,277	4,233	4,258	4,285	4,312	4,340	4,368	4,396	4,425	4,453	4,540	4,613	4,540	4,665
Cuyahoga Heights Euclid	4.50 388.26	5 431	5 427	5 423	5 420	5 417	5 413	5 409	5 411	5 414	5 417	5 419	5 422	5 425	5 427	430	5 439	5 446	5 439	5 451
Fairview Park	3.00	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Glenwillow	1.51	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Highland Heights	7.50	8	8	8	8	8	8	8	- 8	8	8	8	8	8	8	8	8	9	8	9
Hunting Valley Lakewood	1.51 15.42	17	17	17	2 17	17	2 16	2 16	2 16	16	17	17	17	17	17	17	17	2 18	17	18
Lyndhurst	5.40	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Middleburg Heights	105.87	117	116	115	114	114	113	112	112	113	114	114	115	116	117	117	120	122	120	123
North Olmsted	165.47	184	182	180	179	178	176	174	175	176	178	179	180	181	182	183	187	190	187	192
North Royalton Oakwood	144.43 4.25	160	159	157	156	155	154 5	152	153 5	154 5	155 5	156	157	158	159 5	160	163	166 5	163	168
Olmsted Township	8.75	10	10	10	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10
Orange	7.89	9	9	9	9	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9
Parma	1529.99	1,697	1,683	1,668	1,655	1,641	1,628	1,611	1,621	1,631	1,642	1,652	1,663	1,674	1,685	1,695	1,729	1,756	1,729	1,776
Parma Heights	1.47	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Pepper Pike Rocky River	574.05 188.69	637 209	631 207	626 206	621 204	616 202	611 201	605 199	608 200	612 201	616 202	620 204	624 205	628 206	632 208	636 209	649 213	659 217	649 213	666 219
Seven Hills	7.50	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	9
Strongsville	2548.31	2,827	2,802	2,779	2,756	2,734	2,712	2,684	2,700	2,717	2,735	2,752	2,770	2,788	2,806	2,824	2,879	2,925	2,879	2,958
University Heights	103.04	114	113	112	111	111	110	109	109	110	111	111	112	113	113	114	116	118	116	120
Household Hazardous Waste Collection Tire Roundup	314.11 209.51	348 232	345 230	343 228	340 227	337 225	334 223	331 221	333 222	335 223	337 225	339 226	341 228	344 229	346 231	348 232	355 237	361 240	355 237	365 243
Electronics Collections	699.30	776	769	763	756	750	744	737	741	746	750	755	760	765	770	775	790	803	790	812
Phone Book Recycling	416.75	462	458	454	451	447	444	439	442	444	447	450	453	456	459	462	471	478	471	484
Able Alloy	340.00	377	374	371	368	365	362	358	360	363	365	367	370	372	374	377	384	390	384	395
Akron-Canton Waste Oil Company Alloy Exchange	4,400.00 501.98	4,881 557	4,839 552	4,798 547	4,758 543	4,720 538	4,683 534	4,634 529	4,662 532	4,692 535	4,722 539	4,752 542	4,783 546	4,814 549	4,845 553	4,876 556	4,971 567	5,051 576	4,971 567	5,108 583
All Scrap Salvage	7,193.62	7,980	7,911	7,844	7,779	7,717	7,657	7,577	7,621	7,670	7,720	7,769	7,819	7,870	7,920	7,972	8,127	8,258	8,127	8,351
Amware Recycling	21,100.00	23,407	23,203	23,008	22,818	22,635	22,458	22,223	22,355	22,498	22,643	22,788	22,935	23,083	23,232	23,382	23,839	24,221	23,839	24,494
Battery Empire	25.03	28	28	27	27	27	27	26	27	27	27	27	27	27	28	28	28	29	28	29
BBN Oil Recycling Bulldog Battery	96.00	106	106 1,430	105	1.406	103	1.384	101	102	1.386	103	1.404	1.413	105	1.431	1.441	1.469	110	1.469	111
Caraustar Recycling	37,060.00	41,112	40,754	40,410	40,078	39,756	39,445	39,033	39,264	39,516	39,770	40,026	40,283	40,543	40,805	41,068	41,871	42,541	41,871	43,022
Cell Phones For Cancer	22.43	25	25	24	24	24	24	24	24	24	24	24	24	25	25	25	25	26	25	26
City Barrel & Drum	39.60	44	44	43	43	42	42	42	42	42	42	43	43	43	44	44	45	45	45	46
Cleveland Furniture Bank Ferrous Processing & Trading	516.00 258.498.24	572 286.764	567 284,267	563 281.868	558 279.547	554 277.303	549 275.134	543 272,262	547 273.871	550 275.629	554 277.400	557 279.184	561 280.981	564 282.792	568 284.617	572 286.455	583 292.052	592 296.730	583 292.052	599 300.082
Gateway Recycling	55,297.00	61,344	60,809	60,296	59,800	59,320	58,856	58,241	58,585	58,961	59,340	59,722	60,106	60,494	60,884	61,277	62,475	63,475	62,475	64,192
Goodwill Industries	902.50	1,001	992	984	976	968	961	951	956	962	968	975	981	987	994	1,000	1,020	1,036	1,020	1,048
Greater Cleveland Habitat For Humanity	563.74	625	620	615	610	605	600	594	597	601	605	609	613	617	621	625	637	647	637	654
Horwitz & Pintis Co.  I. Schuman Co.	110.00 500.00	122 555	121 550	120 545	119 541	118 536	117 532	116 527	117 530	117 533	118 537	119 540	120 543	120 547	121 551	122 554	124 565	126 574	124 565	128 580
Infoshred.net	1,200.00	1,331	1,320	1,308	1,298	1,287	1,277	1,264	1,271	1,280	1,288	1,296	1,304	1,313	1,321	1,330	1,356	1,377	1,356	1,393
Kimble Transfer & Recycling	1,587.01	1,761	1,745	1,730	1,716	1,702	1,689	1,672	1,681	1,692	1,703	1,714	1,725	1,736	1,747	1,759	1,793	1,822	1,793	1,842
KJ Plastics	50.00	55	55	55	54	54	53	53	53	53	54	54	54	55	55	55	56	57	56	58
Lorain County Resource Recovery Complex Metallic Resources	11,455.00 27	12,708	12,597	12,491 29	12,388 29	12,288 29	12,192 29	12,065 28	12,136 29	12,214 29	12,293	12,372 29	12,451 29	12,532 30	12,612 30	12,694	12,942	13,149	12,942 31	13,298
Metalic Resources  Metalico Annaco, Inc.	1,987	2,204	2,185	2,167	2,149	2,132	2,115	2,093	2,105	2,119	2,132	2,146	2,160	2,174	2,188	2,202	2,245	2,281	2,245	2,307
Medina Mulch	1,667	1,849	1,833	1,817	1,802	1,788	1,774	1,755	1,766	1,777	1,789	1,800	1,812	1,823	1,835	1,847	1,883	1,913	1,883	1,935
Middlefield Pallet Inc.	4,417	4,900	4,857	4,816	4,777	4,738	4,701	4,652	4,680	4,710	4,740	4,770	4,801	4,832	4,863	4,895	4,990	5,070	4,990	5,128
Mondo Polymer Niles Iron & Metal	10 196	11 217	11 216	11 214	11 212	11 210	11 209	11 206	11 208	11 209	11 210	11 212	11 213	11 214	11 216	11 217	11 221	11 225	11 221	12 228
Northcoast Inc. Recycling Specialists	1,137	1,261	1,250	1,239	1,229	1,219	1,210	1,197	1,204	1,212	1,220	1,228	1,236	1,244	1,252	1,260	1,284	1,305	1,284	1,320
Painesville Recycling	170	189	187	185	184	182	181	179	180	181	182	184	185	186	187	188	192	195	192	197
Ponz Recycling Industries	955	1,059	1,050	1,041	1,033	1,024	1,016	1,006	1,012	1,018	1,025	1,031	1,038	1,045	1,051	1,058	1,079	1,096	1,079	1,109
Procex, Inc. PSC Metals	60 28,064	67 31,133	66 30.862	65 30.601	65 30.349	64 30.105	64 29.870	63 29,558	64 29.733	64 29.924	64 30,116	65 30.310	65 30,505	66 30,701	66 30,900	66 31,099	68 31,707	69 32,215	68 31.707	70 32,579
Recycle Zone	978	1,085	1,075	1,066	1,058	1,049	1,041	1,030	1,036	1,043	1,049	1,056	1,063	1,070	1,077	1,084	1,105	1,123	1,105	1,135
Republic Waste Services - Akron Recyclery	53	59	58	58	57	57	57	56	56	57	57	57	58	58	58	59	59	58	57	58
RET 3 Job Corp	932	1,033	1,024	1,016	1,007	999	991	981	987	993	1,000	1,006	1,013	1,019	1,026	1,032	1,032	1,022	1,009	1,010
River Recycling Industries, Inc.	9,178	10,182	10,093	10,008	9,925	9,846	9,769	9,667	9,724	9,786	9,849	9,912	9,976	10,041	10,105	10,171	10,171	10,070	9,936	9,949
Royal Oak Recycling Salvation Army	49,140 2,996	54,513 3,324	54,039 3,295	53,583 3,267	53,141 3,240	52,715 3,214	52,302 3,189	51,756 3,156	52,062 3,175	52,396 3,195	52,733 3,215	53,072 3,236	53,414 3,257	53,758 3,278	54,105 3,299	54,455 3,320	54,455 3,320	53,917 3,288	53,200 3,244	53,269 3,248
Shipmaster Recycling	835	926	918	910	903	896	889	879	885	890	896	902	908	913	919	925	925	916	904	905
Shredding Network	2,700	2,995	2,969	2,944	2,920	2,896	2,874	2,844	2,861	2,879	2,897	2,916	2,935	2,954	2,973	2,992	2,992	2,962	2,923	2,927
Stein, Inc.	42,719	47,390	46,977	46,581	46,197	45,827	45,468	44,994	45,259	45,550	45,843	46,137	46,435	46,734	47,035	47,339	47,339	46,872	46,248	46,309
Smurfit-Stone Container Corp. Strategic Materials	557 36,000	618 39,936	613 39,589	607 39,255	602 38,931	598 38,619	593 38,317	587 37,917	590 38,141	594 38,386	598 38,632	602 38,881	605 39,131	609 39,383	613 39,637	617 39,893	617 39,893	611 39,499	603 38,974	604 39,025
The City Mission	206	229	227	225	223	221	220	217	219	220	221	223	224	226	227	229	229	226	223	224
The Lube Stop, Inc.	35	39	38	38	38	37	37	37	37	37	37	38	38	38	38	39	39	38	38	38
Tymex	295	327	324	322	319	316	314	311	313	315	317	319	321	323	325	327	327	324	319	320
Victor Metals Waste Management Of Ohio	1,297	1,439	1,426	1,414	1,403	1,391	1,380	1,366	1,374	1,383	1,392	1,401	1,410	1,419	1,428	1,437	1,437	1,423	1,404	1,406
Waste Management Of Ohio Waste Parchment	4,730 14	5,247 16	5,202 15	5,158 15	5,115 15	5,074 15	5,034 15	4,982 15	5,011 15	5,043 15	5,076 15	5,109 15	5,141 15	5,175 15	5,208 15	5,242 16	5,242 16	5,190 15	5,121 15	5,127 15
Western Reserve Recycling	4,163	4,618	4,577	4,539	4,501	4,465	4,430	4,384	4,410	4,438	4,467	4,496	4,525	4,554	4,583	4,613	4,613	4,567	4,506	4,512
Wilkoff & Sons Co.	4,525	5,020	4,976	4,934	4,893	4,854	4,816	4,766	4,794	4,825	4,856	4,887	4,919	4,950	4,982	5,014	5,014	4,965	4,899	4,905
Willoughby Iron & Waste	4,454	4,941	4,898	4,857	4,817	4,778	4,741	4,691	4,719	4,749	4,780	4,811	4,842	4,873	4,904	4,936	4,936	4,887	4,822	4,829
Other Recycling Totals	282,767 914,393	313,686 1,014,379	310,955 1,005,545	308,330 997,059	305,792 988,849	303,337 980,910	300,964 973,238	297,823 963,079	299,582 968,770	301,505 974,989	303,443 981,253	305,394 987,565	307,361 993,923	309,342 1,000,329	311,337 1,006,783	313,348 1,013,285	313,348 1,023,393	310,253 1,026,941	306,127 1,011,963	306,527 1,027,096
Iotals	014,393	1,014,379	1,000,545	991,059	au0,649	000,9TU	ar 3,238	JU3,079	000,770	or 4,989	001,253	201,365	993,923	1,000,329	1,000,783	1,013,285	1,023,393	1,020,941	1,011,963	1,021,096

Source(s) of information:
The actual waste recycled in 2009 is from Table III-5.
The total waste recycled 2010 - 2028 is from Table VI-1.
Projections are based on percentage managed per facility during the reference year.

Sample calculation:

Total Tons Recycled in 2010 x Total Tons Recycled in 2010 x Recycled in Recycled Recycled

Table VI-4E Waste Management Method: Composting

Facilities Used by District Name and Location									Tons	Tons of District SW Managed	W Manage	p								
(County & State)	5005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Baldwin-Wallace College	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Bedford Compost Facility	1,687	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568
Boyas Excavating Inc.	377	320	350	320	320	320	320	320	320	320	350	320	320	350	320	320	320	320	320	350
Bridgeview (Kurtz Brothers)	25,703	23,896	23,896	23,896	23,896	23,896	23,896	23,896	23,896	23,896	23,896	23,896	23,896 2	23,896	23,896	23,896	23,896	23,896	23,896	23,896
Brooklyn Compost City of	178	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
City of Beachwood - Public Service Dept.	4,153	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861
City of Westlake, Compost facility	25,785	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972	23,972
Cleveland Metroparks Compost	292	1.42	1.12	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271
Cuyahoga Compost Facility	961	863	893	893	893	893	863	893	893	893	893	893	893	893	893	893	893	893	893	893
Cuyahoga Heights Service Dept.	37	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Independence Compost Facility	3,200	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975	2,975
Kurtz Bros' Cloverleaf Compost Facility	2	2	9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5
Landmark Lawn & Garden	2,333	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169
Maple Heights Compost	435	404	404	404	404	404	404	404	404	404	404	404	404	404	404	404	404	404	404	404
Mayfield Village Service Dept.	1,567	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457
Middleburg Heights City Compost	2,421	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251
Miracle Stone	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
N. Olmsted Compost Facility	7,051	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555	6,555
N. Royalton Regional Compost (Kurtz Brothers)	4,510	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193	4,193
Orange Village Compost	1,147	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,066
Rosby Resource Recovery	6,655	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187	6,187
Sansai Environmental	7,694	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153	7,153
Shaker Hts. Ecology Center	92	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09
Solon Compost	7,439	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916	6,916
Tree Master Supply	3,285	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054	3,054
Utilities Supply Co.	4,055	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770	3,770
Utilities Supply Co.	25,815	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000 2	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Bames Composting Facility	51	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
TRC Landscape Service	5,333	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958	4,958
Ohio Mulch Supply	441	410	410	410	410	410	410	410	410	410	410	410	410	410	410	410	410	410	410	410
Lorain County Resource Recovery Complex	3,649	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392	3,392
Smith Brothers	5,152	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790
Back Yard Composting	5,628	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232
Grass Cycling	6,349	5,902	5,902	5,902	5,902	5,902	5,902	5,902		5,902	5,902	5,902	-		$\dashv$	5,902	5,902	5,902	5,902	5,902
Log Recycling	3,996		3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715	3,715
Totals	167,479	155,702	155,702	155,702	155,702	155,702	155, 702	155,702	155,702 1	155,702 1	155,702 1	155,702 1	155,702 1	155,702 1	155,702 1	155,702	155,702	155, 702	155,702	155,702

Source(s) of information:
The actual waste composted in 2009 is from Table III-6.
The total waste composted 2010 - 2028 is from Table VI-1.
Projections are based on percentage managed per facility during the reference year.

Sample calculation:

Total Tons Composted in 2010 x  $\frac{\text{Log Recycling }2009}{\text{Total Tons}}$  = Log Recycling 2010 Total

 $155,702 = \frac{3,996}{167,479} = 3,715$ 

Name of Facility, Strategy, Program	Program	Location (SWMD,	Description of Program/Facility	• •	Date When the ill Take Place
or Activity	Number	City/Township	3,	Operations Begin	Operations Cease
Recycling and Colle	ction Progr	ams		Following W	
Curbside Recycling	CCSWD-1	Cuyahoga	The District will continue to work with political subdivisions in the county to promote and support curbside recycling. Each community collects at a minimum aluminum and steel cans, glass, newspaper, cardboard, magazines, mixed paper, and plastic #1-2.  The District's overall goal for the planning period is to maintain all existing curbside programs, enhance or upgrade them if possible and increase participation.	Ongoing	Determined by Jurisdiction
			awareness and recycling procedures for their curbside programs through the countywide letailed later in this section.	Ongoing	Ongoing
Strategy 1.2: Work w	ith building o	owners to increase re	ecycling opportunities for residents that reside in multi-family housing units as part of its tegy is detailed in section CCSWD-14.	2013	Ongoing
Strategy 1.3: Work w	ith local and	regional haulers and	d processors to encourage the collection and recycling of 3-7 plastics; to identify any barriers to expand process capacity for 3-7 plastics.	2013	Ongoing
Strategy 1.4: Promot of recyclables using c	arts by work	ing with public and	Initiative 1.4.1: Help communities evaluate how automation can benefit their community. Help communities evaluate potential resident reaction to automation. Assist communities with bidding for automated collection in those communities that contract for this service.	2013	Ongoing
private sector service include the following in	•	is effort may	Initiative 1.4.2: Survey private waste haulers to identify any barriers to the widespread use of automated collection. Evaluate opportunities to address any barriers and to increase the capacity of haulers to provide this service.	2013	Ongoing
Strategy 1.5: Evaluat (WARM) (or an equiva		of this recycling pro	gram on reducing greenhouse gas emissions using the U.S. EPA's Waste Reduction Model	Annually	Annually
Curbside Recycling	CCSWD-1	Bay Village	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Beachwood	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Bedford	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Bedford Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Bentleyville	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Berea	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Bratenahl	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Brecksville	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Broadview Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Brook Park	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Brooklyn	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Brooklyn Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing

Name of Facility, Strategy, Program	Program	Location (SWMD,	Description of Program/Facility		Date When the
or Activity	Number	City/Township	Description of Programm actives	Operations Begin	Operations Cease
Curbside Recycling	CCSWD-1	Chagrin Falls Township	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Chagrin Falls Village	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Cleveland	Curbside Recycling Program (see description above). The City of Cleveland's curbside recycling program is projected to be "rolled-out" to all residents from 2011 through 2015. The City plans to add 25,000 homes per year starting in 2011 until all homes are included in the program in 2015.	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Cleveland Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Cuyahoga Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	East Cleveland	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Euclid	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Fairview Park	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Garfield Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Gates Mills	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Glenwillow	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Highland Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Highland Hills	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Hunting Valley	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Independence	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Lakewood	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Linndale	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Lyndhurst	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Maple Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing

Name of Facility, Strategy, Program	Program	Location (SWMD,	Description of Program/Facility		Date When the
or Activity	Number	City/Township	Description of Flogrania active	Operations Begin	Operations Cease
Curbside Recycling	CCSWD-1	Mayfield	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Mayfield Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Middleburg Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Moreland Hills	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Newburgh Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	North Olmsted	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	North Royalton	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Oakwood	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Olmsted Falls City	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Olmsted Township	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Orange	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Parma	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Parma Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Pepper Pike	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Richmond Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Rocky River	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Seven Hills	Curbside Recycling Program (see description above).	Ongoing	Ongoing

Name of Facility, Strategy, Program	Program	Location (SWMD,	Description of Program/Facility	• •	Date When the
or Activity	Number	City/Township	Description of Flogrania actives	Operations Begin	Operations Cease
Curbside Recycling	CCSWD-1	Shaker Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Solon	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	South Euclid	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Strongsville	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	University Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Valley View	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Walton Hills	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Warrensville Heights	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Westlake	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Curbside Recycling	CCSWD-1	Woodmere	Curbside Recycling Program (see description above).	Ongoing	Ongoing
Drop-Off Recycling	CCSWD-2	Cuyahoga	In 2009, there were 619 recycling drop-off locations within the District that were serviced by either the public or private sectors. Of the total drop-off sites in the District in 2009, 458 were operated by Abitibi Bowater which collects mixed paper; and 161 were operated by a mix of municipal and private sector entities. Each operator was responsible for the development and implementation of the drop-offs. Ninety nine of the 161 drop-off centers collected, at a minimum, aluminum and bi-metal cans, glass, plastics and mixed paper. Some sites also collected cardboard, office paper and other materials.	Ongoing	Determined by Jurisdiction
available in Cuyahoga	County. Th	ne District will condu	wareness activities to assist residents with identifying and using drop-off recycling opportunities ct a detailed inventory of all publically available and accessible recycling drop-off sites in the ents to use to identify drop-off sites that are convenient for them using a zip code.	2014	Ongoing
Strategy 2.2: Use U. greenhouse gas emis		aste Reduction Mode	el (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing	Annually	Annually

Name of Facility, Strategy, Program or	Program	Location (SWMD,	Description of Program/Facility	• •	Date When the 'ill Take Place
Activity	Number	City/Township	Description of Frograms admity	Operations Begin	Operations Cease
Yard Waste Management	CCSWD-3	Cuyahoga	There are 2 Class II, 3 Class II/IV, and 25 Class IV registered and licensed compost facilities in the District. The list of compost and yard waste facilities in included in Table III-6. The yard waste compost facilities owned by political subdivisions typically provide municipal leaf collection services to their residents. Private sector compost facilities provide yard waste management services to customers throughout the District.  The District has 11 grass-cycling programs, 2 backyard composting programs and 17 log reuse programs. Non-	Ongoing	Ongoing
			registered community programs including grass-cycling operations, back yard composting programs, chipping programs and leaves to farmers programs are also available in municipalities throughout the District. The district will annually provide financial support to yard waste facilities that provide yard waste composting support services to participating communities.		
			to compost their yard and food waste by partnering with communities to host a District backyard composting rvice to train local Master Composters to conduct these workshops in their communities on behalf of the District.	2013	Ongoing
Strategy 3.2: Evaluate the ways to ensure adequate available to communities t	facilities and se	ervice providers are	Initiative 3.2.1: Conduct a detailed inventory of all publically available and accessible compost facilities in the county. Based on the results of the evaluation, the District may develop new programs and or initiatives to assist in improving, maintaining and increasing the organic waste management infrastructure in the county.	2016	Ongoing
Strategy 3.3: Use U.S. E	PA's Waste Re	eduction Model (WARM)	(or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.	Annually	Annually
Household Hazardous Waste Collection	CCSWD-4	Cuyahoga	The District sponsored periodic "municipal" collection events, where communities would bring Household Hazardous Waste (HHW) to a central location. The District also sponsored annual collection events that were open to the general public. In 2011, a year-round special waste convenience center will replace the seasonal events.	Ongoing	Ongoing
	the amount of H	HHW collected through the	tion to twice a month collection when Special Waste Convenience Center is open in 2011. During the planning ne new program by partnering with all 59 communities to collect HHW from their residents more frequently and to	2011	Ongoing
Strategy 4.2: Evaluate the reduced/eliminated because			n residents at the Special Waste Convenience Center on an appointment basis if municipal HHW collections are	2011	Ongoing
Strategy 4.3: If the rising including the following:	cost of HHW r	management at the Spec	ial Waste Convenience Center threatens the viability of the program, the District may evaluate cost savings options		
Reduce the list of accep     Reduce the frequency o     Implementing a fee for a     Other options as identification.	f collection accepted HHW	materials		2011	Ongoing
, ,		1 0 1	per HHW disposal by developing an education and awareness program to promote the proper disposal of HHW; smote project planning for the efficient use of paint and other HHW products.	2013	2017
Strategy 4.5: Use U.S. E	PA's Waste Re	eduction Model (WARM)	(or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.	Annually	Annually
Computer Recycling	CCSWD-5	Cuyahoga	The District sponsors periodic computer collection events, where communities may bring computers, computer accessories, and cell phones that they have collected from residents. The District will continue to accept computers from municipalities and provide funding for computer recycling.	Ongoing	Ongoing

Name of Facility, Strategy, Program or	Program	Location (SWMD,	Description of Program/Facility		Date When the ill Take Place
Activity	Number	City/Township	Description of Programma duming	Operations Begin	Operations Cease
Strategy 5.1: Evaluate ec programs to determine the impact participation in the include the following initial	effectiveness computer recy	of these services to	Initiative 5.1.1: Survey residents at special collection events or use other surveying initiatives to determine participation trends; evaluate other Districts in the state to determine their successes in promoting computer recycling programs and increasing participation.  Based on the results of the evaluation, the District may adjust, change, enhance or create new education and awareness activities or initiatives to increase participation in the curbside recycling programs throughout the planning period. New initiatives must be cost effective and sustainable.	2013	Ongoing
Strategy 5.2: Use U.S. E	PA's Waste Re	eduction Model (WARM)	(or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.	Annually	Annually
Scrap Tire Recycling	CCSWD-6	Cuyahoga	The District conducts an annual county-wide collection event for communities that have collected scrap tires from their residents.	1998	Ongoing
Strategy 6.1: Evaluate ed programs to determine the impact changing the beha their tires at local tire deal initiative:	effectiveness vior of resident	of these services to is regarding recycling	Initiative 6.1.1: Survey residents at special collection events or use other surveying initiatives to determine participation trends; evaluate other Districts in the state to determine their successes in promoting behavior change in residents for recycling their tires at tire dealers or through their city.  Based on the results of the evaluation, the District may adjust, change, enhance or create new education and awareness activities or initiatives to change the behavior of residents to recycle their tires at tire dealers or through their city throughout the planning period. New initiatives must be cost effective and sustainable.	2017	Ongoing
			ity in the county by encouraging a scrap tire recycler or processor to develop a facility in Cuyahoga County. Work nent agencies to identify incentives, grants or other methods to attract scrap tire recyclers to the District.	2016	Ongoing
Strategy 6.3: Use U.S. E	PA's Waste Re	eduction Model (WARM)	(or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.	Annually	Annually
Litter Collection Program	CCSWD-7	Cuyahoga	The District will annually fund the collection of litter, illegally dumped materials and scrap tires from along the roadside and public properties. Collection will take place in participating communities and will be implemented by using crews of court offenders year round.	1990	Ongoing
Strategy 7.1: Work to ide collection services.	ntify corporate	partners that may wish	to sponsor clean up crews to beautify the community to help reduce the District's annual cost of providing litter	2014	Ongoing
Mercury Collection Program	CCSWD-8	Cuyahoga	This program will be gradually phased out by 2014 due to the establishment of the District's Special Waste Convenience Center. Throughout and after the phase out, the District will continue to educate residents about the need to properly dispose of mercury containing items through community HHW collections and the District's Special Waste Convenience Center through the following strategies:	Ongoing	2014
Strategy 8.1: Reduce the	e need for spec	cial mercury collection s	ites by promoting municipal HI+IW collection events as the appropriate outlet for mercury containing items.	2013	2014
Strategy 8.2: Provide me	ercury spill kits	to all municipalities and	conduct special mercury handling training.	2013	2014

Name of Facility, Strategy, Program	Program	Location (SWMD, County,	Description of Program/Facility	Following W	Date When the
or Activity	Number	City/Township		Operations Begin	Operations Cease
Strategy 8.3: The Disprogram on reducing			Reduction Model (WARM) (or an equivalent model) to evaluate the impact of this recycling	Annually	2014
Phone Book Recycling Campaign	CCSWD-9	Cuyahoga	Evaluate the need to offer a separate recycling program for phone books now that phone books can be recycled through curbside and drop-off recycling programs county-wide. If the District determines to stop program, it will work with the Cleveland Metropark's to phase the program out in 2015. The roll-off containers will be utilized at the Special Waste Convenience Center or donated to the Metropark's or other public/private entity.	Ongoing	2015*
Special Waste Convenience Center	CCSWD-10	Cuyahoga	In 2010, the District signed a five-year lease for Special Waste Convenience Center, completed renovations, and moved its offices into the Center. It began receiving materials in April 2011.	2007	Ongoing
Strategy 10.1: Evalureuse. Potential items  Books Fluorescent bulbs Shrink wrap Shoes Bicycles Carpet		rtunities to utilize the	a Special Waste Convenience Center (SWCC) to collect additional special wastes for recycling or	2013	2026
<ul> <li>Plant Containers</li> <li>Styrofoam</li> <li>Small Quantity Exer</li> <li>Electronics and TVs</li> </ul> Develop a steering co	mmittee mad	de up of community rase the type of mater	representatives to evaluate these opportunities. Based on the recommendations from the steering rials recycled and/or managed at the SWCC depending on the cost and staffing needed to	20.0	2020
Strategy 10.2: Use Use Use greenhouse gas emis		aste Reduction Mod	del (WARM) (or an equivalent model) to evaluate the impact of this recycling program on reducing	Annually	Annually
Residential/Comme	rcial Sector	Education and Aw	rareness Programs		
Local Government Outreach and Assistance	CCSWD-11	Cuyahoga	The District reserves the right to adjust this program and the basic initiatives offered on an annual basis. Some initiatives may or may not be offered each year of the planning period while other new initiatives may be offered.	Ongoing	Ongoing
list-serve of email add	lresses for all	I mayors and counci	nods whenever possible to inform elected officials of District programs and services. Developing a I members in the County. Use e-mail and social media whenever possible to promote the the success stories that arise from those services.	2013	Ongoing
	ceiving the Di		District's contracting consulting services by promoting local success stories and meeting with consulting services. Hold a contracting workshop for local officials on best practices for solid	2014	Ongoing
Children's Education Programs	CCSWD-12	Cuyahoga	Provide education and awareness programs designed for school age audiences to introduce concepts of waste reduction, recycling and re-use to children. Provide educators with technical assistance, workshops and access to reference materials so they can incorporate solid waste education and awareness into their curriculum. Children's education efforts include the following main initiatives:  School Presentations School Assemblies Teacher Workshops Student and Teacher Publications School Contests School Contests	Ongoing	Ongoing
Strategy 12.1: Revie possible to inform sch			on services to schools. Utilize electronic communication methods and social media whenever t District programs.	2013	2018
presentations. Educa certificates. If feasible	ators would c e, the District	onduct presentations t will work with each	partnership with local colleges to train student teachers to conduct District recycling s for the District pro-bono in exchange for school credit toward individual majors and/or teacher college and university to develop the requirements and procedures for the educator cooperative, universities, and train the candidates.	2013	2018
			tions to schools that meet the State of Ohio curriculum requirements whenever possible by sign presentation materials and lesson plans to meet as many of the state requirements as	2013	2016
current education ser meet as many of the	vices to deter teachers requ	rmine, based on tead uirements as possibl	to schools that meet the needs of teachers and offer value whenever possible by evaluating the cher feedback from the online surveys, the necessary changes to ensure the education services te. The District reserves the right to modify the education programs offered from those listed in cies of the District in the new planning period.	2013	2016
General Public Education and Outreach	CCSWD-13	Cuyahoga	Community outreach efforts and programs were designed for broader audiences and to position the District as the community resource for solid waste management as well as solid waste reduction, recycling and re-use. Education and community outreach efforts include the following main initiatives:  Publications  Media Promotions and Advertising  District Web Site	Ongoing	Ongoing

Name of Facility,	Program	Location (SWMD,		Approximate	Date When the
Strategy, Program or Activity	Number	County, City/Township	Description of Program/Facility	Operations Begin	Operations Cease
Strategy 13.1: This progr		e but will be expanded to	transition current system of general public education and awareness to the new education/awareness branding		
	determined to b	ne necessary based on t	the review process conducted for this program and online survey results from District stakeholders. The District stakeholders it is always than those listed in Section IV based on current events, programs and policies of the District in the new	2015	Ongoing
Commercial, Institutiona	al, and Industr	ial Sector Programs			
Commercial, Institutional and Industrial Recycling Assistance	CCSWD-14	Cuyahoga	The District will assist businesses, institutions, and industries with innovative waste management strategies that could reduce solid waste materials, reduce business costs for waste management and the reliance on landfills. The District's full-time Business Recycling Specialist will assist commercial, institutional, and industrial entities with developing workplace waste reduction, recycling, and food waste composting programs. Additional services offered include waste assessments, presentations, brochures, e-newsletter, and recycling market information.	Ongoing	Ongoing
businesses possible. Pro	vide recycling i	nformation and assistan	al recycling by partnering with local trade associations and chambers of commerce to reach the largest number of ce to members through association meetings and trainings. Focus business recycling assistance efforts to target uch as restaurants and large institutions.	2013	2014
Strategy 14.2: Expand el multi-family housing units	by educating a	nd working with	Initiative 14.2.1: Survey building owners of multi-family housing units to determine their willingness to offer recycling services to their tenants and identify any barriers that has prevented them from offering recycling to date.	2013	2014
apartment owners and ma May include the following		lop recycling programs.	Initiative 14.2.2: Develop a pilot apartment recycling program in cooperation with the local apartment owner trade association to develop a best practices model for property owners to follow.	2013	2014
	ces. The purpo		sses, industrial parks, large retail complexes and other suitable entities to develop cooperative contracting for solid solid waste collection and disposal services while making recycling services more cost-effective and available,	2014	2026
Residential, Commercia	l, and Industria	al Sector Market Devel			
Recycling Market Development	CCSWD-15	Cuyahoga	The District will continue to offer initiatives to support and increase recycling markets in the District. Initiatives include:  ODNR Market Development Grants	Ongoing	Ongoing
			Recycling and Sustainable Business Project Support     Initiative 15.1.1: Develop list of private sector recyclers and businesses that have the potential to increase or		
Strategy 15.1: Partner w	ith local private	sector recyclers and	create markets for recyclable materials.	2013	2028
Strategy 15.1: Partner with local private sector recyclers and businesses to increase and or create new markets for recycled materials. May include the following initiatives:  Initiative 15.1.2: Promote ODNR Market Development Grant for recycling services to list of private sector recyclers and businesses created in Initiative 15.1.1.			2013	2028	
			Initiative 15.1.3: Conduct a round table style event with the list of private sector recyclers and businesses created in Initiative 15.1.1 to conceptualize ways to create new markets in the District.	2014	2028
Residential, Commercia	l, and Industria	al Sector Grant Progra			
			The District will continue to offer grant programs designed to increase recycling awareness and collection. Grants include:		
District Grant Programs	CCWSD-16	Cuyahoga	Community Recycling Awareness Grants     School Recycling Mini-Grants	Ongoing	Ongoing
Strategy 16.1: Increase	funding for the	I grant programs for the n	Recycling Container Grant for Non-Profit Agencies     we planning period (see Section VIII for funding amounts).	2013	Ongoing
Strategy 16.2: Use U.S.	EPA's Waste R	Reduction Model (WARM	) (or an equivalent model) to evaluate the impact of this recycling program on reducing greenhouse gas emissions.	2013	Ongoing
Solid Waste Enforcement	nt Programs	<u> </u>			3 3
Solid Waste Enforcement	CCSWD-17	Cuyahoga	The District will continue to contract with the Cuyahoga County Board of Health and the Cleveland Department of Public Health to conduct solid waste facility inspections and other duties associated with the Ohio EPA code enforcement program.	Ongoing	Ongoing
		,	services provided by the two health departments in the County. Based on the data and information derived from the lents to 9.24% of the District's projected revenue starting in 2013. This is over 6% more than the state wide average.	2013	2028
			trategic planning sessions in 2011. Based on Policy Committee meetings and the data and information presented in District is committed to solid waste enforcement as a strategy for the planning period.		
The solid waste enforcem	ent that funding	will be provided in-part	for by the District will be following:		
			requencies including open and closed solid waste landfills, open and closed solid waste transfer stations, compost ider inspections of solid waste recycling facilities but not auto salvage yards or processing facilities.		
Solid waste flow enforce	ment related to	generation fee payment	fraud.	2013	2028
The District will not fund:					
Non-solid waste facility i     Nuisance complaints     Methane monitoring     Infectious waste facilitie     Autoclave inspections	•	r hauler inspections			
Strategy 17.3: Develop a				2013	2028
Strategy 17.4: Develop a detail all activities perform			Strategy 17.2. Any performance based contract developed should include a minimum of 4 quarterly reports that developed by the District.	2013	2028
the District's generation fe	ees are not to b	e expended on non-solid		2013	2028
orrategy 17.6: The Distri	CI WII not fund (	expenses related to C&D	D facilities based on Strategy 17.2.	2013	2028

Name of Facility,	Program	Location (SWMD,		Approximate	Date When the
Strategy, Program	Number	County,	Description of Program/Facility	Operations	Operations
or Activity Other Programs		City/Township		Begin	Cease
Securing Landfill Disposal Capacity	CCSWD-18	Cuyahoga	The District has access to adequate disposal capacity throughout the sixteen-year planning period. To assure that disposal capacity remains affordable and available to Cuyahoga County residents, businesses and municipalities, the District reserved the right to facilitate cooperative disposal contracts amongst Cuyahoga County municipalities/townships. The Board reserved the right to direct the Executive Director to evaluate and provide a report of recommendations to the Board, with input from the Policy Committee, of the costs, benefits and risks associated with the purchase or use of an existing solid waste disposal facility or the construction or use of a new solid waste disposal facility for solid waste generated within the District. The Board reserved the full and complete authority provided by Chapter 343 of the Ohio Revised Code to accept, modify and implement the recommendations contained in the report.	Ongoing	Ongoing
Solid Waste Management Planning	CCSWD-19	Cuyahoga	The District will continue to conduct annual surveys to obtain up to date waste reduction data used for planning purposes and to report to Ohio EPA in its annual district report. The District utilizes Re-TRAC, a web-based reporting and data management system, to collect recycling and waste reduction data. Annual survey processes may be modified based on a review of annual survey methodologies and effectiveness. Annual surveying processes are likely to focus on processor data rather than waste generator data due to the large number of waste generators in the county and the unreliability of their data.	Ongoing	Ongoing
District Wide Contracting for Services	CCSWD-20	Cuyahoga	The District will continue to reserve the right to contract for collection, transportation and/or disposal or processing of solid waste and recyclable materials District-wide from the residential, as well as the industrial/commercial sectors, as the Board determined to be in the best interest of the District.	Ongoing	Ongoing
Education and Awareness Branding (New)	CCSWD-21	Cuyahoga	The District proposes to develop an initiative that will ensure that a common message is relayed to residents and businesses in a uniform presentation. This initiative will brand the education and awareness efforts that are conducted by the District as well as by the cities, townships and villages in the County. This initiative will involve the following:  • Developing a common logo and slogan that can also incorporate individual political subdivision identities.  • Develop a template for web site promotion of recycling programs political subdivisions and school districts.  • Developing a template for newspaper advertisements of recycling programs.  • Developing a template for radio advertisements of recycling programs.  • Develop video vignettes on curbside recycling participation procedures.  • Develop video vignettes on drop-off recycling participation procedures.  • Develop video vignettes on classroom education presentations (various topics).  • Develop common social networking efforts.	Ongoing	Ongoing

#### Notes:

<sup>\*</sup>Tentative; Dependent upon further evaluation.

Table VI-6 Facilities Identified and Current Designations

	Facilities Identified
	Landfills
Name	Location (SWMD)
Ohio EPA p	Ohio EPA permitted and licensed solid waste landfills
	Transfer Facilities
Ohio EPA permi	EPA permitted and licensed solid waste transfer facilities.
	Recycling Facilities
Recycling Fa	Recycling Facilities presented in Section III of this Plan.
	Designated Facilities
None	None

## VII. Measurement of Progress Toward Waste Reduction Goals [ORC Section 3734.53(A)]

#### A. Compliance with Goal #2

The District annually conducts a comprehensive survey that has consistently provided high quality waste reduction data over the last several years. This data, coupled with District waste generation, has resulted in the District achieving, in the reference year, a 30% waste reduction rate in the residential/commercial sector and a 75% waste reduction rate in the industrial sector. Therefore, the District is choosing to show compliance with Goal #2 of the 2009 State Solid Waste Management Plan. Goal #2 requires solid waste districts to:

- Reduce or recycle at least 25% of the residential/commercial waste generated; and
- Reduce or recycle at least 66% of the industrial waste generated.

#### B. Demonstration of Compliance with Goal #2

Since the District's *Plan Update* is based on Goal #2, plan format tables VII-1 and VII-2 are not applicable and have been omitted.

#### Residential/Commercial Sector

In 2009, approximately 30% of the District's residential/commercial waste stream was recycled including yard waste (Table VII-3). This results in a residential/commercial recycling rate of 2.23 pounds per person per day (PPPD).

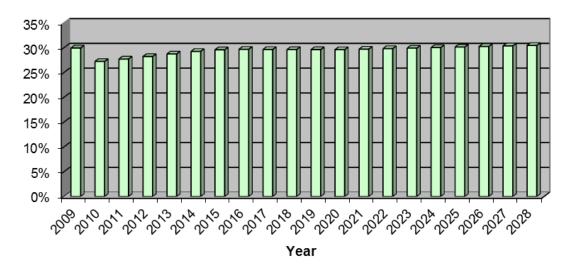
Approximately 45% of the solid waste recycled the residential/commercial sector is residential. This includes the curbside and drop-off recycling programs, yard waste management and special waste collection programs. Solid waste recycled by the commercial businesses is approximately 55% of the waste recycled within the residential/commercial sector. Many commercial businesses have a commitment to recycling and have determined the economic benefits of recycling, in particular cardboard, paper, wood and metals.

The District is committed to maintaining or exceeding the state goals for recycling and waste reduction. The programs presented in Section V and included in Table VI-5 illustrate the District's plans to continue to increase the amount of recyclables and materials that are recycled.

The District will continue to exceed the 25% waste reduction rate throughout the planning period based on the District's projections for successful recycling programs and waste generation within the District. In 2028, the final year of the planning period, the District anticipates a 30% waste reduction rate for the residential/commercial section. This equates to a pounds per person per day (PPPD) rate of 2.16.

The following graph depicts the residential/commercial sector waste reduction rate throughout the planning period.

### Residential/Commercial Waste Reduction Percentage Performance 2009 – 2028

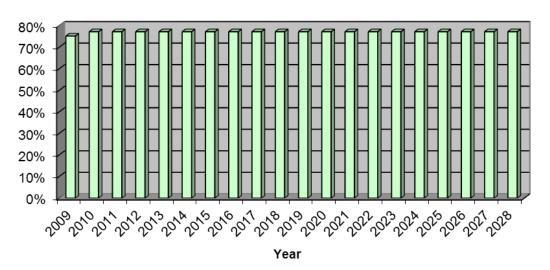


#### **Industrial Sector**

In 2009, 75% of industrial solid waste was recycled (Table VII-4). This equates in a pounds per person per day (PPPD) rate of 2.42. In 2028, the final year of the planning period, the District anticipates a 77% waste reduction rate for the industrial sector. This equates in a pounds per person per day (PPPD) rate of 2.96.

The following graph depicts the industrial sector waste reduction rate throughout the planning period.

Industrial Waste Reduction Percentage Performance 2009 – 2028



#### **All Sectors**

In 2009, the District's total waste reduction rate (residential/commercial plus industrial) was 44% (Table VII-5). This equates in a pounds per person per day (PPPD) rate of 4.65. The District anticipates that the total waste reduction rate will increase to 47% by 2028, the final year of the planning period. This equates in a pounds per person per day (PPPD) rate of 5.12. The projected increase is primarily based on the reduction from the industrial sector.

The following graph depicts all sectors waste reduction rate throughout the planning period.

**Total Waste Reduction Percentage Performance 2009 – 2028** 

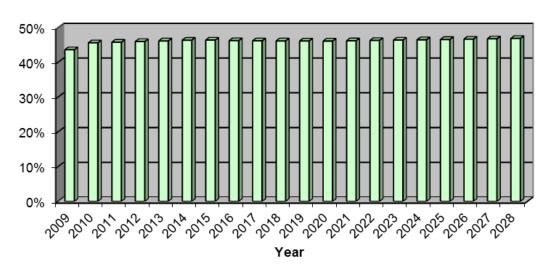


Table VII-3
Annual Rate of Waste Reduction: Residential/Commercial Waste

Year	Recycling (Tons)	Net Composting (Tons)	Net Incineration (Tons)	Landfill (Tons)	Waste Reduction (Tons)	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/person/day)
2009	351,034	167,479	27	1,212,855	518,540	1,275,859	30%	2.23
2010	286,606	155,702	27	1,181,619	442,335	1,280,238	27%	1.89
2011	291,309	155,702	27	1,165,068	447,037	1,282,414	28%	1.91
2012	296,108	155,702	27	1,148,633	451,836	1,284,590	28%	1.93
2013	300,935	155,702	27	1,132,249	456,664	1,286,767	29%	1.94
2014	305,791	155,702	27	1,115,914	461,520	1,288,943	29%	1.96
2015	310,677	155,702	27	1,109,742	466,405	1,291,119	30%	1.98
2016	312,842	155,702	27	1,109,444	468,570	1,293,295	30%	1.99
2017	315,281	155,702	27	1,117,564	471,010	1,295,472	30%	1.99
2018	318,232	155,702	27	1,125,237	473,961	1,297,648	30%	2.00
2019	321,213	155,702	27	1,132,948	476,942	1,299,824	30%	2.01
2020	324,224	155,702	27	1,140,695	479,953	1,302,000	30%	2.02
2021	327,266	155,702	27	1,142,273	482,995	1,299,216	30%	2.04
2022	330,339	155,702	27	1,143,826	486,067	1,296,431	30%	2.05
2023	333,442	155,702	27	1,145,354	489,171	1,293,647	30%	2.07
2024	336,578	155,702	27	1,146,855	492,306	1,290,862	30%	2.09
2025	339,745	155,702	27	1,148,330	495,474	1,288,078	30%	2.11
2026	342,945	155,702	27	1,149,778	498,673	1,285,293	30%	2.13
2027	346,177	155,702	27	1,151,199	501,905	1,282,509	30%	2.14
2028	349,442	155,702	27	1,152,593	505,170	1,279,725	30%	2.16

Recycling, Net Composting, Incineration, Landfill values are from Table VI-2 Tons of Waste Reduction is calculated Population from Table V-1

Waste Reduction rate is calculated

Per Capita Waste Reduction Rate is calculated

#### Sample calculations:

Tons of Waste Reduction = Recycling + net composting + incineration 518,540 = 351,034 + 167,479 + 27

$$\begin{tabular}{ll} Per Capita Waste Reduction & Waste Reduction (Tons) x 2,000 (lbs/tons) \\ & (lb/person/day) = & District Population x 365 days/year \\ \end{tabular}$$

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

Year	Recycling & Source Reduction (Tons)	Net Composting (Tons)	Net Incineration (Tons)	Landfill (Tons)	Waste Reduction (Tons)	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/person/day)
2009	563,359	0	43	185,569	563,401	1,275,859	75%	2.42
2010	727,773	0	43	214,303	727,816	1,280,238	77%	3.12
2011	714,236	0	43	210,316	714,279	1,282,414	77%	3.05
2012	700,952	0	43	206,403	700,994	1,284,590	77%	2.99
2013	687,914	0	43	202,563	687,956	1,286,767	77%	2.93
2014	675,119	0	43	198,795	675,161	1,288,943	77%	2.87
2015	662,562	0	43	195,096	662,604	1,291,119	77%	2.81
2016	650,238	0	43	191,467	650,280	1,293,295	77%	2.76
2017	653,489	0	43	192,424	653,532	1,295,472	77%	2.76
2018	656,757	0	43	193,387	656,799	1,297,648	77%	2.77
2019	660,040	0	43	194,354	660,083	1,299,824	77%	2.78
2020	663,340	0	43	195,326	663,383	1,302,000	77%	2.79
2021	666,657	0	43	196,303	666,700	1,299,216	77%	2.81
2022	669,990	0	43	197,284	670,033	1,296,431	77%	2.83
2023	673,340	0	43	198,271	673,383	1,293,647	77%	2.85
2024	676,707	0	43	199,262	676,750	1,290,862	77%	2.87
2025	680,091	0	43	200,259	680,133	1,288,078	77%	2.89
2026	683,491	0	43	201,261	683,534	1,285,293	77%	2.91
2027	686,909	0	43	202,267	686,951	1,282,509	77%	2.93
2028	690,343	0	43	203,279	690,386	1,279,725	77%	2.96

Recycling, Net Composting, Incineration, Landfill values are from Table VI-3

Tons of Waste Reduction is calculated

Population from Table V-1

. Waste Reduction rate is calculated

Per Capita Waste Reduction Rate is calculated

#### Sample calculations:

Tons of Waste Reduction = Recycling + net composting + net incineration 563,401 = 563,359 + 0 + 43

$$Waste \ Reduction \ Rate \ (\%) = \frac{Waste \ Reduction \ (Tons)}{Waste \ Reduction \ (Tons) + Landfill \ (tons)} \times 100$$

$$75\% = \frac{563,401 \ (Tons)}{563,401 \ (Tons) + 185,569 \ (tons)} \times 100$$

$$Per \ Capita \ Waste \ Reduction \ Waste \ Reduction \ (Tons) \times 2,000 \ (lbs/tons)}{District \ Population \times 365 \ days/year} \times 100$$

$$2.42 \ (lb/person/day) = \frac{563,401 \ (Tons) \times 2,000 \ (lbs/tons)}{1,275,859 \times 365 \ days/year}$$

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

Year	Recycling & Source Reduction (Tons)	Net Composting (Tons)	Net Incineration (Tons)	Landfill (Tons)	Waste Reduction (Tons)	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/person/day)
2009	914,393	167,479	70	1,398,424	1,081,942	1,275,859	44%	4.65
2010	1,014,379	155,702	70	1,395,922	1,170,151	1,280,238	46%	5.01
2011	1,005,545	155,702	70	1,375,384	1,161,317	1,282,414	46%	4.96
2012	997,059	155,702	70	1,355,036	1,152,831	1,284,590	46%	4.92
2013	988,849	155,702	70	1,334,812	1,144,621	1,286,767	46%	4.87
2014	980,910	155,702	70	1,314,709	1,136,682	1,288,943	46%	4.83
2015	973,238	155,702	70	1,304,838	1,129,010	1,291,119	46%	4.79
2016	963,079	155,702	70	1,300,911	1,118,851	1,293,295	46%	4.74
2017	968,770	155,702	70	1,309,988	1,124,542	1,295,472	46%	4.76
2018	974,989	155,702	70	1,318,624	1,130,761	1,297,648	46%	4.77
2019	981,253	155,702	70	1,327,301	1,137,025	1,299,824	46%	4.79
2020	987,565	155,702	70	1,336,020	1,143,337	1,302,000	46%	4.81
2021	993,923	155,702	70	1,338,576	1,149,695	1,299,216	46%	4.85
2022	1,000,329	155,702	70	1,341,110	1,156,101	1,296,431	46%	4.89
2023	1,006,783	155,702	70	1,343,624	1,162,555	1,293,647	46%	4.92
2024	1,013,285	155,702	70	1,346,117	1,169,057	1,290,862	46%	4.96
2025	1,019,836	155,702	70	1,348,589	1,175,608	1,288,078	47%	5.00
2026	1,026,436	155,702	70	1,351,039	1,182,208	1,285,293	47%	5.04
2027	1,033,085	155,702	70	1,353,466	1,188,857	1,282,509	47%	5.08
2028	1,039,785	155,702	70	1,355,872	1,195,557	1,279,725	47%	5.12

Recycling, Net Composting, Incineration, Landfill values are from Table VII-3 and VII-4

Tons of Waste Reduction is calculated

Population from Table V-1

Waste Reduction rate is calculated

Per Capita Waste Reduction Rate is calculated

#### Sample calculations:

Tons of Waste Reduction = Recycling + Net Composting + Net Incineration 1,081,942 = 914,393 + 167,479 + 70

Per Capita Waste Reduction Waste Reduction (Tons) x 2,000 (lbs/tons) (lb/person/day) = District Population x 365 days/year

## VIII. Cost of Financing Plan Implementation [ORC Section 3734.53(A)(9), (12) and (B)]

#### A. Funding Mechanisms

#### 1. District Disposal Fees

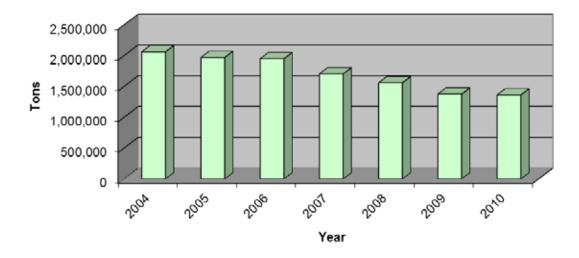
Table VIII-1 is not applicable to the District because the District does not currently assess a tiered disposal fee. The District is not proposing to adopt or impose a tiered disposal fee with the ratification of the *Plan Update*.

#### 2. Generation Fee

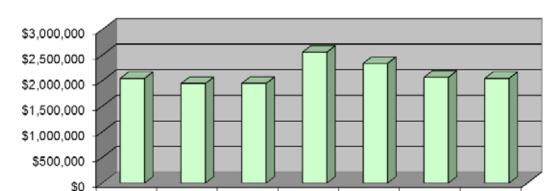
As authorized by Section 3734.573 of the Ohio Revised Code and under the District's current solid waste management plan, the District instituted a \$1.50 per ton generation fee. The generation fee will continue to be collected by the receiving transfer stations, landfills or any other applicable solid waste facility for each ton of solid waste originating within the District and disposed in the State of Ohio. These monies will be forwarded to the District pursuant to Section 3745-28-03 of the Ohio Administrative Code.

An analysis of the District's recent generation fee disposal tonnage from 2004 – 2010 was conducted to better understand past trends. The following chart depicts the amount of solid waste on which the District received its generation fee.

District Actual Generation Fee Tons 2004 - 2010



The following chart depicts the actual generation fees collected for this same period:



#### **District Actual Generation Fees 2004 – 2010**

From years 2004 – 2006, the generation fee collected per ton was \$1.00. Beginning in 2007, the generation fee collected was \$1.50 per ton.

2007

Year

2008

2005

The current economy has affected the District's generation fee revenues, despite the generation fee increase enacted in 2007. The following chart depicts the revenue collected, tons disposed and percent change from 2004 – 2011.

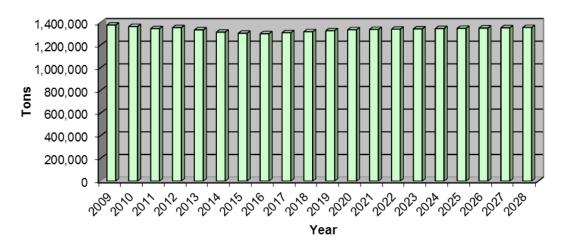
Year	<b>Generation Fee</b>	Tons	Revenue	Tons % Change
2004	\$1.00	2,060,697	\$2,046,314	
2005	\$1.00	1,970,396	\$1,946,109	-4.38%
2006	\$1.00	1,949,599	\$1,949,108	-1.06%
2007	\$1.50	1,705,393	\$2,558,089	-12.53%
2008	\$1.50	1,559,028	\$2,338,542	-8.58%
2009	\$1.50	1,377,786	\$2,066,679	-11.63%
2010	\$1.50	1,364,491	\$2,046,737	-0.96%
2011	\$1.50	1,345,619	\$2,018,428	-1.38%
	Total	13,333,009	\$16,970,006.00	-40.52%

The total decrease in generation fee tonnage was 40.52%. Since 2007, the District's generation fee tonnage has decreased over 35%.

Based on the above analysis, the District incorporated the necessary projections in waste generation in Sections V and VI to account for the current economic conditions and any future growth.

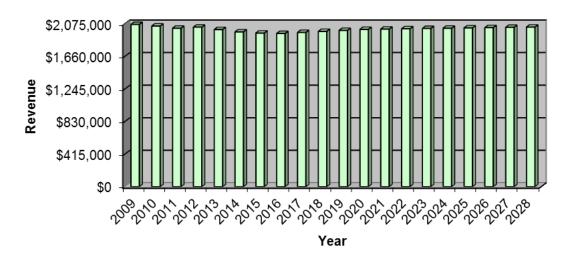
The Generation Fee schedule is provided in Table VIII-2. The District has provided actual revenue and tons disposed for 2009 and 2010. The District also included an estimated revenue amount for 2011 based on six months of generation fee revenue collected. Projected revenues and tonnage for years 2012 – 2028 are based on the landfill projections from Section VI. The following graph depicts the actual and projected disposal tonnage that qualifies for generation fee collection for this *Plan Update*:

District Generation Fee Tons Projections 2009 – 2028



The following graph depicts the actual and projected generation fee revenue for this *Plan Update*:

District Generation Fee Projections 2009 – 2028



#### 3. Summary of District Revenues

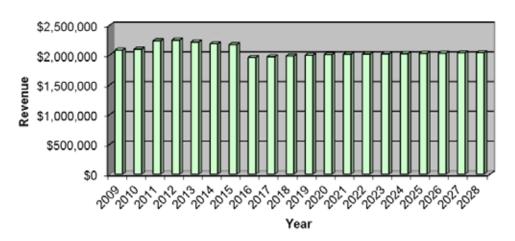
Table VIII-3, "Summary of Revenue Generated and Mechanisms Used," presents the District's actual revenues from 2009 and 2010 and estimated revenues for 2011 – 2028. Estimated revenues include generation fees, miscellaneous revenue, grant revenue and recycling income. Miscellaneous revenues include refunds and reimbursements. Grant revenue includes funds received from ODNR grants and other grants as applied for by the District. Recycling revenue includes income from the sale of recyclables.

Any revenue that may be generated from the operation of the Special Waste Convenience Center, but not limited to user fees, recycling revenue or miscellaneous revenue, shall be deposited in an income account under Chapter 343 under the Ohio Revised Code.

In addition to the revenue sources described above, for the years 2011 – 2015, the District will receive a total of \$1,000,0000 in SEP (Supplemental Environmental Project) funding from the Northeast Ohio Regional Sewer District (NEORSD). This funding must be used exclusively for the household hazardous waste program. Under the terms of the Intergovernmental Agreement by and between the District and NEORSD in 2010, the NEORSD will reimburse the District for 50% of the cost of operating its countywide household hazardous waste disposal program up to \$250,000 per year. NEORSD will continue to pay for half of the HHW disposal costs until the \$1,000,000 funding is exhausted. The District projects the limit to be reached by 2015.

The following graph depicts the District's total actual and projected revenue from 2009 – 2028 and includes all anticipated revenue sources identified above.

District Total Revenue Projections 2009 – 2028



Total revenues are anticipated to increase from \$2.09 million in 2009 to \$2.26 million in 2012, when total annual revenue is expected to peak. Revenue declines from 2013 (\$2.22 million) to 2016 (\$1.96 million), then begins to increase for the remainder of the planning period. In 2028, the final year of the planning period, total revenue is estimated to be \$2.04 million.

#### 4. Other Funding Mechanisms

The District reserves the right to consider other funding mechanisms, including but not limited to, contract fees resulting from the designation of solid waste facilities. This alternate fee mechanism would allow the District to collect fees on all solid waste generated within the District. The process to designate solid waste facilities will comply with Section 343.014 of the Ohio Revised Code. The contract fee is paid by all solid waste facilities designated by the District.

In the event the Board contracts with designated solid waste facilities, the Board will also implement the waiver process for undesignated solid waste facilities. Waiver agreements will permit the delivery of solid waste generated within the District and will require that the owner or operator of the undesignated facility receiving the waiver shall pay a waiver fee to the Board equal to the amount of the contract fee for designated solid waste facilities.

The District's Board of Directors may choose to use these mechanisms to supplement or replace the District generation fee, which was adopted pursuant to Section 3734.573 of the Ohio Revised Code. Any change in the generation fee requires the approval of the District Policy Committee and subsequent ratification by the political subdivisions within the District.

#### B. Cost of Plan Implementation

Table VIII-4, "Anticipated Loans Secured by the District", indicates the District has no outstanding loans and does not anticipate securing loans during the planning period. The District reserves the right to assume debt for any purpose that is in the best interest of the District.

Table VIII-5, "Estimated Cost for Plan Implementation," includes a detailed breakdown of administration, residential/commercial/industrial recycling and collection programs, market development programs, grant programs, residential/commercial education and awareness programs and other programs.

Table VIII-5 presents projected budgets for the above listed categories for the entire planning period. The District understands that changes in revenues and well as expenses throughout the planning period may occur that have not been anticipated in these budgets. The District will evaluate the funding priorities and may adjust the amount of funding that will be allocated to the various initiatives, strategies and programs of the District. If the District concludes that a change in funding is warranted for a District initiative, strategy or program, the District shall evaluate whether the affected initiative, strategy or program constitutes a material change in circumstances that requires an update of the District Plan. If the District concludes that the change in an essential program is not material, the District may adjust funding. The District Executive Director will explain the proposed changes in expenditures to the Board. Thereafter, the adjusted funding shall be in accordance with the District Plan and shall not constitute a basis to update the District Plan.

If the District concludes that adjusted funding for one or more initiatives, strategies or programs constitutes a material change in circumstances, the changes in funding shall be implemented and the Board shall request the Policy Committee to prepare a revised or updated Plan incorporating the changes in funding.

#### Administration

in 2012.

Administration costs include the payroll, payroll taxes and benefits, office expenses, equipment, professional services (includes plan preparation, attorney fees and other consulting), travel and other administrative expenses.

For 2013, the first year of the planning period, the following funding levels are projected for each administrative line item and include a brief description of each expense line item:

Program	Program #	2013 Budget	Annual Escalator			
Payroll	Admin-1	\$343,093	2%			
Payroll includes the cost of employing six District staff. The District reserves the right to add staff to accomplish the major initiatives in programs #10 and #21 or any other programs as deemed necessary by the District. Additional staff costs are not projected in the planning period as it is unclear what staff requirements may or may not be needed. If staff additions are required, the District will work within the existing revenues as projected in this <i>Plan Update</i> . The District may reduce costs						
in other programming to allow for staff a	dditions if n	eeded.				
Benefits	Admin-2	\$101,704	2%			
Benefits include the costs of health care insurance and PERS retirement for the employees of the District.						
PERS Buy Out	Admin-3	<b>\$0</b>	n/a			
The PERS buy out expenses for the previous Executive Director will end						

Program	Program	2013	Annual
	#	Budget	Escalator
Workers Comp	Admin-4	\$5,000	Flat
Workers compensation expenses for Di			
Building Rent	Admin-5	\$196,650	Varies
Cost of rent for current District offices. the lease agreement between the Dis 2010 – 2020. The 2009-rent cost we District office space. The District recurrent building and or any other building District including assuming debt for the	trict and th as the amo serves the ng that is in	e building of ount paid for right to po	owner from or previous urchase its
The District currently occupies a lease attached warehouse was developed as current solid waste plan to serve a Convenience Center. In 2010, a ten building owner, which included the opti building after five years for \$1.45 millio to exercise its purchase option, it will assuming debt. If the decision was rewould be based on the premise that the lower than the current lease payment.	part of the as the Disyear lease on for the Disye. If the Disyellian in the Disyelli	implements strict's Spece was signed District to puristrict's Boaunce this purished	ation of the cial Waste ed with the urchase the rd chooses urchase by building, it
Supplies	Admin-6	\$5,000	Flat
Miscellaneous supplies costs needed support.	by the Dis	trict for ad	ministrative
Duty Travel	Admin-7	\$1,500	Flat
Mileage reimbursement expenses for D			
Travel/Seminar	Admin-8	\$5,000	Flat
Travel costs including professional		nt seminar	expenses
including conference fees, hotels, meals		¢0 000	Flat
Utilities  Natural gas and electricity expenses for	Admin-9	\$8,000	riat
Natural gas and electricity expenses for	Admin-	warenouse.	
County Indirect Charges	10	\$64,000	Flat
Expenses for county services include IT charges are out of the control of the amounts are based on the 2011 expendent	support ar District. Th litures.		•
Postage	Admin- 11	\$4,000	Flat
Postage expenses for outgoing mail and	•	ns.	
Telephone	Admin- 12	\$9,000	Flat
Telephone network, long distance and le	ocal charge	S.	
County Garage	Admin- 13	\$11,000	Flat

Program	Program #	2013 Budget	Annual Escalator			
District vehicle expenses. County garage charges are out of the control of the District. The projected budgeted amounts are based on the 2011 expenditures.						
Other Operating	Admin- 14	\$6,000	Flat			
Miscellaneous administrative expenses.						
Subscriptions/Memberships	Admin- 15	\$6,000	Flat			
Subscriptions for industry trade maga- for various trade associations.	zines and i	membership	expenses			
Equipment/Furniture	Admin- 16	\$1,000	Flat			
Repair and maintenance expenses and	replaceme	nt expenses	8.			
Solid Waste Planning, Consulting and Legal Services	Admin- 17	\$35,000	Varies			
The coats to contract with a qualified conculting firm to assist the District						

The costs to contract with a qualified consulting firm to assist the District with plan implementation management, annual district reporting, annual surveying of business, future plan development, special studies and other tasks as assigned by the Executive Director and/or Board. This line item also includes legal assistance. Future expense projections are escalated during plan preparation years.

The District reserves the right to contract with legislative agents, attorneys and consultants to provide the following services during the planning period:

- Plan implementation and preparation of tasks.
- Defense of the District in a lawsuit resulting from the plan implementation and/or prosecution actions as a result of the plan implementation.
- Assessing the impact of any new legislative and administrative proposals on the District and its residents and on the ability of the Board to implement this *Plan Update*.
- Assessing the feasibility and impact of any proposed solid waste facilities, recycling activities, including the use of new solid waste management technologies.

Since the District cannot project when consulting and legal services will be required, other than during the normal plan update process (every 5 years), the District reserves the right to expend excess generation fee revenue (fund balance) as the Board determines is in the best interest of the District on consulting and legal expenses throughout the planning period. The Board shall thereafter approve any adjustments to this line item.

For 2013, the first year of the planning period, the District is projecting to spend \$801,948 in administrative expenses.

#### Residential/Commercial/Industrial Programs

Residential/commercial/industrial programs include all of the programs and services needed to implement this *Plan Update*. The District has concluded that the rapidly changing economic environment, challenges for generating adequate revenues for local governmental programs and the potential for new technologies or new waste industry participants may require changes in the annual or interim budgets of the District. If the District concludes that the revisions to the annual or interim budget do not impair the ability of the District to finance and implement the District Plan, those adjustments shall be expenditures in accordance with the District Plan.

For 2013, the first year of the planning period, the following funding levels are projected for each program and include a brief description of each expense line item:

Program	Program #	2013 Budget	Annual Escalator				
Curbside Recycling	CCSWD-01	\$0	n/a				
The District does not operate	any curbside	recycling	programs and				
therefore does not incur any dire	ct expenses for	or this progr	am.				
Drop-Off Recycling	CCSWD-02	\$0	n/a				
The District does not operate	any drop-off	recycling	programs and				
therefore does not incur any dire	ct expenses for	or this progr	am.				
Yard Waste Management	CCSWD-03	\$15,000	Flat				
The cost of operating the District's backyard composting education program and bin sale program. The District purchased a significant amount of bins in 2009 and 2011 and is projecting a stable expenditure level throughout the planning period.							
Household Hazardous Waste	CCSWD-04	\$332,928	2%				
The cost of operating the Dist	rict's county-w	ide househ	old hazardous				
waste collection and disposal pro-	ogram.						
Computer Recycling	CCSWD-05	\$27,571	2%				
The cost of promoting the Di events.	strict's Recycl	e Your Co	omputer Month				
Scrap Tire Recycling	CCSWD-06	\$29,403	-1%				
The cost of operating the Dist Scrap Tire Sweeps.	rict's annual S	Scrap Tire	Round-Up and				
Litter Collection	CCSWD-07	\$91,345	2%				

_		0040	A							
Program	Program #	2013 Budget	Annual Escalator							
The cost of providing two supe	 									
litter along roadways in the Cour			owo to remove							
Mercury Collection		•	,							
Recycling	CCSWD-08	<b>\$0</b>	n/a							
The cost of this program is cove	red in CCSWD	-04.								
Phone Book Recycling	CCSWD-09	¢22.260	2% 2013-							
Campaign		\$22,369	2015							
The cost of operating a countywide phone book recycling campaig										
which may be eliminated at the	end of 2015.									
Special Waste Convenience Center	CCSWD-10	\$25,000	Flat							
The cost of equipment, supplies	maintenance	or other ex	penses related							
to expanding the types of mater										
The District incurred a signific										
moving into the facility that is										
expenses for the planning peri-		•								
The District may add staff to m		•	•							
the SWCC. Any revenue that										
the Special Waste Convenience										
recycling revenue or miscellan	eous revenue	shall be d	eposited in an							
income account under Chapter 3	343 under the (	Ohio Revise	ed Code.							
Local Government Outreach	CCSWD-11	\$4,000	Flat							
and Assistance		. ,								
			The cost of operating this program including the production of the							
Residential Recycling Report,	conducting I	rash Talk								
annual awards program.	T									
Children's Education	CCSWD-12	\$25,000								
Program		. ,	seminars and							
Program The cost of operating the [	 District's child	ren's educ	Flat ation program							
Program  The cost of operating the I including printing, supplies, and	 District's child d workshop ex	ren's educ penses. E	Flat ation program expenses have							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by	 District's child d workshop ex	ren's educ penses. E	Flat ation program expenses have							
Program The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by in 2011.	District's child workshop examples ased on budge	ren's educ openses. E	Flat ation program expenses have is implemented							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 be in 2011.  General Public Education	 District's child d workshop ex	ren's educ penses. E	Flat ation program expenses have							
Program The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by in 2011.  General Public Education and Outreach	District's child workshop exased on budge	ren's educ expenses. E eting control	Flat ation program expenses have as implemented 2%							
Program The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by in 2011.  General Public Education and Outreach The cost of operating the general public in general public in 2011.	District's child di workshop example on budge CCSWD-13 eral recycling	ren's educ kpenses. E eting control \$39,847 awareness	Flat ation program expenses have is implemented  2% and education							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 be in 2011.  General Public Education and Outreach  The cost of operating the gene program for the District include	District's child di workshop exased on budge CCSWD-13 eral recycling ling web site,	ren's educ openses. Esting control \$39,847 awareness advertising	Flat ation program expenses have as implemented  2% and education and printing and							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 be in 2011.  General Public Education and Outreach  The cost of operating the gene program for the District include	District's child workshop exased on budge CCSWD-13 eral recycling ling web site, increased in	ren's educ openses. Esting control \$39,847 awareness advertising	Flat ation program expenses have is implemented  2% and education g, printing and							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 be in 2011.  General Public Education and Outreach  The cost of operating the general program for the District including publications. Expenses have	District's child workshop exased on budge CCSWD-13 eral recycling ling web site, increased in	ren's educ openses. Esting control \$39,847 awareness advertising	Flat ation program expenses have as implemented  2% and education and printing and							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by in 2011.  General Public Education and Outreach  The cost of operating the gene program for the District including publications. Expenses have based on increased needs of the	District's child workshop exased on budge CCSWD-13 eral recycling ling web site, increased in	ren's educ openses. Esting control \$39,847 awareness advertising	Flat ation program expenses have as implemented  2% and education and printing and							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 by in 2011.  General Public Education and Outreach  The cost of operating the general program for the District including publications. Expenses have based on increased needs of the Commercial, Institutional and Industrial Recycling Assistance	CCSWD-14  CCSWD-14	ren's educkpenses. Exting control \$39,847 awareness advertising this progra	Flat ation program expenses have is implemented  2% and education g, printing and im since 2009							
Program  The cost of operating the I including printing, supplies, and declined from 2009 and 2010 be in 2011.  General Public Education and Outreach  The cost of operating the gene program for the District include publications. Expenses have based on increased needs of the Commercial, Institutional and Industrial Recycling	CCSWD-14  CCSWD-14	ren's educkpenses. Exting control \$39,847 awareness advertising this progra	Flat ation program expenses have is implemented  2% and education g, printing and im since 2009							

Program	Program #	2013 Budget	Annual Escalator	
Recycling Market Development	CCSWD-15	\$0	n/a	
There are no direct expenses for this program. Staff time is covered under Admin-1.				

District Grant Programs | CCSWD-16 | \$150,000 | Varies

The cost of funding recycling grants provided to communities, schools and non-profit agencies. If revenues permit, the District is projecting to increase funding for this program in 2015 at \$175,000 annually and \$200,000 in 2017, then from 2018 through 2028, the District will budget \$150,000 annually. These increased projections are based on the

success of the current program and the needs of the community.

Solid Waste Enforcement | CCSWD-17 | \$250,000 | Flat

Based on the study conducted by the District's consultant, this line item has been reduced to \$250,000 annually. This amount reflects the recommendation by the consultant to limit and focus health department funding to preserve core program funding. The amount budgeted for the first year of the planning period is 12.5% of the District's budget. The District anticipates that a portion of the health department funding may not be necessary to protect core programs. The District may revise the budgeted funds on an annual basis.

Securing Landfill Disposal | CCSWD-18 | \$0 | n/a |
There are no direct expenses for this program; Staff time is included in Admin-1.

Solid Waste Management	CCSWD-19	\$0	n/o
Planning	CC244D-18	φU	n/a

There are no direct expenses for this program; Staff time is included in Admin-17.

District Wide Contracting for Service CCSWD-20 \$0 n/a

There are no direct expenses for this program; Staff time is included in Admin-1.

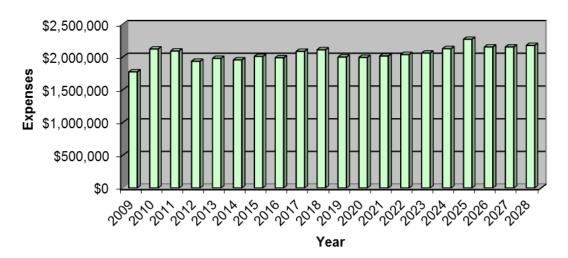
District Wide Education/Awareness	CCSWD-21	\$150,000	Varies
Branding	CC311D-21	ψ130,000	Varies

Expenses related to consulting, advertising, program development and on-going expenses. The District is budgeting \$100,000 in 2014, \$100,000 in 2015, \$75,000 in 2016 and \$75,000 in 2017. The program will be re-evaluated in 2018 during the next plan update process to determine the long-term implementation of the program. The District may add staff to manage this program.

#### **Expense Summary**

The District is projecting to spend \$1,979,410 in 2013, the first year of the planning period and \$2,178,128 in 2028, the final year of the planning period. The following chart summarizes the District's actual and projected expenses throughout the planning period. Note the increase in expenditures in 2010 includes the one-time development costs for the District's Special Waste Convenience Center.

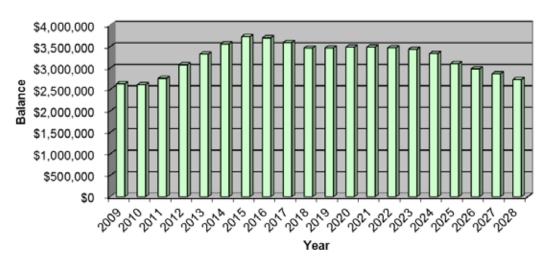
District Expense Projections 2009 – 2028



Based on the projected revenue and expenses detailed in Table VIII-8, the District's fund balance is expected to remain at or above \$2.6 million each year provided that the revenues generated by the generation fee are stable. Generation fees can become unstable from economic forces, loss of population in the county, the potential development of an alternate waste management facility in the county and other factors.

The following graph depicts the projected annual fund balance throughout the planning period:

Projected District Fund Balance 2009 – 2028



Nothing contained in these budget projections should be construed as a binding commitment by the District to spend a specific amount of money on a particular strategy, facility, program and/or activity. The Board, with the advice and assistance of the Executive Director, will review and revise the budget as needed to implement planned strategies, facilities, programs and/or activities as effectively as possible with the funds available. Revenues, including unused generation fee revenue (fund balance) not otherwise committed to an existing strategy, facility, program or activity may be used to increase funding to improve the effectiveness of an existing strategy, facility, program or activity and to provide funding for a new strategy, facility, program or activity the Board concludes is justified based on staff and consultant recommendations.

The District reserves the right to revise the budget and reallocate funds as programs change or as otherwise determined to be in the best interest of the District. The Board shall thereafter approve any adjustments to the budget on an annual or more frequent basis.

The District is committed to implementing planned strategies, facilities, programs and/or activities in a cost-effective manner. The District is committed to improving the effectiveness and reduce the cost of all District strategies, facilities, programs and activities. The District Board is authorized to expend District funds among other uses included in the *Plan Update* when costs are reduced. Additionally, the Board is authorized to use reduced costs to provide grant funds or direct funding to evaluate, test and implement new strategies, facilities, programs and activities.

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

Table VIII-6, "Revenues and Allocations in Accordance with ORC 3734.57, ORC 3734.572 and ORC 3734.573," presents the District's projected costs for the ten allowed uses. The District's budget falls into three categories: preparation and monitoring of plan implementation, implementation of the approved plan, and solid waste enforcement.

The following graph depicts the District's annual expense to implement this *Plan Update*:

### \$1,200,000 \$800,000 \$600,000 \$400,000 \$200,000 \$200,000 \$\frac{1}{2}\text{or}^2\text{or}

**District Expense Distribution 2009 – 2028** 

#### D. Contingent Funding

The District and its Board do not consider funding to be an issue of concern during this planning period. The following contingent funding procedure includes options for increasing the District's generation fee if warranted. Prior to increasing the generation fee, the District will evaluate the estimated expenditures in Table VIII-5 to determine the minimum annual budget to sustain the District's essential strategies, facilities, programs and activities and finance implementation of the District Plan. If an increase in the generation is justified, the District Board will request that the District Policy Committee approve the increase of the generation fee and obtain ratification of that increase.

■ Plan Preparation and Monitoring
■ Plan Implementation
□ Solid Waste Enforcement

In the event that the District fund balance is less than \$1,000,000, the District Board will consider whether to request that the District Policy Committee commence the process to increase the District generation fee or to pursue other sources of funds.

A \$1,000,000 fund balance is approximately half of the District Budget. Maintaining an adequate fund balance is essential for the District's financial stability and continuity of District strategies, facilities, programs and activities, particularly those the *Plan Update* characterizes as essential. The Board will request that the District Policy Committee increase the District's generation fee in \$0.25 per ton increments as needed.

In general, the District is confident that it can adjust to less than catastrophic changes in waste generation/disposal, and thus a loss in projected generation fee revenue. District revenues may vary from year-to-year or season-to-season depending on the waste generation and economic conditions. The Board monitors District revenues and expenses through staff reports and comments provided by the District Policy Committee to assist the Board in its considerations of whether this contingency plan needs to be implemented.

The District anticipates that an increase in the generation fee will require four to seven months to implement.

Once the District has decided an increase in generation fees is needed, the District will set the amount of the generation fee increase and will immediately begin the process to ratify the generation fee in accordance with Section 3734.573 of the Ohio Revised Code. Table VIII-7 does not show a specific amount to be generated by a hypothetical generation fee increase. For every \$0.25 per ton increase, the District may generate approximately \$300,000 in additional revenue annually.

The District may also consider other funding mechanisms as a part of this contingent funding procedure including but not limited to contract fees and designation with contract fees. The District's Board of Directors may choose to use these mechanisms as a contingent funding source or to replace generation fees. Any change in the generation fee requires that the District Policy Committee approve that change and obtain ratification by the political subdivisions within the District.

#### E. Summary of Costs and Revenues

Table VIII-8, "Summary of District Revenues and Expenditures," includes the annual costs for each program and activity for the reference year and each year of the planning period. Total expenditures for the first year of the planning period are projected to be \$1,979,410 and will rise slowly over the planning period ending at \$2,178,128 in 2028. The District is projected to begin the planning period with a carryover fund balance of \$3,076,920 and will have an ending carryover fund balance of approximately \$2,732,476 in 2028. The fund balance in years

2011 – 2015 reflects the \$1,000,000 SEP (Supplemental Environmental Project) funding from the Northeast Ohio Regional Sewer District (NEORSD).

Each year of the planning period has sufficient funding for each of the programs.

The District may alter funding for the strategies, facilities, programs and activities as costs and revenues change during the planning period.

Table VIII-1
District Disposal Fee Schedule and Revenues Generated

	Fe	Fee Schedule (\$/ton)	\$/ton)	Tons	Tons Disposed in the District	e District	
Year	In- District	Out-of- District	Out-of State	In- District	Out-of- District	Out-of State	Total District Fee Revenue
2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2010	Y/N	Y/N	N/A	Y/N	Y/N	N/A	N/A
2011	N/A	Y/A	N/A	Y/N	Y/N	N/A	N/A
2012	W/A	Y/N	N/A	Y/N	Y/N	N/A	N/A
2013	N/A	Y/N	N/A	V/V	Y/N	N/A	N/A
2014	N/A	Y/N	N/A	W/A	Y/A	N/A	N/A
2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2022	N/A	W/A	N/A	N/A	N/A	N/A	N/A
2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2024	N/A	W/A	N/A	N/A	N/A	N/A	N/A
2025	N/A	Y/N	N/A	W/A	Y/N	N/A	N/A
2026	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2027	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2028	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table VIII-2
Generation Fee Schedule and Revenues

Year	Generation Fee	Amount of District Waste to be Disposed (Tons)	Total Generation Fee Revenue
2009	\$1.50	1,377,786	\$2,066,679
2010	\$1.50	1,364,491	\$2,046,737
2011	\$1.50	1,345,619	\$2,018,428
2012	\$1.50	1,355,036	\$2,032,554
2013	\$1.50	1,334,812	\$2,002,218
2014	\$1.50	1,314,709	\$1,972,063
2015	\$1.50	1,304,838	\$1,957,257
2016	\$1.50	1,300,911	\$1,951,367
2017	\$1.50	1,309,988	\$1,964,982
2018	\$1.50	1,318,624	\$1,977,936
2019	\$1.50	1,327,301	\$1,990,952
2020	\$1.50	1,336,021	\$2,004,031
2021	\$1.50	1,338,576	\$2,007,863
2022	\$1.50	1,341,110	\$2,011,666
2023	\$1.50	1,343,625	\$2,015,437
2024	\$1.50	1,346,118	\$2,019,176
2025	\$1.50	1,348,589	\$2,022,884
2026	\$1.50	1,351,039	\$2,026,558
2027	\$1.50	1,353,467	\$2,030,200
2028	\$1.50	1,355,872	\$2,033,807

#### Source(s) of information:

2009 and 2010 data is actual based on generation fee receipts.

Amount to be disposed is from Table VI-1 for years 2012-2028. For years 2009-2011, actual adjusted tons were used. Exempt Waste from Table V-4 is subtracted.

Table VIII-3
Summary of Revenue Generated and Mechanisms Used

	Type of Re	venue Mechanisn	n and Amount Used	
Year	District Disposal Fees	Generation Fees	Other Revenues	Total Revenue Generated
2009	\$0	\$2,066,679	\$20,915	\$2,087,594
2010	\$0	\$2,046,737	\$55,871	\$2,102,607
2011	\$0	\$2,018,428	\$222,500	\$2,240,928
2012	\$0	\$2,032,554	\$222,500	\$2,255,054
2013	\$0	\$2,002,218	\$222,500	\$2,224,718
2014	\$0	\$1,972,063	\$222,500	\$2,194,563
2015	\$0	\$1,957,257	\$222,500	\$2,179,757
2016	\$0	\$1,951,367	\$10,000	\$1,961,367
2017	\$0	\$1,964,982	\$10,000	\$1,974,982
2018	\$0	\$1,977,936	\$10,000	\$1,987,936
2019	\$0	\$1,990,952	\$10,000	\$2,000,952
2020	\$0	\$2,004,031	\$10,000	\$2,014,031
2021	\$0	\$2,007,863	\$10,000	\$2,017,863
2022	\$0	\$2,011,666	\$10,000	\$2,021,666
2023	\$0	\$2,015,437	\$10,000	\$2,025,437
2024	\$0	\$2,019,176	\$10,000	\$2,029,176
2025	\$0	\$2,022,884	\$10,000	\$2,032,884
2026	\$0	\$2,026,558	\$10,000	\$2,036,558
2027	\$0	\$2,030,200	\$10,000	\$2,040,200
2028	\$0	\$2,033,807	\$10,000	\$2,043,807

Table VIII-4
Anticipated Loans Secured by the District

	Loans Obtaine	d by the District		l amouth of	Annual Dakt
Year	Lending Institution	Loan Amount	Interest Rate	Length of Loan	Annual Debt Service
2009	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A	N/A
2018	N/A	N/A	N/A	N/A	N/A
2019	N/A	N/A	N/A	N/A	N/A
2020	N/A	N/A	N/A	N/A	N/A
2021	N/A	N/A	N/A	N/A	N/A
2022	N/A	N/A	N/A	N/A	N/A
2023	N/A	N/A	N/A	N/A	N/A
2024	N/A	N/A	N/A	N/A	N/A
2025	N/A	N/A	N/A	N/A	N/A
2026	N/A	N/A	N/A	N/A	N/A
2027	N/A	N/A	N/A	N/A	N/A
2028	N/A	N/A	N/A	N/A	N/A

Table VIII-5 Estimated Costs for Plan Implementation

	Program Number	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Expense - Administration						1 1		1	1 1	1										1	
Payroll	Admin-1	\$387,445	\$319,784	\$314,892	\$336,366	_	\$349,955	-	-	$\dashv$	-	-	-	$\rightarrow$	-	$\dashv$	$\rightarrow$	$\dashv$	-	$\dashv$	\$461,758
Benefits	Admin-2	\$106,509	\$104,841	\$109,496	\$99,710	\$10	\$103,738	\$105,813	626	88	65	ક્ક	97,	ස	£	12	92	88	58	26	\$136,880
PERS Buy Out	Admin-3	\$18,748	\$31,247	\$49,996	\$37,497	SF.	S# .	SA.	S# .	SA.	S# .	Sa .	SA.	O\$	S# .	SA .	S# .	S# .	S≉ ,	S# .	SA.
Workers Comp	Admin-4	\$2,810	\$4,598	\$3,891	\$4,000	\$5,000	\$5,000	\$5,000	+	+	+	+	+	+	+	+	\$5,000	\$5,000	+	+	\$5,000
Bullang Kent	Admin-5	\$40,775	\$77,883	000's	\$188,100	\$190,050 00 70	002,200 \$7.000,200	\$Z13,750	+	+	+	+	+	+	+	+	\$247,950	000 147	+	+	\$247,950
Salphies	Admin-b	84,280 171.03	\$3,983	\$5,000	\$2,000	\$5,000	32,000	000,000	\$5,000	22,000	\$5,000	32,000	22,000	\$5,000	\$5,000	32,000	\$5,000	22,000	\$5,000	000,00	92,000
Duty Iravei	Admin-/	\$2,475	L COA	31,500	00c,T&	00c,1¢	006,1%	31,500	000,1%	31,500	000,1%	000'18	000,1%	000,18	000,1%	006,1\$	000,1%	006,1%	000,1%	000,1%	31,500
Travel/Seminar	Admin-8	\$5,460	\$6,930	\$5,000	\$2,000	\$2,000	\$5,000	\$2,000	\$5,000	\$5,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	+	\$5,000
Utilities	Admin-9	\$4,302	\$4,976	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	$\dashv$	$\dashv$	$\dashv$	$\dashv$	-	+	$\dashv$	\$8,000	\$8,000	$\dashv$	+	\$8,000
County Indirect Charges	Admin-10	\$30,398	\$41,977	\$63,644	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	+	_	+	+	+	+	+	\$64,000	\$64,000	+	+	\$64,000
Postage	Admin-11	\$2,785	\$1,784	\$4,000	\$4,000	\$ <del>4</del> ,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$ <del>7</del> ,000	\$4,000	\$,000 \$,	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Telephone	Admin-12	\$8,688	\$7,284	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
County Garage	Admin-13	\$7,563	\$7,157	\$10,920	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000
Other Operating	Admin-14	\$6,166	\$5,622	\$7,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Subscriptions/ Memberships	Admin-15	\$6,314	\$5,866	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Equipment/Fumiture	Admin-16	0\$	\$1,539	\$793	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Solid Waste Planning, Consulting and	Admin-17	\$87,543	\$108,096	\$206,893	\$54,976	\$35,000	\$35,000	\$35,000	\$35,000	\$80,000	\$200,000	\$60,000	\$35,000	\$35,000	\$35,000	\$35,000	\$80,000	\$200,000	\$60,000	\$35,000	\$35,000
regal services			3,0		,	9,000	_	+	_	_	_	+	+	+	+					_	
Subtotal		\$722,277	\$734,218	\$985,575	\$841,149	\$801,948	\$819,393	\$837,017	\$854,823	\$917,813	\$1,055,992	\$934,364	\$919,383	\$929,601	\$940,024	\$920,656	\$1,006,500 \$1,137,561		\$1,008,843	\$995,351	\$1,007,089
Expense - Residential/Commercial/Industrial Sector Collection Programs, Technical Assistance and Education Programs: Source Reduction and Recycling	Justrial Secto	r Collection	Programs, 1e	chnical Assi	stance and E	ducation Pro	grams: Sour	e Keduction s	and Recycling								ŀ		F	-	
Non-Subscription Curbside Recycling Programs	CCSWD-01	S	S	S¢	S	S	S,	S,	S,	S,	S <sub>s</sub>	S <sub>s</sub>	S,	<b>%</b>	S <sub>s</sub>	S <sub>F</sub>	S <sub>s</sub>	S	S <sub>s</sub>	S <sub>F</sub>	<b>%</b>
Drop-Off Recy cling	CCSWD-02	\$0	0\$	\$0	0\$	0\$	0\$	\$0	\$0	\$0	\$0	\$0	0\$	\$0	\$0	\$0	0\$	0\$	\$0	0\$	\$
Yard Waste Management	CCSWD-03	\$25,321	\$12,165	\$29,625	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Household Hazardous Waste Collection		\$286,726	\$251,255	\$320,000	\$326,400	\$332,928	\$339,587	\$346,378	\$353,306	\$360,372	$\vdash$	Н	\$382,430	Н	\$397,880	Н	\$413,954	\$422,233	Н	\$439,291	\$448,077
Computer Recy cling	CCSWD-05	_	\$21,378	\$26,500	\$27,030	\$27,571	\$28,122	\$28,684	-	-	-	-	-	-	-	-	\$34,281	\$34,966	-	-	\$37,106
Scrap Tire Recycling	CCSWD-06	- 1	\$30,889	\$30,000	\$29,700	\$29,403	\$29,109	\$28,818	\$28,530	-	-	-	-	-	-	+	+	+	-	+	\$25,288
Litter Collection	CCSWD-07	\$84,108	\$107,607	\$87,798	\$89,554	\$91,345	\$93,172	\$95,035	\$96,936	\$98,875	\$100,852	\$102,869	\$104,927	\$107,025	\$109,166	\$111,349	\$113,576	\$115,848	\$118,165	\$120,528	\$122,938
Mercury Collection Program	CCSWD-08	_	S	80	S	S	0\$	S	S	& &	S	S	0\$	S	S	0\$	0\$	0\$	S	<b>%</b>	S
Phone Book Recycling Campaign	CCSWD-09	\$	\$24,173	\$21,500	\$21,930	\$22,369	\$22,816	\$23,272	<b>%</b>	8		\$	œ	\$0	-	-	\$	œ	\$0	-	S S
Special Waste Convenience Center	CCSWD-10	<b>%</b>	\$429,601	\$50,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Local Government Outreach and Assistance	CCSWD-11	\$2,566	\$2,829	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Children's Education Program	CCSWD-12	\$42,598	\$37,035	\$26,535	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000		\$25,000	\$25,000
General Public Education and Outreach	CCSWD-13	\$5,843	\$27,655	\$38,300	\$39,066	\$39,847	\$40,644	\$41,457	\$42,286	\$43,132	\$43,995	\$44,875	\$45,772	\$46,687	\$47,621	\$48,574	\$49,545	\$50,536	\$51,547	\$52,578	\$53,629
Commercial, Institutional and Industrial	CCSWD-14	\$8,616	\$14,855	\$9,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Recycling Market Development	CCSWD-15	0\$	S	\$0	S	8	\$0	8	0\$	\$	S	8	0\$	8	S	0\$	S	\$	8	S	S
District Grant Programs	CCSWD-16	Š	\$99,119	\$112,000	\$125,000	\$150,000	\$150,000	\$175,000	8	8	8	8	8	8	8	8	\$150,000	\$150,000	8	8	\$150,000
Solid Waste Code Enforcement	CCSWD-17		\$330,559	\$352,167	\$352,167	\$250,000	\$250,000	-	-	-	-	-	-	-	-	-	\$250,000	\$250,000	-		\$250,000
Securing Landfill Disposal	CCSWD-18		0\$	\$0	0\$	\$0	0\$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Solid Waste Management Planning	CCSWD-19	0\$	0\$	0\$	0\$	\$	0\$	0\$	0\$	\$0	0\$	0\$	Q\$	0\$	0%	<b>%</b>	0\$	\$	0\$	0\$	\$
District Wide Contracting for Service	CCSWD-20	O\$	S	\$	S	S	0\$	S	S	0%	S	8	0\$	S	S	0\$	S	S	S	S	S
District Wide Education/Awareness	CCSWD-21	<b>%</b>	O\$	\$0	S	\$150,000	\$100,000	\$100,000	\$75,000	\$75,000	S,	S,	S	0\$	S,	S,	S,	S	\$	S <sub>s</sub>	0%
Dialium		¢4 054 605	64 280 420	\$4 107 425	£4 004 847	¢4 177 163	¢4 427 AED	¢4 479 645	¢4 424 246 ¢	¢4 160 467 ¢	64 054 820 \$4 065 406		¢4 076 204 ¢4 087 226		¢1 008 47¢ ¢1 100 0¢0		C4 424 682 C4 423 645	_	¢4 445 956 ¢	¢4 459 220 ¢	64 474 040
Subjoid		250,100,1¢	\$1,031,033 \$1,003,120 \$1,101,423 \$1,034,047	60,000,000	40,450,16	\$1,171,400	91,157,450	\$1,112,043	010,401,16	104,601,16	\$ 1,004,003	, 004,000,10	* 000,000,10	, 027,100,14	91,000,470	, 109,300	700,121,11	01,133,043	91, 143,030	6 020,001,1	1,17,040
Grand Lotal		\$1,7,73,971	\$2,123,338	\$2,093,000	\$1,935,996	\$1,979,410	\$1,956,843	996   \$1,979,410   \$1,936,843   \$2,009,663   \$1,989,139   \$2,087,280	\$1,989,139	\$2,087,280	82,110,821   31,999, (70   31,995,386   32,016,821   32,036,301   32,056,616   32,126,181   32,271,286   32,135,670   32,176,128	1,999,770	1,985,586	52,016,827	\$2,038,501	2,060,616	2,128,181	2,277,206	\$2,154,699	2,153,6/0	5,1/8,128
Total Expense s Listed in Quarterly Fee Reports   \$1,773,971   \$2,123,338	ee Reports	\$1,773,971	\$2,123,338																		

Revenues and Allocations in Accordance with ORC 3734.57, ORC 3734.572 and ORC 3734.573 Table VIII-6

	Year-End Balance (\$)	\$2,317,042	\$2,630,665	\$2,609,934	\$2,757,862	\$3,076,920	\$3,322,228	\$3,559,948	\$3,730,043	\$3,702,271	\$3,589,973	\$3,467,088	\$3,468,269	\$3,486,714	\$3,487,750	\$3,470,915	\$3,435,736	\$3,336,731	\$3,098,409	\$2,980,268	\$2,866,797	
	Total Budget Allocation (\$)	***************************************	\$1,773,971	\$2,123,338	\$2,093,000	\$1,935,996	\$1,979,410	\$1,956,843	\$2,009,663	\$1,989,139	\$2,087,280	\$2,110,821	\$1,999,770	\$1,995,586	\$2,016,827	\$2,038,501	\$2,060,616	\$2,128,181	\$2,271,206	\$2,154,699	\$2,153,670	
urposes:	10	<<<<<	\$0	\$0	\$0	\$0	\$0	0\$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0\$	
llowing P	6	· · · · · · · · · · · · · · · · · · ·	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
or the Fo	80	×××××	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
evenue F	7	<b>*</b>	\$0	\$0	0\$	\$0	\$0	\$0	\$0	\$0	0\$	\$0	\$0	0\$	\$0	\$0	\$0	\$0	\$0	0\$	0\$	
734.573 R	9	· · · · · · · · · · · · · · · · · · ·	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
nd ORC 3	ιC	· · · · · · · · · · · · · · · · · · ·	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3734.57 aı	4	<<<<<	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
is of ORC 3734.57 and ORC 3734.573 Revenue For the Following Purposes:	е	<<<<<	\$452,893	\$330,559	\$352,167	\$352,167	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
Allocation	2		\$598,802	\$734,218 \$1,058,562	\$755,258	\$742,680	\$927,463	\$887,450	\$922,645	\$884,316	\$919,467	\$804,829	\$815,406	\$826,204	\$837,226	\$848,476	\$859,960	\$871,682	\$883,645	\$895,856	\$908,320	
	-	<<<<<<	\$722,277	\$734,218	\$985,575	\$841,149	\$801,948	\$819,393	\$837,017	\$854,823	\$917,813	\$1,055,992	\$934,364	\$919,383	\$929,601	\$940,024	\$950,656	\$1,006,500	\$1,137,561	\$1,008,843	\$995,351	
F G	Annual Revenue (\$)	Beginning Balance	\$2,087,594	\$2,102,607	\$2,240,928	\$2,255,054	\$2,224,718	\$2,194,563	\$2,179,757	\$1,961,367	\$1,974,982	\$1,987,936	\$2,000,952	\$2,014,031	\$2,017,863	\$2,021,666	\$2,025,437	\$2,029,176	\$2,032,884	\$2,036,558	\$2,040,200	
	Year	Beginning	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	

## Notes:

- Preparation and monitoring of plan implementation.
- Implementation of approved plan.
- Financial assistance to boards of health for solid waste enforcement. 3 2
- Financial assistance to defray the costs of maintaining roads and other public services related to the location or operation of solid waste facilities. 4
  - Contracts with boards of health for collecting and analyzing samples from water wells adjacent to solid waste facilities.
  - 5 -
    - Out-of-state waste inspection program.
- Financial assistance to local boards of health to enforce ORC 3734.03 or to local law enforcement agencies having jurisdiction within the District for anti-Financial assistance to local boards of health for employees to participate in Ohio EPA's training and certification program for solid waste operators and littering. 8
  - facility inspectors.
    - Payment of any expenses that are agreed to awarded or ordered to be paid under section 3734.35 of the Revised Code and any administrative costs Financial assistance to local municipalities and townships to defray the added cost of roads and services related to the operation of solid waste incurred pursuant to that section. -6

Table VIII-7
Contingent Funding Sources

	Amount of Contingent Fu	nding for Each Source	
Year	Generation Fee	Disposal Fee	Total
	Revenue (\$)	Revenue (\$)	(\$)
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018	See Na	arrative in Section VIII	
2019			
2020			
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028			

**Note:** Actual contingent funding amounts will depend on what scenario is encountered by the District. See narrative in Section VIII for specific contingency procedures.

Table VIII-8 Summary of District Revenues and Expenditures

Strategy, Facility, Activity or Program	Program	5003	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Starting Fund Balance		\$2,317,042	\$2,630,664	\$2,609,934	\$2,757,862	\$3,076,920	\$3,322,228	\$3,559,948	\$3,730,043	\$3,702,270	\$3,589,973	\$3,467,087	\$3,468,269	\$3,486,713	\$3,487,750	\$3,470,915	\$3,435,736	\$3,336,731	\$3,098,408	\$2,980,267	\$2,866,797
Revenue																					
Total Revenues		\$2,087,594	\$2,087,594 \$2,102,607 \$2,240,928 \$2,255,0	\$2,240,928	\$2,255,054	054 \$2,224,718 \$2,194,563 \$2,179,757 \$1,961,367 \$1,974,982 \$1,987,936 \$2,000,952 \$2,014,031 \$2,017,863	\$2,194,563	\$2,179,757	\$1,961,367	\$1,974,982	\$1,987,936	\$2,000,952	\$2,014,031	\$2,017,863	\$2,021,666	\$2,025,437	\$2,029,176	\$2,032,884	\$2,021,666 \$2,025,437 \$2,029,176 \$2,032,884 \$2,036,558 \$2,040,200 \$2,043,807	2,040,200 \$	2,043,807
Expenditures - Administration		H						H			- 1-	H			ŀ	H		H	H	ŀ	
Payroll	Admin-1	\$387,445	\$319,784	\$314,892	\$336,366	\$343,093	\$349,955	\$356,954	\$364,093	\$371,375	-	-	\$394,106	\$401,989	\$410,028	-+	\$426,593	-	-	\$452,704	\$461,758
Benefits	Admin-2	\$100,508	\$104,841	\$109,490	988/10	\$101,104	\$103,738	+	\$707,929	\$1.10,U88	25.	33	\$110,820	\$119,103	-+	116	\$1.20,450	\$128,980	çç	+	\$135,880
PERS Buy Out Workers Comp	Admin-3	\$78,748	\$31,247	\$3,891	\$37,497	\$5,000	\$5,000	\$5,000	\$5000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5000	\$5,000	\$5,000	\$5,000	\$2,000	\$5,000
Building Rent	Admin-5	\$40,775	\$77,883	\$179,550	\$188,100	\$196,650	\$205,200	\$213,750	\$222,300	\$230,850	\$239,400	\$247,950	\$247,950	\$247,950	\$247,950	\$247,950	\$247,950	\$247,950		╁	\$247,950
Supplies	Admin-6	\$4,296	\$3,983	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	╌	╁	\$5,000
Duty Travel	Admin-7	\$2,475	\$651	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Travel/Seminar	Admin-8	\$5,460	\$6,930	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Utilities	Admin-9	\$4,302	\$4,976	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
County Indirect Charges	Admin-10	\$30,398	\$41,977	\$63,644	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000	\$64,000
Postage	Admin-11	\$2,785	\$1,784	\$4,000	\$4,000 \$000	000,5%	000,4%	000,5	\$4,000	\$4,000	\$4,000	000	000,5%	000,4%	000,5	\$4,000	\$4,000	000,5	000	000	\$4,000
leiephone	Admin-12	\$6,088	\$7,784	\$9,000	\$3,000	\$3,000	\$9,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$9,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Other Operation	Admin-14	86.166	\$5,622	\$7,000	000 95	000 95	000 95	000	\$6,000	\$6,00	\$6,000	000 95	000 95	000 98	000 95	\$6,00	\$6,000	000 95	+	╁	000 95
Subscriptions/ Membershins	Admin-15	\$6.314	\$5,86	\$6,000	000'98	\$6,000	\$6,000	000,00	\$6,000	\$6,000	\$6,000	\$6,000	26,000	\$6,000	000,00	\$6,000	\$6,000	26,000	000,00	\$6,000	000'98
Equipment/Furniture	Admin-16	8	\$1.539	\$793	\$1.000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1.000	\$1.000	\$1,000	\$1,000	\$1.000	\$1,000	\$1,000	\$1.000	\$1,000	\$1.000	\$1.000
Solid Waste Planning, Consulting	Admin-17	\$87.543	\$108.096	\$206.893	\$54.976	\$35,000	\$35.000	\$35,000	\$35.000	\$80,000	\$200,000	\$60.000	\$35,000	\$35.000	\$35,000	\$35.000	\$80.000	\$200,000	\$60.000	t	\$35.000
Subtotal		\$722.277	\$734.218	\$985,575	\$841.149	\$801.948	\$819.393	\$837.017	\$854.823		\$1.055.992	\$934.364	\$919,383	\$929.601	\$940,024	t	10	+=	-	✝	\$1,007,089
Expenditures - Residential/Commercial Sector Technical Assistance and Education Programs:	ercial Sector	Technical As	sistance and	Education P	rograms: So	Source Reduction and Recycling	on and Recyc	lina		1						-	-	1	-	1	
Non-Subscription Curbside	CCSWD-01	S,	S\$	\$0	\$0\$	\$0	S S	S	0\$	0\$	\$0	\$0	8	0%	8	0\$	0\$	\$0	\$0	0\$	<b>%</b>
Drop-Off Recycling	CCSWD-02	\$0	\$0	\$0	0\$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CCSWD-03	\$25,321	\$12,165	\$29,625	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	-	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	$\dashv$	-	\$15,000
s Waste	CCSWD-04	\$286,726	\$251,255	\$320,000	\$326,400	\$332,928	\$339,587	\$346,378	\$353,306	\$360,372		\$374,931	\$382,430	\$390,078	\$397,880	\$405,837	\$413,954	\$422,233	-	-	\$448,077
Computer Recycling	CCSWD-05	\$23,020	\$21,378	\$26,500	\$27,030	\$27,571	\$28,122	\$28,684	\$29,258	\$29,843	\$30,440	\$31,049	\$31,670	\$32,303	\$32,949	\$33,608	\$34,281	\$34,966	\$35,666	$\dashv$	\$37,106
Scrap Tire Recycling	90-GMSCC	\$26,398	\$30,889	\$30,000	\$29,700	\$29,403	\$29,109	\$28,818	\$28,530	\$28,244	296,725	287,682	\$27,406	\$27,131	\$26,860	256,592	\$26,326	290'97	+	+	\$25,288
Litter Collection Mercury Collection Program	CCSWD-07	\$84,108	\$107,607	\$87,798	\$89,554	\$91,345	\$93,172	\$95,035	\$96,936	\$98,875	\$100,852	\$102,869	\$104,927	\$107,025	\$109,166	\$111,349	\$113,576	\$115,848	\$118,165	\$120,528	\$122,938
Phone Rook Recycling Campaign	CCSWD-09	\$25.741	\$24.173	\$21.500	\$21930	\$22.369	\$22.816	\$23,272	3 S	3 5	S 05	0\$	S &	3 5	8 8	3 S	3 S	9	3	3 S	S &
<u>_</u>	CCSWD-10	0%	\$429,601	\$50,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	8	\$25,000
Local Government Outreach and Assistance	CCSWD-11	\$2,566	\$2,829	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Children's Education Program	CCSWD-12	\$42,598	\$37,035	\$26,535	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	CCSWD-13		\$27,655	\$38,300	\$39,066	\$39,847	\$40,644	\$41,457	\$42,286	\$43,132	\$43,995	\$44,875	\$45,772	\$46,687	\$47,621	\$48,574	\$49,545	\$50,536			\$53,629
Commercial, Institutional and	CCSWD-14	\$8,616	\$14,855	\$9,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Docueling Market Development	COMP. 4E	Ş	Φ	¢0	U	Ç	Ş	Ş	Ş	Ş	Ç	Ç.	Ş	Ş	Ş	Ş	Ş	Ç	¢	Ş	Ş
	CI-OWOOO	é	900 440	9442,000	9425	9450	\$10000	\$47E 000	\$ 75 DOO	OF 00	5	9450	9450	9150000	٤	9450	94 50	046	5	٤	945000
Solid Waste Code Enforcement	CCSWD-16		\$330,550	\$352 167	\$125,000	\$150,000	\$150,000	\$250,000	\$750,000	\$250,000	+	\$150,000	\$250,000	\$250,000	+	\$150,000	\$150,000	\$250,000	+	+	\$250,000
Г	CCSWD-18	Sign	CONTRACTOR OF	300	\$0.	05	S	05°	S	S	05	05	G (507)	S	G. (5)	S	Q: (S)	300	╀	╆	S S
Solid Waste Management Planning   CCSWD-19	CCSWD-19	S	S	\$ 0\$	0\$	\$0\$	S S	8	\$ 8	8 8	\$0\$	0\$	S	S &	8	8 8	S	0\$	0%	S	S &
District Wide Contracting for Service	CCSWD-20	\$	\$0	\$0	\$0	\$0	0\$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$	0\$	\$0	\$0	\$0	\$0	\$0
District Wide Education/Awareness	CCSWD-21	\$0	\$0	\$0	0\$	-	\$100,000			-							\$0	\$0		0\$	\$0
Sub Total		\$1,051,695	\$1,051,695 \$1,389,120 \$1,107,425 \$1,094,847	\$1,107,425	\$1,094,847	_	_			_		-						\$1,133,645	_		\$1,171,040
Total Expenditures	,	\$1,773,971	\$1,773,971 \$2,123,338 \$2,093,000 \$1,935,996	\$2,093,000	\$1,935,996	_	-	_	-+	-	_	_	\$1,995,586	\$2,016,827	-		_	_	-	_	\$2,178,128
Difference (Revenue vs. Expense)	ense)	\$313,622	-\$20,731	\$147,928	\$313,622 -\$20,731 \$147,928 \$319,058 \$245,308		\$237,720	\$170,095							-\$16,835	-\$35,179	-\$39,005	-\$238,322	-\$118,141	_	-\$134,321
Year End Balance		\$2,630,665	\$2,609,934	\$2,757,862	\$3,076,920		\$3,559,948	\$3,559,948 \$3,730,043 \$3,702,270		\$3,589,973	\$3,467,087	\$3,468,269	\$3,486,713	\$3,487,750	\$3,470,915 \$3,435,736	\$3,435,736	\$3,336,731	\$3,098,408	\$2,980,267	\$2,866,797	\$2,732,476

## IX. District Rules [ORC Section 3734.53(C)]

#### A. Existing Rules

According to Ohio Revised Code Section 3734.53(C), "the solid waste management plan of a county or joint district may provide for the adoption of rules under division (G) of section 343.01 of the Revised Code after approval of the plan under section 3734.521 or 3734.55 of the Revised Code."

In Cuyahoga County, Ohio the initial Solid Waste Management Plan approved by OEPA on July 8, 1994, "reserved the authority of the Board to adopt and enforce rules to support and complement the implementation of the Plan. This *Plan Update* reserves the same rulemaking authority. As of the date of preparation of the *Plan Update*, the Board has not adopted any rules.

#### B. Rule Making Authority - ORC 3734.53(G)(1)-(4)

The *Plan Update* authorizes the Board to adopt rules under division (G) of section 343.01 of the Revised Code after approval of the *Plan Update* under section 3734.521 or section 3734.55 of the Revised Code doing any or all of the following:

- (1) Prohibiting or limiting the receipt at facilities covered by the *Plan Update* of solid wastes generated outside the District or outside a prescribed service area consistent with the projections under divisions (A)(6) and (7) of this section, except that the director of environmental protection may issue an order modifying a rule authorized to be adopted under division (C)(1) of this section to allow the disposal in the District of wastes from another county or joint solid waste management district if all of the following apply:
  - (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the director's order;
  - (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;

- (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
- (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the District;
- (e) The district in which the wastes were generated has demonstrated to the director that the conditions specified in divisions (C)(1)(a) to (d) of this section have been met;
- (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of the out-of-District wastes will not limit the capacity of the District to dispose of its in-District wastes to less than eight years. Any order issued under division (C)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the District.
- (2) Governing the maintenance, protection, and use of solid waste collection, storage, disposal, transfer, recycling, processing, and resource recovery facilities within the District and requiring the submission of general plans and specifications for the construction, enlargement, or modification of any such facility to the Board for review and approval as complying with the *Plan Update* or future updates of the District Plan;
- (3) Governing development and implementation of a program for the inspection of solid wastes generated outside the boundaries of the state that are being disposed of at solid waste facilities included in the District's Plan:
- (4) Exempting the owner or operator of any existing or proposed solid waste facility provided for in the *Plan Update* from compliance with any amendment to a township zoning resolution adopted under section 519.12 of the Revised Code or to a county rural zoning resolution adopted under section 303.12 of the Revised Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised Code to open a new or modify an existing solid waste facility.

#### C. Proposed Rules

The District reserves the right to adopt rules under division (G) of section 343.01 and under division (c) of section 3734.53 of the Revised Code. The District has not proposed to adopt any rules.

Rule adoption shall follow the procedures listed in Section IX.C. before becoming final.

#### D. Rule Approval Process

Proposed rules shall follow the steps presented below prior to final approval by the Board.

- 1. Publish notice of proposed rules in the *Plain Dealer*. The District may also publish proposed rules on the District's website and on social media and other publications.
- 2. The publication of any proposed rules shall commence a 30-day public comment period and include instructions on how those comments should be submitted to the Board.
- 3. Following the thirty day public comment period, the Board may elect to provide an opportunity to provide comments at an open meeting of the Board. The Board will include the date, time and location of the open meeting to receive those comments.
- 4. At any time following the public comment period, or following the open meeting to receive comments if the Board provides for an open meeting to hear any comments, the Board may adopt the proposed rules. Thereafter, the Board will publish the rules, as adopted, in the same manner as published in VI.C.1. above.

# Appendix A Resolutions for District Formation

#### RESOLUTION

Establishing the Cuyahoga County Solid Waste Management District pursuant to Chapter 343 and Section 3734.52 of the Ohio Revised Code.

WHEREAS, the Ohio General Asembly has enacted and the Governor has executed legislation requiring all counties in the State of Ohio to form or be a part of a Solid Waste Management District by March 24, 1989; and

WHEREAS, such Solid Waste Management Districts are established in order to provide for management of solid wastes in a safe, environmentally sound, and effective manner; and

WHEREAS, a single County Solid Waste Management District must include all of the incorporated and unincorporated territory of the county and a minimum population of 120,000 persons; and

WHEREAS, the Board of Commissioners of Cuyahoga County has, by Resolution 814313, dated July 13, 1978, previously established the Cuyahoga County Garbage and Refuse Disposal District.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of Cuyahoga County, Ohio that said Board hereby establishes the County County Solid Waste Management District pursuant to Chapter 343 and Section 3734.52 of the Ohio Revised Code to perform all duties and exercise all powers of such Districts, as set forth by law.

BE IT FURTHER RESOLVED that the Cuyahoa County Solid Waste Management District shall consist of all of the incorporated and unincorporated territory of Cuyahoga County, Ohio.

BE IT FURTHER RESOLVED that Resolution 814313, dated July 13, 1978, establishing the Cuyahoga County Garbage and Refuse Disposal District is hereby amended to provide for the termination of the Cuyahoga County Garbage and Refuse Disposal District upon the final approval of the Cuyahoga County Solid Waste Management Plan, as set forth by law. Until a Solid Waste Management Plan is approved or ordered to be implemented under Section 3734.55 of the Ohio Revised Code, the Board of Commissioners shall continue to perform the duties and exercise the powers conferred upon the Board under Chapter 343 of the Ohio Revised Code as that Chapter existed immediately prior to the effective date of the act amending Chapter 343.

#### RESQLUTION

Establishing the Cuyahoga County Solid Waste Management District pursuant to Chapter 343 and Section 3734.52 of the Ohio Revised Code.

WHEREAS, the Ohio General Asembly has enacted and the Governor has executed legislation requiring all counties in the State of Ohio to form or be a part of a Solid Waste Management District by March 24, 1989; and

WHEREAS, such Solid Waste Management Districts are established in order to provide for management of solid wastes in a safe, environmentally sound, and effective manner; and

WHEREAS, a single County Solid Waste Management District must include all of the incorporated and unincorporated territory of the county and a minimum population of 120,000 persons; and

WHEREAS, the Board of Commissioners of Cuyahoga County has, by Resolution 814313, dated July 13, 1978, previously established the Cuyahoga County Garbage and Refuse Disposal District.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of Cuyahoga County, Ohio that said Board hereby establishes the County County Solid Waste Management District pursuant to Chapter 343 and Section 3734.52 of the Ohio Revised Code to perform all duties and exercise all powers of such Districts, as set forth by law.

BE IT FURTHER RESOLVED that the Cuyahoa County Solid Waste Management District shall consist of all of the incorporated and unincorporated territory of Cuyahoga County, Ohio.

BE IT FURTHER RESOLVED that Resolution 814313, dated July 13, 1978, establishing the Cuyahoga County Garbage and Refuse Disposal District is hereby amended to provide for the termination of the Cuyahoga County Garbage and Refuse Disposal District upon the final approval of the Cuyahoga County Solid Waste Management Plan, as set forth by law. Until a Solid Waste Management Plan is approved or ordered to be implemented under Section 3734.55 of the Ohio Revised Code, the Board of Commissioners shall continue to perform the duties and exercise the powers conferred upon the Board under Chapter 343 of the Ohio Revised Code as that Chapter existed immediately prior to the effective date of the act amending Chapter 343.



State of Ohio Environmental Protection Agency

.Ó. Box 1049, 1800 WaterMark Dr. Columbus, Ohio 43266-0149

Richard F. Celeste Governor

March 30, 1989

#### CERTIFIED MAIL

Cuyahoga County Commissioners County Administration Building 1219 Ontario Street Cleveland, Ohio 44113

Dear Commissioners:

Thank you for your letter of February 28 requesting a waiver regarding the composition of the solid waste management policy committee of your single-county solid waste management district. The composition of the committee is set forth in Ohio Revised Code Sec. 3734.54, Div. (B). However, Div. (D) of that section provides that if an existing body has dutles that involve planning for solid waste management, that body may serve as the committee, provided the Director approves of this substitution.

Your request that the Guyahoga County Planning Commission serve as the solid waste management policy committee appears to meet all the criteria for waiving the composition of the committee. Therefore your waiver request is approved.

Please be advised that Div. (D) also provides as follows:

"After issuance of the waiver, the composition of the political subdivisions and other interests represented on the policy committee shall remain the same as that described in the resolution requesting the waiver."

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Law Division of the Office of the Attorney General within three (3) days of filing with the Board.

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

Bylurolenum Date 3/30/89

Obio Environmental Protection Agency ENTERED DIRECTOR'S JOURNAL

### **Appendix B**

## Public Notices for Public Hearings and Public Comment

#### **Public Comment Period for Draft Solid Waste Management Plan**

The Cuyahoga County Solid Waste Management District (District) is establishing a 30-day written comment period (Monday, April 2, 2012 until Tuesday, May 2, 2012) on the draft solid waste management plan (Ohio Revised Code Section 3734.55). The District has prepared a draft solid waste management plan as required by Section 3734.54 of the Ohio Revised Code. The draft plan is available for review on the District's Website at: <a href="www.cuyahogaswd.org">www.cuyahogaswd.org</a> or at the following locations:

Cuyahoga County Solid Waste Management District 4750 E 131st St Garfield Heights, OH 44105

Please call (216) 443-3749 with any questions about the Plan Update or the opportunity to review a copy.

Written comments should be sent to Ms. Diane Bickett, Executive Director, Cuyahoga County Solid Waste Management District, 4750 E 131st Street, Garfield Heights, OH 44105.

The draft solid waste plan includes a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of progress made toward achieving state waste reduction goals, cost to finance the plan and District rules. This draft plan is an update to a previously approved solid waste plan. This plan includes the following programs: Non-Subscription Curbside Recycling Programs, Drop-Off Recycling, Yard Waste Management, Household Hazardous Waste Collection, Computer Recycling, Scrap Tire Recycling, Litter Collection, Mercury Collection Program, Phone Book Recycling Campaign, Special Waste Convenience Center, Local Government Outreach and Assistance, Children's Education Program, General Public Education and Outreach, Commercial, Institutional and Industrial Recycling Assistance, Recycling Market Development, District Grant Programs, Solid Waste Code Enforcement, Securing Landfill Disposal, Solid Waste Management Planning, District Wide Contracting for Service and Education/Awareness Branding.

The District achieves the 25% residential/commercial waste reduction goal and 66% industrial waste reduction goal in this draft plan. In 2009 the District reduced the residential/commercial sector waste stream by 30% and the industrial sector waste stream by 75%.

The draft plan includes a demonstration of access to capacity that determines there is more than sixteen years of landfill capacity available to the District. Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code.

The District currently funds plan programs and current operations through a generation fee of \$1.50 per ton. This fee is not proposed to change during the planning period.

The District will hold one public hearing to obtain oral comments regarding the draft plan on Tuesday, May 8, 2012 from 2:00 pm to 3:00 pm at the Cuyahoga County Solid Waste Management District, 4750 E 131st St, Garfield Heights, OH 44105.

#### 30-DAY WRITTEN COMMENT PERIOD AND PUBLIC HEARINGS

#### **Cuyahoga County Council, Municipalities, Townships**

The Cuyahoga County Solid Waste Management District (District) is establishing a 30-day written comment period (Monday, April 2, 2012 until Tuesday, May 2, 2012) on the draft solid waste management plan (Ohio Revised Code Section 3734.55). The District has prepared a draft solid waste management plan as required by Section 3734.54 of the Ohio Revised Code. The draft plan is available for review on the District's Website at: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a> or at the following locations:

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The District will hold one public hearing to obtain oral comments regarding the draft plan on Tuesday, May 8, 2012 from 2:00 pm to 3:00 pm at the Cuyahoga County Solid Waste Management District, 4750 E 131st St, Garfield Heights, OH 44105.

#### Public Comment Period and Public Hearing for Draft Solid Waste Management Plan

Attention: Ohio EPA Director, Adjacent Solid Waste Management Districts, 50 Largest Industrial/Commercial/Institutional Solid Waste Generators and their Trade Associations

The Cuyahoga County Solid Waste Management District (District) is establishing a 30-day written comment period (Monday, April 2, 2012 until Tuesday, May 2, 2012) on the draft solid waste management plan (Ohio Revised Code Section 3734.55). The District has prepared a draft solid waste management plan as required by Section 3734.54 of the Ohio Revised Code. The draft plan is available for review on the District's Website at: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a> or at the following locations:

Cuyahoga County Solid Waste Management District 4750 E 131st St Garfield Heights, OH 44105

Please call (216) 443-3749 with any questions about the Plan Update or the opportunity to review a copy.

Written comments should be sent to Ms. Diane Bickett, Executive Director, Cuyahoga County Solid Waste Management District, 4750 E 131st Street, Garfield Heights, OH 44105.

The draft solid waste plan includes a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of progress made toward achieving state waste reduction goals, cost to finance the plan and District rules. This draft plan is an update to a previously approved solid waste plan. This plan includes the following programs: Non-Subscription Curbside Recycling Programs, Drop-Off Recycling, Yard Waste Management, Household Hazardous Waste Collection, Computer Recycling, Scrap Tire Recycling, Litter Collection, Mercury Collection Program, Phone Book Recycling Campaign, Special Waste Convenience Center, Local Government Outreach and Assistance, Children's Education Program, General Public Education and Outreach, Commercial, Institutional and Industrial Recycling Assistance, Recycling Market Development, District Grant Programs, Solid Waste Code Enforcement, Securing Landfill Disposal, Solid Waste Management Planning, District Wide Contracting for Service and Education/Awareness Branding.

The District achieves the 25% residential/commercial waste reduction goal and 66% industrial waste reduction goal in this draft plan. In 2009 the District reduced the residential/commercial sector waste stream by 30% and the industrial sector waste stream by 75%.

The draft plan includes a demonstration of access to capacity that determines there is more than sixteen years of landfill capacity available to the District. Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code.

The District currently funds plan programs and current operations through a generation fee of \$1.50 per ton. This fee is not proposed to change during the planning period.

The District will hold one public hearing to obtain oral comments regarding the draft plan on Tuesday, May 8, 2012 from 2:00 pm to 3:00 pm at the Cuyahoga County Solid Waste Management District, 4750 E 131st St, Garfield Heights, OH 44105.

#### **Public Hearing for Draft Solid Waste Management Plan**

The Cuyahoga County Solid Waste Management District (District) will hold one public hearing to obtain oral comments regarding the draft plan on Tuesday, May 8, 2012 from 2:00 pm to 3:00 pm at the Cuyahoga County Solid Waste Management District, 4750 E 131st St, Garfield Heights, OH 44105 as required by Sections 3734.54 and 3734.55 of the Ohio Revised Code.

The draft solid waste plan includes a solid waste facility inventory, projections and strategies, facilities and programs to be used, an analysis of progress made toward achieving state waste reduction goals, cost to finance the plan and District rules. This draft plan is an update to a previously approved solid waste plan. This plan includes the following programs: Non-Subscription Curbside Recycling Programs, Drop-Off Recycling, Yard Waste Management, Household Hazardous Waste Collection, Computer Recycling, Scrap Tire Recycling, Litter Collection, Mercury Collection Program, Phone Book Recycling Campaign, Special Waste Convenience Center, Local Government Outreach and Assistance, Children's Education Program, General Public Education and Outreach, Commercial, Institutional and Industrial Recycling Assistance, Recycling Market Development, District Grant Programs, Solid Waste Code Enforcement, Securing Landfill Disposal, Solid Waste Management Planning, District Wide Contracting for Service and Education/Awareness Branding.

The District achieves the 25% residential/commercial waste reduction goal and 66% industrial waste reduction goal in this draft plan. In 2009 the District reduced the residential/commercial sector waste stream by 30% and the industrial sector waste stream by 75%. Under this plan, the Board of Directors of the District is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code.

The draft plan includes a demonstration of access to capacity that determines there is more than sixteen years of landfill capacity available to the District. Under this plan, the Board of Commissioners is authorized to designate facilities in accordance with Section 343.014 of the Ohio Revised Code.

The District currently funds plan programs and current operations through a generation fee of \$1.50 per ton. This fee is not proposed to change during the planning period.

The District will accept written comments as required by Ohio Revised Code Section 3734.55 on the draft plan from Monday, April 2, 2012 until Tuesday, May 2, 2012. Written comments should be sent to Ms. Diane Bickett, Executive Director, Cuyahoga County Solid Waste Management District, 4750 E 131st Street, Garfield Heights, OH 44105. The draft plan is available for review on the District's Website at: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a> or at the following locations:

Cuyahoga County Solid Waste Management District 4750 E 131st St Garfield Heights, OH 44105

Please call (216) 443-3749 with any questions about the Plan Update or the opportunity to review a copy.

#### State of Ohio ss.

Cuyahoga County

PUBLIC NOTICE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT

Public Comment Period for Draft Solid Waste Management Plan The Cuyahoga County Solid Waste Management District (Bs-tict) is establishing a 30-day written comment period on the draft Cuyahoga County Solid Waste Management Plan Update (2013 – 2028). The District prepared the solid waste management plan update as required by Section 3734.54 of the Ohio Revised Code.

date as required by Section 3734.54 of the Ohio Ravised Code. The District is accepting written comments on the Plan Update beginning Monday, April 2, 2012 through Tuesday, May 6, 2012 through Tuesday, May 6, 2012 the District office located at 4750 E 131st Street, Garriedd Heights, OH 44105. Written comments should he sent to Daine Bickett, Executive Director, Curyahoga County Solid Weste Management District, 4750 East 131 Street, Garrield Heights, OH 44105. The District will hold one public hearing to obtain oral comments regarding the Plan Update on Tuesday, May 8, 2012 from 2:00 p.m. to 3:00 p.m. at the Cuyahoga County Solid Waste Management District, 4750 East 131 Street, Garrield Heights, OH 44105. The draft Cuyahoga County Solid Waste Management District, 4750 East 131 Street, Garrield Heights, OH 44105.

131 Street. Qarlield Heights, OH
44105.
The draft Cuyahoga County Solid
Waste Management Plan Update
is an update to a previously approved solid waste management
plan and documents Cuyahoga
County's progress in achieving
State of Ohio waste reduction
goals and assures adequate landfill capacity for disposal of solid
waste for a 15-year planning period.
The Plan Update demonstrates

od.
The Plan Update demonstrates that Cuyahoga County currently exceeds Ohio's waste reduction goals by reducing residential and commercial waste by 30% and industrial waste by 75% and has sufficient access to landfall capacity to meet the Cuyahoga County's needs for a minimum of 16 years.

to years:

16 Years:

16 Years:

16 Years:

17 Years:

18 Years:

18 Years:

19 Years:

10 Years: 16 years Included in the Plan Update

say that I am a ACCOUNTS RECEIVABLE REPRESENTATIVE of The Plain Dealer Publishing company, publisher of The Plain Dealer, a newspaper printed in said county, and general circulation in Ashtabula, Geauga, Lake, Lorain, Medina, Portage, Summit and Trumbull counties, in addition to said county; the requirements of Section 7/12 of the Revised Code of Ohio as amended September 14, 1957, relating to publication and distribution are fulfilled by said newspaper; and the advertisement attached was published in said newspaper on the following day, or days in a type size larger than agate. Insertion dates as follows: Sworn to and subscribed before me this day of levil Strankly

I, Pauline Shanklin, being duly sworn, do upon my oath, depose and

Brenda G. Jordan Notary Public, STATE OF OHIO My Commission Expires Sept. 4, 2018 (Recorded in Cuyahoga County)



RECEIVED MAR 2 7 2012

**CUYAHOGA COUNTY** SOLID WASTE DISTRICT

#### State of Ohio ss.

Cuyahoga County

PUBLIC NOTICE
CUYAHOGA COUNTY SOLID
WASTE MANAGEMENT
DISTRICT
Public Hearing for Draft Solid
Waste Management Plan
The Cuyahoga County Solid
Waste Management Plan
The Cuyahoga County Solid
Waste Management Plan
Undate
(2013-2028) on Tuesday, May 8,
2012 from 2:00 p.m. to 3:00 p.m.
at the Cuyahoga County Solid
Waste Management Plan Undate
(2013-2028) on Tuesday, May 8,
2012 from 2:00 p.m. to 3:00 p.m.
at the Cuyahoga County Solid
Waste Management Plan Undate
Heights, OH 44105 as required by
Sections 3734.54 and 3734.55 of
the Ohlo Revised Code.
The draft Cuyahoga County Solid
Waste Management Plan Undate
is an update to a previously approved solid waste management
plan and documents Cuyahoga
County's progress in achieving
State of Ohlo waste reduction
goals and assures adequate landfill capacity for disposal of solid
waste for a 15-year planning period.
The Plan Update may be viewed

waste for a 15-year planning period.
The Plan Update may be viewed on the District's website wuxcuyahogaswd.org or at the Cuyahoga County Solid WasteDistrict office located at 4750 E 131st Street, Gartield Helghts, OH 44105. The District is also accepting written comments until Tuesday, May 2, 2012. Written comments should be sent to Diane Bickett, Executive Director, Cuyahoga County Solid Waste Management District, 4750 East

Management District, 4750 East 131st Street, Garfield Heights, OH 44105.

44105. Questions regarding the Plan Update or this public notice should be directed to Jessica Claccla at (216) 443-3728. 2796116 p.d.apr.23,2012

CUYAHOGA COUNTY SOLID WASTE DISTRICT APR 2 5 2012

I, Pauline Shanklin, being duly sworn, do upon my oath, depose and say that I am a ACCOUNTS RECEIVABLE REPRESENTATIVE of The Plain Dealer Publishing company, publisher of The Plain Dealer, a newspaper printed in said county, and general circulation in Ashtabula, Geauga, Lake, Lorain, Medina, Portage, Summit and Trumbull counties, in addition to said county; the requirements of Section 7/12 of the Revised Code of Ohio as amended September 14, 1957, relating to publication and distribution are fulfilled by said newspaper; and the advertisement attached was published in said newspaper on the following day, or days in a type size larger than agate. Insertion dates as follows:

Sworn to and subscribed before me this day of

Brenda G. Jordan Notary Public, STATE OF OHIO My Commission Expires Sept. 4, 2016 (Recorded in Cuyahoga County)



# Appendix C Resolutions and Certification Statements

### CUYAHOGA COUNTY SOLID WASTE MANAGEMENT POLICY COMMITTEE RESOLUTION NO. 110907

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Authorizing the transmittal of the *DRAFT Cuyahoga County Solid Waste Management Plan Update* to the Director of the Ohio Environmental Protection Agency for initial review and non-binding advisory opinion, pursuant to *Ohio Revised Code* Sections 3734.55 and .56.

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WHEREAS, the Ohio Solid Waste Disposal Act, effective June 24, 1988, mandates that all counties establish a Solid Waste Management District and a Solid Waste Policy Committee to prepare, adopt and submit to the Ohio Environmental Protection Agency a Solid Waste Management Plan; and

**WHEREAS**, through Resolution No. 883536, adopted August 29, 1988, the Cuyahoga County Board of Commissioners formed a single-county solid waste management district, in accordance with ORC Section 3734.52; and

**WHEREAS**, the Director of the Ohio Environmental Protection Agency, on March 30, 1989, designated the Cuyahoga County Planning Commission to serve as the Cuyahoga County Solid Waste Policy Committee for the purpose of preparing and submitting a solid waste management plan for Cuyahoga County pursuant to ORC Section 3734.54(D); and

**WHEREAS**, the Board of Cuyahoga County Commissioners, pursuant to Resolution No. 934112, adopted on September 28,1993, appointed two additional Policy Committee members in accordance with Section 3734.54(D); and

**WHEREAS,** on July 8, 1994, the Director of the Ohio Environmental Protection Agency approved the Initial Cuyahoga County Solid Waste Management Plan upon determination that it was duly ratified by local governments comprising the District, pursuant to ORC Section 3734.55(B); and

**WHEREAS**, the Director of the Ohio Environmental Protection Agency approved the first Plan Update on October 6, 2000 and the second Plan Update on November 8, 2006; and,

**WHEREAS**, *Ohio Revised Code* Section 3734.56(A) requires the Cuyahoga County Solid Waste Policy Committee to prepare and submit an amended Plan Update to the Ohio Environmental Protection Agency by November 8, 2011.

**NOW, THEREFORE, BE IT RESOLVED,** that the Cuyahoga County Solid Waste Policy Committee of the Cuyahoga County Solid Waste Management District hereby certifies that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the draft District Solid Waste Management Plan Update, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the sixteen 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.

**BE IT FURTHER RESOLVED**, that the Executive Director of the Cuyahoga County Solid Waste Management District is authorized to deliver the *DRAFT Cuyahoga County Solid Waste Management Plan Update* to the Director of the Ohio Environmental Protection Agency for review and non-binding advisory opinion prior to the initiation of the local ratification process among Cuyahoga County cities villages and townships.

On a motion of Mayor Blomquist, seconded by Mayor Patton, the foregoing resolution was adopted.

AYES: Mayor Blomquist, Jim Danek (for Robert Brown), Ed Jerse, Nate Kelly,

Mayor Patton, Mayor Procuk, John Nolan

NAYS: None

ABSTENTIONS: None

NOT PRESENT: Virginia Aveni, Mayor DePiero, Mayor Kelley, Mayor Mulcahy, Sunny Simon,

Mayor Welo

## CUYAHOGA COUNTY SOLID WASTE MANAGEMENT POLICY COMMITTEE RESOLUTION NO. 120809

Declaring the Adoption of the Amended Cuyahoga County Solid Waste Management Plan for the Cuyahoga County Solid Waste Management District.

WHEREAS the Ohio Solid Waste Disposal Act, effective June 24, 1988, mandated that all counties establish a Solid Waste Management District and Solid Waste Management Policy Committee to prepare, adopt and submit to the Ohio Environmental Protection Agency a Solid Waste Management Plan and to update the plan every five years; and,

**WHEREAS**, the Director of the Ohio Environmental Protection Agency approved the Cuyahoga County Solid Waste District's *Initial Solid Waste Management Plan* on July 8, 1994; the first *Solid Waste Plan Update* on October 6, 2000; and the second *Solid Waste Plan Update* on November 8, 2006; and,

WHEREAS, the Cuyahoga County Solid Waste Management District ("District") and Cuyahoga County Solid Waste Policy Committee ("Policy Committee") prepared a draft amended Solid Waste Management Plan ("Plan") and submitted it to the Ohio Environmental Protection Agency for review and comment on November 8, 2011 and the Ohio Environmental Protection Agency provided comments in a non-binding advisory opinion on December 22, 2011.

WHEREAS, the Policy Committee reviewed the non-binding advisory opinion received from the Ohio Environmental Protection Agency and have taken these comments into consideration and incorporated changes into the amended Plan as appropriate;

WHEREAS, the District conducted a 30-day comment period from April 2, 2012 to May 2, 2012 and a public hearing on May 8, 2012 to provide the public an opportunity to comment on the Plan;

**NOW, THEREFORE, BE IT RESOLVED** that the Cuyahoga County Solid Waste Policy Committee of the Cuyahoga County Solid Waste Management District adopts the amended Solid Waste Management Plan in the form submitted for public comment and the public hearing.

**BE IT FURTHER RESOLVED** that the Cuyahoga County Solid Waste Policy Committee certifies to the best of its knowledge and belief, that the statements, demonstrations and all accompanying materials that comprise the Plan are accurate and are in compliance with the requirements of the District Solid Waste Management Plan Format Revision 3.0.

**BE IT FURTHER RESOLVED** that the Cuyahoga County Solid Waste Policy Committee directs the Executive Director of the Cuyahoga County Solid Waste District to distribute one copy of the adopted Plan to the legislative authority of each municipal corporation, village and township under the jurisdiction of the District for ratification.

On a motion of Mayor Mulcahy, seconded by Mayor Ursu, the foregoing resolution was duly adopted.

AYES: Ms. Virginia Aveni, Mr. James Danek (for Mayor Frank Jackson), Mayor Kathy Mulcahy, Mayor Daniel Ursu, Mr. Ed Jerse, Ms. Sunny Simon, Mr. Nathan Kelly, Mayor Michael Procuk, Mayor Robert Blomquist, Mayor Michael Byrne, Mayor Eileen Patton, Mayor Susan Infeld, Ms. Christina Vernon

NAYS: None

**ABSTENTIONS: None** 

NOT PRESENT:

## CUYAHOGA COUNTY SOLID WASTE MANAGEMENT POLICY COMMITTEE RESOLUTION NO. 120809

Declaring the Adoption of the Amended Cuyahoga County Solid Waste Management Plan for the Cuyahoga County Solid Waste Management District.

Voting for the Resolution:	Voting Against the Resolution
Vugnia Duen	
James Dank Majortrak Jackson	<u>.                                    </u>
Hathy U. Mulcaly	
James Clina	
Ewas Ar	
Simon Simon	
Juthun / Helly	
Muls Me	
Wolt By	
mon	-
Eileen a. Patton	
Ayram K Hall	Si
The Man	~
Total Votes for the resolution: 13	Total Votes against the resolution:

## **Appendix D**

## Identification of Consultants Retained for Plan Preparation

#### **Identification of Consultants for Plan Preparation**

Consulting Firm: GT Environmental, Inc.

635 Park Meadow Road

Suite 112

Westerville, Ohio 43081

Project Manager: James A. Skora

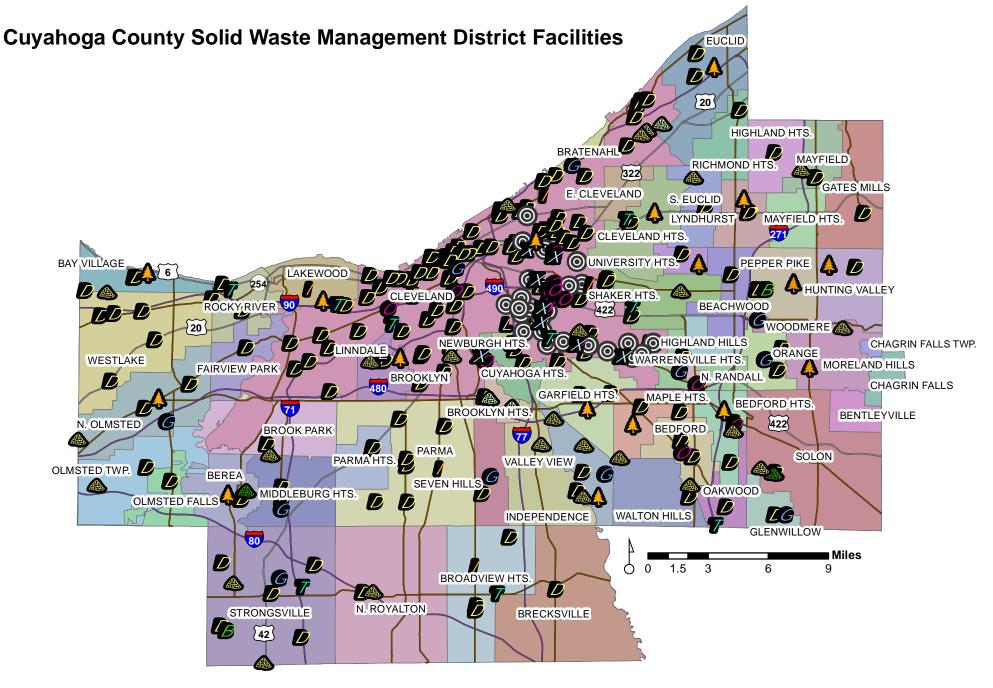
Senior Project Manager

(330) 899-1105 (330) 896-2062 Fax



## Appendix E

**District Map** 



- **G** Grasscycling
- ▲ Log Recycling
- **B** Backyard Composting
- Class II Composting Facilities
- Class II/IV Composting Facilities
- Class IV Composting Facilities
- Mixed (Tire/Debris) Dumps
- Open Dumps
- Waste Tire Dumps

- Landfills
- **7** Transfer Facilities
- Drop-Off Recycling Locations



Incinerators and Waste-to-Energy Facilities

# Appendix F Industrial Survey Results

Appendix F

Cuyahoga County Solid Waste Management District

Amount of Industrial Waste Generated by Standard Industrial Classification (SIC) Category (Tons) As Reported on Industrial Surveys

Type of Material	20	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Total
Office Paper	4.6	0.5	0.0	0.0	2.5	3,116.4	504.7	273.4	0.0	14.1	0.1	3.9	9.4	165.5	32.7	105.5	0.3	37.8	53.8	4,325.0
Newsprint	0.0	0.0	0.1	1.0	0.8	400.0	3,823.3	0.2	0.0	1.1	0.1	0.0	1.3	13.6	1.3	1.1	0.0	0.5	0.3	4,244.5
Cardboard	590.6	0.0	1.0	10.0	996.8	6,817.0	945.9	752.3	0.0	345.6	0.1	62.4	216.9	671.3	288.1	519.5	101.6	356.6	251.0	12,926.7
Other Paper	7.0	0.0	68.3	0.0	0.0	1,607.0	6,258.8	29.5	0.0	5.2	0.0	5.0	0.2	1,913.0	396.4	68.3	0.0	0.0	41.6	10,400.2
Cloth & Fabrics	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.0	0.6	0.0	0.0	0.0	0.0	0.3	4.0
Wood Pallets / Packaging	5.5	0.0	1.0	1,138.0	15.0	63.0	30.2	2,010.1	5.0	290.0	0.0	247.0	119.9	1,246.2	373.3	56.2	37.0	37.2	235.8	5,910.4
Board Ends / Wood Scrap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	93.5	0.0	10.0	0.0	0.0	104.6
Sawdust	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	10.3
Other Wood	0.0	0.0	0.0	68.5	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	59.3	411.2	0.0	0.0	48.0	626.4
Non-Ferrous Metals	27.8	0.0	2.0	10.0	0.3	7.8	149.2	68.8	0.0	123.4	0.0	0.4	20,532.6	27,959.3	651.9	192.7	17.7	28.9	267.6	50,040.4
Ferrous Metals	11.7	0.0	31.0	0.0	411.0	39.0	43.6	502.2	73.4	52.0	0.7	18,960.2	291,231.0	139,162.6	10,175.9	206.2	2,132.0	73.6	3,224.8	466,330.8
Glass	1.7	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	2.8	531.3	0.0	0.0	0.0	0.0	537.3
Plastics	74.9	0.0	0.0	15.0	0.0	43.0	63.3	82.1	18.8	96.2	0.1	8.2	88.2	1,434.3	12.2	15.4	0.0	0.1	401.9	2,353.5
Tires	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1
Stone / Clay / Sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	215.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	217.5
Non-Exempt Foundry Sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Composites	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	8.0
Other Batteries (non-LAB)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	1.5	0.3	0.1	0.0	0.1	0.1	2.6
Ink / Print Cartridges	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.2	0.0	3.0	0.3	0.6	0.0	0.1	0.5	5.2
Food Wastes	4,497.3	0.0	0.0	0.0	0.0	0.0	1.0	13.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	4,512.5
Litho / Photo Film	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	25.0	1.4	0.1	0.0	0.0	0.0	0.0	28.8
Furniture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.3
Yard waste	2.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0	0.0	0.0	0.0	0.0	0.0	4.8
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.6	0.0	282.6	0.0	0.0	0.0	0.0	11.3	21.7	0.0	0.0	0.0	347.2
Commingled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	272.5	0.0	0.0	0.0	0.0	0.0	20.8	0.0	22.3	0.0	0.0	0.0	315.6
General Solid Waste	7,838.0	41.6	424.6	359.7	1,514.4	3,120.9	6,041.2	10,238.5	758.7	2,487.4	2.3	3,343.4	42,270.7	17,553.9	6,515.6	2,493.6	462.1	2,179.0	5,349.6	112,995.1
Total:	13,062.6	42.1	527.9	1,612.2	2,940.7	15,230.2	17,866.9	14,275.9	855.8	3,697.6	3.4	22,845.6	354,599.4	190,184.4	19,143.5	4,115.2	2,760.6	2,714.0	9,875.6	676,353.7

#### Source(s) of information:

The total waste generation was reported on Industrial Waste Surveys as the amount of material disposed and the amount of material recycled.

Appendix F
Cuyahoga County Solid Waste Management District Amount of Industrial Waste Recycled by Standard Industrial Classification (SIC) Category (Tons) as Reported on Industrial Surveys

Type of Material	20	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	Total
Office Paper	4.6	0.5	0.0	0.0	2.5	3,116.4	504.7	273.4	0.0	14.1	0.1	3.9	9.4	165.5	32.7	105.5	0.3	37.8	53.8	4,325.0
Newsprint	0.0	0.0	0.1	1.0	0.8	400.0	3,823.3	0.2	0.0	1.1	0.1	0.0	1.3	13.6	1.3	1.1	0.0	0.5	0.3	4,244.5
Cardboard	590.6	0.0	1.0	10.0	996.8	6,817.0	945.9	752.3	0.0	345.6	0.1	62.4	216.9	671.3	288.1	519.5	101.6	356.6	251.0	12,926.7
Other Paper	7.0	0.0	68.3	0.0	0.0	1,607.0	6,258.8	29.5	0.0	5.2	0.0	5.0	0.2	1,913.0	396.4	68.3	0.0	0.0	41.6	10,400.2
Cloth & Fabrics	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.0	0.6	0.0	0.0	0.0	0.0	0.3	4.0
Wood Pallets / Packaging	5.5	0.0	1.0	1,138.0	15.0	63.0	30.2	2,010.1	5.0	290.0	0.0	247.0	119.9	1,246.2	373.3	56.2	37.0	37.2	235.8	5,910.4
Board Ends / Scrap Wood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	93.5	0.0	10.0	0.0	0.0	104.6
Sawdust	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	10.3
Other Wood	0.0	0.0	0.0	68.5	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	59.3	411.2	0.0	0.0	48.0	626.4
Non-Ferrous Metals	27.8	0.0	2.0	10.0	0.3	7.8	149.2	68.8	0.0	123.4	0.0	0.4	20,532.6	27,959.3	651.9	192.7	17.7	28.9	267.6	50,040.4
Ferrous Metals	11.7	0.0	31.0	0.0	411.0	39.0	43.6	502.2	73.4	52.0	0.7	18,960.2	291,231.0	139,162.6	10,175.9	206.2	2,132.0	73.6	3,224.8	466,330.8
Glass	1.7	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	2.8	531.3	0.0	0.0	0.0	0.0	537.3
Plastics	74.9	0.0	0.0	15.0	0.0	43.0	63.3	82.1	18.8	96.2	0.1	8.2	88.2	1,434.3	12.2	15.4	0.0	0.1	401.9	2,353.5
Tires	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1
Stone / Clay / Sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	215.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	217.5
Non-Exempt Foundry Sand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Composites	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	8.0
Other batteries	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	1.5	0.3	0.1	0.0	0.1	0.1	2.6
Ink/Print Cartridges	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.2	0.0	3.0	0.3	0.6	0.0	0.1	0.5	5.2
Food Waste	4,497.3	0.0	0.0	0.0	0.0	0.0	1.0	13.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	4,512.5
Litho / Photo Film	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	25.0	1.4	0.1	0.0	0.0	0.0	0.0	28.8
Furniture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.3
Yard waste	2.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0	0.0	0.0	0.0	0.0	0.0	4.8
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.6	0.0	282.6	0.0	0.0	0.0	0.0	11.3	21.7	0.0	0.0	0.0	347.2
Commingled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	272.5	0.0	0.0	0.0	0.0	0.0	20.8	0.0	22.3	0.0	0.0	0.0	315.6
Total:	5,224.6	0.5	103.4	1,252.5	1,426.3	12,109.3	11,825.7	4,037.4	97.2	1,210.2	1.1	19,502.3	312,328.7	172,630.5	12,627.9	1,621.6	2,298.5	535.0	4,526.0	563,358.6

#### Source(s) of information:

The total material recycled was reported on industrial surveys and through telephone follow-up with industrial facilities. Material included in Table IV-6 Industrial Recycling is from the returned industrial surveys.

**Note:** SIC code 34 reported 1,000 tons of recycled concrete. These values are not included in the plan.

## **Appendix G**

## Residential/Commercial/Industrial Reference Year Survey Instruments



#### **Community: Instructions**

The 2009 Residential Recycling Report is a means by which the Cuyahoga County Solid Waste District will gather information on the recycling services provided by your community or your private contractor.

Please take a moment to review the forms. There is a page for each of the following:

2009 Residential Recycling Report	<u>Page</u>
Instructions	1
Community background/contact sheet	2
Single family and multi-family recycling	3 - 4
Drop-off recycling	5 – 7
In-house facility recycling	8 – 9

#### 2009 Conversion Factors

For a listing of 2009 conversion factors, calculations and definitions, please visit our website at: www.cuyahogaswd.org

We would appreciate as much detail as you can provide. Check the appropriate boxes, complete any blanks, and list the tonnage collected in 2009 for any applicable materials.

- If you do not have a breakout of the specific materials (such as the different paper types)
  check the materials that are collected, and then list the total number for that category of
  material.
- If you do not have a breakout of any of the recycling commodity categories, check the materials that are collected, and then list the total for all commodities in the GRAND TOTAL section of the table.
- If you are listing a total number <u>only</u> in the GRAND TOTAL section of the table, please check if the GRAND TOTAL includes single family/multi-family services, and/or drop-off services.

The Residential Drop-Off page should contain data for these programs.

The In-House Facility Recycling page should contain data on recycling programs of the political subdivision's departments and agencies.

Your community's annual information is due to the District by: FRIDAY, FEBRUARY 19, 2010.

We suggest making a copy of these forms for your records. If you have any concerns or questions, contact **Jessica Ciaccia at (216) 443-3728**. Please return the 2009 Residential Recycling Report forms to:

Jessica Ciaccia Cuyahoga County Solid Waste District 323 Lakeside Avenue West, Suite 400 Cleveland, OH 44113



### **Community: Background/Contact Information Sheet**

ingiviqual i	Resp	onsible for Comp	leting <b>2009 Residenti</b>	al Recycling R	eport
	•		•	ile	-
		ber		ax	
Communit	y pop	oulation			
		dential units			
Number of	resid	dential units that h	nave access to curbsic	le recycling	
Who colled You					
	•	<del>-</del>	ontract for trash collect or trash collection termi		
	•	Automated or I	Manual trash collectior	•	,
How many	tons	of trash does you	ur community dispose	of annually?	tons
How do yo	u pro	mote your reside	ential recycling progran	ns?	



Community	Name				
<b>Who collect</b> You	<b>s the recycl</b> A private c	ables from the sir	ngle/multi-family (Con		Nobody
Where are the Curb	<b>he recyclabl</b> Oth	es placed for coll er		No curbside re	ecycling offered
	ekly Col	es collected from lected every other			
All recyclable All recyclable Each type of	es mixed toge es mixed toge es mixed toge recyclable in recyclable in	collected? ether in a bag ether in a recycling ether in a recycling a different bag a different bin/buc	wheeled cart		
Automated (	or Manual re	cyclable collection	on?		
<b>Do the resid</b> Yes	lents separa No	te their glass by	color for recyclin	ng?	
Newspapers Newspapers Newspapers	placed in sal placed in a b and RMP pla	me container with orown kraft bag and aced in same conta	other recyclables d then placed nex ainer with other re	IP) collected with to the other recycle cyclables olaced next to the other	ables
<b>Do you colle</b> Yes	ect residenti No	al yard waste sep	parate from solid	waste, so that it m	nay be composted?
<b>Are residen</b> t Yes	tial leaves va No	acuumed from the	e curb?		
<b>Are Holiday</b> Yes	Trees collection	cted separately fr	om the curb, so	that they may be c	omposted/chipped?

Community: Curbside Recycling Data for Single Family and Multi-Family Units



## 2009 Residential Recycling Report Community: Curbside Recycling Data for Single Family and Multi-Family Units

0-	 :4.,	Nama	
CU	 ullitv	Name	١

Materials Collected	X	Tons
Cardboard		Collected Ann Tons
Newsprint		Tons
Office Paper		Tons
Computer Paper		Tons
Residential Mixed Paper (RMP)		Tons
Phone Books		Tons
Magazines		Tons
Fiber Total		Tons
1 1201 10121		10110
Aluminum and Bi-metal Cans		Tons
Tin Cans		Tons
Scrap Metal		Tons
White Goods		Tons
Metals Total		Tons
Polyethylene (PETE #1)		Tons
HDPE (#2)		Tons
Combined Plastics		Tons
Plastics Total		Tons
Cans + Plastics, Co-mingled		Tons
Glass		Tons
Cans+Glass+Plastics,Co-mingled		Tons
Containers+Fiber, Co-mingled		Tons
Plastic Bags		Tons
Tidatic Daga		10113
Leaves		Tons
Brush (chipped and whole)		Tons
Holiday Trees		Tons
Grass Clippings		Tons
Logs		Tons
Grasscycling		Tons
Backyard Composting		Tons
Yard Wastes Total		Tons
The Francisco Folds		10.10

Materials Collected	Х	Tons Collected Ann
Furniture		Tons
Clothing/Fabric/Textiles		Tons
Carpet Padding		Tons
Styrofoam Peanuts		Tons
Flourescent Tubes		Tons
Computers		Tons
Lead Acid (wet cell)		Tons
Household (dry cell)		Tons
Batteries Total		Tons
Gas/Solvents		Tons
		_
Motor Oil		Tons
A ('for		<b>T</b> .
Antifreeze		Tons
Times		<b>T</b>
Tires		Tons
Total of all Annual		
		Ta:::
Recycling Tonnage		Tons

District Will Add	
Computer Round-Up	Tons
HHW Round-Up	Tons
Tire Round-Up	Tons

Grand Total Annual	
Recycling Tonnage	Tons

Total of all A	Annual Rec	∕cling Tonna	age includes

Single Family Multi – Family Dron-Off In-House				
	Single Family	Multi –Family	Drop-Off	In-House



### **Community: Drop-Off Recycling Data**

Com	munity Name_		
<b>Does</b> Yes	<b>your commu</b> No	nity offer drop-off recycling services to your residents?	
<b>ls the</b> Yes	ere more than No	one drop-off location?	
List /	ALL locations	(You may attach a separate list if more than 6)	
1.			
		ials are collected at this location?	
	Who collect You	s the recyclables from the drop-off location?  A private contractor(Contractor's Name)	Nobody
	Hours of Op	peration	
	<b>Is your drop</b> Yes	o-off restricted only to community residents?	
	<b>Is there any</b> Yes	money raised from the sale of the drop-off recyclables?	
2			
	What materi	ials are collected at this location?	
	<b>Who collect</b> You	s the recyclables from the drop-off location?  A private contractor(Contractor's Name)	Nobody
	Hours of Op	peration	
	<b>Is your drop</b> Yes	o-off restricted only to community residents?	
	<b>Is there any</b> Yes	money raised from the sale of the drop-off recyclables?	
3			
	What materi	als are collected at this location?	
	<b>Who collect</b> You	s the recyclables from the drop-off location?  A private contractor(Contractor's Name)	Nobody
	Hours of On	peration	



#### Is your drop-off restricted only to community residents?

Yes Is there any money raised from the sale of the drop-off recyclables? 4. What materials are collected at this location? Who collects the recyclables from the drop-off location? A private contractor \_\_\_\_\_(Contractor's Name) Nobody Hours of Operation Is your drop-off restricted only to community residents? Yes Is there any money raised from the sale of the drop-off recyclables? 5. What materials are collected at this location? Who collects the recyclables from the drop-off location? A private contractor (Contractor's Name) Nobody Hours of Operation \_\_\_\_\_ Is your drop-off restricted only to community residents? Yes Is there any money raised from the sale of the drop-off recyclables? 6. What materials are collected at this location? Who collects the recyclables from the drop-off location? A private contractor \_\_\_\_\_(Contractor's Name) Nobody Hours of Operation Is your drop-off restricted only to community residents? Is there any money raised from the sale of the drop-off recyclables?

Yes



#### Community: Drop-Off Recycling Data

Communit	ty Name
----------	---------

Materials Collected	X	Tons
Cardboard		Collected Ann Tons
Newsprint		Tons
Office Paper		Tons
Computer Paper		Tons
Residential Mixed Paper (RMP)		Tons
Phone Books		Tons
Magazines		Tons
Fiber Total		Tons
1 1201 10121		10110
Aluminum and Bi-metal Cans		Tons
Tin Cans		Tons
Scrap Metal		Tons
White Goods		Tons
Metals Total		Tons
Polyethylene (PETE #1)		Tons
HDPE (#2)		Tons
Combined Plastics		Tons
Plastics Total		Tons
Cans + Plastics, Co-mingled		Tons
Glass		Tons
Cans+Glass+Plastics,Co-mingled		Tons
Ocatainana Eilean Ocatainala I		<b>T</b>
Containers+Fiber, Co-mingled		Tons
Plastic Bags		Tons
Legyes		Tono
Leaves  Brush (chipped and whole)		Tons Tons
, , , ,		Tons
Holiday Trees Grass Clippings		Tons
11 0		Tons
Logs Grasscycling		Tons
Backyard Composting		Tons
Yard Wastes Total		Tons
Tara Wasies Total		10113

Materials Collected	Х	Tons Collected Ann
Furniture		Tons
Clothing/Fabric/Textiles		Tons
Carpet Padding		Tons
Styrofoam Peanuts		Tons
Flourescent Tubes		Tons
Computers		Tons
Lead Acid (wet cell)		Tons
Household (dry cell)		Tons
Batteries Total		Tons
Gas/Solvents		Tons
		_
Motor Oil		Tons
A ('for		<b>T</b> .
Antifreeze		Tons
Times		<b>T</b>
Tires		Tons
Total of all Annual		
		Ta:::
Recycling Tonnage		Tons

Grand Total of all Ann.	
Recycling Tonnage	Tons

<b>Total of all Annual Rec</b>	vcling Tonnage	Includes
--------------------------------	----------------	----------

Single Family \_\_\_ Multi –Family \_\_\_ Drop-Off \_\_\_ In-House \_\_\_



		use Facility Recycling Da		
Community	Name_			
Do any of th program/act			encies/facilities participate in	any type of recycling
Yes	No			
Who particing	oates ir	n a recycling program/act	ivity?	
•			Recreation Department	Parks Department
Police Depar	tment	Fire Department	Other	·
How many e	employ	ees participate in the in-h	ouse program(s)	people
Who collect	s the re	ecyclables from the interr	nal facility recycling program?	•
You	A priv	ate contractor	(Contractor's Name)	Nobody
le thoro any	monov	raised from the sale of t	he in-house recyclables?	
Yes	No	raised from the sale of t	ile ili-ilouse recyclables!	



#### Community: In-House Facility Recycling Data

Community	Name
-----------	------

Materials Collected	Х	Tons
Water lais Collected	^	Collected Ann
Cardboard		Tons
Newsprint		Tons
Office Paper		Tons
Computer Paper		Tons
Residential Mixed Paper (RMP)		Tons
Phone Books		Tons
Magazines		Tons
Fiber Total		Tons
		_
Aluminum and Bi-metal Cans		Tons
Tin Cans		Tons
Scrap Metal		Tons
White Goods		Tons
Metals Total		Tons
Polyethylene (PETE #1)		Tons
HDPE (#2)		Tons
Combined Plastics		Tons
Plastics Total		
Plastics Total		Tons
Cans + Plastics, Co-mingled		Tons
Glass		Tons
Cans+Glass+Plastics,Co-mingled		Tons
Containers+Fiber, Co-mingled		Tons
Containers+1 iber, Co-mingled		10113
Plastic Bags		Tons
Leaves		Tons
Brush (chipped and whole)		Tons
Holiday Trees		Tons
Grass Clippings		Tons
Logs		Tons
Grasscycling		Tons
Backyard Composting		Tons
Yard Wastes Total		Tons

Materials Collected	X	Tons Collected Ann
Furniture		Tons
Clothing/Fabric/Textiles		Tons
Carpet Padding		Tons
Styrofoam Peanuts		Tons
Flourescent Tubes		Tons
Computers		Tons
Lead Acid (wet cell)		Tons
Household (dry cell)  Batteries Total		Tons Tons
Gas/Solvents		Tons
Motor Oil		Tons
Antifreeze		Tons
Tires		Tons
Total of all Annual		
Recycling Tonnage		Tons

Grand Total of all Ann.	
Recycling Tonnage	Tons

Total of all Annual	Recycling	ronnage	includes
---------------------	-----------	---------	----------



#### CUYAHOGA COUNTY SOLID WASTE DISTRICT COMMERCIAL AND INSTITUTIONAL SOLID WASTE SURVEY (February 2010)

This inventory of commercial and institutional solid waste management is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the statemandated County Solid Waste Plan Update (Ohio Revised Code 3734.53 & 56). Reponses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by others.

**Instructions:** Please complete all of the following tables to the best of your ability. Please return the completed survey by **March 2, 2010**. A postage paid return envelope is enclosed for your convenience.

Note: This survey is only in regard to commercial and institutional waste generated by your organization's facilities located in Cuyahoga County. Do <u>not</u> include data from any facilities located outside of Cuyahoga County.

**Confidentiality:** The Cuyahoga County Solid Waste District will use the information in this survey for summary purposes only and to identify types of wastes that may be further reduced or recycled. We are having you return the survey to a research firm that will add your answers to those from similar companies.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia (216-443-3728) at the Solid Waste District.

Part I – General Information	
Name of Company / Institution	
Mailing Address	
City / State / Zip	
Survey For: (check one)   All Locations in C	cuyahoga County    This Location Only
Number of Employees	SIC Code*
Survey Completed by	Title
Phone() Email Address**	Fax()
<u>DISPOSAL:</u> Channeling of waste material to destir	nations, such as landfills, which do not allow for recovery

<u>RECYCLING:</u> The systematic collection, sorting, decontaminating and returning of waste materials to commerce as commodities for use or exchange. Recycling also means to use, reuse, or reclaim a material.

Commercial-Institutional Mail Survey

<sup>\*</sup> If you do not know your SIC Code please check at www.osha.gov/pls/imis/sic\_manual.html

<sup>\*\*</sup>Please note that your email address will not be sold to any company or organization. Email address will be used for follow-up purposes only by the Cuyahoga County Solid Waste District.

#### Part II - Recycling

Table 1 – Recycling in 2009 should include all of the materials **recycled** by your organization in 2009. Please estimate the quantities of **each type** of material recycled. This data is used to calculate the District's progress in meeting state and local recycling goals. **Enter the data in tons (2000 pounds = 1 ton).** Conversion from cubic yards to tons is: 3 cy = 1 ton. If you do not have specific values, use Table 2 to estimate the amount materials recycled.

TABLE 1: AMOUNT RECYCLED IN 2009		
TYPES OF WASTE MATERIAL	TOTAL TONS RECYCLED	
Office Paper		
Newsprint		
Cardboard		
Other Paper (specify)		
Cloth & Fabrics		
Wood Pallets & Packaging		
Boardends and Scrap		
Sawdust		
Other Wood (specify)		
Aluminum Cans		
Aluminum Scrap		
Copper		
Other Nonferrous Metals (specify)		
Steel Cans		
Steel Drums		
Steel Scrap		
Other Ferrous Metals (specify)		
Glass		
PETE (#1)		
HDPE (#2)		
Vinyl (#3)		
LDPE (#4)		
Polypropylene (#5)		
Polystyrene (#6)		
Composite Plastics (#7)		
Other Plastics (specify)		
Plastic Pallets & Packaging		
Tires		
Rubber		
Computers / Electronics		
Stone / Clay / Sand		
Non-Exempt Foundry Sand / Slag		
Concrete		
Composites Lead Acid Batteries		
Other Batteries (specify)		
Ink Cartridges Food Wastes		
Litho / Photo Film		
Animal Wastes		
Furniture Vord Wests		
Yard Waste		
Other (specify)		

A detailed definition of terms is available on the Cuyahoga County Solid Waste District website: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a>

Table 2 – Recycling Material in Dumpster – If you were unable to complete Table 1, Table 2 is a method by which you can estimate your organization's annual **recycling**. If you have completed Table 1, then skip Table 2 and go on to Part III below.

Table 2: Recycling Estimation			
Material Recycled	No. of Pickups per Week (a)	Size of Dumpster (b) (cubic Yards)	Percentage Full When Picked Up (c)
Example:		•	
Cardboard	2	8	80%

#### Part III - Solid Waste Disposal

If you know	the total amount of	of solid waste that yo	ur organization	disposed	of in 2009,	enter the total	tonnage
here:	tons	conversion from cub	ic yards to tons	s is: 3 cy =	1 ton).		

Or you may use table 3 below to estimate the amount of solid waste your organization **disposed** of in 2009.

Table 3: Solid Waste Disposal Estimation			
Material Disposed	No. of Pickups per Week (a)	Size of Dumpster (b) (cubic Yards)	Percentage Full When Picked Up (c)
Example:		•	•
General / Mixed Solid Waste	2	8	80%

#### Part IV - Solid Waste Disposal, Recycling and Scrap Processors

In the table below, please list the facilities where solid waste and recyclables from your organization were taken for disposal or recycling in 2009. Include the amount of material taken to each facility.

Table 4: Disposal and Recycling Processors				
Facility/Processor Name	Landfill, Transfer Station, Recycling, Incinerator or Scrap Processor	County, State	Amount (tons)	
Example: The ABC Landfill	Landfill	Stark County, Ohio	5,000	
Example: The ABC Recycle Company	Recycling	Cuyahoga County, Ohio	250	

#### Part V - Solid Waste Source Reduction:

Source reduction means any effort by your organization to reduce, at the source, the quantity of waste generated, toxic chemical use, or any release into the environment. Source reduction in generation of commercial or institutional wastes could result from process modifications, improvement in feedstock purity, better operating and management practices, and increases in efficiency of machinery.

Please list any waste source reduction programs instituted by the company, the materials affected, and the approximate amount of waste prevented by these programs **since 1995**. If your company operates under ISO 14000 you may have annual reports giving your company's annual solid waste source reduction.

(Example: Computer network message system & double sided copying, reduces paper usage by about 30 reams or 157.5 lbs. per year)

Table 5: Solid Waste Source Reduction					
Program Description /	Material:	Year Implemented:	Annual Amount of Waste Reduction in Tons		
1.					
2.					
3.					
4.					
Please check the types of information	ation your company v	vould like to receive:			
☐ Waste Minimization	☐ Waste Exchange				
☐ Recycling	□ Other				

If you would like more information about recycling or solid waste source reduction, visit our website at: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a>.

Thank you for your cooperation. Please return your completed survey by **March 2, 2010** either by fax to 440-895-9913, or by mail in the enclosed postage-paid envelope to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940

Commercial-Institutional Mail Survey



## CUYAHOGA COUNTY SOLID WASTE DISTRICT INDUSTRIAL SOLID WASTE SURVEY

(February 2010)

This inventory of industrial solid waste management is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated County Solid Waste Plan Update (Ohio Revised Code 3734.53 & 56). Reponses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by others.

**Instructions:** Please complete all of the following tables to the best of your ability. Please return the completed survey by **March 2, 2010**. A postage paid return envelope is enclosed for your convenience.

**Industrial Solid Waste**: Includes any non-hazardous solid waste which results from, or is the residue of an industrial process. Some examples are metal, plastic or wood scrap, ash, slag and foundry sand. Industrial solid waste includes both industrial process wastes such as trimmings and scrap, and non-process wastes such as paper, pallets, drums, cans and packaging wastes.

Note: This survey is only in regard to industrial waste generated by your company's facilities located in Cuyahoga County. Do <u>not</u> include data from corporate facilities located outside of Cuyahoga County.

**Confidentiality:** The Cuyahoga County Solid Waste District will use the information in this survey for summary purposes only and to identify types of wastes that may be further reduced or recycled. We are having you return the survey to a research firm that will add your answers to those from similar companies.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia (216-443-3728) at the Solid Waste District.

Part I – General Information		
Name of Company / Institution		
Mailing Address		
City / State / Zip		
Survey For: (check one) ☐ All Locat	ions in Cuyahoga County	☐ This Location Only
Number of Employees	SIC Code	e*
Survey Completed by	Title	
Phone() Email Addres	S**	Fax()
DISPOSAL: Channeling of waste material to de	estinations, such as landfills, which d	lo not allow for recovery of mate

commodities for use or exchange. Recycling also means to use, reuse, or reclaim a material.

Industrial Mail Survey

RECYCLING: The systematic collection, sorting, decontaminating and returning of waste materials to commerce as

<sup>\*</sup> If you do not know your SIC Code please check at www.osha.gov/pls/imis/sic\_manual.html

<sup>\*\*</sup>Please note that your email address will not be sold to any company or organization. Email address will be used for follow-up purposes only by the Cuyahoga County Solid Waste District.

#### Part II - Recycling

Table 1 – Recycling in 2009 should include all of the materials **recycled** by your organization in 2009. Please estimate the quantities of **each type** of material recycled. This data is used to calculate the District's progress in meeting state and local recycling goals. **Enter the data in tons (2000 pounds = 1 ton).** Conversion from cubic yards to tons is: 3 cy = 1 ton. If you do not have specific values, use Table 2 to estimate the amount materials recycled.

TABLE 1: AMOUNT RECYCLED IN 2009				
TYPES OF WASTE MATERIAL	TOTAL TONS RECYCLED			
Office Paper				
Newsprint				
Cardboard				
Other Paper (specify)				
Cloth & Fabrics				
Wood Pallets & Packaging				
Boardends and Scrap				
Sawdust				
Other Wood (specify)				
Aluminum Cans				
Aluminum Scrap				
Copper				
Other Nonferrous Metals (specify)				
Steel Cans				
Steel Drums				
Steel Scrap				
Other Ferrous Metals (specify)				
Glass				
PETE (#1)				
HDPE (#2)				
Vinyl (#3)				
LDPE (#4)				
Polypropylene (#5)				
Polystyrene (#6)				
Composite Plastics (#7)				
Other Plastics (specify)				
Plastic Pallets & Packaging				
Tires				
Rubber				
Computers / Electronics				
Stone / Clay / Sand				
Non-Exempt Foundry Sand / Slag				
Concrete				
Composites Lead Acid Batteries				
Other Batteries (specify)				
Ink Cartridges Food Wastes				
Litho / Photo Film				
Animal Wastes				
Furniture Vord Wests				
Yard Waste				
Other (specify)				

A detailed definition of terms is available on the Cuyahoga County Solid Waste District website: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a>

Industrial Mail Survey

Table 2 – Recycling Material in Dumpster – If you were unable to complete Table 1, Table 2 is a method by which you can estimate your organization's annual **recycling**. If you have completed Table 1, then skip Table 2 and go on to Part III below.

Table 2: Recycling Estimation			
Material Recycled	No. of Pickups per Week (a)	Size of Dumpster (b) (cubic Yards)	Percentage Full When Picked Up (c)
Example:		,	
Cardboard	2	8	80%

#### Part III - Solid Waste Disposal

If you know the	e total amount of solid waste that your organization disposed of in 2009, enter the	e total tonnage
here:	tons (conversion from cubic yards to tons is: 3 cy = 1 ton).	

Or you may use table 3 below to estimate the amount of solid waste your organization disposed of in 2009.

Table 3: Solid Waste Disposal Estimation			
Material Disposed	No. of Pickups per Week (a)	Size of Dumpster (b) (cubic Yards)	Percentage Full When Picked Up (c)
Example:		•	
General / Mixed Solid Waste	2	8	80%
		<u> </u>	

#### Part IV - Solid Waste Disposal, Recycling and Scrap Processors

In the table below, please list the facilities where solid waste and recyclables from your organization were taken for disposal or recycling in 2009. Include the amount of material taken to each facility.

Table 4: Disposal and Recycling Processors				
Facility/Processor Name	Landfill, Transfer Station, Recycling, Incinerator or Scrap Processor	County, State	Amount (tons)	
Example: The ABC Landfill	Landfill	Stark County, Ohio	5,000	
Example: The ABC Recycle Company	Recycling	Cuyahoga County, Ohio	250	

#### Part V - Solid Waste Source Reduction:

Source reduction means any effort by your organization to reduce, at the source, the quantity of waste generated, toxic chemical use, or any release into the environment. Source reduction in generation of commercial or institutional wastes could result from process modifications, improvement in feedstock purity, better operating and management practices, and increases in efficiency of machinery.

Please list any waste source reduction programs instituted by the company, the materials affected, and the approximate amount of waste prevented by these programs **since 1995**. If your company operates under ISO 14000 you may have annual reports giving your company's annual solid waste source reduction.

(Example: Computer network message system & double sided copying, reduces paper usage by about 30 reams or 157.5 lbs. per year)

Table 5: Solid Waste Source Reduction					
Program Description / Material:		Year Implemented:	Annual Amount of Waste Reduction in Tons		
1.					
2.					
3.					
4.					
Please check the types of information	ation your company v	vould like to receive:			
☐ Waste Minimization	☐ Waste Exchange				
☐ Recycling	☐ Other				

If you would like more information about recycling or solid waste source reduction, visit our website at: <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a>.

Thank you for your cooperation. Please return your completed survey by **March 2, 2010** either by fax to 440-895-9913, or by mail in the enclosed postage-paid envelope to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940

Industrial Mail Survey 4



#### SOLID WASTE INCINERATORS SURVEY

This inventory of solid waste incinerators is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated <u>County Solid Waste Plan Update</u> (Ohio Revised Code 3734.53 & 56). Responses will be used to calculate the District's progress in meeting state and local recycling goals.

Instructions: Please complete all of the following information to the best of your ability pertaining to each solid waste incinerator operating within your jurisdiction. Please copy this survey and complete a separate form for each incinerator. Please return the completed survey by \_\_\_\_\_\_. A postage paid return envelope is enclosed for your convenience.

Note: This survey is only in regard to solid waste generated in Cuyahoga County. Do <u>not</u> include data on incinerators burning solid waste generated outside of Cuyahoga County.

**Confidentiality:** The Cuyahoga County Solid Waste District will use the information in this survey for summary purposes only. To ensure the confidentiality of your information we are having you return the survey to a research firm that will add your answers to those from other sources.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia at the Solid Waste District at 216-443-3728.

1.	Permit #:	_ Unit #:	Terminat	ion Date;//
2.	Company Name:			
	Street Address:			PPN:
	City:			Zip Code:
	Telephone Number: (	)	_ Fax Number: (_	))
	Person Completing Surv	ey:	Email:	

Solid Waste Incinerators Survey

3.	Type of Facility (Check):				
	£ PA (Publicly Available, i.e	e., burns solid wa	ste generated	by others)	
	$\pm$ C (Captive, i.e., only for t	he use of your co	mpany)		
	€ WTE (Waste-to-Energy)				
4.	Waste Received by Sector fr	om District sourc	es during 2009	:	
	Total waste (all sectors):	Lbs/2009	/ 2,000 =	Tons / 2009	
	Residential/Commercial:	Lbs/2009		Tons / 2009	
	Industrial:	Lbs/2009		Tons / 2009	
	Exempt:	Lbs/2009		Tons / 2009	
	Bypass Waste: (TPY):	Lbs/2009		Tons / 2009	
ΕX	EMPT: Flyash, bottom ash, f	oundry sand or s	ag and constru	ıction or demolition de	bris.
ΒY	PASS WASTE: Bulky waste	not burned.			
NC	OTE: Residential/Commercial	+ Industrial + Ex	empt + Bypass	= Total Waste (all see	ctors)
5.	Total Ash Produced:	LBS	8/2009 / 2,00	O =Tons	s/2009
	CALCULATION (only if ash	quantity available	):		
	Lbs. Waste rece	eived	x 0.32 =	Lbs. Ash pr	oduced
	Lbs. Ash produc	ed	/ 2,000 = _	Tons Ash (	(2009)
6.	Did incinerator operator recy	cle materials reco	overed from wa	ste material during 20	09?
	(Check)	Yes £		No ∈	
	If "Yes", list materials:				
	If "Yes", enter total quantity r	ecycled:		_ Tons / 2009	
	Thank you for taking the time completed forms (keep copie	-	•		r partiall

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940

Solid Waste Incinerators Survey 2



#### **RECYCLING ACTIVITIES SURVEY**

This inventory of recycling activities (by brokers, processors, scrap yards, etc.) is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated <u>County Solid Waste Plan Update</u> (Ohio Revised Code 3734.53 & 56). Reponses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by others.

**Instructions:** Please complete all of the following questions to the best of your ability. Please return the completed survey by **September 28, 2010**. An addressed envelope is enclosed for your convenience.

Note: This survey is only in regard to your company's facilities that receive recyclables from Cuyahoga County. Do <u>not</u> include data on recyclables received from outside of Cuyahoga County.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia at the Solid Waste District at 216-443-3728.

Part I – General Information						
Name of Recycling Facility Operator						
Mailing Address						
City / State / Zip						
Survey Completed by	Title					
Phone() Email Address	Fax()					
If your company operates more than one facility that rece County (for example one which may be out of state or in a diff this survey and complete a separate form for each facility.						
Facility Location, if different from mailing address:						
Street Address						
City / State / Zip						
Phone ()						

1.	of	ease identify the nature of your recycling a terms is available on the Cuyahoga Count ww.cuyahogaswd.org	activity. Circle all that apply. A detailed definition ty Solid Waste District website:				
	1	Broker	5	Buy-Back Recyclin	ng C	enter	
	2	End-User	6	Materials Recover	y Fa	cility	
	3	Processor	7	Drop-Off Recyclin	g Ce	enter	
	4	Scrap Yard	8	Auto Body Proces	sor		
	5	Construction/Demolition Debris Recycler	9	Other (specify)			
2.	ls	your facility:	1 C	pen to the public	2	For priv	ate use only
3.	Нс	ours of Operation:					
		MonFri		Sat		Sun	
		Number of Day	s Op	en in 2009:			
Pa	ma a <b>rt 2</b> Die	pes your company provide pick-up service aterials?  2 - Recycling Activities in 2009  d your company / organization process an aterials generated within CUYAHOGA CO	y rec	cyclable 1	Ye		<ul><li>2 No</li><li>2 No</li></ul>
		t of communities in Cuyahoga County is gi		. •	40-8	95-9913.	Thank you
	ea	yes, please complete the remainder of this ich recycling facility run by your company. sove for additional copies.		•		•	
2.	W	hat is the design capacity* of your facility?		tons per day.		ton	s per year.
		Design Capacity is the maximum amount of processed, not the actual amount of materi					
3.		what daily level of processing was your fa	•	operating in 2009 _		tons	per day.*
	"IŤ	not measured in tons, please specify units	3.				

#### Part 3 – Materials Processed at your facility in 2009 from Cuyahoga County Sources

Identify the types and quantity of materials recycled/reused during 2009 that were derived from Cuyahoga County sources. Use quantity abbreviations listed which are most appropriate for your operation. Please attach additional information as needed. **EXCLUDE**: <u>train boxcars, metals from demolition activities, and ferrous metals resulting from salvage operations conducted by licensed motor vehicle salvage dealers (auto parts and bodies).</u>

"T" = tons "G" = gallons "CY" = cubic yards "Lbs" = pounds "UN" = units

Check Materials Processed	Materials Processed	Amount Recycled RESIDENTIAL (Include Units)	Amount Recycled COMMERCIAL (Include Units)	Amount Recycled INDUSTRIAL (Include Units)	Total Amount Processed (Include Units)
110003300	PAPER	(moldae offics)	(include offics)	(include offics)	(include offics)
	Newsprint Cardboard				
	All Other Paper				
	METALS				
	Aluminum beverage cont.				
	Aluminum scrap				
	Copper				
	All Other Non-ferrous Metals				
	Bi-metal/tin food cans				
	Steel (cans, drums, scrap)				
	White goods				
	All Other Ferrous				
	PLASTICS				
	PETE (#1)				
	HDPE (#2)				
	LLDPE (#3)				
	PVC (#4)				
	Polypropylene (#5)				
	Polystyrene (#6)				
	Glass				
	Tires				
	All Other Rubber				
	Stone / Clay / Sand				
	Non-Exempt Foundry Sand / Slag				
	Concrete				
	Composites				
	Wood Pallets & Packaging				
	All Other Wood				
	Furniture				
	Lead Acid Batteries				
	All Other Batteries				
	Computers / Electronics				
	Food Wastes (including napkins, coffee filters, etc.)				
	Cloth & Fabric				
	Litho / Photo Film				
	Yard Waste				
	Other (specify)				
	Other (specify)				

2.	What percent of the materials recycled at your facility in 2009 came from:
	Residential sources%
	Commercial sources%
	Industrial sources %

#### Part 4 - Recycling Service Area in 2009

1. Below is a list of the communities within Cuyahoga County. For both customer types (i.e., residential and commercial) please circle the number next to each community serviced by this facility during 2009.

	Communities in Cuyahoga County						
1	Bay Village	21	Garfield Hts.	41	Olmsted Falls		
2	Beachwood	22	Gates Mills	42	Olmsted Twp.		
3	Bedford	23	Glenwillow	43	Orange		
4	Bedford Hts.	24	Highland Hts.	44	Parma		
5	Bentleyville	25	Highland Hills	45	Parma Hts.		
6	Berea	26	Hunting Valley	46	Pepper Pike		
7	Bratenahl	27	Independence	47	Richmond Hts.		
8	Brecksville	28	Lakewood	48	Rocky River		
9	Broadview Hts.	29	Linndale	49	Seven Hills		
10	Brook Park	30	Lyndhurst	50	Shaker Hts.		
11	Brooklyn	31	Maple Hts.	51	Solon		
12	Brooklyn Hts.	32	Mayfield Village	52	South Euclid		
13	Chagrin Falls	33	Mayfield Hts.	53	Strongsville		
14	Chagrin Falls Twp.	34	Middleburg Hts.	54	University Hts.		
15	Cleveland	35	Moreland Hills	55	Valley View		
16	Cleveland Hts.	36	Newburgh Hts.	56	Walton Hills		
17	Cuyahoga Hts.	37	North Olmsted	57	Warrensville Hts.		
18	East Cleveland	38	North Randall	58	Westlake		
19	Euclid	39	North Royalton	59	Woodmere		
20	Fairview Park	40	Oakwood				

2.	Please estimate the	percent of all	l materials	recycled a	t your facili	ity that are	generated	within
	Cuyahoga County.		_%					

#### Part 5 – Destination of Recyclables in 2009

Were any of the recyclables received at your facility from Cuyahoga 1 Yes 2 No County sold, donated, or exchanged to another recycling facility or end-user in Cuyahoga County in 2009?

If YES, identify those facilities below and list the recyclables sold/donated as well as the quantity of each and specify the appropriate unit:

"G" = gallons "CY = cubic yards "Lbs" = pounds "UN" = number of units "T" = tons

Name of Receiving Facility or End-User	Recyclable Materials	Quantity

Thank you for taking the time to complete this survey. Please return this form (keep a copy for yourself) via fax to 440-895-9913 or by mail to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940



#### SCRAP YARD RECYCLING ACTIVITIES SURVEY

This inventory of recycling activities at scrap yards is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated County Solid Waste Plan Update (Ohio Revised Code 3734.53 & 56). Reponses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by others.

**Instructions:** Please complete all of the following questions to the best of your ability. Please return the completed survey by **January 15, 2011**. An addressed envelope is enclosed for your convenience.

Note: The questions in this survey only pertain to your company's facilities that receive recyclables from Cuyahoga County. Do <u>not</u> include data on recyclables received from outside of Cuyahoga County.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia at the Solid Waste District at 216-443-3728.

Part I – General Information					
Name of Scrap Yard					
Mailing Address					
City / State / Zip					
Survey Completed by		Title			
Phone()	Email Address	Fax(	)		
If your company operates in County (for example one whith this survey and complete a second complete as	ch may be out of state or i	n a different county in			
Facility Location, if different for	rom mailing address:				
Street Address					
City / State / Zip					
Phone ()					

Scrap Yard Survey

#### Part 2 – Recycling Activities in 2009

Please indicate the amount of solid waste tons or pounds accepted and recycled by the categories listed below from Cuyahoga County residents and commercial businesses only. Do <u>not</u> include materials accepted from other scrap yards or recyclers or industrial materials. Industrial businesses include SIC Codes 20 and 22-39.

Please do <u>not</u> include materials from demolition contractors, road construction projects or building contractors. The District <u>can not</u> count construction/demolition debris materials such as aluminum siding, copper pipe, brass fittings, galvanized pipe, steel pipe, rebar, structural steel, and ducting. The District also <u>can not</u> count auto bodies.

Materials Accepted	Tons or Pounds Recycled from the Residential/ Commercial Sector (Include Units)
Aluminum beverage containers	
Bi-metal/tin food cans	
Steel automotive wheels	
White goods (appliances: refrigerators, stoves, washers, dryers, etc.)	
Lead acid batteries	
All other batteries	
Other (specify)	
Other (specify)	
Totals	

Thank you for taking the time to complete this survey. Please return this form (keep a copy for yourself) via fax to 440-895-9913 or by mail to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940

Scrap Yard Survey 2



#### REGISTERED COMPOSTING FACILITIES SURVEY

This inventory of yard waste composting facility operators is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated County Solid Waste Plan Update (Ohio Revised Code 3734.53 & 56). Reponses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by others.

**Instructions:** Please complete all of the following questions to the best of your ability. Please return the completed survey by \_\_\_\_\_. An addressed envelope is enclosed for your convenience.

Note: This survey is only in regard to your company's composting facilities that receive yard waste from Cuyahoga County. Do <u>not</u> include data on yard waste received from outside of Cuyahoga County.

**Confidentiality:** The Cuyahoga County Solid Waste District will use the information in this survey for summary purposes only. To ensure the confidentiality of your information we are having you return the survey to a research firm that will add your answers to those from similar companies.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia at the Solid Waste District at 216-443-3728.

## 

If your company operates more than one composting facility that receives waste from Cuyahoga County, please copy this survey and complete a separate form for each composting facility.

1

Fa	cility Location, if different from mailing ac	ldress:			
Str	eet Address				
Cit	y / State / Zip				
Ph	one ()				
Ins	COMPOSTIN structions: For questions requesting info	G FACILITIES (2009)			
	cubic yards. Please complete this survey				
1.	Please provide the tons or cubic yards of <b>County</b> in 2009.	of each type of yard waste	received from Cuyahoga		
	Yard Waste Material	Yard Waste from Cuyahoga County (Tons)	Yard Waste from Cuyahoga County (Cubic Yards)		
Gr	ass				
Le	aves				
Bru	ush				
Otl	ner (explain)				
То	tal:				
2.	What is the daily processing capacity of yards.	this facility?	tons or cubic		
3.	What is the annual processing capacity cubic yards.	of this facility?	tons or		
4.	How much compost was created from C tons or cubic ya		te at this facility in 2009?		
5.	How much residual material from Cuyahoga County yard waste was disposed of in 2009?  tons or cubic yards.				
6.	Is your facility:	en for Public Use	E For Private Use Only		
7.	What percent of the material processed at this facility in 2003 came from curbside pick up by cities, villages and townships (all combined)?%				
8.	Do you have any plans for expanding the processed?	ne size of this facility or the	types of material		
	£ Yes	1	£ No		
	If yes, in what way?				

Composting Facilities Survey 2

Thank you for taking the time to complete this survey. Please return this form (keep a copy for yourself) via fax to 440-895-9913 or by mail to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940



#### SOLID WASTE HAULERS SURVEY

This inventory of haulers of solid waste and/or recyclables is being conducted by the Solid Waste District, as required by Ohio EPA, in order to meet reporting requirements for the state-mandated <u>County Solid Waste Plan Update</u> (Ohio Revised Code 3734.53 & 56). Responses will be used to calculate the District's progress in meeting state and local recycling goals and to verify information provided by cities, generators, recyclers, compost facilities, transfer stations, and landfills.

**Instructions:** Please complete all of the following information to the best of your ability. Please return the completed survey by **September 28, 2010**. A postage paid return envelope is enclosed for your convenience.

Note: This survey is only in regard to solid waste generated in Cuyahoga County. Do <u>not</u> include data on solid waste generated outside of Cuyahoga County.

If you have any questions regarding the completion of this survey please call: Jessica Ciaccia at the Solid Waste District at 216-443-3728.

#### Part I – General Information

Company Name:			
Mailing Address:			
City / State / Zip			
Survey completed by	: Name:	Title:	
Phone()	Email Address	Fax()_	

#### Part 2 - Services Provided by Your Company in 2009

Circle the number next to each service provided to your customers in 2009. Circle all that apply.

- 1 Curbside collection of residential solid waste materials
- 2 Curbside collection of residential recyclable materials
- 3 Curbside collection or residential yard wastes
- 4 Pickup of residential bulk items (furniture, appliances, basement cleanout)
- 5 Drop-off boxes for residential recyclables
- 6 Collection of commercial/industrial solid waste
- 7 Collection of commercial/industrial recyclable materials
- 8 Collection of commercial/industrial yard waste materials
- 9 Collection of construction and demolition debris
- 1. Please circle the numbers of all of the cities, villages and townships in Cuyahoga County where your company collected solid waste and/or recyclables in 2009.

Communities in Cuyahoga County					
1	Bay Village	21	Garfield Hts.	41	Olmsted Falls
2	Beachwood	22	Gates Mills	42	Olmsted Twp.
3	Bedford	23	Glenwillow	43	Orange
4	Bedford Hts.	24	Highland Hts.	44	Parma
5	Bentleyville	25	Highland Hills	45	Parma Hts.
6	Berea	26	Hunting Valley	46	Pepper Pike
7	Bratenahl	27	Independence	47	Richmond Hts.
8	Brecksville	28	Lakewood	48	Rocky River
9	Broadview Hts.	29	Linndale	49	Seven Hills
10	Brook Park	30	Lyndhurst	50	Shaker Hts.
11	Brooklyn	31	Maple Hts.	51	Solon
12	Brooklyn Hts.	32	Mayfield Village	52	South Euclid
13	Chagrin Falls	33	Mayfield Hts.	53	Strongsville
14	Chagrin Falls Twp.	34	Middleburg Hts.	54	University Hts.
15	Cleveland	35	Moreland Hills	55	Valley View
16	Cleveland Hts.	36	Newburgh Hts.	56	Walton Hills
17	Cuyahoga Hts.	37	North Olmsted	57	Warrensville Hts.
18	East Cleveland	38	North Randall	58	Westlake
19	Euclid	39	North Royalton	59	Woodmere
20	Fairview Park	40	Oakwood	60	All Communities

2. Please report the 2009 tonnages for Cuyahoga County waste by sector in the table below:

Material Category	Residential Sector	Commercial Sector	Industrial Sector
Solid Waste Disposal			
Recyclables			
Yard Waste			
Bulk Items			
Construction/Demolition Debris			

Part III – Facilities in and outside Ohio to which Cuyahoga County solid waste and recyclables were delivered during 2009 by your company. For "recyclers/processors", please include all utilized, even if only for a limited time or for a small quantity of materials (list names):

		Name:	Address:
Landfills:	1.		
	2.		
	3.		
Transfer			
Stations:	1		
	2.		
	3.		
Yard Waste			
Composting:	1		
	2.		
	3.		

Recyclers / Brokers /	
3.	
4.	
6.	
7.	
8.	
11.	 
12.	 
13.	 
14.	
15.	
Construction and Demolition Debris	
Facilities:	
2.	
3.	

Thank you for taking the time to complete this survey. Please return your completed survey (keep a copy for yourself) via fax to 440-895-9913 or by mail to:

CUYAHOGA COUNTY SOLID WASTE DISTRICT c/o TRIAD RESEARCH GROUP, INC. P. O. Box 16486 CLEVELAND, OH 44116-9940

## **Appendix H**

## Online District Services Feedback Survey Instruments and Results

# Cuyahoga County Solid Waste District Public Official Survey (Draft 3) April 2011

The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County. This plan will help reduce waste and increase recycling and composting activities within the County. An important part of developing the plan is soliciting feedback from stakeholders on the programs and services offered by the Cuyahoga County Solid Waste District. This survey is being sent to all Cuyahoga County mayors, council presidents and service directors. Please take a few minutes to complete this survey and help the Solid Waste District evaluate and improve its services to your community.

1.	Wh	at community do you represent?							
2.	What is your position?								
	1	Mayor/City Manager/Township Trustee	3	Service Department Director/Employee					
	2	Council President/Member	4	Other (Specify)					
3.	Please indicate which of the following Solid Waste District programs and services your local government participated in during the past year. <b>Select all that apply</b>								
	1	Community Recycling Awareness Grant	8	Contracting assistance and waste management consulting services					
	2	Household Hazardous Waste Round-Up	9	Trash Talk lunch seminars (training and best practices)					
	3	Litter Collection Services	10	School classroom presentations					
	4	Scrap Tire Round-Up	11	Business recycling assistance					
	5	Computer Round-Up	12	Composting seminars					
	6	Phone book recycling program	13	Solid waste facility inspections					
	7	Municipal contracting consortiums (paper marketing cooperative, solid waste disposal cooperative and recycling cooperative)							

4. How important are each of the following Solid Waste District programs to your community and its residents?

		Extremely Important	Very <u>Important</u>	Somewhat Important	Not Very Important
a.	Community Recycling Awareness Grant	1	2	3	4
b.	Household Hazardous Waste Round-Up	1	2	3	4
C.	Litter collection services	1	2	3	4
d.	Scrap Tire Round-Up	1	2	3	4
e.	Computer Round-Up	1	2	3	4
f.	Phone book recycling program	1	2	3	4
g.	Contracting assistance and waste management consulting services	1	2	3	4
h.	Municipal contracting consortiums (paper marketing cooperative, solid waste disposal cooperative and recycling cooperative)	1	2	3	4
i.	Service Director Trash Talk Lunch Seminars (best practices training)	1	2	3	4
j.	School classroom presentations	1	2	3	4
k.	Business recycling assistance	1	2	3	4
l.	Composting seminars	1	2	3	4
i.	Solid waste facility inspections	1	2	3	4

_	How valuable would	(OII OO) ( ) (OIIF	aammunitu'a r	oovalina nro	aram ia ta vau	r raaidanta?
5.	now valuable would	vou sav vour	COMMUNITY S 1	ecyclina bro	oram is to vou	ir residents?

1 Very Valuable

3 Not Very Valuable

2 Somewhat Valuable

### 6. In what ways, if any, do you think your community's recycling program can be improved? **Select all that apply**

1	Introduce automated collection and recycling
	carts

4 Provide more information on recycling to increase participation

2 Provide more drop-off locations

5 Obtain a better recycling contract

3 Collect more types of materials

6 Other (Specify) \_\_\_\_\_

7. Does your community provide information to residents regarding...

		<u>Yes</u>	<u>NO</u>
a.	Proper disposal of household hazardous waste	1	2
b.	Proper disposal of computers & electronics	1	2
C.	Proper disposal of scrap tires	1	2
d.	Composting	1	2
e.	Waste reduction	1	2
f.	Recycling program procedures	1	2
g.	Waste collection procedures	1	2

8.	When it comes to relaying information to your residents, which of the following are the best ways to communicate with your residents? <b>Select up to 3 responses</b>					
	1	Local newspaper	7	Community meetings		
	2	Community newsletter or other direct mail	8	Community events and festivals		
	3	Community cable channel	9	Videos		
	4	Community web site	10	Social media (Facebook, Twitter, etc.)		
	5	E-mails to residents	11	Other (Specify)		
	6	Local community groups				
9.	-	you aware that the Cuyahoga County Solid Waste communities effectively contract for solid waste c		<u> </u>		
	1	Yes, Aware and have used service	3	No, not aware		
	2	Yes, Aware but have not used service				
10.	cons	are you aware that the Cuyahoga County Solid V sortiums among communities to collectively bid for to obtain the most competitive pricing?				
	1	Yes, Aware and have used service	3	No, not aware		
	2	Yes, Aware but have not used service				
	Solid mate acce	ardous waste and electronics that communities con If Waste District will open a Special Waste Control of the following materials epting at the Center, please select the ones that cotting from residents and delivering to the Center.	nver the it you	nience Center that will accept other Solid Waste District is considering ur community would be interested in		
	1	Polystyrene foam packaging	6	Bicycles for donation		
	2	Plastic bags	7	Tools for donation for Habitat for Humanity Tool Drive		
	3	Shrink wrap	8	Carpet and padding		
	4	Rigid plastic items like plastic mailboxes and toys (i.e., Step 2, Little Tykes, etc.)	9	Other (Specify)		
	5	Athletic shoes for recycling through the NIKE REUSE A SHOE program				
12.	How	often do you go to the Cuyahoga County Solid W	/aste	e District's web site?		
	1	At least once a month	4	Never		
	2	Once every couple of months	5	Not aware of web site		
	3	Once or twice a year				
13.	(If Y	es) How would you rate the Solid Waste District's	web	site?		
	1	Very Useful	3	Not Very Useful		
	2	Somewhat Useful	4	Not Useful at All		

14.	As you may know, the Solid Waste District currently offers a Community Recycling Awareness Grant to help communities promote recycling to residents. If this grant program was expanded, how would your community be likely to spend the grant dollars received from the Solid Waste District? <b>Select all that apply</b>					
	1	Recycling collection equipment and carts for curbside recycling	4	Paper Shredding Days		
	2	Recycling bins and containers for public buildings and spaces	5	Other (Specify)		
	3	Compost bins for residents				
15.		you agree or disagree that your community agement assistance and programs provided by				
	1	Strongly Agree	3	Disagree		
	2	Agree	4	Strongly Disagree		
16.		the Cuyahoga County Solid Waste District help cling and waste management services you prov				
	1	Yes	2	No		
17.	Distr	rou have any suggestions that would help the Crict improve its services to your community (i.e. the Solid Waste District to provide your commun	., any			
and s	ervice	for completing this survey, if you would lies offered by the Cuyahoga County Solid Wogaswd.org.				
swdin	fo@cı	ould like to be contacted by the Solid uyahogacounty.us. Or if you prefer, you can pr someone from the Solid Waste District will conta	ovide	your information in the space provided		
		Name:				
		Title:				
ļ	Munic	cipality:				
	Ac	ddress:				
	I	Phone:				
		Email:				

## Cuyahoga County Solid Waste District Business Recycling Assistance Program Survey (Draft 3) April 2011

Dear Business Leader: The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County. This plan will help reduce waste and increase recycling and composting activities within the County. An important part of developing the plan is soliciting feedback from stakeholders on the programs and services offered by the Cuyahoga County Solid Waste District. You have been selected to complete this survey because you or your company has either used or inquired about the Solid Waste District's programs and services in the past. Please take a few minutes to complete this survey and help the Solid Waste District evaluate and improve its services to businesses and institutions in the county.

1.	In w	hat zip code is your business located?		
2.	Wha	at type of business or institution do you represen	t? <b>Se</b>	lect all that apply
	1	Office	5	Food Service/Restaurant
	2	Industry, Manufacturing	6	Construction
	3 4	Institution (school, hospital, etc.) Retail	7	Other (Specify)
3.		ch of the following materials does your company	/orga	nization <u>currently</u> recycle?
	Sel	ect all that apply		
	1	Paper	6	Metal
	2	Cardboard	7	Food Waste
	3	Beverage Containers	8	Shrink Wrap
	4	Plastic	9	Other (Specify)
	5	Glass	10	None
4.		ch of the following materials would your compar	ny/org	ganization like to add to your recycling
	Sele	ect all that apply		
	1	Paper	6	Metal
	2	Cardboard	7	Food Waste
	3	Beverage Containers	8	Shrink Wrap
	4	Plastic	9	Other (Specify)
	5	Glass		

5.	If your company/organization does <u>not</u> currently have a waste reduction and/or recycling program, which of the following reasons explains why not?							
	Sel	ect all that apply						
	1	Too expensive	5	Do not have time to set up a program				
	2	Too little space for recycling containers	6	Apathy of coworkers				
	3	Too small an organization/not enough materials to recycle	7	Management does not care				
	4	Do not know how to set up a program	8	Other (Specify)				
6.		w did you hear about the business recycling as id Waste District? <b>Select all that apply</b>	sistar	nce offered by the Cuyahoga County				
	1	Through a friend, colleague or professional organization	5	District brochure or email				
	2	Used other Solid Waste District services	6	Internet Search/District Web Site				
	3	Met District staff at event/workshop	7	ZeroWaste NEO				
	4	Heard a District presentation	8	Other (specify)				
7.	Which of the following services has your company/organization received from the Solid Waste District? Select all that apply							
	1	Help with setting up a recycling or composting program	5	Recycling or waste disposal contract assistance				
	2	Information on where to recycle and how to manage various waste streams	6	District Grant				
	3	District staff presentation to your organization	7	District E-newsletter				
	4	Waste assessment	8	District brochures and/or fliers				
8.	or e	ich of the following services do you feel would be expanding your company's waste reduction or rec ect no more than 2						
	1	Help with setting up a recycling or composting program	5	Recycling or waste disposal contract assistance				
	2	Information on where to recycle and how to manage various waste streams	6	District Grant				
	3	District staff presentation to your organization	7	District E-newsletter				
	4	Waste assessment	8	District brochures and/or fliers				

9.	or e	Which of the following services do you feel would be the <u>least</u> helpful in planning, implementing or expanding your company's waste reduction or recycling program?					
		ect no more than 2					
	1	Help with setting up a recycling or composting program	5	Recycling or waste disposal contract assistance			
	2	Information on where to recycle and how to manage various waste streams	6	District Grant			
	3	District staff presentation to your organization	7	District E-newsletter			
	4	Waste assessment	8	District brochures and/or fliers			
10.	Hav	e you visited the Cuyahoga County Solid Waste	Distri	ct's web site in the past year?			
	1	Yes	2	No			
11.	(If Y	es) How would you rate the Solid Waste District'	s wel	h site?			
	1	Very Useful	3	Not Very Useful			
	2	Somewhat Useful	4	Not Useful at All			
	_	Somewhat Oscial	7	Not Oscial at 7 til			
12.		your company/organization ever received a siness Recycling Specialist?	te vis	sit or recycling presentation from our			
	1	Yes	2	No			
13.		(es) Do you agree or disagree that the site visit cialist was professional, informational and met you					
	1	Strongly Agree	3	Disagree			
	2	Agree	4	Strongly Disagree			
14.	such	e you or your company/organization received or n as Less is More: a Guide to Recycling in the ctory for Business and Industry to help start or ex Yes	Work	xplace or Cuyahoga County Recycling			
15.	off pusi	Cuyahoga County Solid Waste District is considered from the Solid Waste District is considered from the Solid Wastenesses could take small quantities of haza pany/organization would be charged a fee base te dropped-off.	e Dis	strict would provide a facility where s waste that they generate. The			
	1	Very Interested	3	Not Very Interested			
	2	Somewhat Interested					

16. And how interested would your company/organization be in participating in a Waste Collection and Recycling Contracting Consortium. With this service, the Solid Waste District would negotiate a collective contract on behalf of a group of participating businesses. The concept is to use volume purchasing to obtain better pricing than each business could get individually. There would be no fee for this service.					
	•	3	Not Very Interested		
		he p	rograms offered from the Cuyahoga		
1	E-newsletter	3	Phone Contact		
2	Mailings	4	Presentation through your trade association		
		strict	helped your company implement or		
1	Yes	2	No		
es off	fered by the Cuyahoga County Solid Wast				
fo@cu	<u>ıyahogacounty.us</u> . Or if you prefer, you can pro	vide	your information in the space provided		
1	Name:				
·					
Com					
Ade	dress:				
Р	Phone:				
Email:					
	and negot to us There 1 2 How Coun 1 2 What provides off cuyaho and s Com Ad F	and Recycling Contracting Consortium. With this negotiate a collective contract on behalf of a group of to use volume purchasing to obtain better pricing the There would be no fee for this service.  1    Very Interested 2    Somewhat Interested  How would you like to receive information about the County Solid Waste District?  1    E-newsletter 2    Mailings  Do you feel the Cuyahoga County Solid Waste District waste reduction or recycling activities?  1    Yes  What additional information or assistance can the provide to help your company/organization reduce was a company of the Cuyahoga County Solid Waste District will contain the Cuyahogaswd.org.  If you for completing this survey, if you would like the cuyahogaswd.org.  If would like to be contacted by the Solid Waste District will contain and someone from the Solid Waste District will contain the Company:  Name:  Title:  Company:  Address:  Phone:	and Recycling Contracting Consortium. With this sen negotiate a collective contract on behalf of a group of part to use volume purchasing to obtain better pricing than There would be no fee for this service.  1  Very Interested		

### Cuyahoga County Solid Waste District Education Programs Survey (Draft 3) April 2011

Dear Educator: The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County. This plan will help reduce waste and increase recycling and composting activities within the County. An important part of developing the plan is soliciting feedback from stakeholders on the programs and services offered by the Cuyahoga County Solid Waste District. You have been selected to complete this survey because you have either used or inquired about the Solid Waste District's programs and services in the past. Please take a few minutes to complete this survey and help the Solid Waste District evaluate and improve its services to educators in the county.

1.	Wha	at is your position?				
	1	Teacher	5	Youth Group Leader		
	2	Principal	6	Environmental Educator		
	3	School Staff Member	7	Other (Specify)		
	4	Parent or School Volunteer				
2.	Whi	ch of the following best describes who you repre	sent?			
	1	School	7	Science Organization		
	2	Environmental Organization	8	Other (Specify)		
	3	Career Service Center				
3.		v did you first hear about the environmental educ inty Solid Waste District?	ation	services offered by the Cuyahoga		
	1	Used other Solid Waste District services	5	From a colleague		
	2	Met District staff at event/workshop	6	Referred by another agency, organization		
	3	Received District postcard or email	7	Other (specify)		
	4	Internet search for local environmental education programs				
4.	Which of the following services or resources does your organization currently receive or have received in the past from the Solid Waste District's Education Program? <b>Select all that apply</b>					
	1	Help setting up a school recycling program or environmental lesson	7	Teacher focused publications, brochures or posters		
	2	Classroom presentations	8	Student focused publications, brochures or posters		
	3	Student contests	9	Teacher resources on District's web site		
	4	Teacher workshops	10	Student resources on District's web site		
	5	Assembly theatrical show	11	Trash Talk Newsletter		
	6	School mini grant	12	Plant Pride Not Litter Program		
	7	Educator outreach through District emails and postcards	13	None		

5.		Which of the following services/resources from the Solid Waste District are the $\underline{most}$ valuable to you? Select no more than 3							
	1	Help setting up a school recycling program or environmental lesson	8	Teacher focused publications, brochures or posters					
	2	Classroom presentations	9	Student focused publications, brochures or posters					
	3	Students contests	10	Teacher resources on District's web site					
	4	Teacher workshops	11	Student resources on District's web site					
	5	Assembly theatrical show	12	Trash Talk Newsletter					
	6	School mini grant	13	Plant Pride Not Litter Program					
	7	Educator outreach through District emails and postcards							
6.		ich of the following services/resources from the S ? Select no more than 3	Solid V	Vaste District are the <u>least</u> valuable to					
	1	Help setting up a school recycling program or environmental lesson	8	Teacher focused publications, brochures or posters					
	2	Classroom presentations	9	Student focused publications, brochures or posters					
	3	Students contests	10	Teacher resources on District's web site					
	4	Teacher workshops	11	Student resources on District's web site					
	5	Assembly theatrical show	12	Trash Talk Newsletter					
	6	School mini grant	13	Plant Pride Not Litter Program					
	7	Educator outreach through District emails and postcards							
7.	edu	ich of the following Cuyahoga County Solid Vicators would you be interested in receiving? ered from the Solid Waste District web site: www.	(Note	e that all of these brochures can be					
	1	Compost Science Investigation	5	Teaching the Loop					
	2	Don't Throw That Out	6	Teachin' Trash Teacher Guide					
	3	Green Teen Survival Guide	7	Tracking Trash					
	4	Start Students Recycling	8	Trash Talk Newsletter					
8.	Hov	v often do you use the Solid Waste District's env	ironm	ental education services?					
	1	4 or more times a year	4	Once a year					
	2	2 or 3 times a year	5	Never					
	3	Every couple of years							

3

4

2

Э.		cation services?	Waste Distri	or brovides i	ligit value ett	ni Oriini <del>e</del> ritai	
	1	Strongly Agree	3	Disagree			
	2	Agree	4	Strongly Di	sagree		
10.	Do you agree or disagree that your students benefit from the Solid Waste District's environmental education services?						
	1	Strongly Agree	3	Disagree			
	2	Agree	4	Strongly Di	sagree		
11.	What, if anything, has prevented you from using more of the Solid Waste District's environmental education services? <b>Select all that apply</b>						
	1	Lack of time	3	Unaware of	f other progran	าร	
	2	Topics do not pertain to subject I teach	n 4	Other (Spe	cify)		
12.	Hav	e you visited the Cuyahoga County Soli	d Waste Disti	rict's web site	in the past yea	ar?	
	1	Yes	2	No			
13.	(If Yes) How would you rate the Solid Waste District's web site?						
	1	Very Useful	3	Not Very U	seful		
	2	Somewhat Useful	4	Not Useful	at All		
14.	Have you ever received a classroom presentation from our Education Specialist?						
	1	Yes	2	No			
15.	(If Yes) Why did you schedule a classroom presentation?						
	1	Introduce a new topic to my students	4	Generate p environmer	roject ideas for ntal group	r class or	
	2	Enhance subject area	5	Other (Spe	cify)		
	3	Offer something fun for my students					
16.	presentation from the Solid Waste District's Education Specialist?						
			Strongly			Strongly	
			<u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Disagree</u>	
a.	pres	as easy to arrange for the sentation with the Education cialist.	1	2	3	4	
b.	аррі	class content that was taught was ropriate for my student's grade level met my needs as a teacher.	1	2	3	4	
C.	My s	students' understanding and	1	2	3	4	

1

c.

knowledge of the topic increased due to the information and activity presented in my class and motivated them to recycle.

17.	Do you receiv	ve the Trash Talk stu	udent newsletter for gi	ad	es K-6?		
	1 Yes			2	No		
18.	(If Yes) How	beneficial is the Tras	sh Talk newsletter to	/OU	and your students?		
	1 Very Be	eneficial	;	3	Not Very Beneficial		
	2 Somew	hat Beneficial					
19.	How would you like to receive information about the environmental education programs offered by the Cuyahoga County Solid Waste District?						
	1 E-news	letter		4	Trade Associations		
	2 Mailings	S		5	Other (Specify)		
	3 Phone 0	Contact					
20.					rams and services been helpful in in recycling and waste reduction		
	1 Yes		2		No		
21.	suggestions	on how it can impro		e	ounty Solid Waste District with some ducation programs and/or what other		
servic www.	ces offered b cuyahogaswd.	y the Cuyahoga ( org.	County Solid Waste	D	e information about the programs and instrict, please visit our web site at the district, you can e-mail us at		
			prefer, you can provi te District will contact		your information in the space provided u.		
	Name:			_			
	Title:	·		_			
	Company:			_			
	Address:			_			
	Phone:			_			
	Email:			_			

### Cuyahoga County Solid Waste District General Public Recycling Survey (Draft 3) April 2011

Dear Resident: The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County. This plan will help reduce waste and increase recycling and composting activities within the County. An important part of developing the plan is soliciting feedback from stakeholders on the programs and services offered by the Cuyahoga County Solid Waste District. You have been selected to complete this survey because you have either used or inquired about the Solid Waste District's programs and services in the past. Please take a few minutes to complete this survey and help the Solid Waste District evaluate and improve its services to the public.

1.	Wh	at is your zip code?		<del></del>			
2.	Do	you currently participate in curbside recyclin	ng in your c	community?			
	1	Yes	2	No			
3.	(If N	(If No) Why don't you participate in curbside recycling? Select all that apply					
	1	Recycling is not convenient	4	Don't know how to recycle			
	2	Too busy to recycle	5	Program not offered			
	3	Recycling not important	6	Other (Specify)			
4.		Do you take some of your household recyclables to a recycling drop-off location or recycling facility?					
	1	Yes	2	No			
5.		(If No) Why don't you take some of your household recyclables to a drop-off location or recycling facility? Select all that apply					
	1	Recycle at home through my curbside recycling program	4	Don't know where the recycling drop-offs are located			
	2	Not convenient	5	Other (Specify)			
	3	No time to recycle					
6.	What types of materials does your household recycle either through your community's curbside program or at a drop-off location/recycling facility? <b>Select all that apply</b>						
	1	Paper	7	Grass/Yard Waste			
	2	Cans/Metal	8	Hazardous Household Waste			
	3	Glass	9	Computers/Electronics			
	4	Plastic	10	Phonebooks			
	5	Cardboard	11	Tires			
	6	Clothing	12	Other (Specify)			

1.	what do you do with your yard waste such as grass clippings, branches and leaves?						
	1	Compost at home	4	Landscaper/lawn service takes it			
	2	Put in the trash	5	Do not produce yard waste			
	3	Set it out for city to recycle					
8.	What do you do with your household hazardous waste (HHW) such as oil paint, paint thinner, concrete sealer, motor oil, antifreeze, and lawn and garden chemicals? <b>Select all that apply</b>						
	1	Take to my community's HHW round-up	4	Do not know how to recycle HHW			
	2	Take to county fairgrounds during a round-up event	5	Do not have any household hazardous waste			
	3	Put it in my trash	6	Other (Specify)			
9.	Wh	What do you do with your unwanted computer equipment and electronics?					
	Select all that apply						
	1	Drop-off at my city	4	Do not know how to recycle them			
	2	Take to computer recycler	5	Do not have any computer equipment/electronics to recycle			
	3	Put it in my trash	6	Other (Specify)			
	4	Keep old computers/electronics					
10.	What do you do with your old phone books?						
	1	Set out for city to recycle	4	Put in my trash			
	2	Take to Cleveland Metroparks to be recycled	5	Other (Specify)			
	3	Take to a recycling drop-off location (excluding Metroparks)					
11.	What do you do with your scrap tires?						
	1	Set out for my city to pick up	4	Keep my scrap tires			
	2	Drop off at my city's Scrap Tire Round-Up	5	Put in my trash			
	3	When I buy new tires, the retailer takes old tires	6	Other (Specify)			

12. How familiar are you with each of the following Solid Waste District programs and services that are available to the general public.

		Very	Somewhat	Not
		<u>Familiar</u>	<u>Familiar</u>	<u>Familiar</u>
a.	Household Hazardous Waste Round-Up	1	2	3
b.	Recycle Your Computer Month	1	2	3
C.	Phone Book Recycling Campaign	1	2	3
d.	Scrap Tire Round-Up	1	2	3
e.	Mercury Collection Program	1	2	3
f.	Recycling Presentations	1	2	3
g.	Composting Seminars and Compost Bin Sales	1	2	3
h.	Recycling Hotline (help with recycling and waste disposal questions)	1	2	3
i.	Recycling Publications	1	2	3
j.	Web Site with Cuyahoga County Recycling Information	1	2	3
k.	Youth Programs	1	2	3
l.	Teacher Resources	1	2	3
m.	Business Recycling Assistance	1	2	3

13. Which of the following brochures available through the Solid Waste District would you be interested in receiving? Note that all can be ordered from the District web site – <a href="https://www.cuyahogaswd.org">www.cuyahogaswd.org</a>. Select as many as you are interested in receiving.

1	Annual Report and Residential Recycling Report	6	How to Stop Unwanted Mail
2	Guide to Backyard Composting	7	Pass It On: A Guide to Donating Usable Stuff
3	Guide to Community Recycling Programs	8	Recycling Directory for Business and Industry
4	Guide to Recycling in the Workplace	9	Summary of the Solid Waste Plan for Cuyahoga County
5	How to Dispose of Hazardous Household Products	10	None

14. How useful is the information you receive about recycling and composting in your community?

- 1 Very Useful 3 Not Very Useful
- 2 Somewhat Useful 4 Do not receive any information

15. Have you visited the Cuyahoga County Solid Waste District's web site in the past year?

- 1 Yes 2 No
- 16. (If Yes) How would you rate the Solid Waste District's web site?
  - 1 Very Useful 3 Not Very Useful
  - 2 Somewhat Useful 4 Not Useful at All

17.	How do you currently hear about events District? <b>Select all that apply</b>	s, programs and services offered by the Solid Waste				
	1 Newspaper	6 My community sends me info				
	2 Radio	7 Friends/family/colleagues				
	3 City Cable Channel	8 Other (Specify)				
	4 Solid Waste District E-newsletter	9 Don't receive any information				
	5 Facebook	,				
18.	And how would you prefer to learn more about new recycling, composting and waste reduction programs and services? <b>Select all that apply</b>					
	1 Newspaper	<ol> <li>Social media (Facebook, Twitter, webstreaming, etc.)</li> </ol>				
	2 Radio	7 Direct Mail				
	3 Television	8 Other (Specify)				
	4 Solid Waste District E-newsletter	9 None				
	5 Presentation					
19.	<ul> <li>Have the Solid Waste District's programs and services been helpful in increasing your awareness and participation in recycling and waste reduction activity?</li> <li>Yes</li> <li>No</li> </ul>					
20.	In your opinion, what is the most importar	at waste or recycling issue in your community?				
21.		or suggestions for the Cuyahoga County Solid Waste you might want to see the Solid Waste District offer in				
servic		would like more information about the programs and Solid Waste District, please visit our web site at				
swdin	•	ne Solid Waste District, you can e-mail us at you can provide your information in the space provided at will contact you.				
	Name:					
	Title:					
	Company:					
	Address:					
	Phone:					
	Email:					



# SUMMARY OF FINDINGS FROM AN ONLINE SURVEY WITH PUBLIC OFFICIAL STAKEHOLDERS OF THE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT

**May 2011** 

10-2749

(440) 895-5353 Fax (440) 895-9913

#### BACKGROUND

### **Survey Methodology**

This summary presents the findings of an online survey with public officials in Cuyahoga County conducted on behalf of the Cuyahoga County Solid Waste Management District. The Solid Waste District emailed a total of 222 public officials in Cuyahoga County and invited them to complete a survey online. This list of public officials included, but was not limited to, mayors, city managers and township trustees, council presidents and council members, service department directors and employees. Of these 222 public officials, a total of 72 completed the online survey. Another 8 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 34% (72 out of 214), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

### **Survey Purpose**

The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County to help reduce waste and increase recycling and composting activities within the County. Thus, it is important to hear from the Solid Waste District's stakeholders regarding the programs and services the District offers. One of these stakeholder groups is local public officials. Some of the topics examined in the survey of public officials included:

- Solid Waste District services and programs their local government participated in during the past year.
- · Importance of specific Solid Waste District programs to their community and its residents.
- The value of their community's recycling program and ways, if any, it could be improved.
- Types of information their community provides to residents regarding recycling, waste reduction, composting, etc. and the best ways to communicate to their residents.
- Types of materials for recycling their community would be interested in collecting from residents and delivering to the new Special Waste Convenience Center.

#### **Note To The Reader**

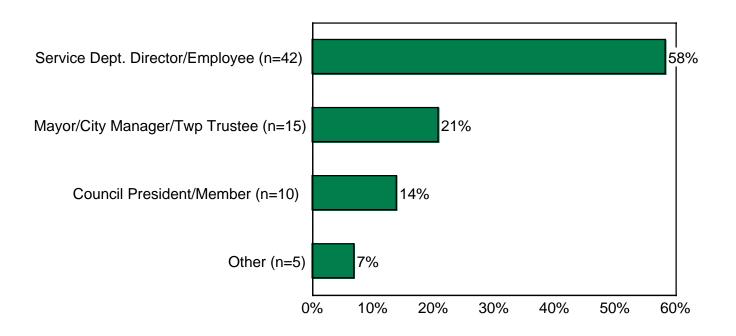
Respondents were asked to indicate which community they represent and one or more public officials from 50 of the 59 communities in Cuyahoga County completed the online survey.



### **SUMMARY OF FINDINGS**

#### **Q2 WHAT IS YOUR POSITION?**

**Total Number Responding: 72** 

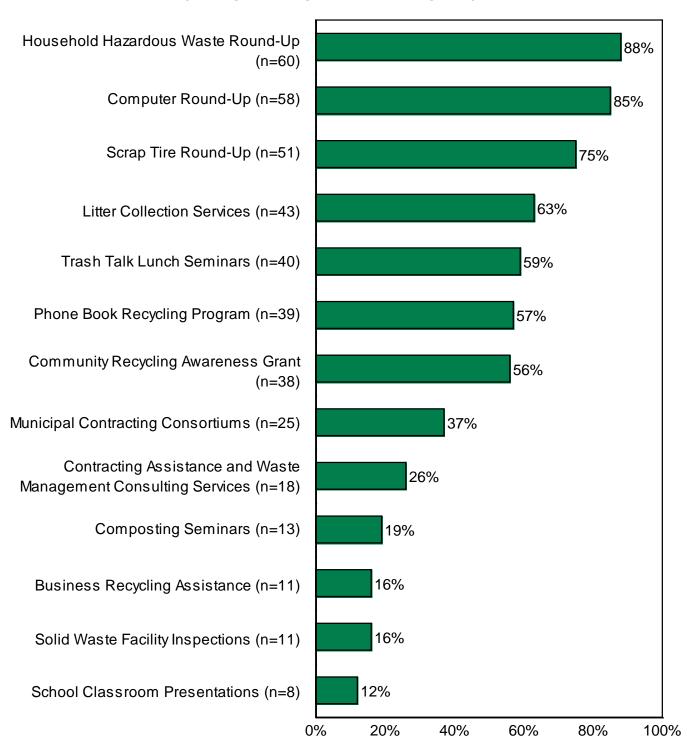


Other Responses Include: Recycle Coordinator, Safety Service Coordinator, Supervisor, Township Fiscal Officer, Clerk



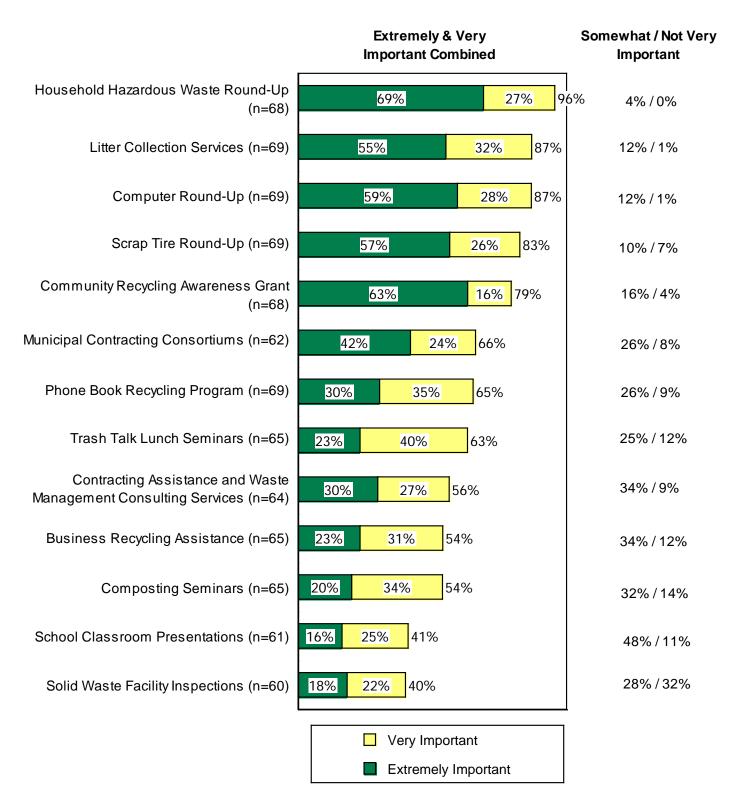
## Q3 WHICH OF THE FOLLOWING SOLID WASTE DISTRICT PROGRAMS AND SERVICES DID YOUR LOCAL GOVERNMENT PARTICIPATE IN DURING THE PAST YEAR?

## **Total Number Responding: 68** (Multiple Responses Accepted)





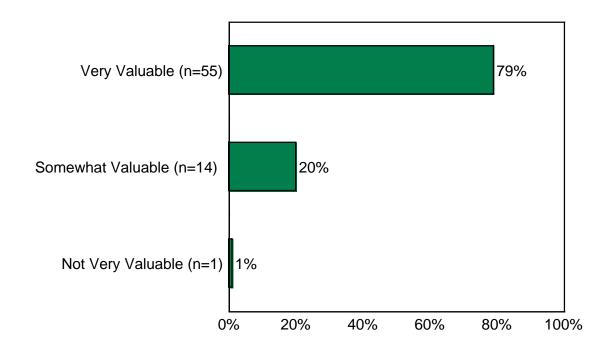
### Q4 HOW IMPORTANT ARE EACH OF THE FOLLOWING SOLID WASTE DISTRICT PROGRAMS TO YOUR COMMUNITY AND ITS RESIDENTS?





## Q5 HOW VALUABLE WOULD YOU SAY YOUR COMMUNITY'S RECYCLING PROGRAM IS TO YOUR RESIDENTS?

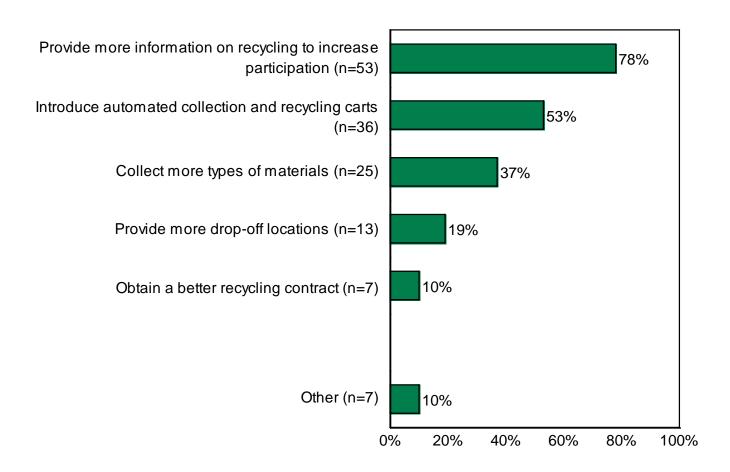
### **Total Number Responding: 70**





## Q6 IN WHAT WAYS, IF ANY, DO YOU THINK YOUR COMMUNITY'S RECYCLING PROGRAM CAN BE IMPROVED?

## **Total Number Responding: 68**(Multiple Responses Accepted)



#### Other Responses Include:

Curbside recycling to start 2011
Discounts and/or penalties
Increase use of composting
Maybe consider TV advertisement
Resident buy in to practice of recycling
Rewards program
Weekly pick up vs. bi-weekly



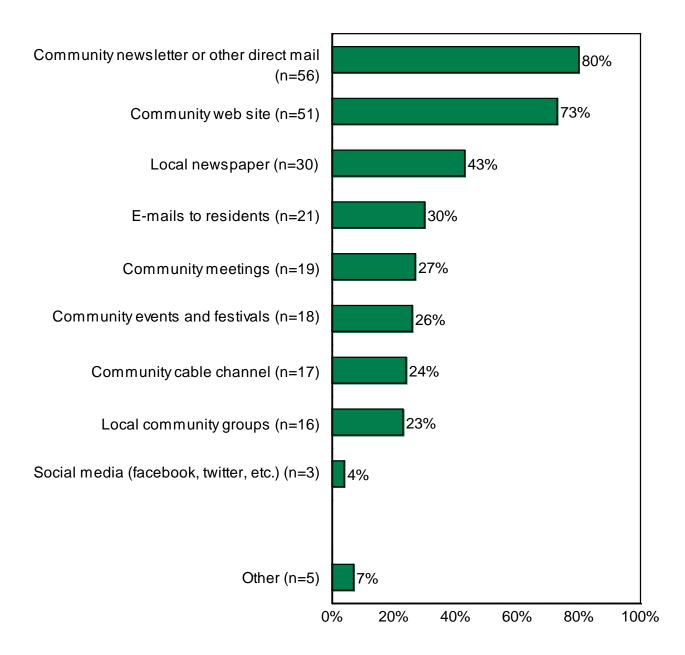
## Q7 DOES YOUR COMMUNITY PROVIDE INFORMATION TO RESIDENTS REGARDING...

### **Percent Saying Yes** Proper disposal of computers & electronics 96% (n=70)Proper disposal of household hazardous 94% waste (n=70) Recycling program procedures (n=70) 93% Waste collection procedures (n=70) 91% 85% Proper disposal of scrap tires (n=68) Composting (n=70) 64% Waste reduction (n=69) 59% 0% 20% 40% 60% 80% 100%



## Q8 WHEN IT COMES TO RELAYING INFORMATION TO YOUR RESIDENTS, WHICH OF THE FOLLOWING ARE THE BEST WAYS TO COMMUNICATE WITH YOUR RESIDENTS?

## **Total Number Responding: 70** (Multiple Responses Accepted)



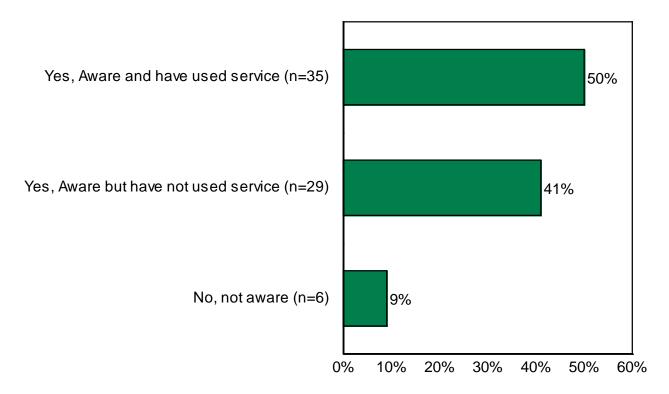
Note that none of the public officials responding to this question mentioned videos.

Other Responses Included: fliers, in person, recycle calendar, sign boards, water/sewer bill



## Q9 ARE YOU AWARE THAT THE CUYAHOGA COUNTY SOLID WASTE DISTRICT OFFERS FREE CONSULTING SERVICES TO HELP COMMUNITIES EFFECTIVELY CONTRACT FOR SOLID WASTE COLLECTION AND RECYCLING SERVICES?

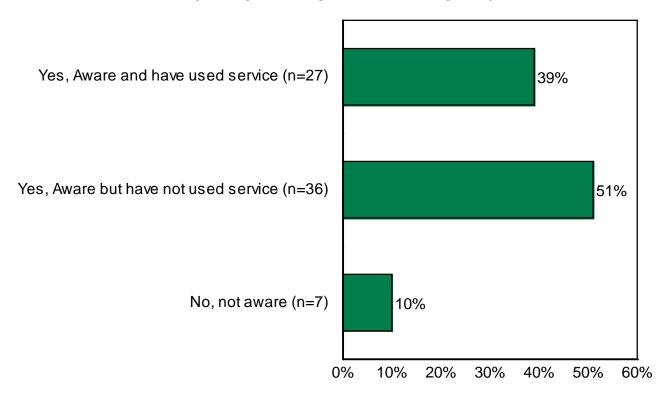
## **Total Number Responding: 70**(Multiple Responses Accepted)





## Q10 ARE YOU AWARE THAT THE CUYAHOGA COUNTY SOLID WASTE DISTRICT FACILITATES CONTRACTING CONSORTIUMS AMONG COMMUNITIES TO COLLECTIVELY BID FOR SOLID WASTE AND RECYCLING SERVICES IN ORDER TO OBTAIN THE MOST COMPETITIVE PRICING?

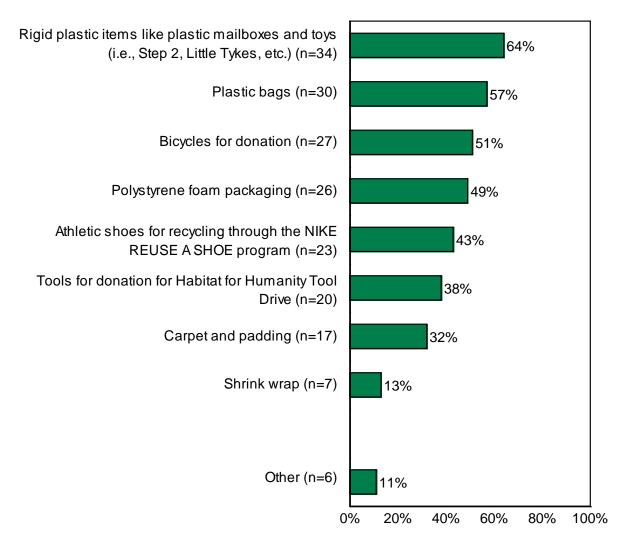
## **Total Number Responding: 70** (Multiple Responses Accepted)





## Q11 \*OF THE FOLLOWING MATERIALS THE SOLID WASTE DISTRICT IS CONSIDERING ACCEPTING AT THE CENTER, PLEASE SELECT THE ONES THAT YOUR COMMUNITY WOULD BE INERESTED IN COLLECTING FROM RESIDENTS AND DELIVERING TO THE CENTER?

### **Total Number Responding: 53** (Multiple Responses Accepted)



<sup>\*</sup> Prior to the question, the survey stated...

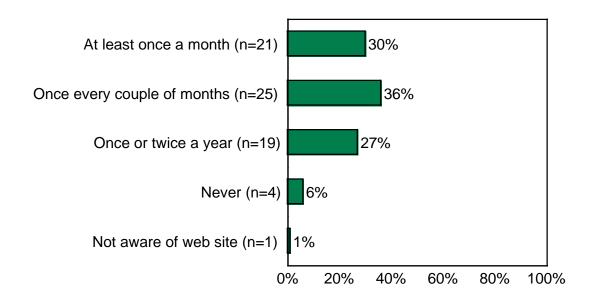
Other Responses Include: latex paint for Habitat for Humanity, paint, televisions (n=2), used lawn maintenance equipment, need to consult with Service Director



<sup>&</sup>quot;As you may know, the Cuyahoga County Solid Waste District currently accepts household hazardous waste and electronics that communities collect from their residents. This spring, the Solid Waste District will open a Special Waste Convenience Center that will accept other materials for recycling."

## Q12 HOW OFTEN DO YOU GO TO THE CUYAHOGA COUNTY SOLID WASTE DISTRICT'S WEB SITE?

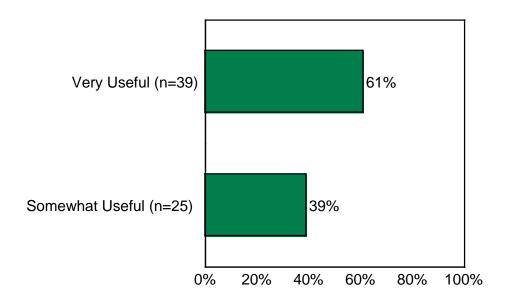
### **Total Number Responding: 70**





## Q13 HOW WOULD YOU RATE THE SOLID WASTE DISTRICT'S WEB SITE?

## Total Number Responding: 64 (Of Those Who Visited Web Site)

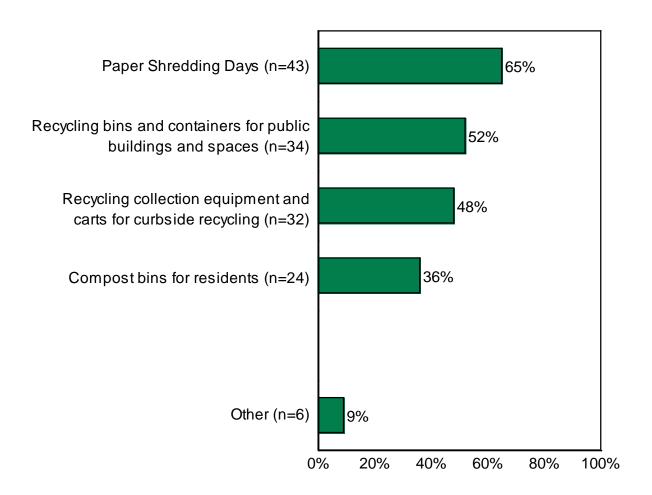


Note that none of those visiting the web site said it was not very useful or not useful at all.



# Q14 AS YOU MAY KNOW, THE SOLID WASTE DISTRICT CURRENTLY OFFERS A COMMUNITY RECYCLING AWARENESS GRANT TO HELP COMMUNITIES PROMOTE RECYCLING TO RESIDENTS. IF THIS GRANT PROGRAM WAS EXPANDED, HOW WOULD YOUR COMMUNITY BE LIKELY TO SPEND THE GRANT DOLLARS RECEIVED FROM THE SOLID WASTE DISTRICT?

### **Total Number Responding: 66**

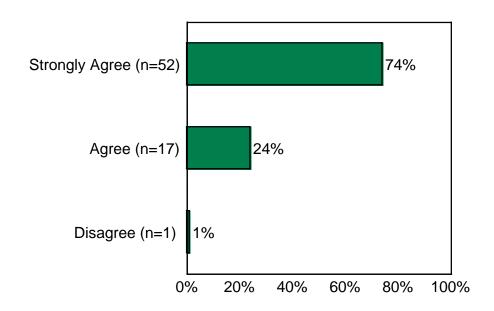


Other Responses Include: Collection info brochure, education, increased communications, other informational mailings, printed information, need to consult with service director



## Q15 DO YOU AGREE OR DISAGREE THAT YOUR COMMUNITY BENEFITS FROM THE RECYCLING AND WASTE MANAGEMENT ASSISTANCE AND PROGRAMS PROVIDED BY THE CUYAHOGA COUNTY SOLID WASTE DISTRICT?

### **Total Number Responding: 70**

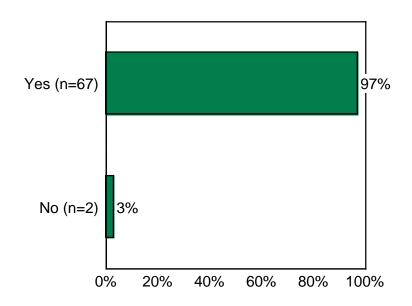


Note that none of those responding strongly disagreed with this statement.



## Q16 HAS THE CUYAHOGA COUNTY SOLID WASTE DISTRICT HELPED YOUR COMMUNITY IMPROVE OR EXPAND THE RECYCLING AND WASTE MANAGMENT SERVICES YOU PROVIDE TO YOUR RESIDENTS?

### **Total Number Responding: 69**





## Q17 DO YOU HAVE ANY SUGGESTIONS THAT WOULD HELP THE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT IMPROVE ITS SERVICES TO YOUR COMMUNITY?

### **Total Number Responding: 25**

- Land bank acquisitions for compost facilities throughout Cuyahoga County. We will need stable facilities in the future for leaves and more communities that start yard waste programs.
- Latex paint disposal
- Would like to see the county make a recycling display trailer that could be used at community
  events to show residents all possible items that can be recycled.
- Our community believes that a County wide trash collection and recycling unification program would benefit all communities. This might well be the best starting point for county-wide consolidation of services.
- Help promote better recycling cost reductions with solid waste haulers by creating consortiums for communities to sell their recyclables collectively. In the same way you have helped create disposal consortiums, have communities that recycle with carts bid their materials out (i.e. consider segregating waste disposal from recycling collection as a way to increase savings). This presumes it is economically better to do it this way.
- · Shredding, TV disposal, any other service that would benefit residents and reduce landfill waste.
- More Household Hazardous Waste recycling locations for Cuyahoga County residents.
- More help with recycling.
- In the Township, it seems that more of our private developments (condominiums, mobile home parks, apartments, etc.) are taking the approach that it is cheaper for them not to collect recyclables at all. That is why we started using a co-mingle recycle dumpster at our Town Hall. After discussing these issues with Mr. Kidder, I did not realize that they even offered such a dumpster. Maybe the district could put together a program where we could reach out to these privates and expand the recycling program on their sites? I just wanted to take a minute and say THANK YOU to everyone at the District for all of the help and assistance that you have provided to us here at the Township. We are looking forward to growing with the District and their many existing, as well as future programs that our Township benefits from.
- · More advertisement to get more information out there, to the public.
- · Florescent light bulb recycling!
- It would be helpful for residents to get information directly from the county. The brochure which shares different cities efforts is not well read. Maybe an incentive between same size communities, with recognition or bragging rights.
- · Anything that would help yard waste recycling.
- Battery drop off
- Looking forward to the new facility and working with the wonderful staff at the CCSWD, everyone



is great to work with and always helpful and give their 100% to all the communities. Thank you all.

- Our Village is going to start recycling next month with curbside pick up. Diane Bickett was very helpful in getting us started. We also are going to continue with our Community Shred Day like we did last year.
- · No. Your regular reports to us are great.
- · No we like what you are doing -- keep it up!
- · KEEP UP THE GREAT WORK!!
- No. The services provided have been very useful and appreciate your assistance
- Keep up the exceptional job. Your organization is remarkable and is an asset to the Greater Cleveland communities.
- Continue with all the efforts. You are an asset in the future of bringing all the communities together as a region.
- None at this time.
- · Not at this time.
- Not at this time.





# SUMMARY OF FINDINGS FROM AN ONLINE SURVEY WITH BUSINESS STAKEHOLDERS OF THE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT

**May 2011** 

10-2749

(440) 895-5353 Fax (440) 895-9913

#### BACKGROUND

### **Survey Methodology**

This summary presents the findings of an online survey with businesses in Cuyahoga County conducted on behalf of the Cuyahoga County Solid Waste Management District. The Solid Waste District emailed a total of 180 businesses in Cuyahoga County that have had contact with the District and invited them to complete a survey online. Of these 180 businesses, a total of 40 completed the online survey. Another 16 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 24% (40 out of 164), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

### **Survey Purpose**

The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County to help reduce waste and increase recycling and composting activities within the County. Thus, it is important to hear from the Solid Waste District's stakeholders regarding the programs and services the District offers. One of these stakeholder groups is the business community. Some of the topics examined in the survey of businesses included:

- Types of materials businesses in Cuyahoga County currently recycle as well as materials businesses would like to recycle in the future. If they don't currently recycle, businesses were asked why not.
- How did they hear about the business recycling assistance offered by the Cuyahoga County Solid Waste District.
- Services businesses received from the District as well as services/programs that were most and least helpful to their company/organization in planning, implementing or expanding their waste reduction and recycling program. This includes whether or not they had a site visit or presentation from the District's Business Recycling Specialist.
- Interest in programs the District is considering offering in the future.

#### **Notes To The Reader**

These results should be viewed with some caution as the number of businesses completing the online survey is small (n=40). In addition, some questions were not completed by all those responding. The number of respondents to each of the questions is shown in the following graphs.

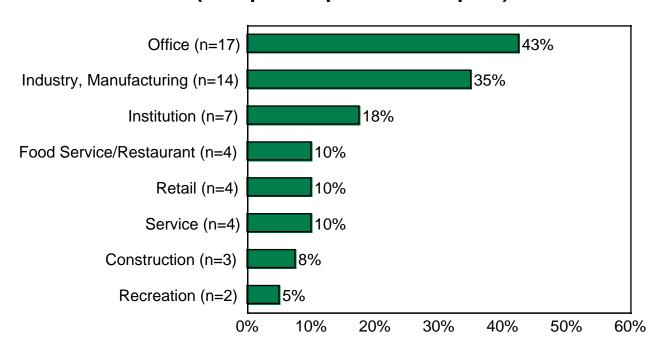
Respondents were asked to indicate which zip code their business is located and about a third each were located in downtown Cleveland (35%), the east side of Cleveland or the eastern suburbs (28%) or in the southern suburbs (33%). Just two of the businesses responding to the survey were located on the west side.



#### **SUMMARY OF FINDINGS**

### Q2 WHAT TYPE OF BUSINESS OR INSTITUTION DO YOU REPRESENT?

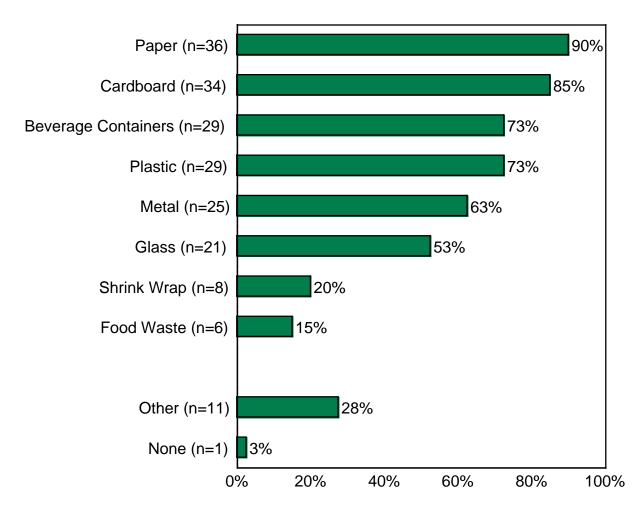
# **Total Number Responding: 40** (Multiple Responses Accepted)





### Q3 WHICH OF THE FOLLOWING MATERIALS DOES YOUR COMPANY/ORGANIZATION CURRENTLY RECYCLE?

# **Total Number Responding: 40** (Multiple Responses Accepted)

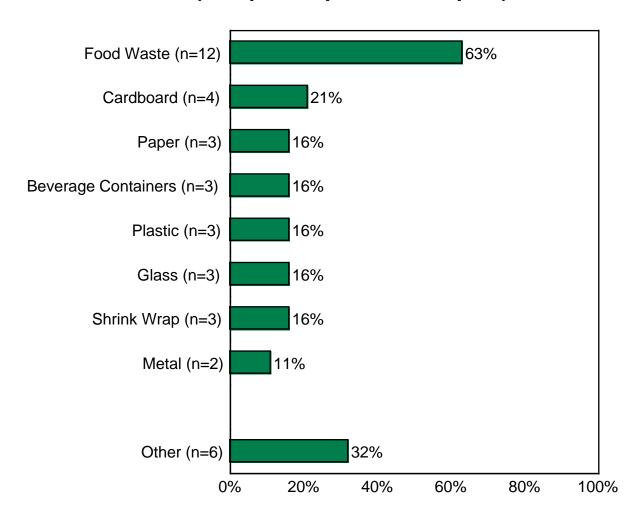


Other Responses Include: batteries, flourescent bulbs, ballasts, cork, fry oil, ewaste, electronic equipment, computers, oil, fuel, oil filters, ink & toner, pallets, steel drums, wood.



# Q4 WHICH OF THE FOLLOWING MATERIALS WOULD YOUR COMPANY/ORGANIZATION LIKE TO ADD TO YOUR RECYCLING PROGRAM?

# **Total Number Responding: 19** (Multiple Responses Accepted)

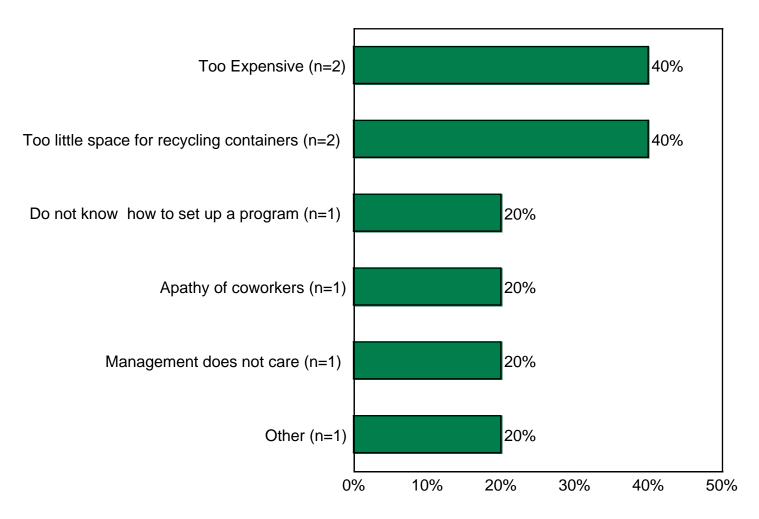


Other Responses Include: batteries, flourescent bulbs, electronic equipment, computers, solvents, wood, wood pallets, plastic items.



# Q5 IF YOUR COMPANY/ORGANIZATION DOES NOT CURRENTLY HAVE A WASTE REDUCTION AND/OR RECYCLING PROGRAM, WHICH OF THE FOLLOWING REASONS EXPLAINS WHY NOT?

# Total Number Responding: 5 (Multiple Responses Accepted)



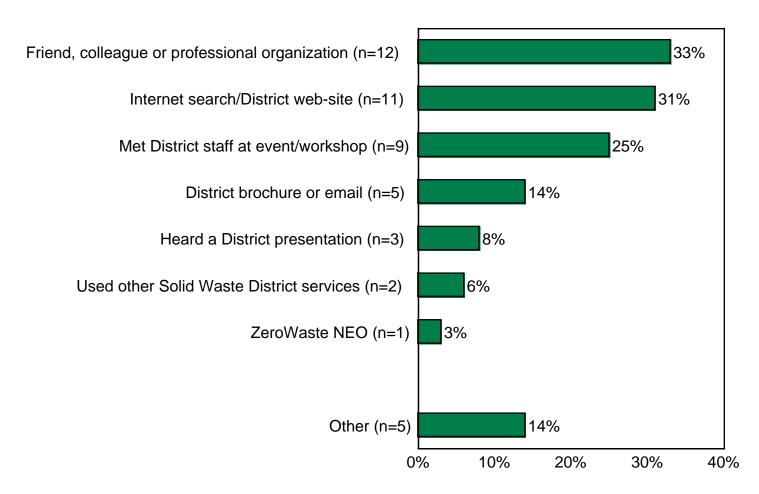
Other Response: Rent owned building and no recycling program desired by owner.

Note that none of the businesses responding to this questioned mentioned "too small an organization/not enough materials to recycle" or "do not have time to set-up a program."



# Q6 HOW DID YOU HEAR ABOUT THE BUSINESS RECYCLING ASSISTANCE OFFERED BY THE CUYAHOGA COUNTY SOLID WASTE DISTRICT?

# **Total Number Responding: 36**(Multiple Responses Accepted)

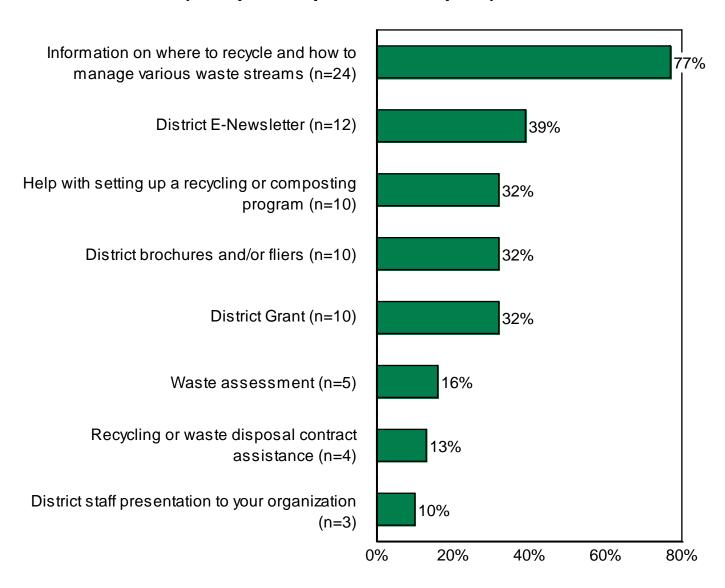


Other Responses Include: Called, E4S, Introducation call from SWD, Looked it up, Seminar by E4S.



# Q7 WHICH OF THE FOLLOWING SERVICES HAS YOUR COMPANY/ORGANIZATION RECEIVED FROM THE SOLID WASTE DISTRICT?

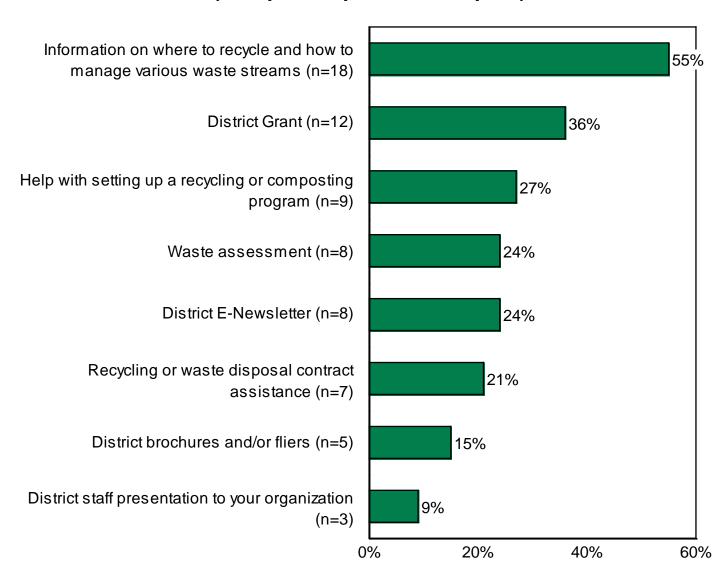
# **Total Number Responding: 31**(Multiple Responses Accepted)





# Q8 WHICH OF THE FOLLOWING SERVICES DO YOU FEEL WOULD BE THE MOST HELPFUL IN PLANNING, IMPLEMENTING OR EXPANDING YOUR COMPANY'S WASTE REDUCTION OR RECYCLING PROGRAM?

# **Total Number Responding: 33**(Multiple Responses Accepted)





# Q9 WHICH OF THE FOLLOWING SERVICES DO YOU FEEL WOULD BE THE LEAST HELPFUL IN PLANNING, IMPLEMENTING OR EXPANDING YOUR COMPANY'S WASTE REDUCTION OR RECYCLING PROGRAM?

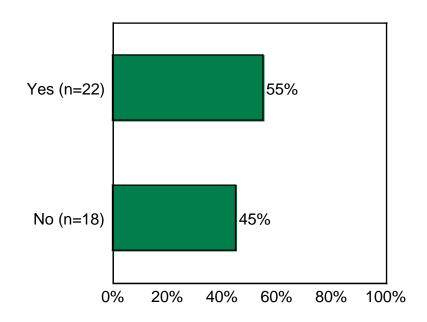
### **Total Number Responding: 28**(Multiple Responses Accepted)





# Q10 HAVE YOU VISITED THE CUYAHOGA COUNTY SOLID WASTE DISTRICT'S WEB SITE IN THE PAST YEAR?

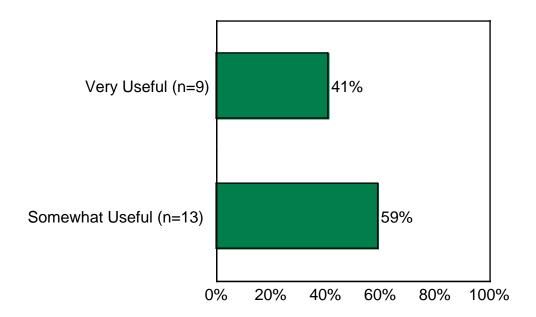
#### **Total Number Responding: 40**





### Q11 HOW WOULD YOU RATE THE SOLID WASTE DISTRICT'S WEB SITE?

# **Total Number Responding: 22** (Of Those Who Visited Web Site)

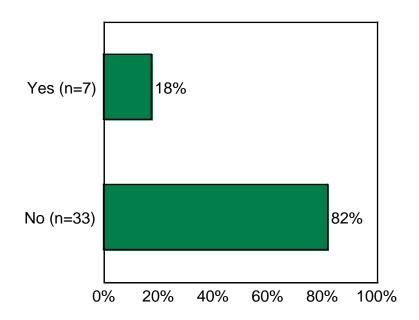


Note that none of those visiting the web site said it was not very useful or not useful at all.



# Q12 HAS YOUR COMPANY/ORGANIZATION EVER RECEIVED A SITE VISIT OR RECYCLING PRESENTATION FROM OUR BUSINESS RECYCLING SPECIALIST?

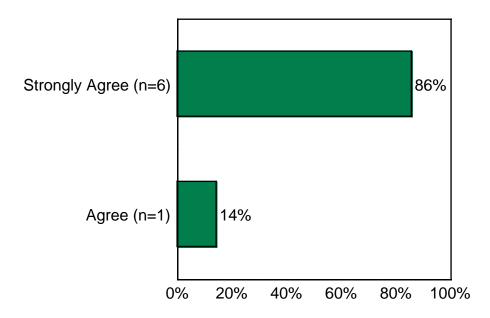
#### **Total Number Responding: 40**





# Q13 DO YOU AGREE OR DISAGREE THAT THE SITE VISIT OR PRESENTATION BY THE BUSINESS RECYCLING SPECIALIST WAS PROFESSIONAL, INFORMATIONAL AND MET YOUR ORGANIZATIONS' NEEDS?

Total Number Responding: 7
(Of Those Who Had Site Visit or Presentation)

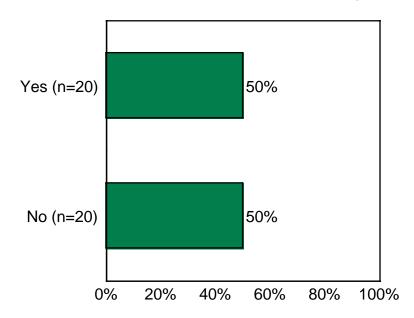


Note that none of those who had a site visit or presentation disagreed with this statement.



# Q14 HAVE YOU OR YOUR COMPANY/ORGANIZATION RECEIVED ONE OF THE SOLID WASTE DISTRICT'S PUBLICATIONS SUCH AS LESS IS MORE: A GUIDE TO RECYCLING IN THE WORKPLACE OR CUYAHOGA COUNTY RECYCLING DIRECTORY FOR BUSINESS AND INDUSTRYTO HELP START OR EXPAND A RECYCLING PROGRAM?

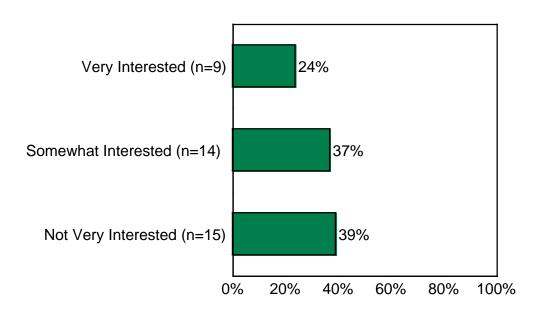
**Total Number Responding: 40** 





# Q15 THE CUYAHOGA COUNTY SOLID WASTE DISTRICT IS CONSIDERING SETTING UP A HAZARDOUS WASTE DROP-OFF PROGRAM.\* HOW INTERESTED WOULD YOUR COMPANY/ ORGANIZATION BE IN PARTICIPATING IN THIS PROGRAM?

**Total Number Responding: 38** 



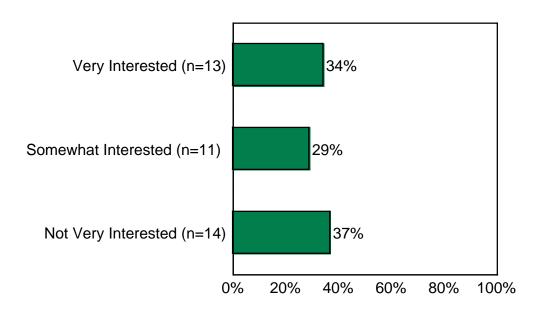
<sup>\*</sup> The following information was also included in the question:

With this program, the Solid Waste District would provide a facility where businesses could take small quantities of hazardous waste that they generate. The company/organization would be charged a fee based on the types and amounts of hazardous waste dropped-off.



#### Q16 HOW INTERESTED WOULD YOUR COMPANY/ORGANIZATION BE IN PARTICIPATING IN A WASTE COLLECTION AND RECYCLING CONTRACTING CONSORTIUM?\*

**Total Number Responding: 38** 



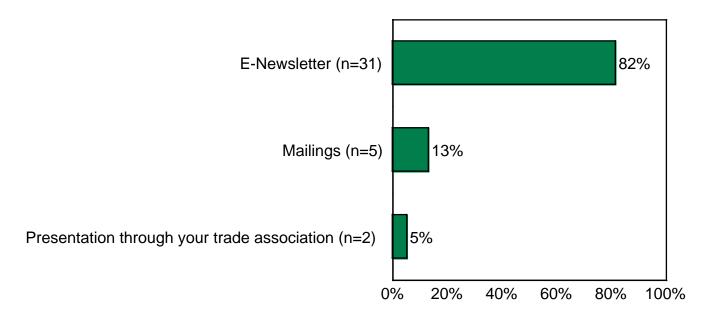
<sup>\*</sup> The following information was also included in the question:

With this service, the Solid Waste District would negotiate a collective contract on behalf of a group of participating businesses. The concept is to use volume purchasing to obtain better pricing than each business could get individually. There would be no fee for this service.



# Q17 HOW WOULD YOU LIKE TO RECEIVE INFORMATION ABOUT THE PROGRAMS OFFERED FROM THE CUYAHOGA COUNTY SOLID WASTE DISTRICT?

**Total Number Responding: 38** 

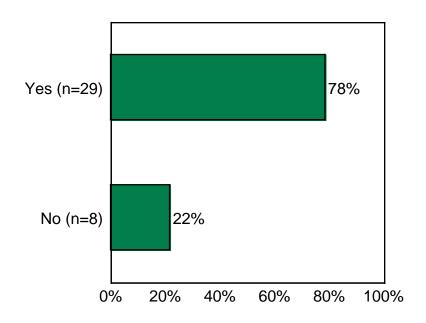


Note that none of the respondents mentioned they would like to get information through phone contact.



# Q18 DO YOU FEEL THE CUYAHOGA COUNTY SOLID WASTE DISTRICT HELPED YOUR COMPANY IMPLEMENT OR EXPAND ITS WASTE REDUCTION OR RECYCLING ACTIVITIES?

**Total Number Responding: 37** 





#### Q19 WHAT ADDITIONAL INFORMATION OR ASSISTANCE CAN THE CUYAHOGA COUNTY SOLID WASTE DISTRICT PROVIDE TO HELP YOUR COMPANY/ORGANIZATION REDUCE WASTE AND RECYCLE MORE?

#### **Total Number Responding: 12**

- CCSWD was very helpful. Bottom Line Expense. We as an agency were willing to do all of the extra work it takes to separate the trash, etc., but it is so expensive. It has been almost depressing. We have tried the composting through Rosby, cardboard, paper, etc. and its just too expensive. The best way you can help is to help us figure out how to afford it. My name is Kris and I work for the Menorah Park campus. We have 360 Long Term Care apartments and 500 independent/assisted living apartments on our campus. We have 1200 staff. We have a lot of waste as a result, but a lot of dedicated staff members. I was hoping the new Abitibi Bowater program would be the ticket to help us move forward, but it still came up more expensive.
- I could use some further help with setting up a composting program. It would basically consist of items left over from peoples' lunches, coffee grounds, etc.
- Show concern & inquire (prompt) facilities about recycling, items that can be / should be recycled.
   Demonstrate benefits to organizations that recycle.
- Our organization was not aware that additional educational services were available until after we
  designed our program. We would have saved significant amount of time if we knew we were able
  to receive feedback on our program before we submitted our grant application.
- Keep up the good work! Be open to the variety of waste streams coming out of companies. If you
  have enough of anything, it is recyclable somewhere.
- We currently have the materials & staff (clients) to produce rain barrels. We would like help in marketing these.
- I like getting email updates about the things that CCSWD is doing. I would love to be able to post this information to the general public (we are a public library) but the attachments are not really in a brochure/flyer format that makes it easy to post on our community board.
- Recycling methods and locations for construction both commercial and residential demo material.
- I am told we use a company that does sorting after pickup.
- Recycling specific items: wooden pallets. What are other companies doing about recycling? (enews would be good for this) What items are particularly difficult to recycle? What are some basic mis-steps that companies make (relative to recycle)? Do we really need a County Solid Waste District . . who are they, what do they do . . . how many bodies are there in the organization . . .what are their big success stories . . . do they do more than send out surveys and emails?
- · Thanks for all of your assistance over the years it has been a great help!
- Beau Daane is one of your best assets! Having him speak at a firm meeting might prove to be very helpful.





# SUMMARY OF FINDINGS FROM AN ONLINE SURVEY WITH EDUCATOR STAKEHOLDERS OF THE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT

**May 2011** 

10-2749

(440) 895-5353 Fax (440) 895-9913

#### BACKGROUND

#### **Survey Methodology**

This summary presents the findings of an online survey with educators in Cuyahoga County conducted on behalf of the Cuyahoga County Solid Waste Management District. The Solid Waste District emailed a total of 546 educators in Cuyahoga County and invited them to complete a survey online. This list of educators included, but was not limited to, teachers, principals, other school staff members, parent or school volunteers, youth group leaders and environmental educators. Of these 546 educators, a total of 114 completed the online survey. Another 63 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 24% (114 out of 483), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

#### **Survey Purpose**

The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County to help reduce waste and increase recycling and composting activities within the County. Thus, it is important to hear from the Solid Waste District's stakeholders regarding the programs and services the District offers. One of these stakeholder groups is local educators. Some of the topics examined in the survey of educators included:

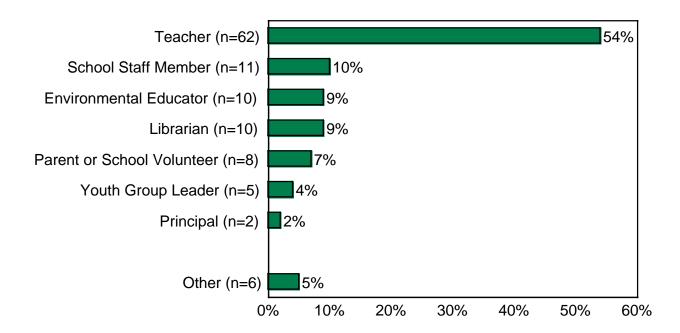
- How they first heard about the District's Education Program.
- Solid Waste District services or resources educators received from the Solid Waste District's Education Program and which ones were most and least valuable to them. How often they use the District's environmental education services was also obtained.
- The value of the District's environmental education services to them and what obstacles, if any, they have to using more of the District's environmental education services.
- If they have received a classroom presentation from the District's Education Specialist and their level of agreement with statements regarding the classroom presentation.
- Which student and educator brochures, if any, they would be interested in receiving from the District.



#### **SUMMARY OF FINDINGS**

#### Q1 WHAT IS YOUR POSITION?

#### **Total Number Responding: 114**

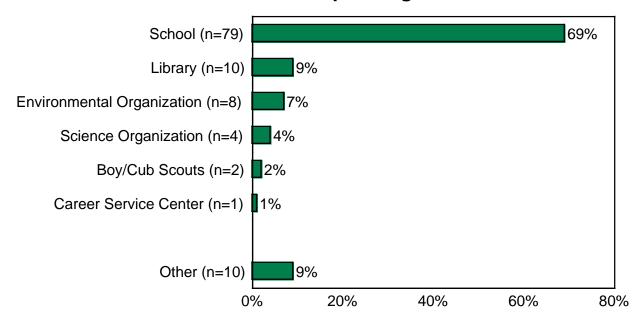


Other Responses Include: after school program, Educator for the SASWMA, police officer, property manager, Refuse and Recycling Division Manager, vendor



### Q2 WHICH OF THE FOLLOWING BEST DESCRIBES WHO YOU REPRESENT?

#### **Total Number Responding: 114**

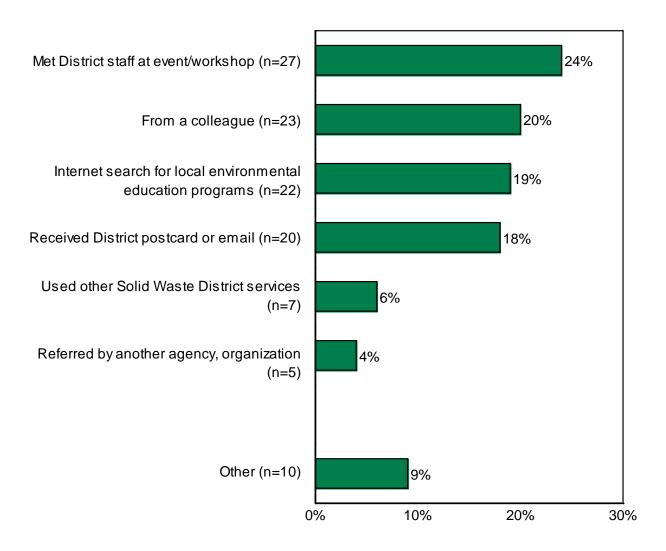


Other Responses Include: building project management, children, youth, county government, municipality, national trade association, nature center, non-profit service organization (City Year), university, vendor



# Q3 HOW DID YOU FIRST HEAR ABOUT THE ENVIRONMENTAL EDUCATION SERVICES OFFERED BY THE CUYAHOGA COUNTY SOLID WASTE DISTRICT?

#### **Total Number Responding: 114**



Other Responses Include: As part of a grant we received

Earth Day Coalition from at least 7 years ago Researching things for Eath Day program

In Summit County

Newsletter

They visited my son's class

Through local recycling committee Through the inspections at work

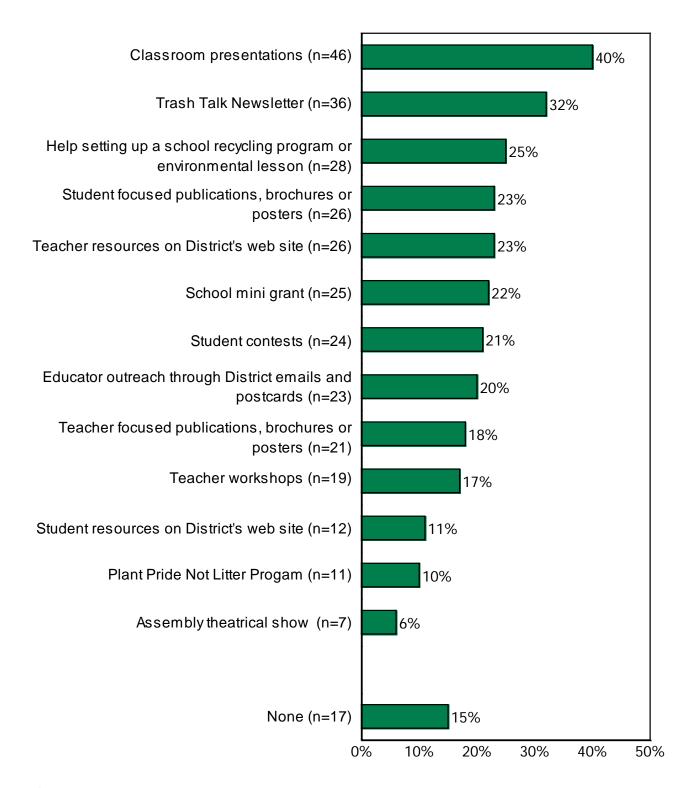
Don't remember

Don't know much about them



# Q4 WHICH OF THE FOLLOWING SERVICES OR RESOURCES DOES YOUR ORGANIZATION CURRENTLY RECEIVE OR HAVE RECEIVED IN THE PAST FROM THE SOLID WASTE DISTRICT'S EDUCATION PROGRAM?

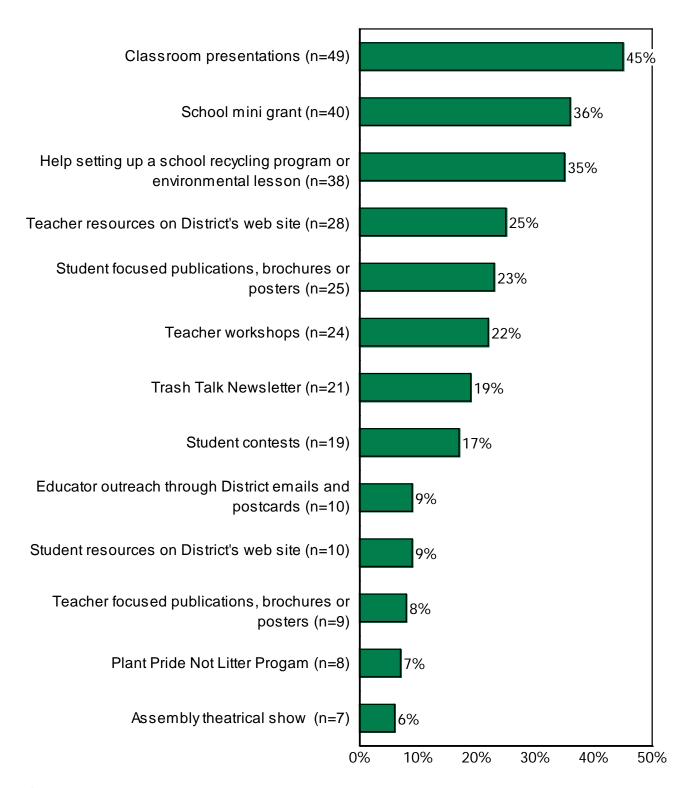
### Total Number Responding: 114 (Multiple Responses Accepted)





### Q5 WHICH OF THE FOLLOWING SERVICES/RESOURCES FROM THE SOLID WASTE DISTRICT ARE THE MOST VALUABLE TO YOU?

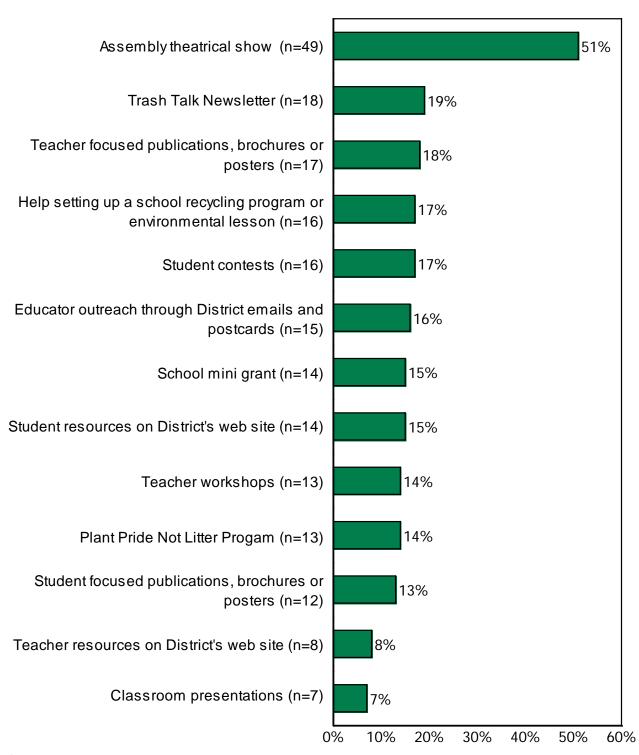
### Total Number Responding: 110 (Multiple Responses Accepted)





### Q6 WHICH OF THE FOLLOWING SERVICES/RESOURCES FROM THE SOLID WASTE DISTRICT ARE THE LEAST VALUABLE TO YOU?

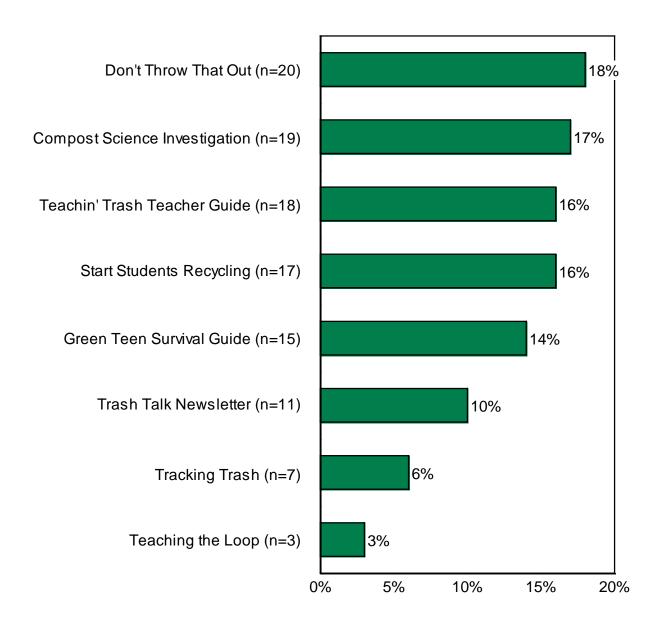
### Total Number Responding: 96 (Multiple Responses Accepted)





# Q7 WHICH OF THE FOLLOWING CUYAHOGA COUNTY SOLID WASTE DISTRICT BROCHURES FOR STUDENTS AND EDUCATORS WOULD YOU BE INTERESTED IN RECEIVING?\*

#### **Total Number Responding: 110**



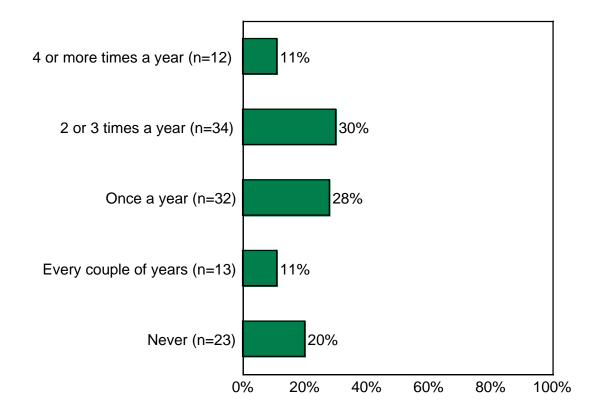
<sup>\*</sup>Question also stated...

<sup>&</sup>quot;Note that all of these brochures can be ordered from the Solid Waste District web site: www.cuyahogaswd.org"



### Q8 HOW OFTEN DO YOU USE THE SOLID WASTE DISTRICT'S ENVIRONMENTAL EDUCATION SERVICES?

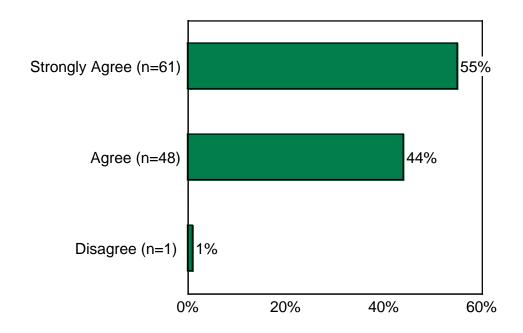
#### **Total Number Responding: 114**





# Q9 DO YOU AGREE OR DISAGREE THAT THE SOLID WASTE DISTRICT PROVIDES HIGH VALUE ENVIRONMENTAL EDUCATION SERVICES?

#### **Total Number Responding: 110**

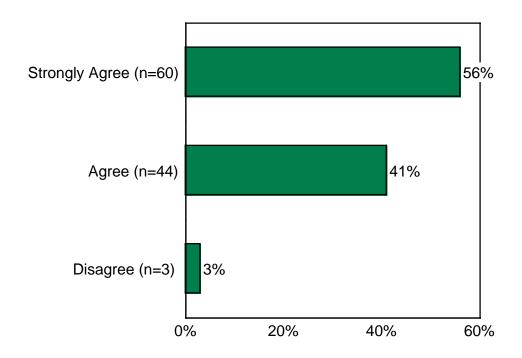


Note that none of those responding to this question strongly disagreed.



# Q10 DO YOU AGREE OR DISAGREE THAT YOUR STUDENTS BENEFIT FROM THE SOLID WASTE DISTRICT'S ENVIRONMENTAL EDUCATION SERVICES?

#### **Total Number Responding: 107**

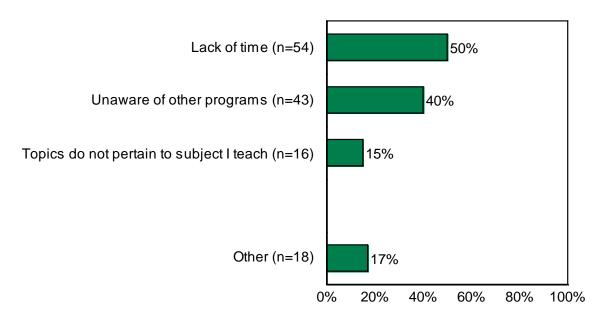


Note that none of those responding to this question strongly disagreed.



# Q11 WHAT, IF ANYTHING, HAS PREVENTED YOU FROM USING MORE OF THE SOLID WASTE DISTRICT'S ENVIRONMENTAL EDUCATION SERVICES?

### **Total Number Responding: 108** (Multiple Responses Accepted)



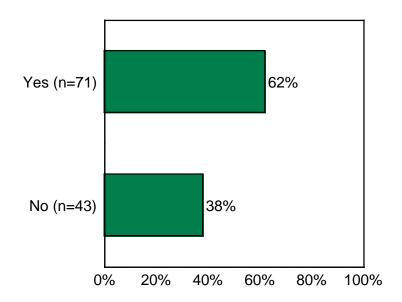
#### Other Responses Include:

- From Summit County and work for a Solid Waste District.
- I'm retired.
- I have written emails and speak directly; however I only receive standard emails back. I needed to know how to get presentations brought to by school, any fees, etc.
- · I live and work in Ross County.
- Lack of internal leadership at school beyond parent volunteers.
- Majority of information and resources are too general, need more detailed information, specifically for Cleveland where local recycling goes.
- No longer in the classroom.
- · Not a teacher, only a yearly library program.
- · Not applicable to preschoolers.
- Pertain to 9<sup>th</sup> grader in Cleveland School District?
- Planning ahead when there is only one educational coordinator and there are busy times of year like Earth Week – that get booked.
- Programs book up quickly and programs must be booked early.
- Relates to younger audience?
- · Scheduling conflict.
- Some not low enough level for low readers.
- Still waiting for recycling dumpster! Don't have necessary basic program tools yet.
- Target age of materials.
- We have recycling program in place.



# Q12 HAVE YOU VISITED THE CUYAHOGA COUNTY SOLID WASTE DISTRICT'S WEB SITE IN THE PAST YEAR?

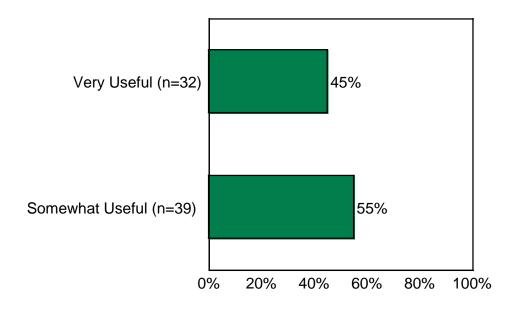
#### **Total Number Responding: 114**





### Q13 HOW WOULD YOU RATE THE SOLID WASTE DISTRICT'S WEB SITE?

# **Total Number Responding: 71 (Of Those Who Visited Web Site)**

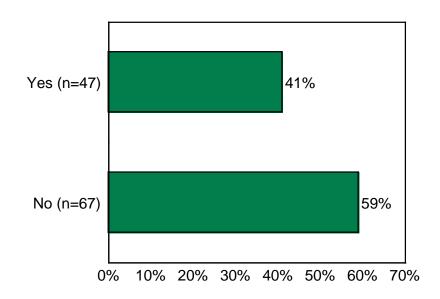


Note that none of those visiting the web site said it was not very useful or not useful at all.



### Q14 HAVE YOU EVER RECEIVED A CLASSROOM PRESENTATION FROM OUR EDUCATION SPECIALIST?

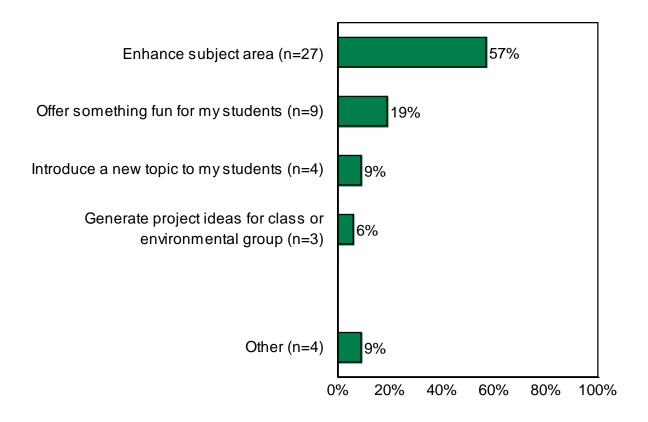
**Total Number Responding: 114** 





#### Q15 WHY DID YOU SCHEDULE A CLASSROOM PRESENTATION?

### Total Number Responding: 47 (Of Those Receiving Classroom Presentation)



Other Responses Include: Attended at another location

Composting Workshop
Develop compost program

Environmentally oriented event at the Nature

Center at Shaker Lakes



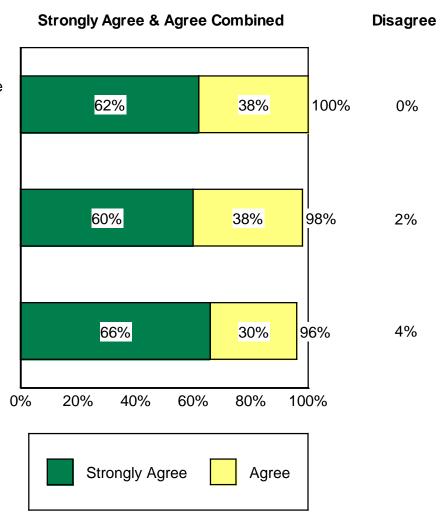
# Q16 DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS REGARDING THE CLASSROOM PRESENTATION FROM THE SOLID WASTE DISTRICT'S EDUCATION SPECIALIST?

### Total Number Responding: 47 (Of Those Receiving Classroom Presentation)

My students' understanding and knowledge of the topic increased due to the information and activity presented in my class and motivated them to recycle.

It was easy to arrange for the presentation with the Education Specialist.

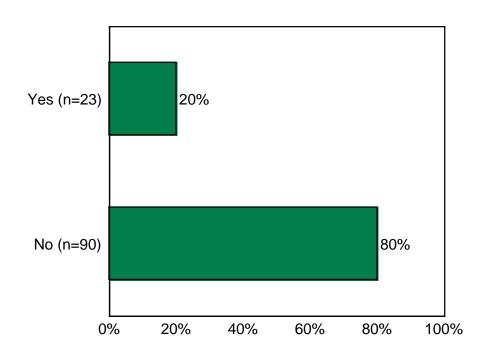
The class content that was taught was appropriate for my student's grade level and met my needs as a teacher.



Note that none of those receiving a classroom presentation strongly disagreed with any of these statements.



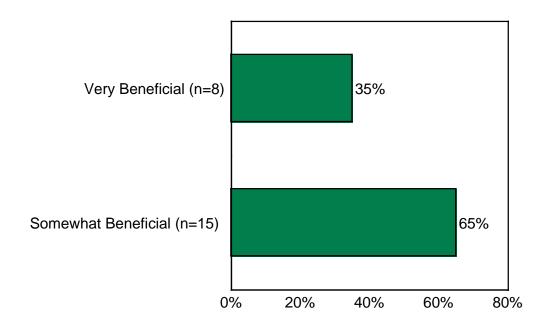
## Q17 DO YOU RECEIVE THE TRASH TALK STUDENT NEWSLETTER FOR GRADES K-6?





## Q18 HOW BENEFICIAL IS THE TRASH TALK NEWSLETTER TO YOU AND YOUR STUDENTS?

## **Total Number Responding: 23** (Of Those Receiving Newsletter)

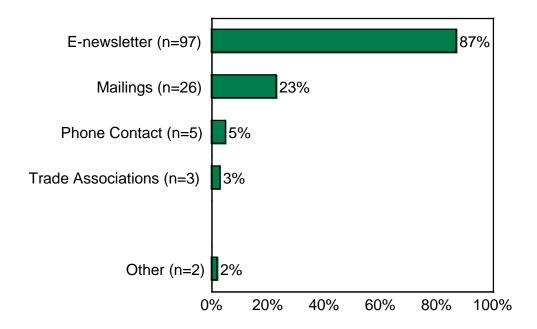


Note that none of those receiving the newsletter said it was not very beneficial.



## Q19 HOW WOULD YOU LIKE TO RECEIVE INFORMATION ABOUT THE ENVIRONMENTAL EDUCATION PROGRAMS OFFERED BY THE CUYAHOGA COUNTY SOLID WASTE DISTRICT?

## **Total Number Responding: 111**(Multiple Responses Accepted)



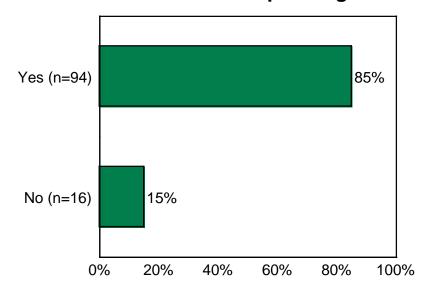
Other Responses Include: Summit County

Talk to PTA & staff at school about assemblies and

programs



## Q20 HAVE CUYAHOGA COUNTY SOLID WASTE DISTRICT'S PROGRAMS AND SERVICES BEEN HELPFUL IN INCREASING YOUR STUDENTS' AWARENESS AND PARTICIPATION IN RECYCLING AND WASTE REDUCTION ACTIVITIES?





# Q21 PLEASE TAKE THIS OPPORTUNITY TO PROVIDE THE SOLID WASTE DISTRICT WITH SOME SUGGESTIONS ON HOW IT CAN IMPROVE ITS ENVIRONMENTAL EDUCATION PROGRAMS AND/OR WHAT OTHER PROGRAMS YOU WOULD LIKE THE SOLID WASTE DISTRICT TO OFFER?

- I wish my classes could visit your facilities. The problem is the cost of transportation. I wish I could find an organization that would give us a grant for this transportation. Do you know of any?
- Tours of recycling centers and places to eliminate waste for home-school & traditional classroom students.
- I would be interested in receiving information regarding assembly presentations for the primary grades. I
  teach kindergarten in a CMSD school and finances prohibit us from taking field trips. The visit would be a
  welcome addition to the environmental education program in our building, especially if it is interactive or
  entertaining.
- I know there is budgeting considerations, but it would be helpful to know what programs such as the visiting presenters would be appropriate for middle school students. Also a phone contact person in case we have specific questions. Finally, is it possible to connect middle school science classes with the local universities/colleges. Students love to meet people who are in their field of special area. Maybe help them with science fair. This program could be used in so many different ways, but probably because of funding it is not possible.
- · Publish results from composting programs.
- Coordination with grade level chairs as lesson planning is underway would help integrate SWD
  presentations into curriculum plans. Presentations to school business managers and/or school boards may
  also improve school's adoption of recycling measures.
- We enjoyed our classroom presentations very much. Perhaps the specialist could bring info for the children to take home and share with parents.
- · I would like to receive more flyers.
- Education programs must be aligned to new state science standards in order to be considered as part of school functions. Teachers benefit from aligned guides, projects, and investigations. Also look at the model syllabus for high school environmental science and consider resources for involving high school teachers and students in community-based learning projects.
- I feel the Solid Waste District already offers great educational programs. I feel our government leaders need to make recycling mandatory in Cuyahoga County. I understand it's not the most popular thing to make someone do something, but it's the right thing to do for the following reasons: 1) Reduce garbage and cost for pick up. 2) Reduce amount of garbage going into a landfill which will expand the amount of years we can use that landfill (once that landfill is full residents will pay more in the long run to transport garbage out of state.) 3) It's an easy way to protect our environment. 4) Come on folks it's 2011. Thanks for including me in on your survey.
- If you have materials geared towards college students, I would be interested in them. It is difficult to get the
  word out about resources that you have. I have been unaware of your programs, perhaps because I am
  inundated with announcements, flyers, etc. Sending out more announcements to local colleges and
  universities about your resources might help.
- Please approach school administrators & teachers about your programs in order to organize an assembly. The school needs help with recycling, teaching science.
- Our environmental club is very interested in starting a compost at Brush High School, but we need some suggestions as to how to get started. We also want to make our community aware of recycling of toxic chemicals/cleaners safely. Again, we're not sure how to begin that process.
- Have programs for high school students.
- More recycling in some communities.



- Kathleen Rocco is a great resource! I'm still in need of a more permanent aluminum can recycling container for our school's cafeteria. We are on our last cardboard one from October and it's on its last leg (wet and starting to get moldy at the bottom). Do you have one (about the same size) that we can have for our school--that's all--just one to keep in the cafeteria permanently -- or one we could purchase at a cheap school rate? Please email me at mattandjog@yahoo.com Thanks! Joanie :)
- A monthly or quarterly contest for students to create useful or art using Recycle material. It would help
  increase student interest in recycling and use their imagination. Send schools projects they can do with
  students utilizing recycle materials instead of purchasing new materials.
- The Trash Talk newsletter is a little too difficult for a K-3 population.
- More resources available online including lessons.
- Go beyond your elementary level focus.
- Emphasis on the dangers of fireworks, littering and purchasing over packaged products. More collection opportunities during the year at a variety of sites E, W, S in the county.
- Specific programs for Boy Scouts. If you have any interest in having any staff members/volunteers becoming Merit Badge Counselors (or creating one day merit badge sessions), I can help you get started. Perhaps some interest in the following merit badges: Composite Materials, Environmental Science. Go to http://meritbadge.org/wiki/index.php/Merit\_Badges Ken Zabel (Brooklyn, OH): kenzabel.bsa319@gmail.com
- Visibility? I'm not sure why more teachers are not aware of your programs. I have only attended one dealing with worm composting.
- Will you be including information about the methods, benefits and drawbacks of converting human and pet solid waste into compost? I imagine that most of solid pet waste is bagged and placed curbside on garbage collection day. Isn't there a more intelligent and environmentally friendly way to reuse this?
- The only suggestion I have is for someone to contact me regarding the contests and programs you offer, instead of me forgetting about them or looking at the website. I need that email reminder. I try to get my students involved in EVERY aspect of what the district has to offer and have very much appreciated all of the help I have received. It's a wonderful asset to our students' learning.
- Perhaps add to the program descriptions to let us know what to collect to use in projects as we're selecting the program.
- Provide free transportation so the students can visit your facility.
- Coordination of recycling locations and companies for our school. Because we have a private contractor for our waste we have to take our recyclables ourselves to area pick up centers. Further we would love to have help with composting our kitchen waste products, and recycling of cardboard.
- Something to help students take the message home. In our neighborhood (Denison/Pearl) there is always TONS of garbage on garbage day. Doesn't look like recycling goes on in the home.
- Recycling programs have good intentions; however, there needs to be more structure and time given to
  implement them in either a classroom or school building. Support within the classroom also can be given. I
  have always wanted to have my 3 science classes participate in the recycling program, but I am not sure I
  have the time to organize such an endeavor. I incorporate your poetry contest with our 4th grade Ohio
  poetry indicators and Ecology Unit, which works for me. Thank you.
- I contacted Cuyahoga County Solid Waste District Education Specialist Kathleen Rocco for posters, handouts, brochures, etc. for our Earth Day display and showcase at Parma Heights Public Library. She was very helpful and gave me a multitude of useful materials. Unfortunately, we can not display materials with sale prices on them. If the cards did not have prices on them we would have been able to display them. There was genuine interest and all of the compost brochures were taken as well as many others. The materials coincided nicely with a Juvenile Let's Be Green" program as well. Thank you very much.
- It would be great for CCSWD to work with local government to help getting non-paper recycling (#1, #2 plastics, glass, cans and cardboard) started in the schools. I for one have not had any success getting anywhere with this in Westlake!
- Mini grant programs to set up recycling projects have been very helpful to local high school students. In this
  economy, I hope that they continue.
- Perhaps the District could do "audits" of the schools and give them ideas about how they can improve their recycling programs or even how they can reduce their energy consumption.
- Offer more high school programs.
- · Your agency has offered many interesting and fun programs. Unfortunately, scheduling activities is difficult.



- Our staff of 7th grade science teachers at the Olmsted Falls Middle School have been extremely pleased with Kathleen Rocco's classroom presentations. She is organized, relates well to her audience, and presents the material in a new and entertaining way. Her lessons are challenging and fun!
- Please keep these programs they are a wonderful resource for our community in teaching students the importance of protecting the environment. Thanks!
- I am sure I have not taken full advantage of what you have to offer but I do not have a typical classroom. Less preaching and more science is always good.
- I really like the programs that Kathy Rocco provides. It fits into the curriculum very well and enhances the subject area and provides excellent information to encourage the students to recycle, reuse and reduce! It also has changed the way I shop and recycle!
- Kathleen Rocco does an amazing job! (and no, she didn't pay me to say this truly an unsolicited comment)
- As a fellow solid waste educator/outreach specialist in southern Ohio, I do not regularly take advantage of your programming. However, from attending workshops/trainings with your personnel, I recognize that your District has provided excellent environmental education programming and I have received some great ideas from them in the past!
- Thank you for all you do. I teach preschoolers with special needs and often need to adapt educational materials. This is fine. I just need more time.
- I have been pleased and DELIGHTED with the programs Kathleen Rocco presents to our students each year!!!!!!
- I have had classroom presentations done with my students for the past several years. I am always extremely impressed with the presentation from Ms. Rocco. Her knowledge, professionalism and ability to present to kids in a meaningful and interactive manner keep the kids interested beyond the day of her visit! I only wish I had more time to learn about and use more of the resources.
- I can't think of a way to improve. Your presenters are excellent, the material is age appropriate and engages the children.
- I can't really provide a lot of good feedback for this survey since my experience with Cuyahoga Co's programs have been very limited thus far. We are still waiting on a recycling dumpster for the school. The school currently has NO recycling capacity...no interior or exterior collection, etc. Loads of opportunity here but we are starting from scratch. I'd love to obtain the county dumpster soon so we can really kick off a comprehensive program at the beginning of the next school year. That said, I'm new to Ohio and your website has been a helpful place to start figuring out the system in this area. It is frustrating to see how far behind this area is compared to other parts of the country/world we've lived in when it comes to waste reduction and recycling. Keep up the good work!
- I think the programs are outstanding. I can't think what else they could do.
- My responses may seem contradictory because I have never actually used your services with my students - at least not yet. I do hope to in the future.
- None.
- None.
- No Suggestions.





# SUMMARY OF FINDINGS FROM AN ONLINE SURVEY WITH GENERAL PUBLIC STAKEHOLDERS OF THE CUYAHOGA COUNTY SOLID WASTE MANAGEMENT DISTRICT

**May 2011** 

10-2749

(440) 895-5353 Fax (440) 895-9913

#### **BACKGROUND**

#### **Survey Methodology**

This summary presents the findings of an online survey with residents in Cuyahoga County conducted on behalf of the Cuyahoga County Solid Waste Management District. The Solid Waste District emailed a total of 589 residents in Cuyahoga County who have had contact with the District and invited them to complete a survey online. Of these 589 residents, a total of 201 completed the online survey. Another 14 emails were "undeliverable" due to bad email addresses. Thus, the survey had a response rate of 35% (201 out of 575), which is a very good response rate for this methodology. The surveys were collected in April and May 2011.

#### **Survey Purpose**

The Cuyahoga County Solid Waste Management District is in the process of updating the 15-year solid waste management plan for Cuyahoga County to help reduce waste and increase recycling and composting activities within the County. Thus, it is important to hear from the Solid Waste District's stakeholders regarding the programs and services the District offers. One of these stakeholder groups is local residents or the general public. Some of the topics examined in the survey of the general public included:

- If they participate in their community's curbside recycling program including which materials they recycle through the program. If they don't recycle through their community's program, why not?
- If they take recyclables to a drop-off location or facility. If they don't recycle this way, why not?
- Residents were also asked what they do with yard waste, household hazardous waste, unwanted electronics and computer equipment as well as old phone books and scrap tires.
- Familiarity with several specific Solid Waste District programs and services was also measured.
- · Which brochures, if any, they would be interested in receiving from the District.
- Preferences for learning about Solid Waste District events, programs and services as well as how they would like to learn more about new recycling, composting and waste reduction programs and services.

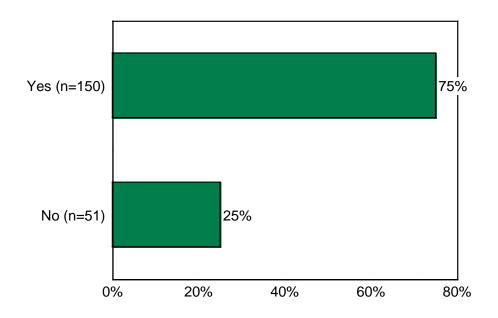
#### **Note To The Reader**

Respondents were asked their zip code and about a fourth each live in the southern suburbs (26%), eastern suburbs (23%) and the western suburbs (22%). The remaining respondents live in the City of Cleveland with 17% on the west side of the city and 10% living on the east side. It is also worth noting that two respondents live in Arizona.



#### **SUMMARY OF FINDINGS**

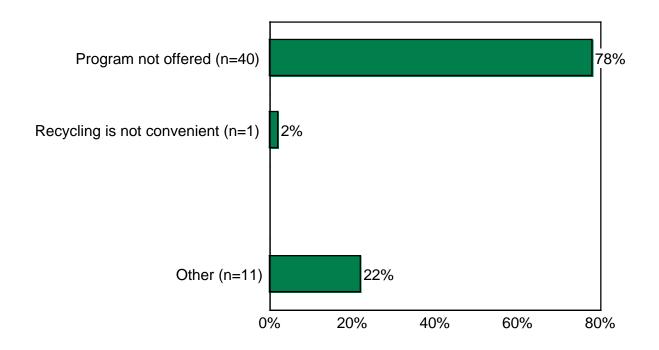
### Q2 DO YOU CURRENTLY PARTICIPATE IN CURBSIDE RECYCLING IN YOUR COMMUNITY?





#### Q3 WHY DON'T YOU PARTICIPATE IN CURBSIDE RECYCLING?

#### Total Number Responding: 51 (Of Those Who Don't Participate) (Multiple Responses Accepted)



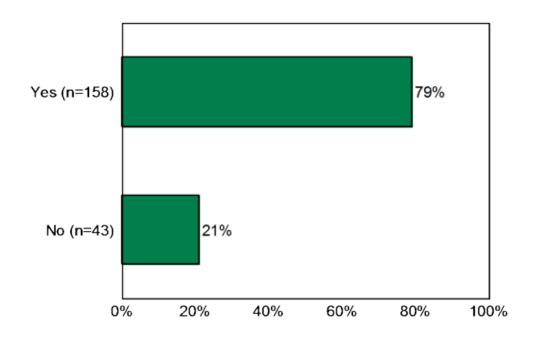
Note that none of those responding said "too busy to recycle," "recycling not important," or "don't know how to recycle"

#### Other Responses Include:

- Live in apartment, complex does not recycle (n=4)
- Business, we do own recycling
- Office building own recycling program
- Creates too much clutter
- Use community's drop-off facility
- Take old newspapers to recycling bins
- We would if containers were offered
- My familiy and I are in Joe Cimperman's ward. We live on West 14th Street and our area was selected as one of the first to attempt the implementation of curbside recycling. It's a joke in our estimation. I am a compulsive recycler and choose to take our recycling elsewhere.



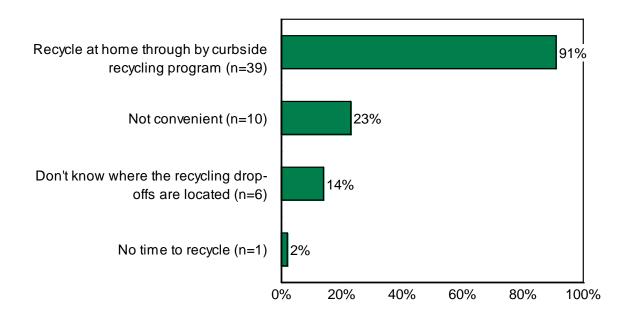
## Q4 DO YOU TAKE SOME OF YOUR HOUSEHOLD RECYCLABLES TO A RECYCLING DROP-OFF LOCATION OR RECYCLING FACILITY?





## Q5 WHY DON'T YOU TAKE SOME OF YOUR HOUSEHOLD RECYCLABLES TO A DROP-OFF LOCATION OR RECYCLING FACILITY?

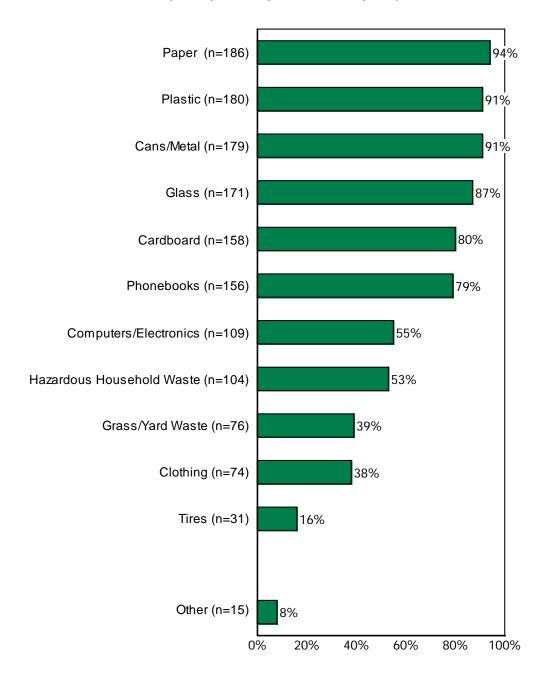
## Total Number Responding: 43 (Of Those Who Don't Participate) (Multiple Responses Accepted)





## Q6 WHAT TYPES OF MATERIALS DOES YOUR HOUSEHOLD RECYCLE EITHER THROUGH YOUR COMMUNITY'S CURBSIDE PROGRAM OR AT A DROP-OFF LOCATION/RECYCLING FACILITY?

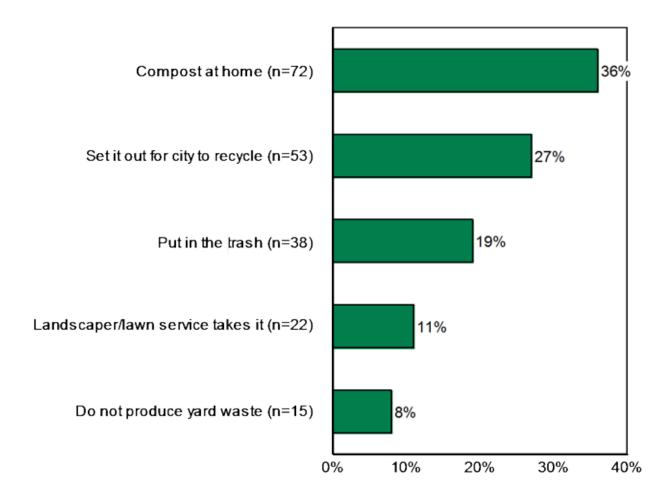
### Total Number Responding: 197 (Multiple Responses Accepted)



Other Responses Include: appliances (n=2); batteries; batteries, construction debris, motor oil; bulbs; CFL and plastic bags; CFLs; plastic bags; chipboard (cereal boxes); food waste (compost at home); pass on good items that I can no longer use to others in need of said items; shoes and books; still looking for location to bring our boxes of old shoes; Styrofoam (n=2)



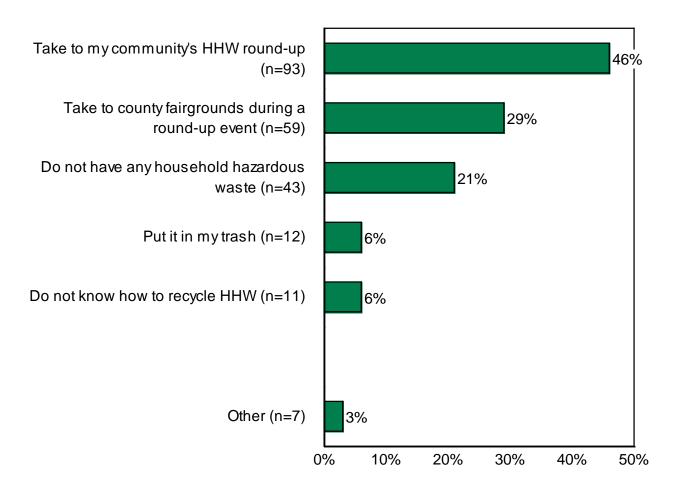
## Q7 WHAT DO YOU DO WITH YOUR YARD WASTE SUCH AS GRASS CLIPPINGS, BRANCHES AND LEAVES?





## Q8 WHAT DO YOU DO WITH YOUR HOUSEHOLD HAZARDOUS WASTE (HHW) SUCH AS OIL PAINT, PAINT THINNER, CONCRETE SEALER, MOTOR OIL, ANTIFREEZE, AND LAWN AND GARDEN CHEMICALS?

## **Total Number Responding: 201** (Multiple Responses Accepted)



Other Responses Include: Contract with appropriate vendors for disposal

Gas station

My place of employment - energy conservation team

My work

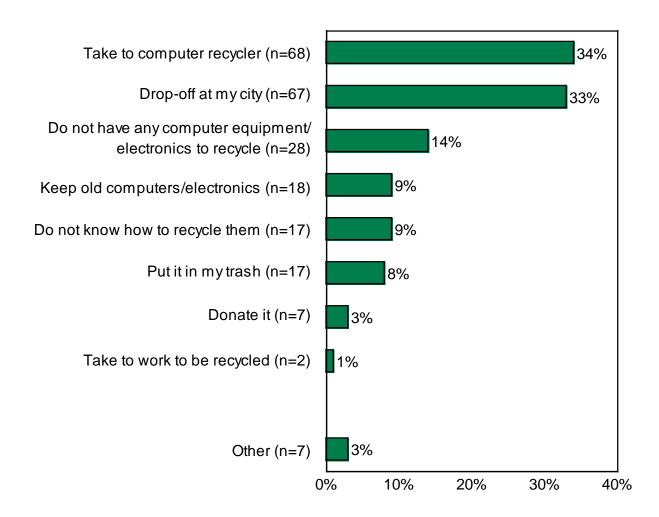
Recycle motor oil Take to a car shop

Saving to take to a round-up



#### Q9 WHAT DO YOU DO WITH YOUR UNWANTED COMPUTER **EQUIPMENT AND ELECTRONICS?**

#### **Total Number Responding: 201** (Multiple Responses Accepted)



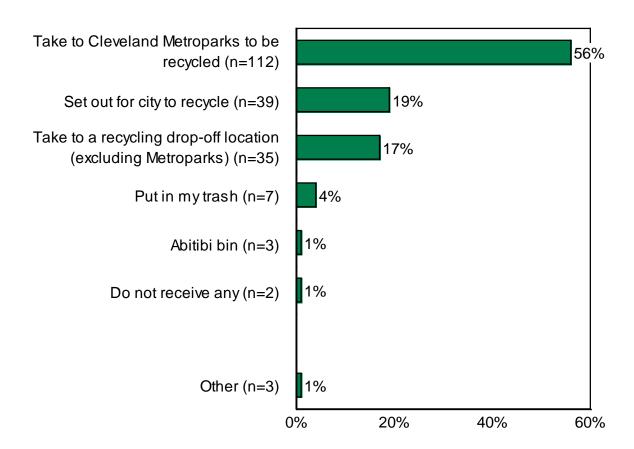
Other Responses Include: - Drop off at another city.

- Freecycle
- Special computer recycling event or RET3
- Take to re-sale shop
- Use the county round-up program
- Whole Foods recycling day
- City will pick up computers and recycle them. Or I take some electronics and sell them for scrap metal, like microwaves and vacuums.



#### Q10 WHAT DO YOU DO WITH YOUR OLD PHONE BOOKS?

#### **Total Number Responding: 201**



Other Responses Include: Burn it

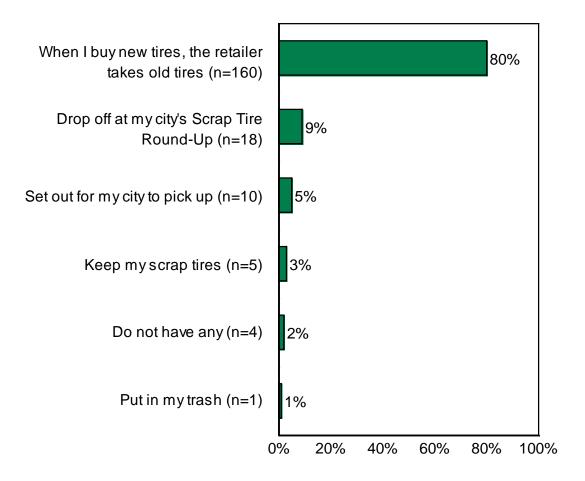
Don't know where to drop off

Nothing. Only have 2.



#### Q11 WHAT DO YOU DO WITH YOUR SCRAP TIRES?

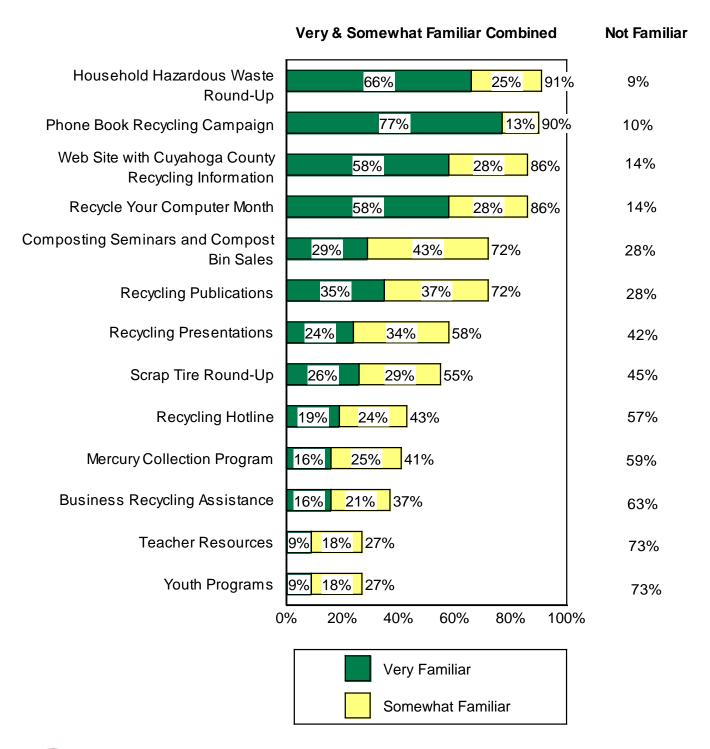
#### **Total Number Responding: 199**



One person mentioned they pay a gas station to take the scrap tires.



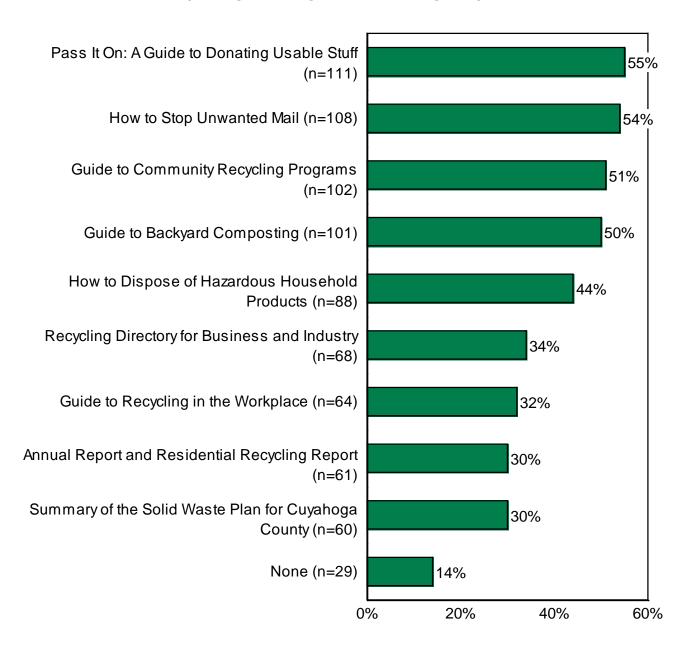
## Q12 HOW FAMILIAR ARE YOU WITH EACH OF THE FOLLOWING SOLID WASTE DISTRICT PROGRAMS AND SERVICES THAT ARE AVAILABLE TO THE GENERAL PUBLIC?





## Q13 WHICH OF THE FOLLOWING BROCHURES AVAILABLE THROUGH THE SOLID WASTE DISTRICT WOULD YOU BE INTERESTED IN RECEIVING?\*

## **Total Number Responding: 201**(Multiple Responses Accepted)

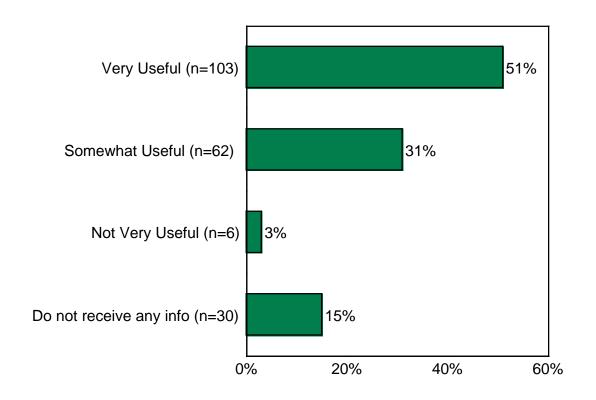


<sup>\*</sup>Question also stated...

<sup>&</sup>quot;Note that all can be ordered from the District web site - www.cuyahogaswd.org"

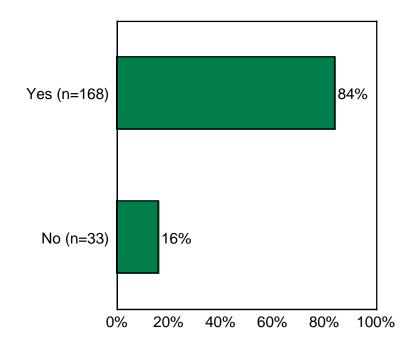


### Q14 HOW USEFUL IS THE INFORMATION YOU RECEIVE ABOUT RECYCLING AND COMPOSTING IN YOUR COMMUNITY?





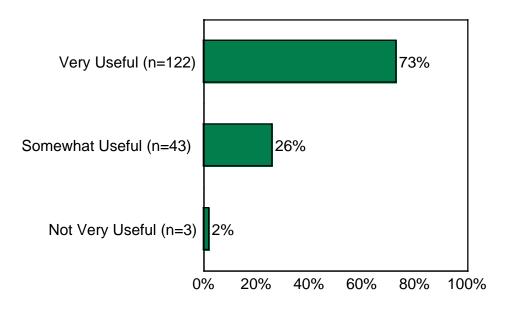
## Q15 HAVE YOU VISITED THE CUYAHOGA COUNTY SOLID WASTE DISTRICT'S WEB SITE IN THE PAST YEAR?





## Q16 HOW WOULD YOU RATE THE SOLID WASTE DISTRICT'S WEB SITE?

## **Total Number Responding: 168** (Of Those Who Visited Web Site)

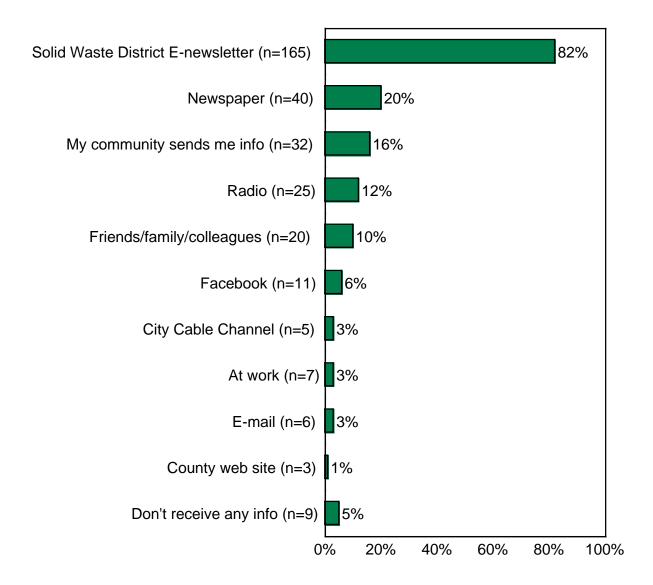


Note that none of those visiting the web site said it was not useful at all.



#### Q17 HOW DO YOU CURRENTLY HEAR ABOUT EVENTS, PROGRAMS AND SERVICES OFFERED BY THE SOLID WASTE DISTRICT?

## **Total Number Responding: 201**(Multiple Responses Accepted)

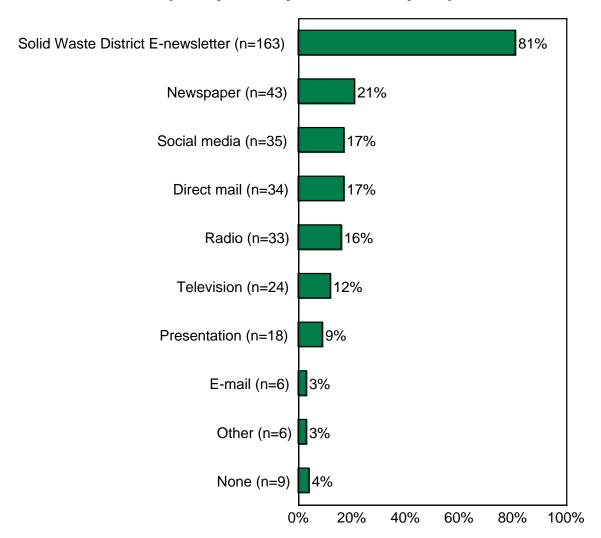


One person mentioned they "attend meetings like the Towpath Progression or Earth Day and sign up on mailing lists for different entities."



## Q18 HOW WOULD YOU PREFER TO LEARN MORE ABOUT NEW RECYCLING, COMPOSTING AND WASTE REDUCTION PROGRAMS AND SERVICES?

### **Total Number Responding: 201**(Multiple Responses Accepted)

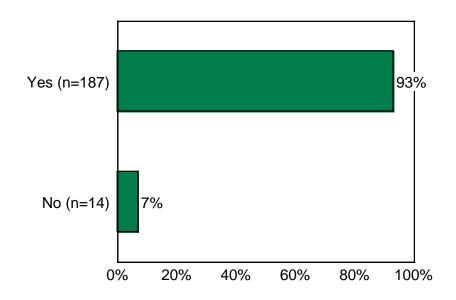


#### Other Responses Include:

- Beth will continue to update me.
- Can I use the website to find information specific to my area? My recycling days, which items can be recycled, where I can bring other items, info on composting, etc.?
- Community newsletters (MORE and the Lamplighter)
- Our news radio station, WTAM, should be in the loop. Television is hit or miss with the myriad of stations and I don't get to read the newspapers enough.
- Through my community
- web seminars



## Q19 HAVE THE SOLID WASTE DISTRICT'S PROGRAMS AND SERVICES BEEN HELPFUL IN INCREASING YOUR AWARENESS AND PARTICIPATION IN RECYCLING AND WASTE REDUCTION ACTIVITY?





### Q20 IN YOUR OPINION, WHAT IS THE MOST IMPORTANT WASTE OR RECYCLING ISSUE IN YOUR COMMUNITY?

#### **Total Number Responding: 170**

#### Lack of Participation, Get More People/Households to Participate, Make it Mandatory

- · Cities & Counties need to force participation in some form of recycling effort.
- Getting all households to participate. My neighbor does not recycle and I have suggested they begin. What is a good way to encourage them?
- · Getting more to participate!
- · Cities should make recycling mandatory.
- · More people need to get into the habit of recycling all that they can.
- · People who don't recycle at all.
- Not having more families participate.
- Solon does a great job of recycling, but too few residents comply. We need to get more of them on board.
- Increasing community participation and accepting additional materials curbside such as boxboard/mixed paper and other plastics.
- Not enough participation. End of yard waste pickup program.
- · Laziness of the people.
- Getting all residents to participate.
- · Lack of residential support.
- · Compliance.
- Getting people to do it.
- Overcoming people's reluctance (or refusal) to recycle. A friend came right out and said "I don't recycle". When I asked why, she said she just didn't want to be bothered. My city has supplied every household with a trash can and a recycle can, to go along with their new program using an automated pick up system. How could this get any easier? Maybe it would help to see publish/advertise/communicate more numbers, especially financial numbers about how recycling impacts a community.
- How to get more people to use the curbside recycling. Too often I see households with absolutely no recycling items and I know that they must have them. They only have garbage bags put out.
   Very frustrating!
- Recycling should be mandatory. Some residents do not put out any recycling containers on trash
  day. The city should be able to randomly inspect trash and issue citations for those that refuse to
  recycle.
- Not enough households participate in curbside recycling.
- Encouraging more residents to recycle for weekly pickup.
- Lack of participation by residents.
- Getting more people involved; thus the need to raise the awareness level and almost mandate it to reduce the amount of potential recyclables that are thrown out instead.
- Getting more to recycle.
- · Recycling in general.
- Getting people more involved and excited about recycling efforts.
- Make it a law that people have to recycle.
- Lakewood has A LOT of bars and eateries. I know that most of them are doing a poor job of sorting their garbage and recyclables and food scraps properly.
- Encouraging others to recycle.
- It seems most people are not recycling. I'm concerned that their recyclables are just going into the



landfill. I really hope the trash is being sorted through and recyclables are being taken out before being dumped.

- · Not enough people recycling.
- I think mandatory curbside recycling would be beneficial to all! I wish the city provided cans and pick-up service for all of Cleveland to participate in.
- Not enough participation. End of yard waste pickup program.
- · The fact that so many do not participate.
- Encouraging more people to recycle.
- Doesn't recycle glass. Most people here don't even recycle anything.

#### Provide More Information/Education about Ease of/Importance of/What can be Recycled

- · What to do with cardboard is an issue, we put a lot into weekly garbage pick up. How to get more people to recycle, a LOT of recyclables are just going into landfills.
- Education regarding recycling to reduce waste going into landfill and reduce cost to my municipality.
- Awareness of the importance of recycling and how easy it really is to recycle.
- Ease of recycling and one stop pick up for residents.
- It's convenient, so it's easy.
- Increasing awareness to community and the city. Every trash day I see neighbors / community people with recyclable materials stuck in the trash - cardboard, glass, TVs, etc.
- · All info on recycling.
- Increase of awareness and community support for the benefits of recycling more, especially green
  waste in home or community composting site creation and maintenance and use of the compost
  product in home or business gardens and lawns.
- Awareness of how many things can be recycled.
- I am not sure what the recycling program is in Olmsted Township. I had heard that the Trustees had canceled the curbside recycling program, but I have seen others putting cans and bottles on the tree lawn, and I started to do it again. I don't know where it ends up though.
- The biggest waste issue is the fuel and time used to continue curbside recycling in communities served by a Materials Recycling Facility (MRF). In those communities where waste is picked by staff at a MRF there is no reason for the residents to separate their recyclables, nor for the municipalities to act as if they are continuing with curbside recycling. Let's stop wasting fuel and time by educating residents when their trash goes to a MRF. This is an educational role CCSWD should play!!! Are you really about sustainable recycling or is this just a political gimmick to make sure our cities continue to receive recycling funding?
- People are unsure of what exactly can be recycled. Paperboard from granola bar boxes, cereal boxes, shoe boxes, etc. We still are not sure if that counts as paper or mixed paper or what the city takes.
- I recently attended a meeting in my community on the new trash disposal program. I was very surprised to listen to people asking basic questions about recycling-such as "how would you know if plastics are 1's or 2's-where would you find that information?" So people's lack of awareness regarding basic recycling that has been going on for at least 20 years tells me that a lot of people don't recycle at all or see importance of same from an environmental standpoint.
- When you see what is or is not placed at the curbside of the houses on our street I feel that they
  do not get their message out adequately. It is the residents, however, who do not pay any
  attention.
- · Making people aware of how easy it is to recycle, and increasing participation.
- Education. Getting people to understand that no man is an island...that each person's action or lack of action does impact everyone else, so we have a right to be ticked off at people who selfishly refuse to participate in conservation efforts.
- I think we need to communicate/educate more to individuals and families, that there is more to recycling than just recycling cardboard, glass, newspapers/magazines, and plastic. How additional



items, such as foam material (used for food products or beverages), can be recycled at Heinen's or even when recycling plastic bags, how one can include bread bags, dry cleaning bags, plastic wrap around products, etc.... Really educate! Send out direct mail, although not being green or enewsletters to public showing the difference made by recycling or dollar amount earned by cities that recycled. Show how it was used to benefit the city. I think this may motivate others to recycle, I am also interested in the process of what is done with the items collected from the curbside recycling. Is there a tour of the facilities or somewhere where we can go to see the process and what is made from what we recycle?

- Lack of knowledge.
- Educating community members about how and what to recycle and where and when to recycle.
- · I don't think people care about recycling since they can't see the importance.
- Convincing the general population of the need to recycle. Education, education, education and
  make it convenient and easy. The county also needs to reach out to area schools to help them
  establish in-house programs. It needs to reach out to school administrations much like colleges
  and universities reach out to recruit students. The schools need help in changing the culture and
  way of thinking of the student body and staff.
- Awareness and resource distribution.
- I believe North Royalton has great programs. I see a lot of people in my community recycling. Awareness of the programs and the ease of the programs is probably our biggest issue. I really enjoy the newsletter and forward it to friends, colleagues, and family on a regular basis.
- I don't think my neighbors know what they can recycle. Or maybe they don't care? My neighbors don't recycle often, and my city has moved recycling to every other week, which is very frustrating to me as most of my trash is recycling.
- · Learning how to recycle.
- Very few people are aware of what can be recycled. I suspect that if we charged more for garbage collection and offered free curbside recycling it would have a positive impact.
- · People need more education.
- Education of what can actually be recycled and how. Seeing pizza boxes in with cardboard drives me nuts.
- I feel the issue of each household participating in the recycling of the trash through the program just instituted has begun to make the community appreciate the definite need to be pro-active. The meeting I attended in February with video, PowerPoint presentation and Q&A session was a great start to involving the public with facts/info concerning trash dump/disposing of our waste.

#### Make Curbside Recycling Available to Everyone

- Getting curbside recycling in our portion of the City of Cleveland.
- Instituting curbside recycling in all communities with lots of community education on it's importance.
- Need curbside recycling it is not convenient enough for most people to find and regularly visit a recycling drop-off site in our area.
- · Getting curbside recycling.
- Because curbside recycling is not available in all areas of Cleveland, many people say that Cleveland doesn't recycle even though the city provides drop-off sites. If curbside recycling was available, participation should increase along with opportunities to educate about recycling.
- Funding to expand automated curbside recycling.
- No curbside recycling in all Cleveland neighborhoods.
- The expansion of curbside recycling to all City of Cleveland residents.
- Getting curbside recycling citywide; offering recycling bins that are larger in size than trash bins; and offering bins that are easy for seniors/handicapped citizens to use.
- · The need for curbside recycling.
- Expansion of curbside programs. Incentive structure that promotes recycling pay for trash, recycle for free.



- We need to have a recycling program at the Hampton Apartments in Beachwood. There are approximately 400 apartment units. A start would be to be able to recycle paper and junk mail.
- Not having curbside pick-up. I think that more people would recycle in our neighborhood if it was picked-up directly from the curb.
- I wish our city did recycling. We recieved a card in the mail that we would be getting blue recycling boxes, that was 2 if not 3 months ago and still have nothing. My understanding is our yard waste is also going right into the trash trucks.
- The fact that the City of Cleveland does not have curbside recycling.
- Getting curbside recycling in Cleveland. Some areas have it now but not all. The quarterly charge for garbage pick-up by the City of Cleveland. I live by myself, recycle & compost. Normally have one bag of garbage a week, yet I pay the same as a family that has 10 bags. This does not seem fair to me!
- · Availability of curbside pick up of recyclables. If it's easy, then people will do it.
- · Continue recycling programs.
- · One stop pick up.
- Restoring curb side recycling.
- The fact that only parts of Cleveland have the curbside toters. A couple of blocks away from me they have them, but I am not in one of their zones. I collect and take all of my stuff to Metro's City of Cleveland drop off. And when it's convenient, I end up having to raid the neighbors' trash when I can grab something bulky and get it into my garage without looking like a trash picker. People will see me hovering around their trash and just assume I'm going thru their stuff and not trying to get recyclables, when all I'm trying to do is take something away that's disgustingly large or obvious and get it recycled. Even though I'm the sane one, I end up looking like the whacky neighbor picking trash.
- Providing curbside pick-up of recycling. The city supposedly "piloted" the new trash & recycle cans and was supposed to roll it out city-wide, but hasn't yet.
- I live in Summit County and they do not provide curbside recycling. However I work in Cuyahoga County and am somewhat involved with the recycling program at my work.

#### Recycle More Materials (Curbside), Make it More Convenient

- comingled.
- Possibly the issue of cardboard, paper and plastic bottles.
- Consistent access, collected materials and process from community to community. When people
  move or talk to one another, each community has different rules/process/curbside/drop off
  patterns, which causes confusion and frustration. I think the District should find a way to insist that
  all cities at least collect the same materials (plastics 1-7, all glass colors, etc) and let the haulers
  report on how much of it they recycle. The haulers with bad capture rates will surface quickly and
  influence selection.
- They don't take newspapers or cardboard at curbside.
- Recycling for small businesses, such as restaurants and bars. The inability to recycle plastic #6 and take-out containers that are made of un-recyclable materials.
- · Paper, plastic, glass ...standard items most folks toss.
- Ease of recycling. If it isn't convenient, large numbers of people won't do it. This is especially important with the mandated new light bulbs that have Mercury in them. Nobody is talking about this, but this mandate is going to cause a lot of environmental problems with Mercury if something isn't done to make it very easy for people to recycle them.
- Making it easier to recycle.
- Need to be able to recycle all plastics, not just #1 and #2.
- I wish my community collected cardboard and all mixed paper curbside, as they do with glass/plastic/metal. Also, would like to be able to recycle ALL (or at least most) plastics. Collection of organics would be fabulous too!
- Phonebooks, hazardous waste (knowing how to recycle), workplace recycling and sustainability.



- Ability to only recycle #1 & #2 plastics.
- Currently my community waste pickup only accepts #1 and #2 plastics. This only accounts for 1/2 of the plastics waste because there are many other plastic containers that are not #1 and #2.
- · Paper materials, cans.
- The City of Cleveland needs to make a commitment to recycling. If not curbside, then making recycling more accessible in the city. I am tired of filling two trash bags every time I go for a walk in my neighborhood. The area around the Puritas RTA station is embarassing. I fill a trash bag on my walk home every day.
- Cans, plastic and paper.
- Since paper and cardboard recycling can only be done by taking it to the bin at the city service garage, not enough people do it.
- Parma needs to take more curbside plastics than just 1's and 2's. They need to take the 3's, 4's, 5's, 6's and 7's.
- · There is limited recycling in my city. Would like more done.
- Nobody takes used fire extinguishers or plastics numbered 5.
- Sorting.
- Recycling water bottles!
- Recycling plastics.
- To recycle anything at all. So many people still don't do any level of recycling in this city.
- Recycling is very limited in my city. Only recycle plastic #1 and #2. Would like to see more as well as an office of sustainability in Parma.
- Making all of it easy for residents. It is the only way they will participate.
- · Single stream recycling, corrugated cardboard.

#### How to Recycle HHW, Household Items, Tires

- HHW
- · Household items.
- Hazardous waste disposal.
- Hazardous waste.
- Hazard material.
- · Used motor oil and hazardous waste collection.
- Mercury. Computers and electronics.
- Inconvenient and limited days to drop of hazardous waste. For example, the fairgrounds waste program comes too early in spring and too late in fall. I still have old gasoline and oil to drop of because my fall yard work season is still in progress until late November. How do you yourself manage to dispose of your yard products at the end of the season? Fluorescent lamps and batteries are also an issue. I have to store these items until there is a round-up. The bulbs are in danger of getting broken because of limited storage space.
- At this time, since CCSWD is no longer conducting collections at the Berea Fairgrounds, where in my community am I able to take our Household Hazards & Waste.
- The proper disposal of hazardous materials, gas, oil, other chemicals...empty spray paint cans.
- · Questions regarding fluorescent bulb recycling without cost to the resident or city.
- Phonebooks and hazardous paints/chemicals being thrown away in the regular trash. I know many people that do this because they do not know what to do with these items.
- Batteries.
- Automobile tires.
- · How to get rid of used tires and furniture.
- What do I do with latex paint?
- People in my community trash old tires... in my back ally they dump trash and the city seems to do
  nothing about it. I call the city and report it all the time. It's Lucian ct. off Fulton road.



#### **Pharmaceutical Waste/Proper Disposal**

- Pharmaceutical waste.
- · Our city recycling program. New program for disposal of pharmaceuticals.

#### **Construction and Demolition Debris**

- Construction and demolition waste needs to be mandated for recycling and reuse.
- · For my building construction materials.

#### **Need to Compost More/Reduce Yard Waste**

- Composting.
- · Composting.
- Composting. Not just yard waste, but kitchen and household scraps as well. This would cut down on SO MUCH of our waste. Junk mail is also a big issue. We receive unwanted mail every day. What a waste!
- We need to start food waste composting curbside. Also, a lot of people do not know that the service director collects HHW and Computers for recycling; these collections are not well marketed in Bratenahl.
- Explaining and encouraging composting.
- I'd love to see more composting. I think most people are not aware of how and why to compost.
   Community composting and community gardens together would be a great thing to promote.
   Provides a wonderful experience for children and adults.
- Yard waste composting through city (e.g., Christmas trees and curbside brown bags to be composted, not put in trash!), and storm water issues city mismanaged (we were required by Strongsville to put PVC pipe to connect downspouts directly to storm sewer several years ago!!!!!)
- Yard waste, I believe my city does not do any composting. Any resident putting yard waste at the curb is not aware that it ends up in the landfill.
- Need somewhere to dispose of/compost yard waste without throwing it in the trash.
- There are quite a few trees in our community and I would like to see better access to yard/lawn/tree composting service, removal services or whatever you want to call it.
- Yard waste by far... in the past all BV yard waste set out in brown bags or in garbage containers have been going to the landfill. That will change this May when the city moves to automated trash pick-up and all yard waste placed in brown bags or garbage containers will be composted since Allied Waste has partnered with (I think) Rosby - yeah!
- · Yard waste people just leave it curbside to get thrown in the dump.
- Lawn/yard waste.
- · Yard waste.
- Yard waste.
- · Yard waste.



#### Reduce Waste/Trash

- Producing less trash! Recycling is great, but I still see huge numbers of garbage bags on the curb on pick-up day. I wonder how one household can produce so much trash!
- There is WAY too many items going to the landfill that could be donated, reused, recycled, or composted. WAY TOO MANY--probably an average of 1 ton per household per year in many communities. It's way too easy to just set your stuff on your lawn and let someone else take care of it. There is currently no incentive for people to reduce their waste and no consequence for sending waste to the landfill. There is a huge opportunity here.
- Getting people to reduce what they purchase first.
- There is no inducement for zero waste. In Cleveland, I watch neighbors throwing out twenty bags of garbage, hazardous electronic equipment, organic matter and recyclables and they are not charged for polluting the environment. On the other hand, I compost all organic material, repurpose or freecycle salvageable goods and produce less than one 30 gallon bag of "waste" per year. I am expected to pay extra for "waste" pick-up as I watch the city putting hazardous material in landfills and let people throw out perfectly serviceable goods. The inducement would be to pay for what you "throw out" on a per household basis. Let those who want to fill their tree lawn with "waste" pay for every bag and every piece they are "throwing out."
- · Keep materials out of landfills.
- Learning more about ways to reduce waste, how to get companies to use less packaging or more recyclable packaging, and getting more people to participate.
- Reduction.
- I think there is a need to focus on producing less waste and thinking before you buy. I would also like to see communities reducing the amount of pick-up for trash. I believe that if you recycle and compost and work on reducing your waste you should only need garbage pick up every other week or even once a month. That would save communities a lot of money and reduce the region's carbon footprint.

#### **Need More Drop-Off Bins/Recycling Centers**

- Need for larger recycling centers. Water conservation. Stop paper bulk mail advertising.
- The lack of recycling containers at major community events, like the Feast of the Assumption, Arts Festivals in the summer, Edgewater and Mentor Headlands State Parks, etc.
- Having enough containers to make the program work.
- Not enough drop-off options for downtown residents living in condos/apts. I travel to take my recyclable items to City of Cleveland bins.
- Lack of neighborhood recycling centers for glass, plastic and metals.
- · I would like to see more drop-off bins for the glass/plastic/cans items.

#### **Other Suggestions**

- It all comes down to money, who is going to pay for it. Every time the government talks of making life better what they are really saying is how can I pass on to the consumer the cost of the program. Lets see, the City of Cleveland is declining, money coming in is down, so let's generate new money (fees) by improving the waste or recycling program.
- Some recycling facilities have admitted to not having the ability to recycle items placed in blue grocery bags. These bags are sent to the landfills. Our community (Lakewood) requires items be put in said bags. How do we know these items are being recycled and why are we required to use these bags.
- I would like to see packaging of almost every item bought cut dramatically. The over-packaging of items contributes greatly to the amount of paper, cardboard, plastic, etc. consumers need to recycle or dispose of, and cities, etc., must provide the crews, trucks, etc. to accommodate the collection of recyclables and trash, driving up the economic cost and the cost of waste to all.
- The impact of waste running into our rivers and lake.
- · Lack of green space, too much concrete and not enough trees.



## Q21 DO YOU HAVE ANY ADDITIONAL COMMENTS OR SUGGESTIONS FOR THE CUYAHOGA COUNTY SOLID WASTE DISTRICT, INCLUDING ANY RECYCLING SERVICES YOU MIGHT WANT THE SOLID WASTE DISTRICT TO OFFER IN THE FUTURE?

#### **Total Number Responding: 88**

#### More Education/Information about Recycling, Ease of/Importance of Recycling

- Increase visibility. Most people are not aware of the services and information available to them through you.
- · More education offerings for general public on why recycling is important and how to recycle.
- More public service announcements that will educate the average person on how to recycle and why they should.
- I would like to see more community events that families and individuals can attend to learn about new services and programs, receive information on how to be "greener", and participate in fun activities. Something like North Ridgeville's Green Fest. We went last year and they had handouts, kids activities, drop-off bins for recyclable items including clothes and eye glasses, the Red Cross blood mobile, information on issues that impact the environment, vendors that sold "green" products and natural foods, and live entertainment from a local high school band. Very much worth the trip out there.
- How to dispose of fabric/clothing. Like old jeans too worn to donate, or mattress pads, odd items. Can these go into the blue bags? Further, as far as I know, Garfield can toss all recyclables in the same bag, I would like to know how these items get dispursed at the recyling center. That would be interesting to learn just how the items we toss in the recycle bin get turned into something, and isn't this a money making thing, trash to cash for the City?
- I never hear about when I can put my brush out on the curb to be picked up... does that ever happen?
- Pointers on how to change people's behavior regarding recycling. They do not understand the relationship of the costs, both tangible and intangible for throwing it all away.
- · More information about how/where to recycle lawn/branches etc.
- It would be advantageous to get the Pass it On publication better circulated. It really pains me to see so many perfectly good items in the trash, instead of going to good use. We sooooo have to get past this one-time use, dispose attitude. I think that the leaders of each of our 59 county communities should be educated about recycling beyond the usual and taking this information back into their communities individually. Instead of the SWD educating the whole county, they teach 59 people/cities and then they take it forward into their communities and it comes together en mass.
- Better business information.
- The Solid Waste District might be able to help with educational materials for residents to understand the entire waste stream.
- What happened to the Leaf Composting service? Every spring I would buy several yards of the black gold for my gardens, then suddenly it went out of business. Now I buy it from a nursery.
- Where can you recycle long tube fluorescent bulbs and old empty non-industrial propane tanks from a grille, lantern, hand torch ...etc?
- · Info on where to recycle plastics 3-7 and styrofoam.
- A printable piece of reference material so I don't have to log in every time I need to find out more information.
- More demo and projects display during our community festivals and events.



#### **Recycle More Items**

- I genuinely appreciate the information about recycling and donating items, and the ease with which the information can be found online. It would be great if we could recycle #6. (My community already recycles #1-5 and 7.)
- Styrofoam recycling services. I'm never sure what to do with styrofoam.
- Recycling old electronics e.g. non-cellular phones, small electronics-an old food mixer, charger cords for old phones, CD players, etc. Things a household may only have 1-2 of.
- Cardboard recycling & hazardous waste. No one takes cardboard & storing hazardous materials for months until one of your round-ups is a pain.
- · Increased availability of plastics recycling other than #1 and #2 plastics.
- Other states recycle alkaline batteries and we are told that because they are not toxic, to throw
  them in the trash. Is that because there is no one in our area that can recycle them? I have more
  questions asked about alkaline batteries than almost any other item, and I receive skeptical looks
  when I tell them that alkaline batteries are not recyclable.
- More computer/electronic recycle locations and programs. Make people more aware of the hazards of mercury pollution, especially with the new light bulbs.
- Clothing, painted wood.
- CFL's, #3 and greater plastics, greater opportunity for recycling household hazardous waste and computers/electronics (a few drop-off sites throughout the county open on a limited weekend basis)
- Very disappointed that the hazardous waste round-up at the Berea fairgrounds will not take place this year. Leaving this up to the individual communities to do will mean that it probably will not be done or as convenient.
- Electronics besides computers.
- · Reusable batteries.
- Non-working, small to medium electrical/power appliances/equipment recycling drop-off.
- Cell phones.
- · Future recycling services: Shoes, styrofoam. Tell us what to do with broken hard plastic toys.
- · Fluorescent bulb recycling at no cost to resident or city.
- Non-rechargeable batteries are the most difficult thing to recycle/dispose of properly. I consider
  myself an "advanced recycler" and I have trouble figuring out what to do with mine. I have a pile of
  batteries sitting in my house waiting for me to figure this out. Please help!
- Recycling ALL plastics, not just 1's and 2's.
- · Automobile tires.
- Latex Paint
- Many citizens do not feel comfortable taking metals to scrap yards, so why not have a city drop-off site or neighborhood bins where these items might be recycled and the city could take them to scrap yards with money received put into other efforts.
- Electronics recycling besides computers.

#### Curbside Recycling (Should be Everywhere, Improve Program)

- The City of Cleveland needs curbside recycling. Need to impose stricter enforcement of fines for littering and garbage on vacant land.
- It is time to get some communities started on curbside composting; if they can do it in Huron, OH, we can do it in Bratenahl or in Beachwood...
- We'd love to have the two-bin trash/recyclables program that Lyndhurst has, but we don't have the dough for the truck and bins, so it would be nice if the District could help fund the program.
- Cleveland Heights has a FABULOUS curbside program that can be a model for other communities.
- · Would love to see curbside. Please, please continue to do the e-newsletter- it's really worthwhile.
- You guys are doing a great job. I wish the City of Cleveland would expand the curbside recycling to include my area. Seems that when money gets tight programs like this are the first to go.



#### **Incentives to Recycle**

- Yes, 5 cent deposit on soda bottles and cans. I am from New York and this program worked well.
- Start charging households for amount of garbage they put out. This would encourage recycling and composting!
- I want to see private contractors service private residential homes on a free market basis. I would prefer to have a private contractor pick up my recyclables and "waste" and charge me for what I "throw out." I would want my tax dollars refunded to me for using a private contractor instead of city services. More competition means more inducements for the private businesses and the households who choose to use their services.
- · Money for all recycling. Paper, etc. If people got paid, they would recycle more.

#### Provide Recycling Bins (Curbside and Public Places)

- · I wish there were more public bins available to dispose of paper, plastic, etc. downtown.
- I would like to have something to put recycling items into (bin or can) so that weather does not
  affect the recycling process. People are less likely to recycle when they know that they will be
  cleaning up recycling from their yards the next day.
- Provide Recycling BINS to the community. Or for a small fee. The Blue bags are getting expensive
  and annoying. We make it a priority to recycle but the easier you make it, the better results you will
  have. \*Also a guide to reusing instead of recycling. For example.. we reuse a ton of glass tomato
  sauce jars for everyday use as beer mugs etc..

#### **Continue Round-Ups at Fairgrounds**

- Continue collections at the fairgrounds. By doing so, it gives residents a chance for those communities that do not have Round-Ups of their own to dispose of articles such as tires, household hazards and computers, without driving downtown and having to pay to dispose of certain articles.
- Website says HHW Roundup events are being discontinued (to be done more locally now, I
  guess), but where & when? Also, provide some more detailed guidance on what can/should be
  taken to that event, also how to safely store materials until you can drop them off.

#### Other Suggestions

- · Pharmaceutical waste management.
- Create a "kid friendly" recycling truck to go through the neighborhoods (like the ice cream trucks used too) and introduce family members directly to recycling issues.
- It would be interesting to check up on Allied Waste Services, our provider in Olmsted Falls, if they're having issues. I'll see them take the clearly marked recycle bins and throw them in with regular trash. Also, they make zero effort to keep glass from breaking throwing it in the recycle truck, I have a tough time believing it all gets recycled properly. We've been here 7 years, I've NEVER heard one word from them on what they want recycled...like the number system on plastics.
- What is the CCSWD doing to help support home composters and business owners create and maintain composting sites?
- With gasoline prices going up and up, would it be possible to have Household Hazardous Waste Drop Off in multiple locations? I'm lucky that my city will take oil based paints and chemicals, because I wouldn't want to drive all the way to the Fairgrounds from Lyndhurst. But I'm afraid with the rising gas prices people will start throwing it in their regular trash. Make it convenient and easy.
- County-wide organics/compost collection or drop-off locations.



- I would like CCSWD to consider the open dumping and litter problem in the Greater Cleveland area. Every exit ramp and fence seems to be littered with trash and paper. I can't imagine what visitors think when they arrive for a business meeting or conference. It seems to me that cleaning up Greater Cleveland would go a long way towards convincing businesses to relocate here and aiding in our economic revival. I would like CCSWD to look for innovative ways to motivate community groups and municipalities to clean up. How about a marketing campaign aimed at reducing littering and dumping? CCSWD could tie this effort directly to economic revival. At this point, the City of Solon is the only community that I'm aware of that routinely cleans its highways and ramps. We need more of this type of thing!
- I would like to see the CCSWD offer "open houses" to businesses within each individual city on how to recycle. This would be a more efficient way to reach more business leaders. Collaborate with individual cities throughout the county, host a business recycling seminar, especially for bars and restaurants!
- More effort to get small businesses to recycle and more educational programs at major sporting events at the Gund, Progressive Field, and Browns Stadium.
- I would love to see something addressing being more aware when shopping and purchasing
  products with minimal packaging, avoiding products like styrofoam, and adopting the attitude that
  "less is more." Also, maybe addressing the fact that there is never a reason to LITTER, under
  any circumstance. That would make a huge impact.
- Right now I pay \$100 a year fee for trash pick up by the City of Cleveland, besides paying property taxes; but do you think these people who come around and collect the trash could at least pick up what falls on to the road when they collect it? No, it lays in the road, one time I went out and picked it up and walked up to the garbage truck and handed it to the worker. Lets see, a \$100 a year more and at times I still have to pick up the trash.
- Few months ago the City of North Olmsted started a new recycling program. All house residents received two new trash cans for curbside pick up, one dark green and one blue. Well, they want us to throw the recyclables into the dark green cans opposed the blue one. So far quite a few people in my neighborhood have been very confused with that order...We think that the recyclables should be put into the blue trash can since color blue is an international color for recycling. In the past we had to put all recyclables into the blue plastic bags. If the dark green trash can had a big recycle symbol on it, that maybe would have helped.... Despite the City's efforts to make this recycling program more efficient, their system is backwards and quite stupid. On top of it, nobody seems to know what to do with ALL the old trash cans that we have also... So, maybe the Cuyahoga County Solid Waste District could sit down with our city hall people and get through to them on the issue of color coding recyclables. That would be a good start, before we let them run their wild, wild west show. Thank you for all your efforts in making this county a better place :o) Sincerely, Eva Lowe North Olmsted, OH
- You should promote companies who use recycled products or who manufacture recycled products from what people are putting into recycling bins.
- · Grants for people to take action in their communities.
- And what about the City of Cleveland? When do you think they will catch up with the rest of us?
- · Brownfield remediation for urban agriculture.
- More local gardens. Use the garbage/tree lawn clippings for County Garden.
- I have friends in apartment buildings in Parma Heights and they have no recycling plans, it all goes down the garbage chute. This needs to be addressed.



#### **Positive Comments**

- Great services--love the website, the consulting, and the education available.
- · Recycling e-newsletter is very informational.
- · Thanks so much for everything you do! You are a valuable resource for the community!
- · I like the litter collection programs.
- · I would not presume. You do a fabulous job!
- Keep up the good info in the e-letter. I have learned so much from it.
- I do find useful information in your e-newsletter but wished it went out earlier. Sometimes the dates for things listed are just around the corner, need more time to plan things.
- Keep up the good work!
- Keep up the good work.
- Hi friends.
- I like the web site. I would like to have information mailed to my home so I can use it at home and share with my neighbors.
- Thank you for your efforts to educate county residents. I use your website frequently and am usually successful in receiving answers to my question.
- Keep up the great green work!
- Learning how to use your black cylinder food composting bins. We have two bins and love it. We seem to have less garbage.
- · Website is excellent! Tons of info and resources.
- The information and suggestions offered in the newsletter I receive in my e-mail shows me that our elected officials are keeping up with the demands of the times. I congratulate all who have a part in these efforts/programs.
- I think the District does an excellent job and needs to continue its community outreach and show cities that by reducing waste and recycling it can help their budget.

