

Mercer County Board of Commissioners

UPDATE AND
REVISION
2011

MERCER COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN

DRAFT FOR REVIEW AND COMMENT



Project Consultant | Nestor Resources, Inc.



"IF WE'VE LEARNED ANY LESSONS DURING THE PAST FEW DECADES, PERHAPS THE MOST IMPORTANT IS THAT PRESERVATION OF OUR ENVIRONMENT IS NOT A PARTISAN CHALLENGE; IT'S COMMON SENSE.

OUR PHYSICAL HEALTH, OUR SOCIAL HAPPINESS, AND OUR ECONOMIC WELL-BEING WILL BE SUSTAINED ONLY BY ALL OF US WORKING IN PARTNERSHIP AS THOUGHTFUL, EFFECTIVE STEWARDS OF OUR NATURAL RESOURCES."

Ronald Regan, Former President of the United States, 1984

MERCER COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN

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The Mercer County Municipal Solid Waste Management Plan Revised 2011 was funded in part by an Act 101, Section 901, Planning Grant issued by the Pennsylvania Department of Environmental Protection.

Introduction

Although the philosophies, methods, and requirements have progressed during the past 50 years, local governments have always assumed a role in establishing how waste should be managed in their jurisdictions. In the past, solid waste management plans were primarily developed at the municipal level. Progressive waste management practices and steps to protect the environment were often dismissed as impractical. Consequently, these plans contained theory that was rarely practiced. Local dumps dotted the landscape and served as the primary means of disposal. Garbage collection was prevalent in urban areas, but was not always available in rural communities. During the 1970's and proceeding into the 1980's, new environmental regulations at the federal level and a general concern that the nation would run short of land disposal space turned the tide on how Americans viewed their garbage.

In 1988, Pennsylvania instituted significant changes in municipal solid waste management. The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) dictated that plans have more tangible results. Act 101, for the first time, shifted the authority for Municipal Waste Management to the County. This transfer of authority away from the municipalities was intended to give the County the ability to implement the recommendations developed in the planning process.

The primary responsibility delegated to a county by Act 101 was to secure sufficient disposal capacity for its waste. Contractual agreements with landfills or other processing facilities were most frequently used to attain this goal. In addition to the disposal concerns, Act 101 required a county to demonstrate to what extent it could feasibly attain the state's recycling initiative.

In 1990, Mercer County, in accordance with the provisions of Act 101, began to develop a ten-year plan for the management of Municipal Solid Waste generated within its boundaries. The final Plan was reviewed and ratified by the municipalities. It was approved by the Pennsylvania Department of Environmental Protection (PADEP). Finally, the Plan was adopted on December 5, 1991 by the Board of County Commissioners. The plan was amended in 1997 to correct legal issues associated with its landfill capacity agreements. An update to the Plan was approved on April 26, 2001.

Obvious benefits to Mercer County have resulted from the recommendations made in the original Plan. By securing disposal capacity in professionally operated state of the art landfills, the County ensured its citizens fair and equitable disposal costs and increased protection from future potential environmental liabilities. The provision of voluntary recycling opportunities has conserved valuable natural resources.

The current project takes an in-depth look at waste management and recycling practices in Mercer County. The document outlines the step-wise process from fact finding through analyses to final recommendations. It incorporates changes in oversight and operations that have occurred since the last revision. Certain components were revised and programs were altered to complement the current regulatory climate and the economic resources of Mercer County.

The Plan establishes a fresh approach to the types and levels of waste management service offerings that could be made available in the County. It also addresses the responsibility to fund such services at the individual, municipal, and county level. Lastly, it provides legal mechanisms to implement and enforce the recommended changes.

BASIC ELEMENTS OF THE PLAN

To evaluate the current solid waste management practices and behaviors in Mercer County, as well as to establish future feasible improvements, certain waste management issues and components were considered.

WASTE STREAM ANALYSIS

The Waste Stream Analysis inventories waste stream generators, and provides an analysis of waste based on national and regional studies and trends. The composition of the local waste stream is used to calculate future disposal and recovery rates. Finally, projected population trends are used to derive future solid waste management capacity needs.

WASTE HANDLING AND DISPOSAL

The Waste Handling and Disposal component explores the County's municipal solid waste collection programs for residential, commercial, institutional, and government entities. An assessment of the adequacy of collection programs for the County's current and future population is included. This component also contains a detailed inventory and description of current disposal programs. Each disposal facility is recorded along with its ownership, location, and capacity.

Assurances of available capacity for the ten-year planning period are required within the Waste Handling and Disposal element.

RECYCLING AND WASTE MINIMIZATION

The Recycling and Waste Minimization component catalogs the waste recycling programs available within Mercer County. The Recycling and Waste Minimization component contains an assessment of the County's actual overall performance when compared to national trends and constraints that might exist. Finally, this component highlights future potential enhancements to County and/or municipal programs.

PUBLIC AWARENESS AND PARTICIPATION

The Public Awareness and Participation component includes direct involvement from a diverse group of stakeholders throughout Mercer County. Municipal officials, the general public, business owners and private sector representatives from the waste and recycling industry offer perspectives and opinions on the adequacy of current services and a vision for the future.

IMPLEMENTATION STRATEGY

The final component of the plan is the Implementation Strategy, which brings together the findings and recommendations of the planning process into an action plan. The Implementation Strategy describes the resources, tools, and timeframe to achieve the goals of the Municipal Solid Waste Management Plan.

PLAN ORGANIZATION

The Mercer County Municipal Solid Waste Management Plan is comprised of twelve chapters and eleven appendices. Following is a brief description of their contents.

- ❖ Chapter 1 discusses Mercer County's current waste stream characteristics, reported and estimated waste quantities and material types, and projections of the waste stream over the next 10 years. The chapter also examines general demographic data such as population and housing densities, urban and rural elements, economic conditions, and county characteristics, including geography and traffic conditions that may influence waste collection, waste disposal, and type of materials disposed over the next 10 years.

- ❖ Chapter 2 documents the current collection and disposal practices throughout the County. It identifies transporters of different types of municipal waste. It also provides data on the ultimate disposition of various Mercer County municipal waste components. Lastly, it discusses the degree to which Mercer County competes for disposal capacity with other entities.
- ❖ Chapter 3 projects the future waste generation and disposal capacity, which will be required by Mercer County for the next decade. It presents legal issues related to flow control and capacity assurances. It also considers alternative waste management technologies that could be proposed during the request for disposal capacity process.
- ❖ Chapter 4 presents the overall performance of recycling programs currently operating throughout Mercer County. It compares the County's efforts to similar programs implemented in other areas of the United States. It illustrates strengths and weaknesses and makes recommendations for future recovery.
- ❖ Chapter 5 demonstrates the analysis and reasoning behind selections made during the planning process for a comprehensive waste management system in Mercer County. It provides economic and environmental benefits of various options. It also offers a description of anticipated gaps in waste management as well as potential opportunities.
- ❖ Chapter 6 presents the results of Mercer County's request for disposal capacity. It subsequently identifies the names, locations, and types of facilities opting to reserve capacity and to be designated to receive Mercer County's municipal solid waste over the next 10 years.
- ❖ Chapter 7 identifies the agency that will assure that the final recommendations of the plan are carried out according to the implementation strategy.
- ❖ Chapter 8 discusses the facilities, equipment and programs currently owned and operated by public sector organizations in Mercer County for the purpose of conducting waste management and recycling activities. In addition, it speculates on the extent to which future public facilities might be developed.
- ❖ Chapter 9 explains the legal documents necessary to implement and enforce specific elements of the approved Mercer County Municipal Solid Waste Management Plan. These include contracts, licenses, ordinances, and others.
- ❖ Chapter 10 outlines how the elements of the Plan will allow for a smooth transition from any current and potentially conflicting programs to those newly recommended.

- ❖ Chapter 11 describes the relationship between the Mercer County Municipal Solid Waste Management Plan and private sector owned and operated facilities located both within and outside of the County. It offers assurances that the County will not interfere with their normal operations and business practices, and furthermore provides for a fair and open marketplace.
- ❖ Chapter 12 shows both citizen and private sector involvement in development of the future vision of waste management in Mercer County and the final adoption of the Plan. It discusses those issues that the Solid Waste Planning Advisory Committee felt had the most importance.
- ❖ Appendix A contains basic words and acronyms used throughout the document and their meanings as they relate to solid waste management.
- ❖ Appendix B contains the contract provisions required of all facilities, which agreed to reserve disposal capacity for Mercer County during this planning period.
- ❖ Appendix C offers a simplified format and the necessary documents to add a facility and additional secured capacity during this planning period.
- ❖ Appendix D includes any and all County ordinances necessary to implement the provisions of the Mercer County Municipal Solid Waste Management Plan.
- ❖ Appendix E includes the intergovernmental agreement designating the Lawrence –Mercer Recycling/Solid Waste Department as the implementing entity of the Mercer County Municipal Solid Waste Management Plan
- ❖ Appendix F provides the official resolution of the Mercer County Board of Commissioners to approve and implement the recommendations contained in the Plan.
- ❖ Appendix G presents a list of background publications referenced and other tools used to justify assumptions and other recommendations made in the development of the Plan.
- ❖ Appendix H documents the degree of public participation utilized in development of this Plan. It includes a combination of presentations, handouts, and meeting minutes.
- ❖ Appendix I provides a summary of the Sustainability Study and its findings that led to a series of changes in the management and operation of the County's solid waste and recycling program.
- ❖ Appendix J offers a holding place for amendments, information, or documentation that may be added to the Plan after its publication.

Chapter 1

Municipal Waste Basics

QUANTITIES AND COMPOSITION

To initiate a plan for the proper management of municipal solid waste, it is crucial to gather data on the makeup of the community including its population, housing, economic conditions and general overall nature. Of equal importance is to identify the origin, types, and quantities of waste produced. An understanding of attitudes, behaviors, and current waste management practices provides the foundation upon which meaningful improvements can be made.

This first chapter provides an overview of Mercer County and how municipal solid waste is generated there. It discusses the sources, the volumes, and explains in brief the categories, or streams that comprise municipal solid waste.

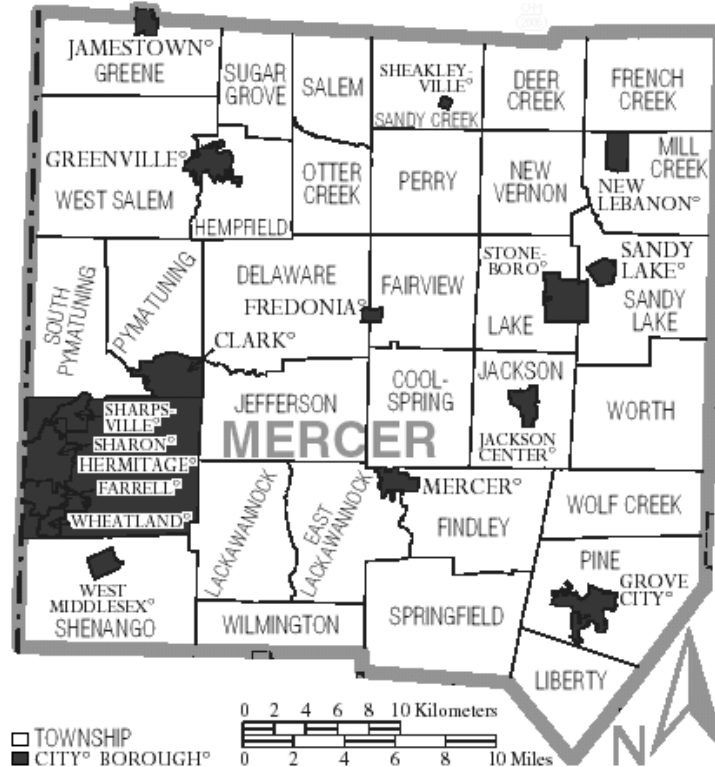
AN OVERVIEW OF THE COUNTY

Mercer County is located along the western border of Pennsylvania. The County is in close proximity to Youngstown and the Mahoning Valley in Ohio and shares in that region's industrial roots. From the early to mid/late 20th century, forges, foundries, mills, and fabricators attracted generations of workers and their families to the County's cities and boroughs. The greatest influx of people settled in the Shenango Valley communities of Sharon, Farrell, Wheatland, and Sharpsville. However, municipalities such as Grove City, Mercer, and Greenville also prospered from a strong manufacturing presence. Figure 1 shows the County and its municipalities.

In spite of its industrial heritage, Mercer County has always been categorized as predominantly rural. Based on information from the Center for Rural Pennsylvania, forty of the County's municipalities are classified as rural and only eight qualify as urban areas. In recent history, slight changes have occurred.

The decline of the steel industry in the 1970's had a dramatic impact on the County. The social and economic complexion of the County subsequently shifted.

FIGURE 1-1 MAP OF MERCER COUNTY



Source: US Census Bureau

The traditional population centers saw not only a loss in jobs but also in residents. Fewer taxpayers in the cities and boroughs placed a burden on the local governments' abilities to provide basic services such as waste collection and sewage treatment. While some areas of the County became distressed, others began to prosper. The former Hickory Township experienced new residential development and transitioned into the City of Hermitage. A similar phenomenon, although to a lesser degree, occurred in the County's other townships. The trend to build in and move to the townships continues today. These transitioning rural areas are now faced with the responsibility to ensure adequate solid waste management and recycling services. The needs of all types of communities must be considered in the planning process.

The *County Population Projections for Pennsylvania, 1990-2030*, published by the Pennsylvania State Data Center projects that the population in Mercer County has not only shifted, but it is also shrinking. According to the 2000 US Census Bureau, the County had a population of 120,293. That figure represents a slight decrease from the 1990 census results. The data for 2007 shows a decrease of nearly 3% to a total population of 116, 809. This information reaffirms the Data Center's prediction. Table 1-1 shows Mercer County's 2007 population by municipality. Figure 1-2 and Table 1-2 illustrate the most current disbursement of the population throughout the County.

TABLE 1-1 MERCER 2007 POPULATION BY MUNICIPALITY

Municipality	Total Population
Mercer County	116,809
Clark Borough	625
Coolspring Township	2,267
Deer Creek Township	432
Delaware Township	2,129
East Lackawannock Township	1,666
Fairview Township	995
Farrell City	5,795
Findley Township	2,288
Fredonia Borough	602
French Creek Township	772
Greene Township	1,120
Greenville Borough	6,142
Grove City Borough	7,746
Hempfield Township	3,870
Hermitage City	16,332
Jackson Township	1,320
Jackson Center Borough	209
Jamestown Borough	582
Jefferson Township	2,326
Lackawannock Township	2,473
Lake Township	747
Liberty Township	1,380
Mercer Borough	2,224
Mill Creek Township	597
New Lebanon Borough	191
New Vernon Township	539
Otter Creek Township	587
Perry Township	1,417
Pine Township	4,711
Pymatuning Township	3,584
Salem Township	770
Sandy Creek Township	836
Sandy Lake Borough	696
Sandy Lake Township	1,325
Sharon City	14,982
Sharpsville Borough	4,131
Sheakleyville Borough	152
Shenango Township	3,882
South Pymatuning Township	2,806
Springfield Township	1,953
Stoneboro Borough	1,022
Sugar Grove Township	845
West Middlesex Borough	855
West Salem Township	3,358
Wheatland Borough	700
Wilmington Township	1,239
Wolf Creek Township	770
Worth Township	819

Source: PA Data Center

FIGURE 1-2 MERCER COUNTY POPULATION DENSITY 2007

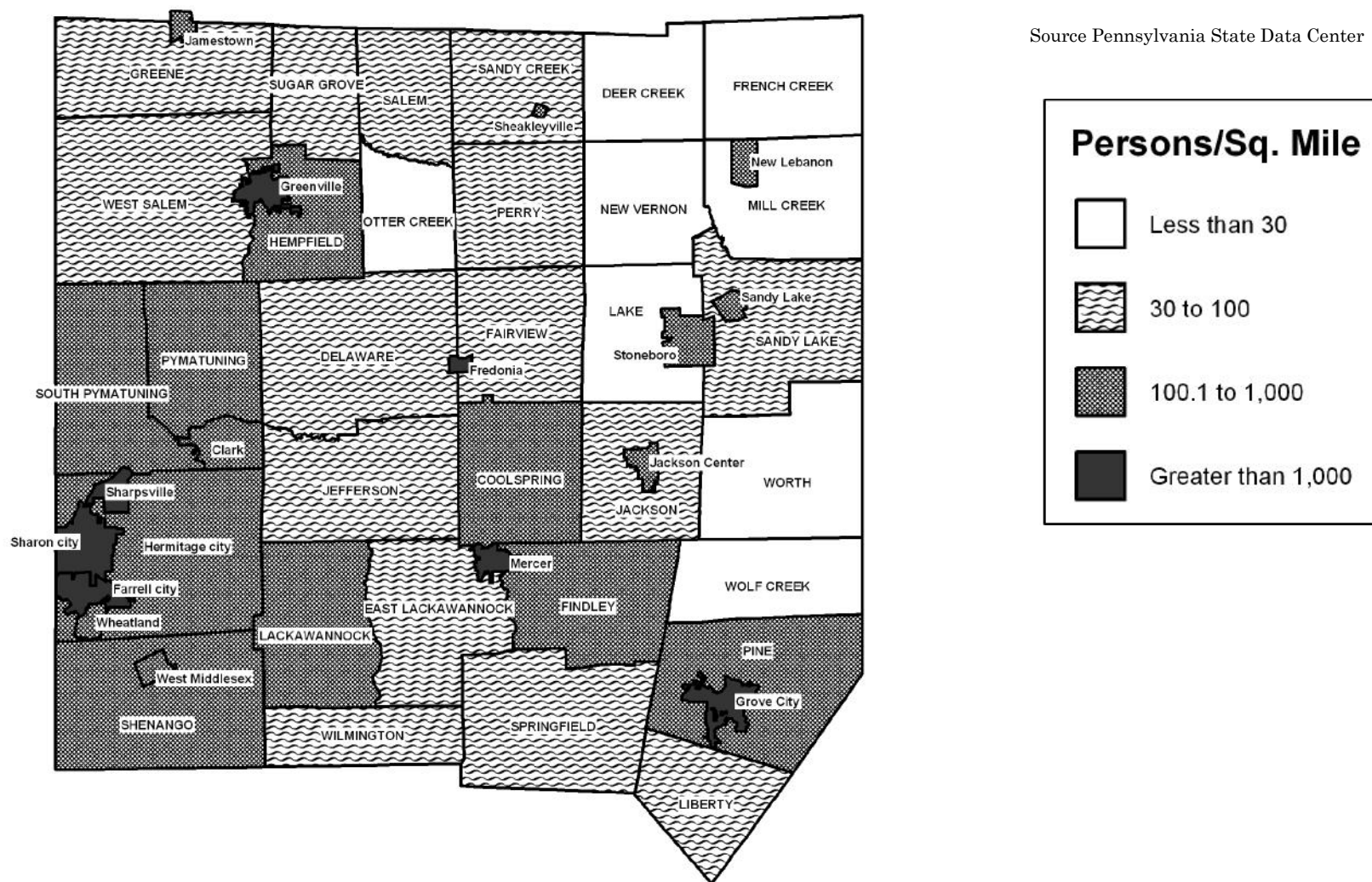


TABLE 1-2 –MERCER HOUSING UNITS AND POPULATION DENSITY 2007

Geography	Population	Housing units	Area in Square Miles	Population per Square Mile
Mercer County	116,809	46,712	671.8	173.9
Clark Borough	625	226	3.1	204.9
Coolspring Township	2,267	818	19.2	118.2
Deer Creek Township	432	164	14.5	29.8
Delaware Township	2,129	807	32.5	65.5
East Lackawannock Township	1,666	584	21.2	78.5
Fairview Township	995	332	18.7	53.3
Farrell City	5,795	2,508	2.3	2,476.50
Findley Township	2,288	542	21.1	108.3
Fredonia Borough	602	251	0.4	1,505.00
French Creek Township	772	279	20.7	37.3
Greene Township	1,120	459	21.9	51
Greenville Borough	6,142	2,464	2.0	3,149.70
Grove City Borough	7,746	2,572	2.7	2,923.00
Hempfield Township	3,870	1,590	14.2	273.5
Hermitage City	16,332	6,809	29.5	554.2
Jackson Township	1,320	441	17.1	77.1
Jackson Center Borough	209	87	1.1	183.3
Jamestown Borough	582	262	0.8	746.2
Jefferson Township	2,326	958	24.5	94.8
Lackawannock Township	2,473	909	20.8	119.1
Lake Township	747	234	15.9	47.1
Liberty Township	1,380	492	14.6	94.8
Mercer Borough	2,224	1,020	1.2	1,793.50
Mill Creek Township	597	239	18.9	31.5
New Lebanon Borough	191	76	1.3	149.2
New Vernon Township	539	199	15.1	35.8
Otter Creek Township	587	233	11.8	49.7
Perry Township	1,417	581	18.0	78.6
Pine Township	4,711	1,537	25.7	183.2
Pymatuning Township	3,584	1,519	16.5	217.2
Salem Township	770	291	13.3	57.8
Sandy Creek Township	836	325	15.9	52.4
Sandy Lake Borough	696	297	0.8	838.6
Sandy Lake Township	1,325	499	24.5	54.1
Sharon City	14,982	6,791	3.8	3,984.60
Sharpsville Borough	4,131	1,907	1.4	2,971.90
Sheakleyville Borough	152	64	0.2	950
Shenango Township	3,882	1,637	29.9	130
South Pymatuning Township	2,806	1,132	19.3	145.2
Springfield Township	1,953	717	27.2	71.8
Stoneboro Borough	1,022	476	2.8	366.3
Sugar Grove Township	845	363	12.3	68.8
West Middlesex Borough	855	372	1.0	900
West Salem Township	3,358	1,314	37.0	90.8
Wheatland Borough	700	350	0.9	795.5
Wilmington Township	1,239	380	13.1	94.7
Wolf Creek Township	770	281	16.6	46.3
Worth Township	819	324	24.8	33.1

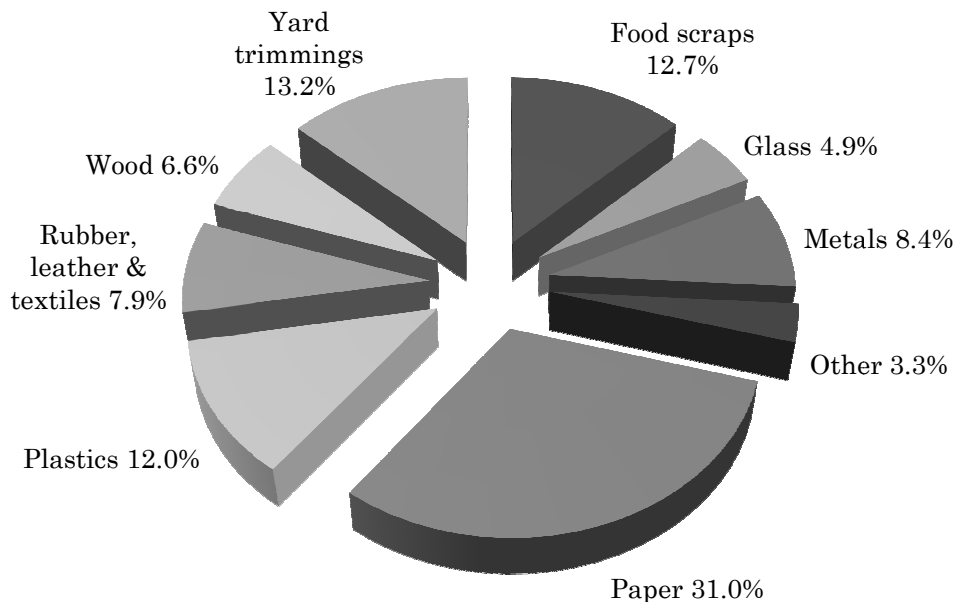
IDENTIFYING MUNICIPAL SOLID WASTE

Municipal waste is generally easy to understand because we all produce it on a daily basis. Whether we are at home, at work, at school, or otherwise engaged in the community, we are likely to encounter municipal solid waste in some form. Common household items, once discarded, become municipal solid waste. These may include bottles, cans, newspapers, old clothing, grass clippings, appliances, scraps from the kitchen, furniture, junk mail, etc.

Figure 1-3 shows on a percentage basis, the material components found in municipal solid waste, according to *“Municipal Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2008”*. The data presented is the result of an ongoing study and series of publications, sponsored by the USEPA, and conducted by Franklin Associates of Kansas. The conclusions in the study are based on information collected from 1960 through 2008. Previously this series of reports was titled, *“Characterization of Municipal Solid Waste in the United States”* and has often been referred to as “The Franklin Study.” While other reports and studies have been conducted by a variety of sources, “The Franklin Study” has served as the definitive survey on the characterization and composition of the national waste stream.

NATIONAL AND STATE MUNICIPAL WASTE TRENDS

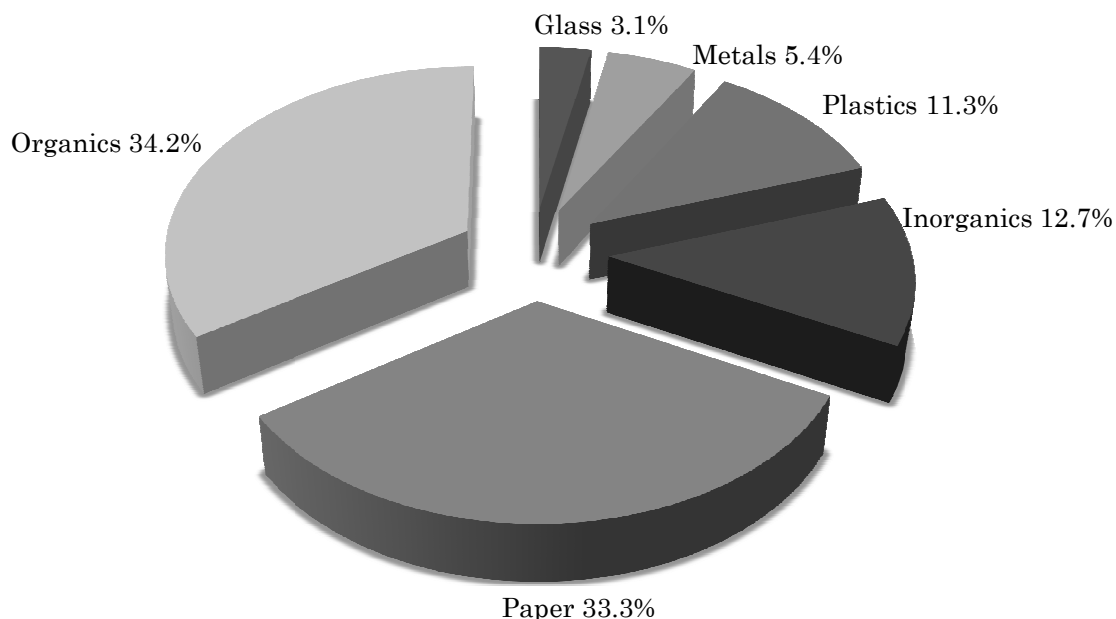
FIGURE 1-3 USEPA COMPOSITION OF MUNICIPAL WASTE GENERATED 2008



A percentage of each material shown in this figure is eventually recovered and diverted from disposal

A statewide characterization study of solid waste being disposed in Pennsylvania was conducted in 2001 for the PADEP. The purpose of the study was to determine the components of the Pennsylvania municipal waste stream, which were actually disposed. According to the findings, organics (food waste, yard waste, etc.) and paper make up the largest segments of the waste stream, followed by inorganics, plastics, metals, and glass. Figure 1-4 represents the data presented in the PADEP waste composition study. It shows the aggregate percentage of materials that were found in the overall waste stream in Pennsylvania at that time. It differs in some respects from the national averages.

FIGURE 1-4 PADEP 2001 COMPOSITION OF MUNICIPAL WASTE DISPOSED



A percentage of each material shown in this figure has already been recovered and diverted from disposal

The USEPA graph shows waste generated and the PADEP graph shows waste disposed. In order to compare the studies more accurately one must look further into the USEPA study to determine the amount of material actually disposed. By subtracting the material recovered and diverted from disposal, and calculating the percentage of each remaining material in the overall amount disposed, a more accurate comparison of data is possible. Tables 1-3A and 1-3B show the results of the USEPA and PADEP surveys. Table 1-3A shows materials with wood waste considered an inorganic material and Table 1-3B considers wood waste to be an organic material.

TABLE 1-3A COMPARISON OF NATIONAL AND STATE MATERIALS DISPOSED

<i>Comparison of National and State Materials Disposed (by weight)</i>		
With Wood Waste included as inorganic rather than organic:		
Material	USEPA (2008 data)	PADEP
Organics	25.6%	34.2%
Paper	20.7%	33.3%
Metal	8.2%	5.4%
Glass	5.6%	3.0%
Plastics	16.8%	11.3%
Inorganics	23.1%	21.1%

TABLE 1-3B COMPARISON OF NATIONAL AND STATE MATERIALS DISPOSED

<i>Comparison of National and State Materials Disposed (by weight)</i>		
With Wood Waste included as organic rather than inorganic:		
Material	USEPA (2008 data)	PADEP
Organics	32.7%	34.2%
Paper	24.3%	33.3%
Metal	7.2%	5.4%
Glass	6.1%	3.0%
Plastics	16.3%	11.3%
Inorganics	13.4%	12.8%

THE IMPACT OF RECYCLING ON DISPOSAL

The results of recycling specific materials in Pennsylvania is readily visible in Table 1-3 A & B as metal, glass and plastics, are less prevalent in the State's disposed waste stream than they are at the national level. Those materials are commonly found in municipal recycling programs due to the provisions of Act 101, the Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988. The percentages for glass, plastics, and metal could be skewed, however, by a disproportionately higher percentage of other materials disposed. Noticeable are the amounts of organics and paper found in Pennsylvania landfills, over 10% higher than the national average. Across the nation, organics are often banned from landfills and targeted for large-scale composting in other areas. Aggressive paper and corrugated cardboard recovery programs are also implemented.

It is important to note that Pennsylvania's Waste Composition Study was conducted in 2001. Since then new methods of collecting and processing material for recycling that allow for greater quantities of paper to be recovered have become common. Therefore, it is likely that a study done today would show that in areas of the State where this new technology for recycling systems has been implemented, Pennsylvania's figures would more closely resemble the national trends. During the planning process, when evaluating the inclusion of certain materials for recycling, serious consideration was given to the local impact on collection, transporting and processing costs in Mercer County.

MERCER COUNTY'S MUNICIPAL WASTE SOURCES

The generators of municipal waste in Mercer County cover a broad spectrum of candidates. At some level each of us produces certain amounts of municipal solid waste. We generate it at our residences, commercial establishments, government buildings, institutions, and community events. Municipal waste includes a comprehensive list of materials, which are produced by the majority of generators. However, there are special categories of municipal waste resulting from select generators. It was important for the County to examine the special needs and conditions of all of these entities as it developed the revisions to the Plan.

RESIDENCES

The greatest quantities of municipal solid waste are generated in private residences. Houses, condominiums, trailers, and apartment high-rises, are locations where residential municipal solid waste is generated. USEPA and the PADEP both estimate that on average at least 54% of municipal waste is generated by a community's residents. In rural areas, like most of Mercer County, the studies show the proportion of residential waste to be even higher. Ensuring that residents exercise proper waste management practices is crucial in determining the livability of a community. Identifying the strengths and weaknesses of the current municipal solid waste collection and disposal system is an important element of the Plan.

COMMERCIAL ESTABLISHMENTS

Retailers, wholesalers, and a wide variety of service industries are considered commercial generators of municipal waste generated in Mercer County. Office complexes, government facilities, schools, and institutions also fall within this category. Combined they generate an average of 46% of the municipal waste at the national level. In Mercer County it is supposed that the proportion of commercial waste is slightly less.

TABLE 1-4 FEDERAL, STATE AND LOCAL GOVERNMENT FACILITIES

FEDERAL	STATE	COUNTY and LOCAL
United States Post Offices	Liquor Stores	Mercer County Government Agencies
Congressional Representatives	State Department of Highways	Mercer County Courthouse
Armed Forces Recruiters	State Correctional Institution	Mercer County Jail
Army National Guard	Bureau of Forestry	Mercer County Redevelopment Authority
Department of Farm Service	Bureau of Vocational Rehabilitation	County Fairgrounds
Fish and Wildlife Service	Department of Agriculture	District Magistrates and Justices
Social Security Administration	Department of Conservation & Natural Resources	Township and Borough Offices
	Department Of Labor & Industry	Municipal Authority Offices
	Department of Health	Council of Government Offices
	Department of Public Welfare	Planning Commission
	Driver's License Center	Police and Fire Departments
	Pennsylvania State Police	Public Libraries
	Parks and Recreation	
	PA Army National Guard	
	Pennsylvania Higher Education Assistance Agency	
	State Congressional Representatives	

GOVERNMENT FACILITIES

Government functions at the federal, state and local levels are conducted daily in Mercer County. Departments, agencies, and quasi-government organizations are located in offices and other facilities. Social services, economic development, the military, environmental, and agricultural are all represented. The operations of township, borough, and also county government are located in offices and other facilities throughout the County. Police and fire departments, municipal authorities, libraries, and even prisons are included. Table 1-4 lists the various categories of government offices found in Mercer County.

TABLE 1-5 MERCER COUNTY PUBLIC SCHOOL SYSTEMS

COMMODORE PERRY DISTRICT COMMODORE PERRY INTERMEDIATE COMMODORE PERRY JUNIOR/SENIOR HIGH SCHOOL	FARRELL AREA DISTRICT FARRELL ELEMENTARY/LOWER MIDDLE SCHOOL FARRELL AREA HIGH/UPPER MIDDLE SCHOOL
GREENVILLE AREA DISTRICT HEMPFIELD PRIMARY EASTERN INTERMEDIATE GREENVILLE JUNIOR/SENIOR HIGH SCHOOL	GROVE CITY AREA DISTRICT GEORGE JUNIOR REPUBLIC (ALL LEVELS) HIGHLAND PRIMARY WASHINGTON PRIMARY HILLVIEW INTERMEDIATE GROVE CITY AREA MIDDLE SCHOOL GROVE CITY AREA HIGH SCHOOL
HERMITAGE DISTRICT ARTMAN INTERMEDIATE HERMITAGE INTERMEDIATE DELAHUNTY MIDDLE SCHOOL HERMITAGE MIDDLE SCHOOL HICKORY HIGH SCHOOL	JAMESTOWN AREA DISTRICT JAMESTOWN AREA INTERMEDIATE JAMESTOWN AREA JUNIOR/SENIOR HIGH SCHOOL
	KEYSTONE CHARTER SCHOOL
LAKEVIEW DISTRICT OAKVIEW PRIMARY LAKEVIEW MIDDLE SCHOOL LAKEVIEW HIGH SCHOOL	MERCER AREA DISTRICT MERCER ELEMENTARY INTERMEDIATE MERCER JUNIOR/SENIOR HIGH SCHOOL
REYNOLDS DISTRICT REYNOLDS ELEMENTARY INTERMEDIATE REYNOLDS JUNIOR/SENIOR HIGH SCHOOL	SHARON CITY DISTRICT CASE AVENUE INTERMEDIATE MUSSEY INTERMEDIATE WEST HILL INTERMEDIATE SHARON MIDDLE/HIGH SCHOOL
SHARPSVILLE AREA DISTRICT SEVENTH STREET INTERMEDIATE SOUTH PYMATUNING INTERMEDIATE SHARPSVILLE AREA MIDDLE SCHOOL SHARPSVILLE AREA HIGH SCHOOL	WEST MIDDLESEX AREA DISTRICT LOWER W. LOW PRIMARY OAKVIEW INTERMEDIATE WEST MIDDLESEX JUNIOR/SENIOR HIGH SCHOOL

EDUCATIONAL INSTITUTIONS

Thirteen major public school districts, with facilities from primary through secondary, represent the largest segment of educational institutions in Mercer County. Other learning centers also exist. These include three colleges, technical and vocational schools, and numerous private schools. Tables 1-5, 1-6, and 1-7 list by category the educational facilities within the County.

TABLE 1-6 PRIVATE SCHOOLS IN MERCER COUNTY

CALVARY CHRISTIAN ACADEMY	ORCHARD HILL SCHOOL
COUNTY LINE SCHOOL	PILGRIM FELLOWSHIP SCHOOL
DEER RUN AMISH SCHOOL	PINE HOLLOW SCHOOL
DUTCH LANE SCHOOL	PLEASANT VIEW SCHOOL
FAIRVIEW SCHOOL	SHADY MAPLE AMISH PAROCHIAL SCHOOL
GREEN MEADOW PAROCHIAL	SHENANGO VALLEY FAITH ACADEMY
GROVE CITY CHRISTIAN ACADEMY	ST. JOSEPH SCHOOL
HILLTOP AMISH SCHOOL	ST. MICHAEL SCHOOL
KENNEDY CATHOLIC HIGH SCHOOL	STONEBORO WESLEYAN METHODIST SCHOOL
LIVING WORLD CHRISTIAN SCHOOL	VALLEY VIEW SCHOOL
MEADOW VALLEY CHRISTIAN SCHOOL	WOODLAWN SCHOOL
MONSIGNOR GENO MONTI SCHOOL	ZUVER SCHOOL No. 8
NOTRE DAME SCHOOL	

TABLE 1-7 HIGHER EDUCATION INSTITUTIONS IN MERCER COUNTY

COLLEGES	VOCATIONAL AND TECHNICAL
PENN STATE SHENANGO CAMPUS	MERCER COUNTY AREA VOCATIONAL TECHNICAL SCHOOL
GROVE CITY COLLEGE	LAUREL TECHNICAL INSTITUTE
THIEL COLLEGE	

RESIDENTIAL CARE FACILITIES

In the category of institutional generators of municipal waste, also included are the numerous skilled nursing, personal care and assisted living facilities that are found in the County. While these facilities produce municipal waste commonly found in most residences, they also generate materials that require special handling. Due to the nature of their operations, a portion of the municipal waste generated in these facilities falls into a special category known as infectious chemotherapeutic waste. Table 1-8 shows the residential care facilities in Mercer County.

TABLE 1-8 MERCER PERSONAL CARE AND ASSISTED LIVING FACILITIES		
CLEPPER MANOR 959 EAST STATE STREET SHARON, PA 16146	COUNTRYSIDE CONVALESCENT HOME 8221 LAMOR ROAD MERCER, PA 16137	ASHBY PERSONAL CARE 752 STAMBAUGH AVENUE SHARON, PA 16146
GROVE CITY MEDICAL CENTER 631 N BROAD ST EXT GROVE CITY, PA 16127	GROVE MANOR 435 NORTH BROAD STREET GROVE CITY, PA 16127	GRZEJZKA'S CONNELLY HOUSE 511 B STREET HERMITAGE, PA 16148
HOSPITALITY CARE CENTER 3726 EAST STATE STREET HERMITAGE, PA 16148	JOHN XXIII HOME 2250 SHENANGO FREEWAY HERMITAGE, PA 16148	CROSBY'S BOARDING HOME 371 PRINDLE STREET SHARON, PA 16146
NUGENT CONVALESCENT HOME 500 CLARKSVILLE ROAD HERMITAGE, PA 16148	ORCHARD MANOR, INC 20 ORCHARD DRIVE GROVE CITY, PA 16127	KETTERINGPERSONAL CARE 374 HARRISON STREET SHARON, PA 16146
SAINT PAUL HOMES 339 EAST JAMESTOWN ROAD GREENVILLE, PA 16125	SHARON REGIONAL HEALTH SYSTEM 740 E. STATE STREET SHARON, PA 16146	MAPLELEAF MANOR 80 FEDONIA ROAD GREENVILLE, PA 16125
TRINITY LIVING CENTER 400 HILLCREST AVENUE GROVE CITY, PA 16127	UPMC HORIZON TCC SHENANGO 2200 MEMORIAL DRIVE FARRELL, PA 16121	RIDGEWOOD AT SHENANGO VALLEY ONE ELSTON WAY HERMITAGE, PA 16148
WHITE CLIFF NURSING HOME 110 FREDONIA ROAD GREENVILLE, PA 16125	WOODLAND PLACE 745 GREENVILLE ROAD MERCER, PA 16137	BENTLEY HOUSE 2400 GARDEN WAY HERMIATGE, PA 16148
JUNIPER VILLAGE AT SHENANGO INN 1330 KIMBERLY ROAD SHARON, PA 16146	HECKATORN PERSONAL CARE 313 WEST JAMESTOWN ROAD JAMESTOWN, PA 16134	GREYSTONE COUNTRY ESTATES 424 DELAWARE ROAD FREDONIA, PA 16124

MERCER COUNTY WASTE GENERATION RATES

Although data is readily available on the amount of municipal solid waste from Mercer County, which is disposed in Pennsylvania and some Ohio landfills, the accuracy of the information is suspect. It is known that the methods used to record and report waste varies between Pennsylvania and Ohio facilities. It is also known that transfer operations erroneously identify loads transported to a landfill as the location of their facilities rather than as the origin of the waste generation. Likewise, no accurate data is reported on the municipal waste that is handled in other fashions. Consequently, the disposal reports cannot fully or accurately demonstrate the amount of waste that is actually produced.

In order to calculate the total quantity of waste generated in Mercer County, one must first determine the actual municipal solid waste generation rate. With this information, one could determine the rates for recycling and disposal. If the waste composition is also known, then Mercer County can be compared to other locales and the national average. With this information, possible sources of recyclable materials can be identified along with their potential for recovery.

In spite of the fact that approximately 75% of the population in the United States, including Pennsylvania, resides in urban areas, 48 of the 67 Pennsylvania counties are considered rural. Based on population density, the Center for Rural Pennsylvania classifies Mercer County as one of those rural counties. Eight communities in Mercer County have somewhat urban characteristics based on demographic indicators. Approximately 52% of the population in Mercer County resides in the urban areas. These include the Boroughs of Sharpsville, Grove City, Wheatland and Greenville, the Cities of Farrell, Sharon, and Hermitage and Hempfield Township. The remaining 40 municipalities are rural and have 48% of the population.

Nationally, and statewide the average MSW generation rate for 2008 is about 0.8 tons per person per year or 4.5 lbs per person per day. The USEPA and the PADEP both utilize this standard of measurement when no local information is available.

A study of materials actually disposed in Pennsylvania landfills was conducted in 2001, by R.W. Beck for the PADEP. The municipal solid waste composition study indicated that for the PADEP Northwestern Region, the average rate of municipal solid waste disposed in 2001 was 2.84 lbs per person per day. Mercer County is part of the Northwestern Region.

TABLE 1-9 MSW GENERATION BY MUNICIPALITY AND SOURCE

Estimated MSW Generation by Municipality Based on Countywide Totals and National Trends					
Geography	Population 2009	% County Population	MSW Generated	Estimated Residential	Estimated Commercial
Mercer County	116,809	100.00%	85,271	51,162	34,108
Clark Borough	625	0.54%	456	274	183
Coolspring Township	2,267	1.94%	1,655	993	662
Deer Creek Township	432	0.37%	315	189	126
Delaware Township	2,129	1.82%	1,554	933	622
East Lackawannock Township	1,666	1.43%	1,216	730	486
Fairview Township	995	0.85%	726	436	291
Farrell City	5,795	4.96%	4,230	2,538	1,692
Findley Township	2,288	1.96%	1,670	1,002	668
Fredonia Borough	602	0.52%	439	264	176
French Creek Township	772	0.66%	564	338	225
Greene Township	1,120	0.96%	818	491	327
Greenville Borough	6,142	5.26%	4,484	2,690	1,793
Grove City Borough	7,746	6.63%	5,655	3,393	2,262
Hempfield Township	3,870	3.31%	2,825	1,695	1,130
Hermitage City	16,332	13.98%	11,922	7,153	4,769
Jackson Township	1,320	1.13%	964	578	385
Jackson Center Borough	209	0.18%	153	92	61
Jamestown Borough	582	0.50%	425	255	170
Jefferson Township	2,326	1.99%	1,698	1,019	679
Lackawannock Township	2,473	2.12%	1,805	1,083	722
Lake Township	747	0.64%	545	327	218
Liberty Township	1,380	1.18%	1,007	604	403
Mercer Borough	2,224	1.90%	1,624	974	649
Mill Creek Township	597	0.51%	436	261	174
New Lebanon Borough	191	0.16%	139	84	56
New Vernon Township	539	0.46%	393	236	157
Otter Creek Township	587	0.50%	429	257	171
Perry Township	1,417	1.21%	1,034	621	414
Pine Township	4,711	4.03%	3,439	2,063	1,376
Pymatuning Township	3,584	3.07%	2,616	1,570	1,047
Salem Township	770	0.66%	562	337	225
Sandy Creek Township	836	0.72%	610	366	244
Sandy Lake Borough	696	0.60%	508	305	203
Sandy Lake Township	1,325	1.13%	967	580	387
Sharon City	14,982	12.83%	10,937	6,562	4,375
Sharpsville Borough	4,131	3.54%	3,016	1,809	1,206
Sheakleyville Borough	152	0.13%	111	67	44
Shenango Township	3,882	3.32%	2,834	1,700	1,134
South Pymatuning Township	2,806	2.40%	2,048	1,229	819
Springfield Township	1,953	1.67%	1,426	855	570
Stoneboro Borough	1,022	0.87%	746	448	298
Sugar Grove Township	845	0.72%	617	370	247
West Middlesex Borough	855	0.73%	624	374	250
West Salem Township	3,358	2.87%	2,451	1,471	981
Wheatland Borough	700	0.60%	511	307	204
Wilmington Township	1,239	1.06%	904	543	362
Wolf Creek Township	770	0.66%	562	337	225
Worth Township	819	0.70%	598	359	239

Using the 2008 landfill reports for the Northwestern Region it appears that the average rate of disposal in the Northwest Region is 2.87 lbs per person per day. Using an average recycling rate of 15%, found in similar demographic areas, the expected diverted tons were applied to determine that the waste generation rate for the Northwestern Region was 3.37 lbs per person per day. This figure is less than the national and statewide average. The landfill reports do not include waste from the region, which is exported to other states. This likely skews the results.

In 2008, Mercer County reportedly disposed of 113,414 tons of materials considered to be municipal waste in Pennsylvania and Ohio landfills. Based on this information, the average disposal rate for the County was 5.47 lb per person per day. Including an additional 10,102 tons per year of reported recyclable material, yields a total of 123,516 tons generated and an estimated MSW generation rate of 5.80 lbs per person per day. This figure is approximately 129% of state and national average. To account for known errors in reporting and the County's rural nature, the generation rate was adjusted to 4 lb per person per day. Table 1-9 shows the estimated waste generation per municipality based on the County's overall estimated rate. The estimated portion of municipal waste projected to be generated by residents and commercial sources is illustrated.

It should be noted that the figures shown for each municipality are strictly averages. In the more urban municipalities it is likely that the commercial/residential split is proportionately different from in the rural municipalities. Additionally, in some areas the generation rate per person is probably higher than the County average and in others it will be much lower. For instance, Hermitage has the bulk of the retail service industry for the entire Shenango Valley and perhaps for the entire County. Therefore, it would be expected to generate more waste and specifically more commercial waste than its population might suggest. Yet, it is shown in the table using the average based on the overall performance of the County.

MUNICIPAL WASTE COMPOSITION

The waste composition study also revealed that the proportion of constituents in MSW from rural sources also differed from the average. A greater proportion of cans, bottles and other non-combustibles were present. This result is what would be expected if the amount of paper, yard waste, and food wastes disposed were reduced. Table 1-10 illustrates the differences in waste composition from urban to rural settings.

A difference in the proportion of wastes from residential and commercial sources in rural areas was identified in the waste composition study. Statewide the ratio was 64% residential to 36% from commercial sources. In rural areas, the ratio was 72% to 28%. In analyzing data from Mercer County, where the population is

52% urban and 48% rural, a ratio of 60% residential to 40% commercial was used. The average waste generation rate in Mercer County is estimated to be 4 lb per person per day. The quantity generated from residences is 60% of this figure, or 2.4 lb per person per day.

TABLE 1-10 WASTE COMPOSITION IN NORTHWESTERN PENNSYLVANIA BY DEMOGRAPHIC SECTOR

Material	Demographic Sector			Aggregate
	Urban	Suburban	Rural	
Paper	33.1%	27.7%	31.8%	30.9%
Plastic	11.3%	9.1%	12.1%	11.2%
Glass	2.1%	1.5%	3.6%	2.9%
Metals	4.0%	4.7%	7.2%	6.2%
Organics	38.6%	39.3%	31.4%	34.3%
Other Waste	10.9%	17.7%	14.0%	14.6%
Total	100.0%	100.0%	100.0%	100.0%

Some recyclable wastes such as cardboard and office paper come primarily from commercial sources. Others are primarily generated from residential sources. Therefore, understanding the ratio of commercial to residential sources in Mercer County is useful in identifying potential sources of recyclable materials based on the unique municipal solid waste composition of each sector. A more detailed discussion of the materials that could be recovered and the overall economics of recycling in Mercer County can be found in Chapter 4.

CONSTRUCTION AND DEMOLITION ACTIVITIES

Just as the name implies, Construction and Demolition waste (C&D) is generated from construction, renovation, and demolition activities in residential, commercial, and industrial establishments. Pennsylvania regulates C&D waste as a subset of municipal solid waste. It is thus included in the reporting and planning activities. The USEPA and many other states do not factor C&D materials into their equations when calculating municipal solid waste generation and disposal.

This portion of the municipal waste stream is highly variable. Its composition fluctuates on a project-by-project basis. Construction and Demolition waste may contain a conglomerate of items, which include asphalt, concrete, earth, sand, trees, steel, brick, lumber, roofing materials, carpet remnants, dry wall, and other similar materials. Loads bound for disposal resulting from construction activities might also include packaging materials such as cardboard boxes, Styrofoam, nylon or plastic strapping, pallets, etc. Although they are not generally included

in the official definitions of C&D waste, it is not uncommon for demolition projects to generate lead, asbestos, mercury, liquid paints and stains, pressure treated lumber, etc. These must be removed and disposed according to practices and regulations beyond those for C&D waste.

Although Construction and Demolition debris is generated at a steady pace year round in warmer climates, it fluctuates on a seasonal basis in areas with harsher winters similar to Mercer County. The state of the economy, which has an impact on new development and construction, and remodeling, etc, plays a role regardless of the region. The amounts from month to month and year to year are less consistent than municipal waste as a whole. Therefore, it is much more difficult to project generation rates and quantities for the long term. Contributing to that difficulty is the lack of universal documented disposal activity.

In 2008, Pennsylvania reported 375 tons of C&D waste originating in Mercer County disposed at Pennsylvania facilities. An additional 2836 tons were reported by Ohio facilities. This represents approximately 2.71% of all reported disposed municipal waste from Mercer County. The Annual Facility Reports issued by the Pennsylvania Department of Environmental Protection, show 17.5% of the material disposed in Pennsylvania landfills can be categorized as C&D waste.

It is suspected that the reported figures do not represent the total amount of such material generated in the County. Much of Mercer's C&D waste is hauled to Ohio. While one of the facilities did report quantities of C&D, the remainder of the facilities may or may not accurately record C&D waste let alone Mercer County waste. Often, loads containing C&D waste could be mixed with other types of materials and thus could be identified as municipal waste in other states. Out-of-state waste in Ohio may be recorded by state, but not necessarily documented by county. In addition, much like municipal waste, some of the C&D debris finds its way into loads managed at transfer stations.

Unlike MSW, C&D waste is not consistently collected and transported by municipalities or through ongoing arrangements with private garbage haulers. Much of it is handled by construction demolition contractors, or homeowners and businesses that generate the waste. This complicates the monitoring and tracking of disposal. It also makes it more difficult to ensure that proper disposal occurs. Whether due to lack of awareness, regulations controlling self-haulers or enforcement, the material does not always make its way to a proper disposal facility. Some of the material is burned on construction sites and is never accounted. Another common method used by homeowners and contractors is illegal dumping. Surveys conducted by Keep Pennsylvania Beautiful throughout Pennsylvania, including in Mercer County, document that C&D waste is a major component of the material found at open dumpsites. This activity creates a significant environmental pollution problem.

Construction and Demolition material, which does not reach a landfill, is not necessarily improperly managed or disposed. Much of brick and concrete and other masonry materials are utilized as clean fill. Contractors also reuse doors, windows, hardware, etc. in other project applications.

Based on all of these factors, it is impossible for a county to determine C&D waste generation based on landfill records alone. A better source may be construction/demolition contractors who could be required to report on waste that they transport for disposal. In some areas the proper disposal of construction demolition waste is tied to deposits on building permits and is refunded when documentation is provided.

With the advent of Leadership in Energy and Environmental Design (LEED) Green Building Rating System, there is more demand for the proper handling of C&D material including the recycling of many of the components. This practice could present future opportunities for greater waste diversion in Mercer County. Consideration of these potential solutions was part of the revision planning process. Further discussion on this issue is provided in Chapter 5.

SPECIAL HANDLING MUNICIPAL WASTE

There are certain categories of municipal waste, which are not readily identified by the average person. These materials are managed separately because they require special handling and treatment not common to other types of municipal solid waste. Special handling wastes include municipal sewage sludges and waste resulting from medical facilities.

INFECTIOUS AND CHEMOTHERAPEUTIC WASTE

Hospitals have been the primary source of Infectious and Chemotherapeutic Waste (ICW) over the years. In recent times, however, many medical procedures are no longer performed at hospitals or as in patient services. Outpatient medical care has grown in popularity. Insurance requirements and cost concerns have dictated this trend. The offices of physicians, dentists, and varying health practitioners as well as other resident care facilities provide more technical and complicated procedures than in the past. Therefore, significant amounts of ICW once generated by hospital procedures have been shifted to these remote medical facilities.

Many hospitals continue to operate incinerators or autoclave units for onsite treatment and disposal. It is just as common however, for commercial transporters and treatment facilities to provide these services to the hospital and the network of outpatient facilities. Hospitals and satellite medical offices in

Mercer County are similar to other facilities in Pennsylvania in the respect that much, if not all, of their ICW is transported to regional processing and disposal facilities.

TABLE 1-11 INFECTIOUS CHEMOTHERAPEUTIC WASTE SOURCES

Estimated Infectious Chemotherapeutic Waste Generation in Mercer County			
Type of Facility	Number of Establishments	Estimated Annual ICW Generation in Tons 2008	Projected Annual ICW Generation in Tons 2018
Hospitals	6	439	491
Physicians	125	10	12
Dentists	50	5	5
Health Practitioners	73	11	13
Dialysis Centers	3	40	45
Outpatient Care Centers	19	3	3
Home Health Care	9	1.39	2
Veterinary Practitioners	13	3	3
Funeral Homes	15	1.18	1
Nursing or Residential Care Facilities	38	18	20
Total	351	531	595

Table 1-11 shows the estimated volume of ICW generated in Mercer County. Transporters, treatment facilities, and medical practices are not required to report to the County the amount of ICW generated or processed. Therefore, the volume of waste, which is shown in Table 1-11, was calculated using the expected rate of generation by type of facility or medical practice, documented in the *Pennsylvania Infectious and Chemotherapeutic Waste Plan, 1990*.

TABLE 1-12 PUBLIC WASTEWATER TREATMENT PLANTS

Estimated Sludge Generation at Public Wastewater Treatment Plants in Mercer County			
Geography	Served by Wastewater Treatment Facility	Occupied Housing Units	Tons Per Year
Mercer County		46,712	11678
Clark Borough	Hermitage Municipal Authority	226	56.5
Coolspring Township	Coolspring Jackson Lake Latonka Joint Authority	818	204.5
Deer Creek Township		164	41
Delaware Township		807	201.75
East Lackawannock Township		584	146
Fairview Township		332	83
Farrell City	Farrell Wastewater Treatment Plant	2,508	627
Findley Township		542	135.5
Fredonia Borough	Fredonia Municipal Authority	251	62.75
French Creek Township		279	69.75
Greene Township		459	114.75
Greenville Borough	Greenville Sanitary Authority	2,464	616
Grove City Borough	Grove City Wastewater Treatment Plant	2,572	643
Hempfield Township	Greenville Sanitary Authority	1,590	397.5
Hermitage City	Hermitage Municipal Authority	6,809	1702.25
Jackson Township	Coolspring Jackson Lake Latonka Joint Authority	441	110.25
Jackson Center Borough	Coolspring Jackson Lake Latonka Joint Authority	87	21.75
Jamestown Borough	Jamestown Municipal Authority	262	65.5
Jefferson Township	Hermitage Municipal Authority	958	239.5
Lackawannock Township		909	227.25
Lake Township	Lakeview Joint Sewer Authority	234	58.5
Liberty Township	Grove City Wastewater Treatment Plant	492	123
Mercer Borough	Mercer Borough Sewage Treatment Plant	1,020	255
Mill Creek Township		239	59.75
New Lebanon Borough		76	19
New Vernon Township		199	49.75
Otter Creek Township		233	58.25
Perry Township		581	145.25
Pine Township	Grove City Wastewater Treatment Plant	1,537	384.25
Pymatuning Township		1,519	379.75
Salem Township		291	72.75
Sandy Creek Township		325	81.25
Sandy Lake Borough	Lakeview Joint Sewer Authority	297	74.25
Sandy Lake Township	Lakeview Joint Sewer Authority	499	124.75
Sharon City	Sharon Wastewater Treatment Plant	6,791	1697.75
Sharpsville Borough	Sharon Wastewater Treatment Plant	1,907	476.75
Sheakleyville Borough		64	16
Shenango Township	Hermitage Municipal Authority	1,637	409.25
South Pymatuning Township	Hermitage Municipal Authority	1,132	283
Springfield Township	Grove City Wastewater Treatment Plant	717	179.25
Stoneboro Borough		476	119
Sugar Grove Township		363	90.75
West Middlesex Borough	Shenango Township Municipal Authority	372	93
West Salem Township	West Salem Township Municipal Sewage Authority	1,314	328.5
Wheatland Borough	Hermitage Municipal Authority	350	87.5
Wilmington Township		380	95
Wolf Creek Township		281	70.25

SEPTAGE AND SEWAGE SLUDGE

Available infrastructure to collect, transport and treat sewage has developed primarily around the urban areas of Mercer County. The 2006 Mercer County Comprehensive Plan discusses the need to upgrade many of the existing wastewater treatment plants (WWTP) to facilitate expansion of the collection lines and network of services. It also speaks to the current lack of services in many of the municipalities. Private homeowners within the remaining non-serviced municipalities are expected to use on lot septic systems. Multi-family dwellings, such as trailer parks and residential care facilities, as well as industrial operations often operate private pre-treatment systems, with the sewage being transported for final treatment at a WWTP. Similarly, septic systems are often pumped and the septage is either land applied or transported for treatment to these facilities.

Both the raw sewage and septage treated at WWTP's is dewatered sufficiently to become sewage sludge or biosolids. This end waste requires some disposal outlet. Common methods of handling biosolids include, agricultural utilization to fertilize crop producing fields; land reclamation to recover lands impacted by strip mining; composting; distribution to individuals, for use as fertilizer; landfill disposal and incineration. Biosolids Disposal in Pennsylvania, a study conducted in 2007 by professors from the Penn State University Department of Agriculture reports that in spite of the potential for beneficial use, most biosolids generated in the Commonwealth continue to be disposed in landfills. Ease of regulatory approval for this method along with general public acceptance were purported to be the reasons for using landfills, in spite of the fact that that land application proved to be more cost effective.

The overall amount of biosolids generated within Mercer County is estimated to be 11,678 tons per year. A breakdown of estimated biosolids generation by municipality is shown in Table 1-12. The estimates are based on the PADEP publication Sewage Sludge and Septage Management in Pennsylvania, which indicates that an average household will generate approximately .25 tons of biosolids per year. Table 1-12 also shows which municipalities are serviced by a specific WWTP.

COMMUNITY ACTIVITIES

Farm shows and fairs, church festivals, firemen's carnivals, arts and crafts shows, music concerts, and other special events bring local residents and businesses together to celebrate and socialize. Data on waste generation trends at these events is scarce because the nature of these events varies. The number of participants, the location, and the types of activities must be considered. The

availability of food and beverages, as well as the manner in which each is prepared, packaged and served, are all-important factors that differ from event to event. The National Solid Waste Management Association released a technical bulletin in 1985 that listed the amount of waste generated by tourists under a variety of conditions. The bulletin indicated that during a daylong event, depending upon the types of refreshments and activities available at each event, an average of 3 lbs. of waste per attendee per day can be expected. It is assumed that most of this waste is actually generated by the vendors. Mercer County hosts several fairs festivals and other events during the year. These include the Penn's Wood West Folk and Art Festival; Buhl Days; the Great Stoneboro Fair; the Hermitage Arts Festival; the Pymatuning Pioneer and Arts Festival. A number of smaller events also occurs throughout the year.

Chapter 2

Current Waste Management Practices

TRANSPORTATION, DISPOSAL, AND PROCESSING

Ensuring disposal capacity is the primary responsibility assigned to counties by Act 101. Typically, counties enter into contracts or agreements with disposal facilities for this purpose. Mercer County has utilized that approach since the development of its original Act 101 Plan in 1991.

In addition to obtaining disposal capacity assurances, Mercer County has an interest in protecting the health and safety of its citizens. How waste is managed factors significantly into achieving that objective. Therefore, the planning process also focuses on implementing proper practices for the storage and collection of municipal solid waste. This chapter outlines how each type of municipal solid waste generated in Mercer County is currently collected, transported, and where it is ultimately processed and disposed.

COLLECTION AND TRANSPORTATION NETWORK

Residents in every Mercer County municipality have access to waste collection services. Approximately 35% of the municipalities secure these services for residents through a competitive bidding process and a contractual agreement. In the remaining communities, residents that opt to have collection services contract directly with the hauler of their choice. Because subscribing to waste collection is voluntary in the majority of Mercer communities, by either personal choice or economic circumstances, many residents have no service provider. Even in municipalities that do provide contracted services, rate structures often inadvertently allow residents to avoid paying for collection. While individual efforts of conservation and use of environmentally friendly alternatives might reduce the need for waste collection, most often, the absence of collection service signals the presence of undesirable disposal methods and environmental pollution. The extent to which municipal waste goes uncollected or is disposed illegally is an issue that must be examined and considered in policies resulting from the planning process.

Table 2-1 Waste Transporters Operating in Mercer County Service Area

Name	Address	PADEP Authorization
BFI of Ohio	3870 Hendricks Road ,Youngstown, PA	
Brocklehurst Drop Boxes	54 Kimberly Drive, Grove City, PA	WH6404
Chester Conley	2407 MacArther Road, Jamestown , PA	WH2776
Crump Hauling & Excavating	2420 Masury Road, Hubbard, OH	
Griffin Excavating, Inc.	360 Sopher Road, Grove City, PA	WH6792
J. Slick Hauling	451 Pearson Drive, Edinburg, PA	
Jeff Reddick Roll-Off Service	2654 Sandy Lake-Grove City Rd, Stoneboro, PA	WH2696
John McDowell Trucking	270 Hemlock Road, Grove City, PA	WH0144
McJunkin & Sons	2064 Perry Hwy., Fredonia, PA	WH7239
N.N. Moss, Inc.	150 Main Street, Greenville, PA	WH8736
PA DOT District 1-4	215 North Maple Street, Mercer, PA	WH4215
Phoenix Disposal	38 South Meridian Road, Youngstown, OH	
Pickett's Hauling	914 Emerson Avenue, Farrell, PA	
Richard Boccia Construction	816 Robbins Avenue, Niles, OH	
Richard L. Dunham	1767 Perry Hwy., Fredonia, PA	WH2202
Sereday's Hauling	7591 Warren-Sharon Road, Brookfield, OH	
Stateline Roll-Off Services	239 Hillsville Road, Edinburg, PA	
Thomas Construction, Inc.	310 Diamond Road, Grove City, PA	WH4525
Tri County Industries	1 Landfill Road, Grove City, PA	WH0618
Tri State Aggregate Supply	502 East Jamestown Road, Greenville, PA	WH7418
Waste Management of Pennsylvania	Morrisville, PA	WH1436
Wolford's Refuse & Recycling	175 Ohio Avenue, McDonald, OH	

MUNICIPAL WASTE TRANSPORTERS

Since 2002, all waste transportation vehicles (trucks and truck tractors with a registered gross vehicle weight greater than 17,000 lbs., and trailers with a registered gross vehicle weight greater than 10,000 lbs.) transporting municipal or residual waste to waste processing or disposal facilities in Pennsylvania have been regulated by the Waste Transportation Safety (Act 90). These qualifying transporters must obtain Waste Transporter Authorization from the PADEP. Haulers that transport waste to out-of-state facilities are not required to obtain authorization. Self-haulers and haulers of small quantities of waste are also exempted from the license. Because of this exemption, border counties like Mercer often have a more difficult time enforcing the flow control requirements of their solid waste management plans and tracking waste generation and disposal trends. A County level ordinance, which include reporting requirements, is a common solution to monitoring these smaller operators.

Table 2-1 lists the transporters of municipal waste known to be operating within Mercer County. It is important to note that not only those who collect municipal waste from residences and businesses are required to be licensed, but also those who haul construction demolition debris and significant quantities of materials from their own operations. Therefore, commercial businesses, builders, developers, roofers and remodeling contractors fall into this category. When compared to other counties, the list of those operators with Act 90 Waste Transporter Authorization, as well as those who do not, appears to be small. The list provides additional evidence that implementing some type of control at the county level has merit. As mentioned previously, this is probably because waste can easily be transported across the border without Act 90 constraints. Most likely missing from the list are those that do not typically perceive themselves as transporters of solid waste, yet regularly haul waste that they generate on the job. Studies have shown that these same small operators are responsible for significant amounts of illegal dumping. Without a tracking program, they are more difficult to identify and the temptation to operate outside of the law is greater.

DESTINATION OF MERCER COUNTY'S WASTE

Mercer County exports all of its waste for disposal. All of the municipal and residual waste generated in Mercer County is disposed out-of-county and, much of it, out-of-state. The County does not currently have any actively operating disposal facilities. As a result, Mercer is totally dependent on the willingness of other counties and states to accept its waste. The County has maintained disposal capacity agreements with facilities outside of the County for that purpose. However, the County does compete for capacity at each of those sites. In part, the County entered into multiple agreements to ensure that local disposal needs

TABLE 2- 2 DISPOSAL FACILITIES WITH EXISTING CAPACITY AGREEMENTS FOR MERCER COUNTY WASTE

Landfill	Permit	Volume Daily / Av Max	County/Municipality	Address	Owner/Operator
Arden Landfill	100172	2400	Chartiers Township/Washington	200 Rangos Lane Washington, PA 15301	Waste Management
		2800			
Carbon Limestone Landfill	CID 28726	6500	Lowellville/Mahoning (Ohio)	8100 South Stateline Road Lowellville, OH 44436	Republic Services dba BFI of Ohio
		NA			
County Land Development	CID 28776	NA	Salem/Mahoning (Ohio)	9960 South Range Road Salem, OH 44460	Republic Services dba BFI of Ohio
Lakeview Landfill	100329	4600	Summit/Erie	851 Robison Road Erie, Pa 16509	Waste Management
		5200			
Mahoning Landfill	CID 20984	2500	New Springfield/Mahoning (Ohio)	3510 Garfield Road New Springfield, OH 44443	Waste Management
		NA			
Northwest Sanitary Landfill	100585	2500	Clay Township/Butler	1436 West Sunbury Rd West Sunbury, PA 16061	Waste Management
		2500			
Seneca landfill	100403	3000	Jackson/Lancaster/Butler	421 Hartmann Road Evans City, PA 16033	Vogel Inc.
		3000			
Valley Landfill	100280	2600	Penn Township/Westmoreland	6015 Pleasant Valley Rd Irwin, PA 15642	Waste Management
		4000			

would always be met despite the lucrative demands on landfills from out-of-state sources. Additionally, the availability of multiple disposal sites provided for greater competition in the local marketplace. Factors such as lower tipping fees, accessibility, convenience, business relationships, and/or or internalization of disposal all impact the decision of where to direct the waste by the transporter. Lastly, utilizing multiple disposal facilities offers greater protection during catastrophic events. Table 2-2 lists the facilities designated to receive waste generated in Mercer County. It also shows their permit number, location, owner/operator, and the overall daily volume that can be accepted at each site.

REPORTED DISPOSAL ACTIVITY

Pennsylvania requires facilities to report quarterly and annually the types, amounts, and origins of wastes received for disposal. Based on current facility reports, it is easy to track the municipal waste generated in Mercer County, which is disposed in Pennsylvania landfills. More difficult to monitor is waste that is transported to out-of-state facilities. While these sites may distinguish between in state and out-of-state material, the actual county of origin is not typically identified. Out-of state facilities that have entered into agreements with the County to secure capacity are required to collect and report this data. However, their ability to identify the source of waste is limited. It is suspected that a certain amount of Mercer County municipal solid waste goes unreported by out-of state landfills, with or without capacity contracts. That known out-of-state haulers operate in the County without Act 90 Waste Authorization is an indicator that waste finds its way across state lines. Additionally, it is not uncommon for contractors and remodelers inadvertently to misidentify the true origin of waste they haul. An ordinance at the County level, which outlines transporter requirements, could provide greater reporting mechanisms and accountability.

Table 2-3 illustrates the types and amounts of waste from Mercer County reported by Pennsylvania landfills in 2008. Although information that is more recent is available, this year was chosen as a baseline year for all data used in the overall Plan to ensure consistency in comparative analyses. Little to no change was observed in subsequent years; therefore, the end results do not differ. How each of Mercer County's designated and receiving landfills factor into the disposal of the County's municipal solid waste follows in a brief narrative.

ARDEN LANDFILL

Arden Landfill is owned and operated by Waste Management. The facility is located in Chartiers Township, Washington County near Canonsburg. Although listed as one of the landfills currently reserving disposal capacity, it reports no waste of any type that originates in Mercer County. Arden does receive waste

TABLE 2-3 FACILITIES REPORTING DISPOSED TONS OF MERCER COUNTY WASTE 2008

Facility	Owner	Permit	Municipal	% MSW	Residual	% RSW	Sludge	% Sludge	Construction	% C&D	Ash Residue	% Ash	Asbestos	% Asbestos	Total Tons	% Total Tons	% of Total MSW
Carbon Limestone	Republic Services	CID 28726	12103.5	10.67%	27778.03	78.00%	0.00	0.00%	2835.22	88.29%	0	0.00%	0	0.00%	42716.75	27.74%	12.63%
Greentree Landfill	Veolia Environmental Services	101397	0	0.00%	832.3	2.34%	0	0.00%	0	0.00%	0	0.00%	24	23.10%	856.3	0.56%	0.00%
Imperial Landfill	Republic Services	100620	0	0.00%	0	0.00%	0	0.00%	6.3	1.68%	0	0.00%	79.3	76.32%	85.6	0.06%	0.01%
Lakeview Landfill	Waste Management	100329	10760.3	10.62%	105.5	0.30%	0	0.00%	40.9	10.88%	0	0.00%	0	0.00%	10906.7	7.08%	9.13%
Northwest Sanitary Landfill	Waste Management	100585	714.7	0.71%	308.4	0.87%	0	0.00%	179.9	47.86%	0	0.00%	0	0.00%	1203	0.78%	0.76%
Seneca Landfill	Vogel Inc	100403	89836.3	88.67%	6587	18.50%	1672.8	100.00%	148.8	39.58%	0	0.00%	0	0.00%	98244.9	63.79%	77.48%
Wayne Township Landfill	Clinton County Solid Waste Authority	100955	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.6	0.58%	0.6	0.00%	0.00%
			113414.8		35611.23		1672.8		3211.12		0		103.9		154013.85		113414.8

from eight other Pennsylvania counties as well as from the states of Ohio and West Virginia.

CARBON LIMESTONE LANDFILL

One of the out-of-state landfills designated to receive Mercer County municipal waste is the Carbon Limestone Landfill. Situated just across the border near the town of Lowellville in Mahoning County, Ohio, the facility is owned by Republic Waste Services. However, it still does business under the corporate name Browning Ferris Industries or BFI of Ohio. Carbon Limestone receives nearly 13% of the municipal and 78% of the residual waste generated in Mercer County. The facility accepted 14,938 tons of the Mercer County combined municipal waste stream. The site accounts for over 88% of the construction demolition waste reported as disposed in 2008. Close proximity to the County, along with lower tipping fees in Ohio, contribute to the volume delivered to this facility by the company's own hauling division as well as by third party transporters

GREENTREE LANDFILL

Located in Fox Township, Elk County Veolia Environmental Services operates the Greentree Landfill. The landfill is not currently under contract to secure capacity nor is it designated to receive Mercer County municipal solid waste. Therefore, only residual waste and asbestos were received at the landfill in 2008 from Mercer County. Distance to the landfill is prohibitive for direct hauls and likely accounts for the lack of municipal waste disposed at the site from Mercer. It is likely that Greentree could be more feasibly utilized in conjunction with a transfer station. Forty-one counties send some type of waste to Greentree. Nevertheless, 71% of the site's gate capacity is consumed by out-of-state sources, primarily New Jersey and New York.

IMPERIAL LANDFILL

Imperial Landfill is owned and operated by Republic Services. The facility is located near Carnegie in Allegheny County. The landfill is not currently under contract to secure capacity nor is it designated to receive Mercer County municipal solid waste. The site did report receipt of a negligible amount of construction demolition waste from Mercer County, 6.3 tons. The site also reported 79.3 tons of asbestos originating in Mercer County in 2008. The landfill is not currently designated to receive the construction demolition component of the municipal solid waste stream as indicated in the County's capacity agreements. Due to the small amount reported, this could be a misdirected load associated with the asbestos or its origin misidentified at the gate, a common mistake.

LAKEVIEW LANDFILL

Erie County is the host of Waste Management's Lakeview Landfill, which is located in Summit Township. The facility received a little more than 10% of the combined municipal waste stream generated in Mercer County in 2008. Overall, this represents less than 1% of the total waste received at the facility. The waste was likely transported to the landfill via Waste Management's transfer station located in Mercer County in Greenville. Lakeview accepts municipal and residual waste from ten other counties, primarily from Erie and Crawford. It also accepted marginal amounts of waste from four other states in 2008. Lakeview receives waste from one or more Waste Management hauling divisions as well as from public sector and independent haulers.

MAHONING LANDFILL

Waste Management's Mahoning Landfill is located across the Ohio border in New Springfield, Mahoning County. The facility reported no waste received from Mercer County in 2008.

NORTHWEST SANITARY LANDFILL

Waste Management also owns and operates the Northwest Sanitary Landfill. This site is located in Clay Township near the town of West Sunbury in Butler County. Less than 1% of the combined municipal solid waste stream generated in Mercer County was disposed at this facility in 2008. Of that, nearly 175 tons was construction demolition material. Northwest receives material primarily from one or more of Waste Management's hauling divisions. It also serves a variety of small independent hauling companies.

SENECA LANDFILL

By far the largest recipient of Mercer County municipal waste is the Seneca Landfill located in Jackson and Lancaster Townships near Zelenople and Evans City in Butler County. The landfill, owned and operated by Vogel, Inc., reported more than 91,000 tons of the combined municipal waste streams in 2008 and over 6500 tons of residual waste. This represents nearly 78% of Mercer County's waste and approximately 25% of the total waste received at the facility in 2008. Mercer County competes for capacity at the facility with 14 other counties. Seneca also receives a marginal amount of waste from Ohio. Nearly all of the material disposed at Seneca is delivered by one or more of Vogel's hauling divisions. Outside haulers also utilize the facility but to a lesser degree than the company's own fleet.

VALLEY LANDFILL

Another Waste Management owned and operated facility, Valley Landfill is located near Irwin in Westmoreland County. The site reported no Mercer County waste in 2008, although it does have a capacity agreement with the County. Distance is likely a major factor as direct haul to this facility could be cost prohibitive.

WAYNE TOWNSHIP LANDFILL

The Clinton County Solid Waste Authority owns and operates the Wayne Township Landfill. The facility reported less than one ton of asbestos received from Mercer County in 2008. The facility is a considerable distance from Mercer and would require some type of transfer operation to be considered a cost effective destination for residential and commercial vehicles.

TRANSFER OPERATIONS

Two transfer stations are currently operating in Mercer County. These sites receive municipal and residual waste, consolidate it into larger vehicles, and transport it to remote disposal facilities.

TRI COUNTY INDUSTRIES

Tri County Industries is a division of Vogel Inc. This transfer station is located in Pine/Liberty Townships near Grove City. The facility, which is on the site of the Tri County Landfill, was opened as a temporary means to serve the Tri County Industries' hauling operation pending re-permitting of the landfill. Approximately 78% of all of the municipal generated in Mercer County is received at the facility and is currently transported to Butler County. When and if the landfill permit is approved Mercer's waste will likely be disposed at the site.

WASTE MANAGEMENT

The second operating transfer station in Mercer County is located in Greenville. This facility is owned and operated by Waste Management and serves the local Waste Management hauling division. Material from this facility is transported to Lakeview Landfill in Erie County and Northwest Landfill in Butler County.

OTHER METHODS OF DISPOSAL

Disposal facility reports indicate that Mercer County has a slightly higher than normal waste generation rate when compared to national trends. At face value,

this could lead one to believe that all of Mercer County's waste is captured. However, other data suggests that more waste is generated in Mercer County than is properly disposed.

When trailers from transfer operations cross the scales at a landfill, it is easy and common for the driver and/or the weighmaster to misreport the origin of the material as the location of the transfer station. In fact, the load could be comprised of waste from a variety of counties, which were consolidated for transport. Mercer County waste is known to be handled at two transfer stations that also receive materials from other counties. It is a safe assumption that at least a portion of the loads are erroneously credited and reported fully as Mercer County, rather than as mixed sources. The cumulative effect likely skews Mercer's waste generation rates.

A review of revenues and delinquency rates in local Mercer communities with single hauler contracts reveals that homeowners have been allowed to opt out of collection through the simple act of non-payment. Enforcement varies from municipality to municipality, but in general, it is weak. In more rural areas of the County, evidence suggests that not all homeowners in the County contract directly to have their waste removed.

Residents of rural communities often have more direct and practical methods for dealing with household waste than do their counterparts in urban areas. While some of these methods are environmentally acceptable, like backyard composting, others are questionable. The following section describes some of the less than desirable practices observed in Mercer County.

ILLEGAL DUMP SITES

Across the Commonwealth, every county is witness to the practice of illicit dumping. The presence of illegal dumps in a county or municipality raises significant concerns. Studies and surveys have shown that the mere existence of dumpsites breeds more dumping. Property values, public health and safety and the overall quality of life are all negatively affected. Commercial and residential development is often stifled. Tourism suffers.

Illegal dumping tends to be more prevalent in rural areas where offenders can discreetly discard unwanted items on private and public lands. However, urban and suburban neighborhoods are not unscathed by the issue. Poor availability of adequate waste collection services promotes illegal dumping. Allowing for voluntary use of the services that are available can be a major contributing factor also. Although waste collection in Mercer County is readily available and affordable, participation is, for the most part, voluntary. Even where collection is mandatory, enforcement is lax, leaving an opportunity for many households to avoid proper waste handling.

In 2005, Keep Pennsylvania Beautiful (formerly Pa CleanWays) completed a study, which identified the location of illegal dumping sites within Mercer County. This study is one in a series of similar projects conducted by Keep Pennsylvania Beautiful in Pennsylvania counties. A total of 143 sites were identified in Mercer County. A total of more than 150 tons of waste was estimated to exist at the sites. A significant amount of the material cataloged at the sites was regular household trash. Because comprehensive surveillance of the entire land area of the County was not possible for this study, it is suspected that the findings are representative of an even greater problem. This is particularly true since at least one or more open dumpsites were identified in all of Mercer's municipalities.

Cleanup of illegal dumpsites often falls to public works or road crews. The cost to local government to remove these abandoned materials is significant. Based on statewide clean-ups conducted by Keep Pennsylvania Beautiful, it is estimated that the cost can range from \$700 to \$1,000 per ton. The remedy can be costlier in the form of property taxes than the original cost of legally disposing of these materials. Ironically, offenders attempting to avoid waste collection and disposal fees, still pay in the end.

Stricter ordinances for waste storage and mandatory collection of municipal waste could eliminate a significant amount of roadside dumping. Enforcement and prosecution for illegal dumping in conjunction with public acknowledgement of offenders, has proven to be an effective deterrent. Many counties use a Joint Code Enforcement Officer whose services are shared and paid for by all municipalities. Groups like Keep Pennsylvania Beautiful and the Shenango River Watchers provide much needed labor and resources to prevent and remediate the damage done. Expansion and financial support of the activities of these organizations would be beneficial.

LITTERING

A gum wrapper randomly floats to the ground. A cigarette is extinguished and the filter remains long after the smoker has departed. The remnants of a drive-thru lunch are tossed from an automobile window. All of these simple acts have a lingering impact on our communities. *The American State Litter Scorecard: A Sociopolitical Inquiry into Littering and The Response Role of 50 American States* describes littering as an environmental crime that damages scenic environments, promotes accidents, harms livestock, and fuels a breeding ground for disease causing insects and rodents. It also lowers property values and deters economic development. Littering is as common on the streets of Erie, Pittsburgh, and Philadelphia as it is on the roadways of Pennsylvania's rural counties. Litterers are often unaware of the consequences of their behavior.

The cumulative toll of daily littering is visible in Mercer County. The limited availability of waste and recycling receptacles in public places can trigger littering behavior. Bottles, cans, paper and cigarettes strewn along the roadways and streets are often the result of, and a hindrance to, high tourist traffic. Mercer County communities should consider anti-litter campaigns. Many communities affiliate with Keep America Beautiful to initiate grassroots efforts in litter prevention. They provide tool kits and turnkey programs. Education, enforcement, and convenient disposal containers could help alleviate the issue.

OPEN BURNING

For generations of Western Pennsylvanians, the long-standing tradition of striking a match to ignite the family's garbage has raised little concern. Most individuals lack awareness of the environmental and health issues related to open burning. In the past, household garbage contained primarily paper, wood, and glass and thus, the practice was much less dangerous to one's health. Over the past 50 years there has been a dramatic increase in the volume of plastic and other synthetic packaging material, which have entered the waste stream. When burned these materials emit pollutants. According to *The Evaluation of Emissions from the Open Burning of Household Waste in Barrels: Volume 1. Technical Report, November 1997* published by the USEPA, the levels of emissions of toxic chemicals from a single household burn barrel are potentially equal to those from a well-controlled municipal incinerator burning thousands of tons.

The open burning of municipal solid waste is not condoned in Mercer County, but it is not commonly prohibited and the practice does exist. It is more tolerated in areas of the County with greater distances between neighbors. However, it is not uncommon to see burn barrels and pits in the backyards of homeowners in suburban municipalities, who not only have access to waste collection services, but may also be mandated to recycle. The reasons for open burning vary. The study, *Open Burning in Rural Northeastern Wisconsin: An Analysis of Potential Air Pollution* examined the motivations and behaviors associated with the burning of waste. The study found the major motivations for burning waste to be convenience, habit, avoided cost of trash collection, timesaving by not having to self-haul trash, and the long distance to disposal outlet. Adoption and enforcement of burning ordinances combined with ordinances requiring mandatory waste collection can minimize the practice.

SPECIAL HANDLING WASTES

Specialized methods of processing and disposal are required for select portions of the municipal waste stream. These include land application of biosolids, and thermal treatment or incineration of infectious chemotherapeutic waste.

MANAGEMENT OF BIOSOLIDS AND RESIDENTIAL SEPTAGE

In Mercer County communities with high population densities, the infrastructure exists to flow wastewater from residences and businesses through pipelines to treatment facilities. According to the *2006 Mercer County Comprehensive Plan*, these systems exist in and serve the communities around Sharon, Farrell, Hermitage, Grove City, Mercer, Greenville and Jackson. Here the wastewater goes through a number of physical, chemical, and biological processes that clean it and remove the solids. The results are biosolids. Biosolids are not raw sewage, but are the nutrient-rich organic materials derived from wastewater solids that have been stabilized to meet specific processing and quality control standards. Biosolids often are disposed in landfills. Some biosolids are land-applied as a fertilizer to help rejuvenate farmland, forests, and minelands.

In the absence of a public wastewater treatment system, homeowners and business must use on-lot treatment systems. Most commonly these systems utilize a septic tank that must be periodically emptied by a septage transporter. Residential septage can be managed in one of two approved methods. The first option is to transport the septage to a municipal or private wastewater treatment facility or a septage treatment facility where it can be properly treated prior to final disposal. Because facilities within a reasonable driving distance may not be permitted to accept septage, this is not always a viable option. An alternative then is to beneficially use the septage by land application at an agricultural or reclamation site.

TABLE 2-4 SEPTAGE TRANSPORTERS OPERATING WITHIN MERCER COUNTY

Septage Service in Mercer County	
Roto Rooter 137 East Shenango Street Sharpsville, PA 16150-2215	Peterman Septic Services 26 Everbreeze Drive Hadley, PA 16130-2836
Currie & Brown Septic Tanks 6964 East State Street, Hermitage, PA 16148	Hockenberry & Sons Septic 620 E Main Street Ext Grove City, PA 16127-6344

SEPTAGE TRANSPORTERS

In Pennsylvania transporters of residential septage must register with the PADEP. Information for each load of septage that is collected and transported is recorded by the transporter. Required information includes, at a minimum: the county and state where the waste was collected; the name and address of the hauler transporting the septage; the name and location of the transfer, processing, or disposal facility where the septage has been or will be delivered; the weight or volume of the septage; and a description of any handling problems

or emergency disposal activities. Although a report is not filed, the information must be made available upon request to PADEP inspectors.

Septage cleanouts are done on a periodic as needed basis. Therefore, homeowners contact the transporter of choice. It is common for transporters to cross county lines to provide such services. The PADEP can only identify haulers based on their origin, not on their service area. Therefore, many counties also require septage transporters to register their intent to operate within the county. Table 2-4 lists those registered septage haulers known to offer services within Mercer County.

Table 2-5 PA Infectious Chemotherapeutic Waste Transporters 2008

ADVANT-EDGE SOLUTIONS INC

927 RED TOAD RD
NORTH EAST, MD 21901

ALPHA BIO/MED SERVICES LLC

PO BOX 304
LEOLA, PA 17540-0304

BESTRANS INC

931 RED TOAD RD
NORTH EAST, MD 21901

CLEAN HARBORS ENVIRONMENTAL SERVICES INC

42 LONGWATER DR
NORWELL, MA 02061

ENV WASTE MINIMIZATION INC

14 BRICK KILN CT
NORTHAMPTON, PA 18067

HEALTHCARE WASTE SOLUTIONS OF PA LLC DBA GENESIS ENV

380 LOCUST ST
IND MANOR II
MCKEESPORT, PA 15132

JPS EQUIPMENT CO

PO BOX 788
5038A WEST CHESTER PIKE
EDGEMONT, PA 19028

STERICYCLE INC

1525 CHESTNUT HILL RD
MORGANTOWN, PA 19543

**UNIVERSITY OF PITTSBURGH OF THE COMMONWEALTH SYSTEM
OF HIGHER EDUCATION**

PUBLIC SAFETY BLDG FL 4
3412 FORBES AVE
PITTSBURGH, PA 15260

VEOLIA ES SOLID WASTE OF PA INC

6330 RT 219
BROCKWAY, PA 15824

WEAVERTOWN TRANSPORT LEASING INC

2 DORRINGTON RD
CARNEGIE, PA 15106

INFECTIOUS CHEMOTHERAPEUTIC WASTE MANAGEMENT

Transporters of infectious chemotherapeutic waste also fall within the ranks of those requiring a license in Pennsylvania. A stipulation of the license is that each transporter must report the origin and ultimate destination of the waste. Table 2-5 shows the infectious chemotherapeutic waste transporters that are located in

closest proximity to Mercer County or have a regional presence. Although no infectious chemotherapeutic waste transporters are based within the County, most companies operate within a wide service area, if not the entire state.

DISPOSAL SYSTEM CONCLUSIONS AND RECOMMENDATIONS

A review of the disposal activities in Mercer County reveals some interesting facts. The first finding is that Mercer County is a large exporter of waste with total reliance on facilities located in other counties and states. Waste collection, while available, is voluntary and often avoided in lieu of less desirable practices. Illegal dumping is still an issue, particularly in rural areas of the County. Littering is commonly visible. Open burning is still tolerated.

Moving forward, the County should create an awareness and sensitivity of how its current waste management practices impacts other counties and states. Increasing the number of homes that contract for waste collection services, could decrease open dumping and burning. Joining rural communities together for that purpose could reduce the overall cost of waste collection. At a minimum, municipalities should be encouraged to enact mandatory waste collection ordinances. Existing mandates for waste collection should be more stringently enforced.

State and County reporting systems provide a relatively accurate accounting of disposal destinations. However, inconsistencies and lax reporting techniques still exist. Therefore, it is suggested that the County investigate a more uniform reporting system to retrieve information from landfills and the companies who transport waste there for disposal.

To further improve the waste management program, it is recommended that the County seek to increase education, and support and rekindle citizen interest in the volunteer organizations active in litter prevention and cleaning up illegal dumps.

Many of these recommendations along with potential methods of implementation are discussed in more detail in Chapter 5.

Chapter 3

Disposal Capacity Needs

GUARANTEES FOR THE FUTURE

On a yearly basis, landfills that are permitted to operate in Pennsylvania must submit an Annual Operations Report to the PADEP. The report summarizes the disposal activity that occurred during the calendar year. In addition to documenting the total waste received at each landfill from all sources, the report also indicates the varied types of waste streams received for disposal along with the origin of the waste. To determine disposal trends at the landfills designated in the Mercer County Municipal Solid Waste Plan and to assess the degree of future capacity assurances needed, these reports were reviewed.

As part of the report each facility calculates its “remaining available capacity.” Although tracking and monitoring of municipal waste is typically done by the ton, it is the density and volume of material that has impact on the life or capacity of a landfill. Therefore, this process determines the unfilled volume of space measured in cubic yards, which is available for disposal in the permitted area of the landfill. What is not factored into the capacity reported is the future potential for additional space, which may become available through permit approvals or expansions of currently un-permitted areas of the landfill property. Act 101 requires Mercer County to secure a portion of this “available capacity” sufficient to handle the municipal waste originating in the County for a 10-year period.

This chapter presents the estimated future disposal capacity required for Mercer County. It is based on current reported disposal quantities, adjustments based on related observations and comparisons to surrounding counties, possible future changes in the rate of municipal solid waste generated per capita, and projected changes in population.

DISPOSAL FACTORS

In the economic climate that exists during this planning process, there is a clear

downward trend in tons received for most if not all of the landfills designated in the Mercer County Municipal Waste Management Plan. It would be logical to conclude that a number of landfills designated should have no lack of current or future disposal capacity. On the other hand, the waste disposal industry is a dynamic proposition. Just as volumes diminished, it is safe to assume that these facilities will seek out new sources of waste. Unforeseeable changes in operational status, regulatory constraints, catastrophic events, windfall contracts or economic conditions could alter those estimates and trends.

Permit modifications and renewals are not the only issues that impact the life of a landfill. Its available capacity is affected by operational practices such as compaction ratios; density of material received; increases in maximum daily volumes; poor use of daily cover material; and unforeseen construction difficulties. Each and every one of these can decrease the space available for disposal. A shift in ownership at one or more of the landfills designated in the Plan could also alter the utilization of the air space, and thus its availability to Mercer County. This could be significant if the new owner had a different market strategy or need to cater to its own internal disposal needs.

Theoretically, the intention of any operator is to maximize use of the entire footprint of the land owned. Claims are often made that a facility has a life, which extends beyond the existing permit. Many landfills with current disposal capacity agreements might not be able to continue to fulfill those obligations without expansions of their permitted areas. With changing regulatory requirements and public views, there are no guarantees that such expansions will be approved.

When these uncertainties are considered, the County can justify seeking additional capacity to ensure that its future needs will be protected.

PROJECTED FUTURE ANNUAL CAPACITY

The disposal needs for municipal solid waste originating in Mercer County were estimated for the next 20 years. The projections were determined by using a combination of information provided by the County, and common accepted assumptions for municipal solid waste generation.

TABLE 3-1 POPULATION PROJECTIONS: 2000-2030

Pennsylvania State Data Center Population Projections: 2000-2030							
County	April 1, 2000 Census	July 1, 2010 Projection	July 1, 2020 Projection	July 1, 2030 Projection	% Change 2000-2010	% Change 2000-2020	% Change 2000-2030
Pennsylvania	12,281,054	12,540,718	12,871,823	13,190,400	2.1	4.8	7.4
Mercer	120,293	120,047	121,376	122,967	-0.2	0.9	2.2

Population

The Pennsylvania State Data Center at the Pennsylvania State University has produced state and county population projections for the Commonwealth of Pennsylvania. Presented in Table 3-1 are county totals from the 2000 Census and projections for 2010 to 2030. These projections were published in 38 Pa. Bulletin. 4721, Saturday, August 30, 2008.

Reported Disposal Quantities

For Mercer County, reported data for the year 2008 from PA DEP landfill Annual Operations Report was used and supplemented with information provided by Carbon Limestone Landfill in Ohio.

FUTURE WASTE GENERATION RATE

The Franklin Study commissioned by the USEPA, tracks and monitors national municipal solid waste generation and disposal rates. In recent years, the generation rate per capita has been about 0.85 tons/person/year with little variation. Mercer County's rate trends slightly higher but with little change. For projection purposes, it was assumed that per capita generation rates will remain unchanged.

Table 3-2 presents projected disposal capacity requirements for the years 2010 through 2030. The figures are based on a constant per capita generation rate with adjustments due to projected population changes. For Mercer County, the quantity is based on the estimated 2007 population.

WASTE FLOW CONTROL

The control of the waste commodity, specifically where it can be disposed, is a debate that continues in spite of a series of legal cases and court rulings. In a rigid interpretation and enforcement of flow control, some jurisdictions, governmental laws or policies require waste materials to be disposed at one designated disposal facility. Typically, this occurs when the government entity has a vested interest in a landfill, transfer station or incinerator. Supporters argue this to be an effective tool to ensure proper management and funding of solid waste programs. Those in opposition see it as an artificial inflation of rates, and an interference with free trade and interstate commerce.

A form of waste flow control has existed in the Mercer County Municipal Solid Waste Management Plan. However, the requirements were less restrictive than those implemented for the purpose of supporting a publicly owned facility as described above. Mercer County directed waste transporters to use a wide variety

TABLE 3-2 PROJECTED DISPOSAL CAPACITY REQUIREMENTS

Mercer County Projected Disposal Capacity Requirements					
2010 through 2030					
Year	Population	MSW	C&D	Sludge	Total
2010	120,047	104,260	387	1495	106,142
2011	120,115	104,319	387	1496	106,202
2012	120,183	104,378	387	1497	106,262
2013	120,250	104,436	387	1498	106,322
2014	120,318	104,495	388	1498	106,382
2015	120,386	104,554	388	1499	106,441
2016	120,584	104,726	389	1502	106,617
2017	120,782	104,898	389	1504	106,792
2018	120,980	105,070	390	1507	106,967
2019	121,178	105,242	390	1509	107,142
2020	121,376	105,414	391	1512	107,317
2021	121,586	105,597	392	1514	107,503
2022	121,797	105,780	392	1517	107,689
2023	122,007	105,962	393	1520	107,875
2024	122,218	106,145	394	1522	108,061
2025	122,428	106,328	395	1525	108,247
2026	122,536	106,421	395	1526	108,342
2027	122,644	106,515	395	1527	108,438
2028	122,751	106,609	396	1529	108,533
2029	122,859	106,702	396	1530	108,628
2030	122,967	106,796	396	1531	108,724

of designated landfills with signed contractual agreements for the disposal of municipal solid waste generated within Mercer County's boundaries. Local licensing ordinances and regulations (allowable at the time) established the requirements for compliance. The Plan revision continues to follow an open waste flow control philosophy with minor amendments to update its ordinances to repeal licensing (superseded by Act 90) and improve its tracking and monitoring practices.

Local market conditions and participants were considered in the establishment of Mercer County's form of waste flow control. Distances, daily access to capacity and business practices were all reviewed. The use of a fair open and competitive process is also a major legal factor when designating select facilities for disposal. Therefore, court interpretations and rulings that establish if, when, and how flow control can be implemented were determining factors.

The sources for legal opinion and the cases that are typically cited include:

- ❖ Article I, Section 8, Clause 3 of the U.S. Constitution (the "Dormant" Commerce Clause)
- ❖ *Pike v. Bruce Church, Inc.*, 397 U.S. 137 (1970).
- ❖ *Harvey & Harvey v. Chester County*, 68 F.3d 788 (3d Cir. 1995)
- ❖ *C&A Carbone, Inc. v. Town of Clarkstown, New York*, 511 U.S. 383 (1994)
- ❖ *United Haulers Association Inc. v. Oneida-Herkimer Solid Waste Management Authority*, 127 S.Ct. 1786 (2007)

ALTERNATIVE DISPOSAL AND PROCESSING TECHNOLOGY

Western Pennsylvania and Ohio host numerous land disposal facilities. Therefore, based on the proximity and cost associated with this disposal methodology, this option has always been an affordable and logical waste management solution for Mercer County. In spite of a growing interest in composting and waste to energy options, currently, no known alternative outlets for disposal, other than captive facilities, operate within Mercer County. Sometimes during the request for disposal capacity process, such alternatives are presented. These possibilities could provide potential reductions in operational costs or environmental risk and thus must be considered in the review process.

IMPACT OF RESIDUAL WASTE AND OUT-OF-STATE WASTE ON CAPACITY

Other than those landfills operating in Ohio, out-of-state waste does not contribute significantly to the overall volume accepted for disposal at the landfills currently designated in Mercer County's Municipal Solid Waste Management Plan. Although the network of Interstate Highways in Western Pennsylvania provides easy access and Constitutional support for Interstate Commerce makes it more difficult for states to enact legislation controlling the flow of waste from outside its boundaries, material exported from continuous states is not a market factor at this time.

A steady decline in the volumes of out-of-state waste disposed has been realized throughout the Commonwealth. A change in modes of transportation now used by many of the largest waste exporting states; the cumulative negative impact of state fees on the affordability of airspace in our region; and the current state of the economy have contributed to that decline. Nevertheless, it is still prudent to consider that, even if it is at a lesser rate, out-of-state waste could occupy airspace now thought available to the County.

Non-municipal waste streams from Mercer County and outside sources also compete for disposal capacity. Mercer County has a strong industrial heritage. Although the types and number of manufacturers are different than historically realized in the County industries still produce notable quantities of waste or residues from the manufacturing process. Residual waste from Mercer as well as from other counties is accepted at each facility designated in the Plan in significant quantities.

On any given day, a fluctuation in the amount of residual waste transported to a facility, especially from remediation projects, could diminish the permitted daily volume available for Mercer County's Municipal Waste.

REQUESTING FUTURE DISPOSAL OR PROCESSING CAPACITY

From analyses of conditions, it was determined that the County should advertise and accept proposal's from facilities for additional disposal capacity. The PADEP was notified of the County's determination and a formal request was advertised nationally in the industry trade journal, Waste and Recycling News in the July 19, 2010 issue. Proposals were solicited. Figure 3-1 shows the public notification.

FIGURE 3-1 SOLICITATION FOR MUNICIPAL SOLID WASTE DISPOSAL CAPACITY

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REQUESTS PROPOSALS FOR
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MERCER COUNTY BOARD OF COMMISSIONERS,
MERCER, PENNSYLVANIA

In accordance with Pennsylvania Code Title 25. Environmental Protection. Chapter 272.225 Municipal Waste Planning Recycling and Waste Reduction (as amended December 22, 2000), Mercer County Board of Commissioners has determined that additional waste disposal or processing capacity for municipal solid waste (MSW), including construction/demolition (C/D) waste and sewage sludge generated within the County is required for a period covering the next ten years. The Mercer County Board of Commissioners is hereby soliciting proposals for disposal capacity for County generated MSW, to begin on January 1, 2011.

SOLICITATION FOR MUNICIPAL SOLID WASTE DISPOSAL CAPACITY

The Mercer County Board of Commissioners will receive sealed proposals until 3:00 p.m., Prevailing Time on Thursday, August 12, 2010. Copies of the Request for Proposals (R.F.P.) may be purchased on or after July 12 only from Mr. Timothy Hofius, Chief Clerk, Mercer County Courthouse, Mercer PA 16137-1227 by pre-payment of a non-refundable amount of \$50.00 per proposal. Proposers should make checks payable to Mercer County. All sealed proposals must include an executed Representations and Certifications Affidavit as provided in Section 5 of the proposal package. All proposals must be made on the Proposal Forms and be in accordance with the Requirements for Submitting Proposals contained in the Request for Proposals. The Proposer is required to submit one (1) original and two (2) copies of the Proposal to Mercer County at the address listed below. Envelopes containing the proposals must be sealed and clearly labeled to show the name and address of the Proposer, the statement "Proposal Disposal Capacity" and be addressed to: Mercer County Board of Commissioners, Mercer County Courthouse, Mercer PA 16137-1227. Attention: Mr. Brian Bader, Chairman. Proposers may withdraw their proposal at any time prior to the scheduled closing time for receipt of proposals. Mercer County Board of Commissioners reserve the right to reject any or all proposals, to waive any irregularities and/or information in any proposal and to make an award in any manner, consistent with applicable laws, which is deemed to be in the best interest of the County.

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Proposals must be received by
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Proposals submitted to Purchasing Division, 1st Floor,
City Hall, 100 East Santa Fe, Olathe KS 66061

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Chapter 4

Status of Mercer County Recycling

CHALLENGES AND ACCOMPLISHMENTS

The methods of collection and processing have advanced and the variety of materials recovered has expanded but the purpose for recycling remains as basic as ever. Recycling has been an important element in the overall waste management schematic for Mercer County for decades. Waste diversion is practiced by residents, businesses, and government agencies. Recycling is one thing that the average citizen can do that has a direct impact on the conservation of energy, natural resources, pollution prevention, and climate change. It also creates jobs and reduces the costs of manufacturing.

This chapter describes Mercer County's recycling accomplishments. It acknowledges those entities from both the private and public sectors that are involved in the provision of recycling services. Also explored are the constraints often encountered in the development and implementation of a rural recycling operation. The current performance of the recycling activities and a comparison to national and state trends is included. Issues that must be considered in the development of cost effective collection programs are also discussed.

COMPLYING WITH STATE RECYCLING MANDATES

In Mercer County, several municipalities with certain levels of population and density are required by the Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101) to implement a recycling program. Each of these municipalities must adopt ordinances that include provisions for mandatory recycling by residents and commercial establishments, as well as mandatory waste collection. These include the Cities of Sharon, Farrell, Hermitage, the Boroughs of Greenville and Grove City. All recycling programs and activities implemented at the County level and in other municipalities are strictly voluntary and are not required by law.

AN OVERVIEW OF CONDITIONS

The opportunity to recycle in Mercer County does exist. For some it requires the simple effort of segregating certain materials otherwise bound for disposal and placing all the recyclables together in a bin or cart for collection at the curb. For others, it requires segregating the materials, sorting them by categories and transporting them to a near-by drop-off collection site. Still others have more limited access and must travel greater distances to find outlets for their segregated materials. Material from these areas flows to traditional scrap yards; is transported to remote drop-off sites in other municipalities, or due to the constraints of time and distance most frequently is disposed. A commonality observed in all instances is that, given the convenient opportunity, residents of Mercer County will recycle and when there are obstacles they will not. These same conclusions are well documented in rural recycling programs throughout the nation.

A local citizenry's willingness to pay, whether via taxes, direct or indirect fees, is an equally strong determining factor in their desire to recycle. Additionally, for elected officials a tax base, which is already overwhelmed by the demands of failing infrastructures and other social services, the monies available to subsidize recycling programs for local residents is reduced. Therefore, not only convenience but also affordability is necessary in such programs. Labor, time, money and equipment are all necessary components that must be taken into account when developing programs in Mercer County.

FEASIBILITY OF RURAL RECYCLING

The viability of recycling in a rural community is an often-debated issue. Studies have been conducted to explore that issue. Elements commonly evaluated include program design, public attitudes, education and of course cost effectiveness. The conclusions confirm with cautionary statements that rural recycling is feasible provided that the types and sources of funding available are commensurate with the program structure. Additionally, the program must be user friendly. Findings from three of those studies are summarized here.

The first study deals primarily with how and why certain people utilize a recycling program, while others do not. It offers insight into conditions that would make Mercer County programs most effective. *The Effects of Behavior and Attitudes on Drop-off Recycling Activities* published in January 2010 in Resources, Conservation and Recycling outlines the results of a recent study on the profile of people who utilize drop-off recycling sites. It also analyzes the factors influencing their site usage. It does not evaluate direct costs or other economic factors.

The study concluded that convenience and familiarity with the location were of prime importance. An interesting finding was that in communities where people perceived recycling to be a social norm usage was higher. It infers that targeted and effective education campaigns can create peer pressure sufficient to drive others to recycle. Interestingly, the study found that beliefs about the environmental effects of recycling were not significantly related to the degree of participation and use of the program.

The second study, *Case Studies in Rural Solid Waste Recycling* was conducted in 1987 for the Ford Foundation by the Minnesota Project, a community development organization based in St. Paul, Minnesota. The third study *Recycling Programs: Attitudes, Costs, and Designs* was prepared for the Rural Economic Analysis Program (REAP) at Virginia Polytechnic Institute was prepared in 1997.

The Virginia study examined several rural counties, which were mandated to recycle by state laws. The Minnesota project investigated random rural programs that had been operating in six states for 5 to 15 years. A more practical and pragmatic approach to evaluating cost factors was taken by the Virginia Polytechnic Institute. Aside from direct and obvious costs, researches also took into consideration implicit costs such as the time and effort to sort and prepare materials, the expense of gas to transport materials to a collection site, etc. These real costs are often ignored in a comparative cost analysis of curbside and drop-off programs. The Ford Foundation's study relied heavily on the avoided cost of disposal to determine the economic feasibility of the programs. Although it did not include in its calculations other avoided costs, such as clean up of illegal dumping, it did recognize them as influencing factors.

Despite the varied methods and approaches used by the researchers, certain commonalities were evident in the two studies that focused more on economic factors. A combined sampling of the conclusions offered in those research projects follows. In evaluating the current recycling opportunities available in Mercer County, as well as planning for future enhancements to the program, the findings of these studies should be considered.

- 1) First and foremost the studies stressed the need to communicate that recycling is not free and that residents ultimately pay those costs. The risk of financial shortfalls and need for local subsidies, whether through user fees, taxes, or other mechanisms must be made clear.
- 2) Making citizens aware of all of the costs associated with a recycling program was deemed essential. An understanding of high implicit costs (personal time, storage space, inconvenience, fuel,) can sway the public into opting for the higher direct cost of a curbside collection program over the indirect costs associated with a drop-off program.

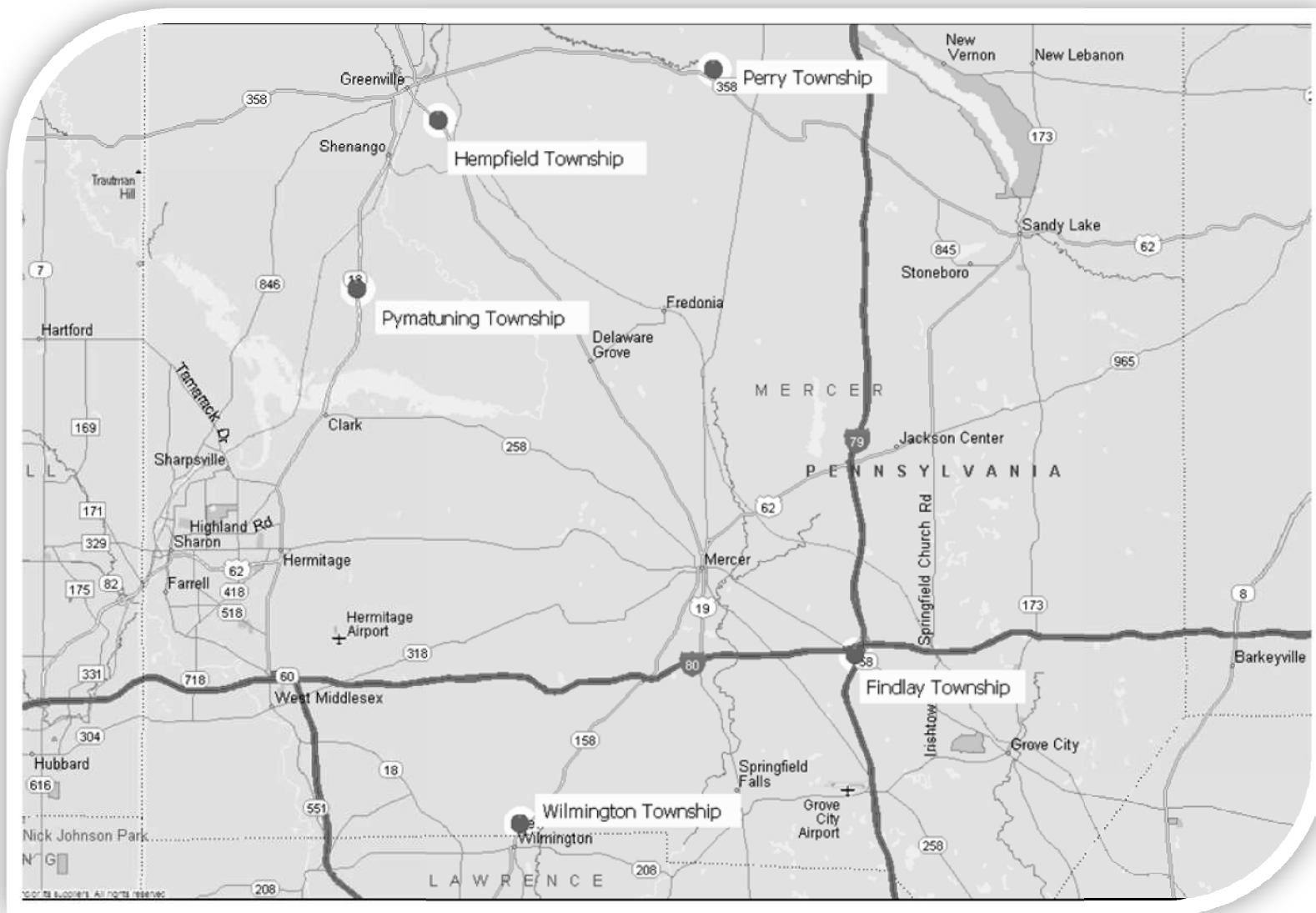
- 3) Programs were deemed more successful when the unit of government responsible for waste collection and disposal was also the one designated with the responsibility for recycling. In other words, in states like Pennsylvania where municipal code delegates that authority to local municipalities, it makes sense to include recycling service as part of their waste collection contracts, or in subscription areas as a mandate in their ordinances, etc. The greatest success was seen when curbside collection of waste is accompanied by curbside collection of recyclables; or in remote rural areas drop-off convenience centers collect both waste and recyclables.
- 4) It was recommended that these services should be treated as a public utility, like sewage and water and should be similarly billed either by the municipality or the service provider.
- 5) Connecting the cost of disposal to the benefits of recycling using pay as you throw programs (PAYT) was suggested as a means to control costs and increase participation.
- 6) Public education and awareness campaigns were stressed to increase acceptance of policies, procedures, and the willingness to pay.

It is important to note that both of the economic focused studies were conducted prior to the advent of current technologies that have increased the efficiencies and reduced the cost of rural recycling. Split body vehicles now allow for co-collection of waste and recyclables in the same vehicle and reduce the number of vehicles necessary to service the same collection route. Single stream recycling currently enables all materials to be collected together without the need for separate vehicle compartments and excessive sorting by residents. This can extend the length of a route and in some instances the frequency of drop-off and/or curbside collection. Automated collection, whether full or semi, more commonly provides for the use of larger carts that reduce the frequency of curbside collection. Nevertheless, even without the availability of those advantages, both studies found that rural recycling could be implemented and that costs could be controlled. These technologies are available throughout Mercer County from many service providers and could make a difference in extending recycling to those areas once thought unserviceable.

PAST CHALLENGES AND CURRENT ACTIVITIES

Recycling services and activities have evolved since the 2000 revision to the Mercer County Municipal Solid Waste Management Plan. At that time, many municipal programs either were out of compliance or out-dated in their approaches. Programs were completely lacking in some cases. The idea of a countywide collection system was in the incubator stage. Some of those conditions still exist today. Many others have seen significant improvements.

FIGURE 4-1 LOCATION OF COUNTY DROP-OFF SITES



Slight modifications have helped others to survive. This section describes the current status of recycling programs operating throughout Mercer County.

MERCER COUNTY DROP-OFF COLLECTION PROGRAM

In 2000, the Mercer County Solid Waste Authority had a dedicated source of funding for recycling operations from landfill tipping fees. Therefore, the development and expansion of drop-off collection services seemed to be a viable option to improve the level of recycling participation throughout Mercer County. Due to a number of factors, mostly related to costs and revenues, the Authority's program encountered some major difficulties, was modified, and subsequently absorbed as a direct function of the County. Details on the factors and conditions that prompted those changes can be found in Appendix I.

Mercer County continues to support a recycling drop-off program. Materials accepted include newspapers, corrugated cardboard and other forms of paperboard, magazines, junk mail, plastics, glass bottles and jars, aluminum and bi-metal beverage and food cans. The program operates under contract with a local service provider. Sites once existed in mandated municipalities and near others that had curbside recycling available. To control costs and to make those curbside programs more effective, the drop-off program became more limited in scope than originally operated. Today it targets areas of the County where the opportunities for recycling are less available or otherwise non-existent. Figure 4-1 shows the locations of drop-off sites currently included in the Mercer County program

MUNICIPAL PROGRAMS

Access to recycling is made available to residents by many municipalities. A combination of mandatory and voluntary recycling programs exists in Mercer County municipalities. Curbside and drop-off collection options sometimes operate both within the same municipality. The majority of Mercer County municipalities are categorized as rural. When the challenges of rural recycling are considered, the attempts to make recycling accessible in these areas are admirable. Some programs fare better than others. Participation and recovery vary from one community to another in spite of seeming similarities in program structures. Demonstrated results and commentary are provided later in this chapter.

For the most part, materials are collected in one of three ways. In a single stream system, glass bottles and jars, aluminum and bi-metal cans, plastics, papers and cardboard are mixed together in the same container and vehicle body. In other programs, bottles, jars, cans, jugs, plastics are collected commingled, or mixed

together, but no paper is included. In dual stream programs, paper and often cardboard are added to the mix but collected in a separate container and in a separate vehicle or compartment than the commingled items. In some dual stream programs residents are asked to put papers in a bundle on top of the bottles, jugs, and cans in their recycling bins.

Historically, Mercer County municipal contracts for waste and recyclables have been strikingly similar. Commingled or dual stream recycling is offered using 13 or 18-gallon recycling bins. Subtle nuances may exist, but primarily the contracts have allowed for the collection of unlimited volumes of waste at one flat rate, with or without rental of a wheeled container/cart. Unlimited waste collection typically provides a disincentive to recycling. Options for pay by the bag are often included for low volume waste generators. However, there is normally no requirement to ensure that pay by the bag customers actually purchase bags.

Enforcement mechanisms are rarely if ever implemented to motivate residents to participate at any level in waste collection or recycling. These conditions are magnified where voluntary subscription is prevalent. Improvements to program enforcement and rate structures could increase recycling performance and reduce the overall cost of recycling for the majority of Mercer County residents.

MANDATED PROGRAMS

Five Mercer County municipalities are mandated by Act 101 to operate residential curbside recycling and leaf waste collection programs. These include the City of Hermitage, the City Of Sharon, the City of Farrell, the Borough of Grove City, and the Borough of Greenville. Each of these communities has entered into a single hauler contract that incorporates municipal waste and recycling collection into a bundled service package. Most of the programs are typical of those described previously.

The collection of leaves, or in some cases yard waste collection that also includes grass clippings, may be included in the hauler's contract. Municipal employees may also provide this service. Although brush, twigs, etc are considered leaf waste, and must be segregated from municipal waste in mandated municipalities, most of the municipal contracts require the hauler to collect this material along with the garbage. Some exceptions exist, but primarily only during other seasonal collections.

Leaves are collected seasonally by the City of Sharon. The leaf waste is collected by the same transporter contracted to provide curbside waste and recycling services.

Grove City Borough provides once per month collection of yard debris, excluding grass clippings, from April through September. Leaves must be bagged or containerized and brush must be cut and stacked. The Borough manages the material at its own compost site.

Greenville residents use compostable bags for leaf waste, which is collected seasonally by the Borough's waste collection service provider. A compost site located at the Greenville Airport processes the material. The public works crew makes a monthly pickup of 3" or larger tree limbs, which are chipped and hauled to the compost site for processing. The compost is utilized throughout the Borough for landscaping.

The City of Hermitage has an extensive yard waste collection program, which is described in more detail in the next section.

RESULTS ORIENTED IMPROVEMENTS

A commendable change was made in the Shenango Valley where communities shifted from having to pay for each bag of recyclables, a clear disincentive to participation and recovery, to the use of curbside recycling bins. The bins were acquired by the Mercer County Solid Waste Authority through a Section 902 grant and distributed to the municipalities.

One of the mandated communities recently made major enhancements to its overall program. In order to fully comply with the provisions of Act 101 and Act 140, the City of Hermitage determined that an overhaul of its existing waste collection contract and policies was long overdue. The staff and council demonstrated leadership in being the first municipality in Mercer County to transition to a fully automated integrated waste management system.

The program incorporates a variable rate, pay as you throw structure. Residents pay one base fee to cover the collection of waste, recyclables and yard debris. Each home receives a cart for recyclables and one for yard waste. Recyclables are collected weekly using the single stream method. Yard waste is collected weekly from April through November and transported to a private sector compost site. Disposal options vary based on preference and need. Residents select one of three disposal options: a 96-gallon cart, a 35-gallon cart, or bags. Stickers are sold for the disposal of bulk items and white goods.

In spite of some anticipated public intolerance for change, reports of overall customer satisfaction in Hermitage are the norm. The program dramatically increased the recovery of recyclables. Reported tonnages from 2008 to 2009 nearly doubled. During the planning process, the Solid Waste Advisory Committee acknowledged the Hermitage system as a model program for other communities to follow.

VOLUNTARY PROGRAMS

Residents in twelve municipalities have access to voluntary curbside collection services. Four others sponsor local drop-off sites. Several of these programs are the result of a municipal contract. However, even more are provided directly by the waste hauler as part of the residential subscription waste collection service. Following is a breakdown of the voluntary municipalities and the types of programs they offer.

CURBSIDE CONTRACT

Clark Borough
Jackson Center
Mercer Borough
Sharpsville Borough
West Middlesex Borough
Wheatland Borough

CURBSIDE SUBSCRIPTION

Jackson Township
Liberty Township
Pine Township
Sandy Lake Township
Springfield Township
Worth Township

DROP-OFF CONTRACT

Delaware Township
Fredonia Borough
Jefferson Township

DROP-OFF SUBSCRIPTION

Jamestown Borough

COMMERCIAL & INSTITUTIONAL RECYCLING

The contribution made by commercial and institutional establishments in meeting Mercer County's recycling goals is important. For most large retail establishments, recovering and processing the corrugated cardboard generated in their operations has been a standard business practice for years. Evidence that commercial recycling occurs at these major retailers is prominent in the PADEP annual reports submitted by the municipalities where these stores are located. It is also common for hospitals, government agencies and legal offices, which are most sensitive to privacy protection laws, to utilize the services of a document destruction company. Data exists showing the prevalence of document destruction services has grown in Mercer County. In turn the volume of office paper, which is ultimately recycled in the process, has increased.

Smaller retailers, businesses, schools, and other institutions also recycle. Reported activity at this level is not limited to mandated municipalities. The degree of participation and the actual types of businesses that tend to recycle has not been monitored closely. A transporter ordinance, which requires transporters of recyclables to report their activities to the County on a quarterly basis, will increase the depth and validity of the data collected. This will allow the Recycling Coordinator to target efforts to increase recycling in commercial sectors with the highest projected return.

PRIVATE SECTOR RECYCLING SERVICES

Government sponsored programs are not stand-alone outlets for recycling in Mercer County. In fact, the private sector owns the majority of collection and processing equipment and facilities necessary to manage the recyclable materials. There are private sector drop-off collection sites and scrap yards that accept recyclables directly from the general public. Many waste transporters engage in recycling collection as a value added service to their residential and commercial customers. Broker transporters buy material from large retail establishments. Additionally, document destruction companies ultimately recycle the paper they process on behalf of their customers.

ACCOMPLISHMENTS AND EXPECTATIONS

In 1986, the USEPA first commissioned a project to research the source and disposition of waste generated in the United States beginning with historical data from 1960 and thru 1986. The Characterization of Municipal Solid Waste in the United States was prepared and has been updated over the course of years by Franklin Associates LTD., of Prairie Village, Kansas. It is commonly referred to as "The Franklin Study." In its most recent version the name of the report has been revised. It is now entitled Municipal Solid Waste Generation, Recycling and Disposal in the United States: Facts and Figures for 2008. The report does not specifically address local and regional variations in the waste stream. Neither does it offer sophisticated models for determining the life cycles of including or excluding certain materials from a program. However, the data in the report is considered reliable enough to develop estimates and comparisons for basic planning purposes.

PERFORMANCE BENCHMARKS

Arguments occur over the validity of the boasts and accomplishments often claimed by communities and organizations. Statistics and methods of measurements of recovery and diversion can vary drastically. Therefore, minor results can sometimes be portrayed as major achievements. In discussions and analyses of waste generation, composition, and recycling, it is important to establish a common ground so that comparisons and interpretations of available data are accurate and meaningful. Therefore, the USEPA requested that all state regulatory agencies use the same criteria in reporting waste generation and recovery rates. This allows both the federal and state agencies to establish realistic goals for recycling and monitor the actual performance of recovery programs. Pennsylvania currently requires counties to report using the USEPA methodology. Many of the assumptions in the USEPA formulas utilized in these reports have been derived from the findings of Franklin Associates.

Over the years, the series of the updates published have reflected changes in generation and recovery trends based on economic conditions and the regulatory climate. Actual data often contradicts predictions made in previous years. Planning projections are therefore dependent on the trends reflected in the updated version utilized. To determine the impact of Mercer County's combined recycling efforts, its municipal solid waste generation and recycling recovery rates were compared to national figures based on the Franklin Study data for 2008, the most recent available.

LOCAL RESULTS

This section reviews the current and historical data resulting from reported recycling activities in Mercer County. It compares the performance of the overall County to national figures. It also looks at specific municipal programs and offers some insight into their performance.

TABLE 4-1 MERCER COUNTY COMPARED TO NATIONAL AVERAGES

Mercer County Reported Recovery versus Expected Results						
Material	Expected	Actual Reported Tons				
	2008	2009	2008	2007	2006	2005
Glass Containers	1078.1	464.5	471.2	504.5	557.8	586.3
Aluminum	276.2	91.8	99.9	84.6	153.9	135.2
Bi Metal	556.3	195.7	191.3	197.5	154.4	109.3
Plastic #1 thru #7	663.7	129.1	120.1	134.5	202.3	110.9
Plastic #1 and #2	498.7	129.1	120.1	116.0	169.6	81.1
Paper:						
Newspaper	2965.6	1269.8	1261.3	1220.5	699.2	702.4
Commercial Printing	844.0	47.6	182.2	40.7	898.7	769.0
Office-type Papers	1645.8	737.4	788.4	372.8	295.7	241.7
Corrugated Boxes	8731.8	7409.7	6868.2	5365.0	6736.8	5540.6
Bags and Sacks	168.8	0.0	0.0	4.8	0.0	0.0

Table 1 presents recycling data from the PADEP Annual Reports submitted by Mercer County from 2005 through 2009. This information was obtained from the ReTRAC, the software reporting system used by the PADEP. It presents an

analysis of the Mercer County municipal solid waste recycling quantities as compared to national figures based on data found in *Municipal Solid Waste Generation, Recycling and Disposal in the United States: Facts and Figures for 2008*, the most recent title and version of the Franklin Study. The first column in the table lists categories of materials in municipal solid waste (MSW) that are included in recycling programs in Mercer County. The next column entitled "Expected " presents the expected quantities of the materials to be recycled in Mercer County if recovered at the same rate, as they are nationwide. The final columns show the reported tonnages for each year.

RECOVERY OF TRADITIONAL RECYCLABLE MATERIALS

In order to compare Mercer County's performance to the results of the Franklin Study, the numbers in the study need to be analyzed to derive the figures that are comparable to the recycling rates reported by Mercer County. This analysis is required because the Franklin Study groups the materials in the national solid waste profile in categories different than the categories reported by Pennsylvania counties. For example, Mercer County reports numbers for glass recycling that are primarily the result of collecting bottles and jars (glass packaging). In contrast, the Franklin Study includes in its glass totals not only glass packaging, but also glass contained in durable goods and products. Thus, in order to use the data from the Franklin Study for glass generated, recycled and disposed it is important to identify those figures pertaining to glass containers and not include the numbers for all glass found in the municipal solid waste stream

TABLE 4-2 PERCENTAGE OF EXPECTED RECOVERY

Mercer County Percentage Achieved of National Norms						
	Expected Tons 2008	2009	2008	2007	2006	2005
Glass Containers	1078.1	43.1%	43.7%	46.8%	51.7%	54.4%
Aluminum	276.2	33.2%	36.2%	30.6%	55.7%	48.9%
Bi Metal	556.3	35.2%	34.4%	35.5%	27.8%	19.6%
Plastic #1 thru #7	663.7	19.4%	18.1%	20.3%	30.5%	16.7%
Plastic #1 and #2	498.7	25.9%	24.1%	23.3%	34.0%	16.3%
Paper:						
Newspaper	2965.6	42.8%	42.5%	41.2%	23.6%	23.7%
Commercial Printing	844.0	5.6%	21.6%	4.8%	106.5%	91.1%
Office-type Papers	1645.8	44.8%	47.9%	22.7%	18.0%	14.7%
Corrugated Boxes	8731.8	84.9%	78.7%	61.4%	77.2%	63.5%
Bags and Sacks	168.8	0.0%	0.0%	2.8%	0.0%	0.0%

Table 4-2 shows Mercer County's recovery performance as a percentage of the national norm for the years 2005 through 2009. This number is not the recycling rate, but rather the degree to which Mercer County compares to the national recovery rate. As shown, for most materials, reported amounts are less than average. A more detailed explanation for each material follows.

GLASS

The estimated annual quantity of waste glass generated nationally in 2008 was 12.15 million tons per year. Of this, 10.05 million tons per year of glass was in the form of clear and colored containers available for recycling; 2.81 million tons per year were recovered. Glass containers constituted about 4.03% of the total municipal waste generated and were recovered nationally at the rate of 28.0%. Residential sources generate about 81% of the glass containers contained in MSW.

Based on population it is estimated that 3,856 tons of waste glass packaging were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 1,078 tons would be expected to be recovered. Based on recycling reports, the quantity of glass recycled in 2008 was estimated to be 471 tons, about 44% of the national norm. All of this material was collected from residential sources

ALUMINUM

The estimated annual quantity of waste aluminum generated nationally in 2008 was 3.41 million tons per year. Of this 1.53 million tons per year was contained in durable and nondurable goods and was not generally available for recycling. Thus, 1.88 million tons per year of aluminum was in the form of packaging available for recycling; 0.72 million tons per year were recovered. Aluminum packaging constituted 0.75% of the total municipal waste generated and was recovered nationally at the rate of 38.3%. Residential sources generate about 81% of the aluminum packaging contained in MSW.

Based on population it is estimated that 721 tons of waste aluminum packaging were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 276 tons would be expected to be recovered. Based on recycling reports, the quantity of aluminum cans recycled in 2008 was estimated to be 100 tons, about 36% of the national norm.

BIMETAL

Bimetal refers to tin cans, which are over 99% steel. Bimetal cans are included in the Franklin study in the category of ferrous metal wastes. The estimated annual quantity of ferrous metal wastes generated nationally in 2008 was 15.68 million tons per year. Of this 13.13 million tons per year was contained in durable and nondurable goods and not generally available for recycling. Thus, 2.55 million

tons per year of ferrous metal wastes is in the form of containers and other packaging. Included in this figure are 0.24 million tons per year of steel drums and other steel packaging not included in residential recycling programs. The remaining 2.31 million tons per year was available for recycling; 1.45 million tons per year were recovered. This material constituted slightly less than 1.0% (0.93%) of the total municipal waste generated and was recovered nationally at the rate of 62.77%. Residential sources generate about 85% of the bimetal packaging contained in MSW.

Based on population it is estimated that 886 tons of waste bimetal cans were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 556 tons would be expected to be recovered. Based on recycling reports, the quantity of bimetal recycled in 2008 was estimated to be 191 tons, about 34% of the national norm

PLASTIC

The estimated annual quantity of plastic waste generated nationally in 2008 was 30.05 million tons per year. Of this, 17.04 million tons per year was contained in durable and nondurable goods and was not generally recycled. Plastics in packaging account for over 80% of all plastic recycled from municipal solid waste and 13.01 million tons per year of plastic in the form of packaging was available for recycling. The amount recovered was 1.73 million tons per year. Plastic packaging constituted 5.21% of the total municipal waste generated and was recovered nationally at the rate of 13.30%. Residential sources generate about 83% of the plastic contained in MSW.

Plastics #1 and #2 account for only about 30% of waste plastic in all MSW, but about 52% of waste plastic in containers and packaging. The quantity of Plastics #1 (PET) in waste packaging was 2.89 million tons per year and for #2 (HDPE) was 3.89 million tons per year. Thus, 6.78 million tons per year of Plastic #1 and #2 in the form of packaging was available for recycling. Nationally, 1.30 million tons per year of Plastics #1 and #2 are recovered from waste containers and other packaging, about 75% of the total plastic recovered from waste packaging. The recovery rate for Plastic #1 is 0.73 million tons per year out of 2.89 million tons per year generated, 25%. For Plastic #2, 0.57 million tons per year is recovered of 3.89 million tons per year generated, 14.7%. The average recovery rate for Plastic #1 and #2 is 19.2%.

Based on population it is estimated that 2,601 tons of waste plastic #1 and #2 were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 499 tons would be expected to be recovered. Based on recycling reports, the quantity of plastic recycled in 2008 was estimated to be 120 tons, about 24% of the national norm.

PAPER

The estimated annual quantity of waste paper generated nationally in 2008 was 77.42 million tons per year. This figure includes 39.12 million tons per year of nondurable goods such as newspapers, magazines and other printed matter. Also included in this category are materials in a form that is not generally available for recycling, such as paper plates, towels, tissue, etc. A negligible amount of unrecyclable paper is also contained in durable goods. The other 38.29 million tons per year of waste paper is waste packaging. The largest category of waste packaging is OCC, old corrugated cardboard, generated at a rate of 29.71 million tons per year.

Paper accounts for about 31% of the total municipal solid waste generated in 2008 and 42.94 million tons per year was recovered at a recovery rate of 55.46%. Residential sources generate about 41% of the total paper in municipal solid waste.

NEWSPAPER

Included in this category is newsprint and newspaper inserts since the two materials are generally mixed together as disposed or recycled. Old newspaper is sometimes referred to as ONP. The estimated annual quantity of ONP generated nationally in 2008 was 8.80 million tons per year. This material constituted 3.53% of the total municipal waste generated and 7.73 million tons per year were recovered nationally, a rate of 87.8%. Residential sources generate about 85% of the ONP contained in MSW.

Based on population it is estimated that 3,376 tons of waste ONP were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 2,966 tons would be expected to be recovered. The reported quantity recycled was 1,261 tons, including the amount estimated to be included in commingled and single stream materials.

MAGAZINES

The estimated annual quantity of waste magazines generated nationally in 2008 was 2.05 million tons per year. This material constituted about 0.8% of the total municipal waste generated and 0.82 million tons per year were recovered nationally, a rate of 40.0%. Residential sources generate about 85% of the magazines contained in MSW.

It is estimated that 786 tons of waste magazines were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 315 tons would be expected to be recovered. None were reported recycled.

TELEPHONE DIRECTORIES

The estimated annual quantity of these materials generated nationally in 2008 was 0.84 million tons per year, of which 0.18 million tons per year was recycled, a rate of 21.43%.

Residential sources generate about 60% of the discarded phone directories that constitute 0.34% of the total municipal solid waste generated.

Based on population it is estimated that 322 tons of waste telephone directories were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 69 tons would be expected to be recovered. None were reported to be recycled.

BOOKS, STANDARD MAIL AND OTHER COMMERCIAL PRINTING

The estimated annual quantity of discarded books generated nationally in 2008 was 1.34 million tons per year, of which 0.4 million tons per year was recycled, a rate of 29.85%. This material constituted 0.54% of the total municipal waste generated. Residential sources generate about 80% of the discarded books contained in MSW

The estimated annual quantity of mail and other commercial printing generated nationally in 2008 was 10.64 million tons per year, of which 4.44 million tons per year was recycled, a rate of 41.73%. This material constituted 4.27% of the total municipal waste generated. Residential sources generate about 65% of the discarded mail and commercial printing contained in MSW.

Based on population it is estimated that 4,596 tons of these items were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 1,856 tons would be expected to be recovered. About 182 tons were reported to be recycled, about 22% of the national norm.

OFFICE PAPERS

Office papers includes high quality office paper such as stationary, copy paper and computer paper. The estimated annual quantity of office paper generated nationally in 2008 was 6.05 million tons per year. This material constituted 2.42% of the total municipal waste generated and 4.29 million tons per year were recovered nationally, a rate of 70.9%. Residential sources generate about 25% of the office paper contained in MSW.

Based on population it is estimated that 2,321 tons of waste office paper were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 1,646 tons would be expected to be recovered. About 788 tons were reported to be recycled, nearly 50% of the national norm.

CARDBOARD BOXES

Often referred to as old corrugated cardboard (OCC). Material included in this category is primarily cardboard boxes. Also sometimes included are folding cartons and paper bags. They were not included in this analysis. The estimated annual quantity of OCC generated nationally in 2008 was 29.71 million tons per year. This material constituted 11.90% of the total municipal waste generated and 22.76 million tons per year were recovered nationally, a rate of 76.6%. Commercial sources generate about 90% of the OCC packaging contained in MSW.

Based on population it is estimated that 11,398 tons of waste OCC packaging were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 8,732 tons would be expected to be recovered. Based on recycling reports, the quantity of OCC recycled in 2008 was reported to be 6,868 tons, almost 80% of the national norm and primarily from commercial sources.

FOLDING CARTONS, BAGS AND SACKS

Other paper and paperboard packaging in municipal solid waste includes folding boxes (e.g., cereal boxes, frozen food boxes, and some department store boxes), bags and sacks, wrapping papers, and other paper and paperboard packaging (primarily set-up boxes such as shoe boxes). The estimated annual quantity of these materials generated nationally in 2008 was 6.51 million tons per year, of which 2.32 million tons per year was recycled, about 36%. Residential sources generate about 65% of these materials that constitute 3.61% of the total municipal solid waste generated.

Based on population it is estimated that 2,498 tons of waste folding cartons, bags and sacks were generated in 2008 in Mercer County. If recycled at the national recycling rate, about 890 tons would be expected to be recovered. None were reported to be recycled.

EVALUATING LOCAL RECYCLING EFFORTS

As discussed previously in this chapter, a number of recycling programs operate at the municipal level in Mercer County. Mandatory, voluntary, curbside and drop-off collection systems can be found. Table 4-3 shows the tonnage reported from Mercer County municipalities in 2008, excluding yard waste. It also illustrates the recovery rate per person per day for residential, commercial and total combined recycling in each municipality that reported activity for that year.

In the 2008 Franklin Study it was estimated that nationally, the recovery rate for materials was 1.5 lbs/per person/per day, or 1.12 lbs/person/day excluding yard waste. The data in general reflects the suspected lack of participation and enforcement that is prevalent even in the mandated communities. Nearly all of

the municipal programs fall below the national average. A public awareness campaign along with changes to the program structures could improve this situation.

Of all of the programs with regularly scheduled curbside service, the City of Hermitage performs better than others. Even its statistics do not compare favorably with the national norms. However, it should be noted that the 2008 reports did increase from the prior year and they do not reflect a full year's implementation of Hermitage's new collection system. It is anticipated that these figures will continue to improve.

The Borough of Jamestown shows high performance for a drop-off program. This could mean that residents in Jamestown are more avid recyclers than in other parts of Mercer County. It could also indicate that residents from other communities, including those from out-of-state, use the drop-off site.

Only Pine and Springfield Townships exceed the national norm with the help of some extraordinarily high reported commercial numbers. The source of this reported activity should be confirmed.

TABLE 4-3 COMPARISON OF MUNICIPAL PROGRAMS

Recycling Statistics from Mercer County Municipalities					
Municipality	Residential Tons Per Year	Commercial Tons Per Year	Residential lbs/person/day	Commercial lbs/person/day	Total lbs/person/day
Clark Borough	4.16	5.99	0.04	0.05	0.09
Coolspring Township	0.00	69.87	0.00	0.17	0.17
Delaware Township	9.48		0.02	0.00	0.02
East Lackawannock Township	0.00	3.99	0.00	0.01	0.01
Farrell City	109.90	122.72	0.10	0.12	0.22
Fredonia Borough	7.41		0.07	0.00	0.07
Greene Township	0.00	4.49	0.00	0.02	0.02
Greenville Borough	206.41	92.99	0.18	0.08	0.27
Grove City Borough	191.50	486.50	0.14	0.34	0.48
Hempfield Township	0.00	603.62	0.00	0.83	0.83
Hermitage City	653.18	2,057.29	0.22	0.68	0.90
Jackson Township	19.13	4.49	0.08	0.02	0.10
Jackson Center Borough	0.28	2.25	0.01	0.06	0.07
Jamestown Borough	114.10		1.07	0.00	1.07
Jefferson Township	10.47		0.02	0.00	0.02
Lackawannock Township	0.00	8.79	0.00	0.02	0.02
Liberty Township	27.63		0.11	0.00	0.11
Mercer Borough	19.45	107.34	0.05	0.26	0.31
Pine Township	81.62	2,366.42	0.09	2.74	2.83
Pymatuning Township	0.00	43.03	0.00	0.07	0.07
Sandy Creek Township	0.00	1.50	0.00	0.01	0.01
Sandy Lake Borough	0.00	7.79	0.00	0.06	0.06
Sandy Lake Township	7.52	355.89	0.03	0.13	0.16
Sharon City	279.70	283.24	0.10	0.07	0.17
Sharpsville Borough	116.45	1.52	0.15	0.00	0.16
South Pymatuning Township	0.00	94.00	0.00	0.18	0.18
Springfield Township	35.05	587.23	0.10	1.65	1.75
Stoneboro Borough	0.00	5.99	0.00	0.03	0.03
West Middlesex Borough	5.03	31.40	0.03	0.20	0.23
Wheatland Borough	0.39	6.34	0.00	0.05	0.05
Wilmington Township	0.00	20.78	0.00	0.09	0.09
Wolf Creek Township	0.00	11.94	0.00	0.08	0.08
Worth Township	9.58		0.06	0.00	0.06

CONSTRUCTION AND DEMOLITION RECYCLING

The Construction Materials Recycling Association (CMRA) estimates that 325 million tons of recoverable construction and demolition (C&D) materials are generated in the United States annually. Materials such as concrete, asphalt, asphalt shingles, gypsum wallboard, wood and metals fall into this category.

There is growing emphasis from architects and on construction sites to reduce the environmental impacts of renovation and new construction. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a driving force in this trend toward “Sustainable Building.”

The City of Pittsburgh is considered a leader in green building with structures such as the David L. Lawrence Convention Center, and most recently the CONSOL Energy Center. Locally, in the City of Hermitage, the LindenPointe technical park is a LEED certified project, the first in Mercer County. Local governments often qualify for greater economic development funding for LEED certified projects. Therefore, more interest in green buildings is anticipated.

Recycling C&D debris is one of the most important aspects of this movement. Recycling Construction and Demolition Wastes: A Guide for Architects and Contractors is a manual published by the Massachusetts Department of Environmental Protection, the Boston Society of Architects and Associated General Contractors of Massachusetts. It claims that 90%-95% of the material found on job sites can be recycled. To encourage the practice, recycling qualifies the structure for two or more points in the LEED Green Building Rating System. One LEED point is awarded for a recycling rate of 50%; a second for a recycling rate of 75%.

Contractors and waste management companies are often ill prepared to comply with the C&D recycling requirements. This can place them at a disadvantage in bidding and acquiring contracts for LEED projects. Currently, no C&D recycling facilities exist in Mercer County or in close proximity within Western Pennsylvania. Low landfill disposal rates have hampered interest in developing such operations. However, as more and more projects seek LEED certification, the need for knowledgeable contractors, haulers and processors will increase. By providing education on the benefits and practices of C&D recycling, the County could help improve job opportunities along with diverting a greater portion of its municipal waste stream from disposal.

MANAGING SPECIAL MATERIALS

Bottles, cans, paper and other more traditional materials are associated with recycling by the average household, however many other items can and should

be removed from the waste stream rather than being disposed in a landfill. Some or all of the items have been banned from landfills in other states. Although, it is not yet illegal to dispose of these materials in Pennsylvania, there are more practical reasons to handle the items in a more environmentally responsible manner. This section discusses the environmental and other issues associated with these materials and the benefits of managing them in an organized program.

HOUSEHOLD HAZARDOUS WASTE

In maintaining our homes, lawns, gardens, and swimming pools, we purchase and store a variety of products that would otherwise be considered hazardous materials if found in an industrial setting. Because they are generated in a residential context they are classified as Household Hazardous Waste (HHW). Cleaning agents, pool chemicals, paints, herbicides and pesticides are all considered HHW. Considering that these materials may be ignitable and/or poisonous, they can be a liability in the community.

Many of these materials create a serious health and safety hazard in homes especially to children and the elderly. Oils, solvents, and other HHW when poured into the sanitary sewer systems can cause costly damage to public wastewater treatment systems. According to the Oklahoma State University Extension Fact Sheet *Household Hazardous Waste Handling Procedures to Prevent Environmental Contamination*, more than two percent of all garbage collectors are injured by chemical burns, explosions, etc. each year from HHW in trash. Unexpected dangers occur when HHW combines with regular household trash; for example, soft drinks mixed with swimming pool dry chlorine can ignite.

The Pennsylvania Department of Environmental Protection, estimates that each person in Pennsylvania generates an average of four pounds of Household Hazardous Waste (HHW) each year. With a population in 2010 of approximately 120,000 Mercer County could expect to produce approximately 240 tons of HHW per year.

The magnitude of HHW should not be underestimated. Communities in which residents remain at the same location for many years often find that the expected annual volume of HHW accumulates in homes over time rather than being disposed on a regular basis. The average household may have up to 16 pounds of HHW in storage.

Individuals faced with eventual removal of these accumulated quantities often encounter significant obstacles and associated costs. Providing regularly scheduled HHW collection events and providing a database of other local commercial outlets can prevent pollution and accidents.

DISCARDED ELECTRONICS

Televisions, computers and monitors and cell phones all become disposable commodities within extremely short time spans. Current trends show that these items are replaced by newer, better models every few years. For smaller devices, this happens as soon as every few months. This planned obsolescence has created a new problem in what to do with the old ones. Lead and other toxic materials are common elements in much of the equipment. Mercury from electronics has been cited as a leading source of mercury in municipal waste. In addition, brominated flame-retardants are commonly added to plastics used in electronics. Therefore, when discarded electronic equipment ends up in landfills, it can pose environmental hazards if these hazardous materials leach into the soil.

Increasingly, counties and municipalities are offering computer and electronics collections as part of HHW collections or separate special events. In addition, electronic manufacturers have emerged that accept computers and other electronics for recycling. Several counties throughout Pennsylvania hold e-cycling events. Public response to the drop-off events has been favorable. Reports indicate that the amount of material recovered from one-day collections is substantial. However, it is still minimal in comparison to the volume known to exist. Programs that collect material more frequently are shown to have a higher degree of participation and increased recovery.

Although, it will not capture the full volume of electronics discarded, an electronics collection event could serve as a convenient outlet for residents wishing to properly manage their equipment. A private sector program currently operating in multiple Western Pennsylvania locations offers more frequent collection at a reasonable price. The company, Environmental Coordination and works with surrounding counties to promote and manage the electronics collections. Drop-off locations exist in Erie, Butler and Crawford counties and currently results in a reduced price to their residents based on subsidies obtained by the counties through funding from the PADEP Household Hazardous Waste Program. Although Mercer County residents can utilize any of these facilities, they can expect to pay higher rates, because the County currently has no formal agreement with the company, nor has it applied for the grant subsidies. There is potential for the company to locate a new facility in convenient proximity to the Shenango Valley and Lawrence County.

Mercer County should consider, at a minimum, hosting an individual collection event and exploring the potential for frequent events. Whether at an event or an ongoing program, consumers are typically charged by the pound or by the category of item (i.e. television, computer, cell phone). Some programs charge by the carload. Partial reimbursement for both options is currently available

through the PADEP Household Hazardous Waste Program. Most programs require participants to pay fees sufficient to cover the remaining costs.

Pennsylvania legislators recently adopted Act 108, the Covered Device Recovery Act. This piece of legislation provides for extended producer responsibility for discarded electronics, including computers and televisions, and bans these items from landfill disposal beginning in 2013. The Act establishes a fund to pay for the recycling of these items. However, orphan materials, those produced prior to the effective date of the Act and/or by companies that no longer exist, are not included. It is anticipated that counties will still need to play a role in the collection of discarded electronics not covered by the Act and until the wave of orphan materials minimizes.

UNWANTED PHARMACEUTICALS

Waste pharmaceuticals encompass all types of over-the-counter and prescription medications. These wastes come in the form of solid pills and capsules, creams, liquids and aerosols. Many pharmaceuticals intended for pets are similar or identical to those prescribed to humans and should be treated exactly the same.

In a perfect world, all the pharmaceuticals that are prescribed for a patient or bought by a person to treat a common illness (such as headaches, colds, etc) would be consumed. However, for a host of reasons, significant quantities of pharmaceuticals go unused and remain in our homes. How this occurs is understandable.

Unwanted pharmaceuticals can adversely affect human health when they are improperly ingested. They can also work their way into the environment, where they can indirectly impact people's health. Studies in many countries have demonstrated the presence of pharmaceutical products at trace levels in water streams. The life cycle of pharmaceutical products was analyzed and it was determined that the major contributor to the presence of these substances in the environment is not the manufacturing operations but the use and actions of the consumers. Primarily, these substances are flushed into the environment through our sanitary sewer systems.

Storing unwanted medicines in the home increases the risk that these drugs may be used by young people for non-medical reasons. A 2008 report from the Office of National Drug Control Policy notes that prescription medicines are the drug of choice among youth beginning at 12- and 13-years old. The increasing illicit use of these medications has contributed to higher incidents of accidental deaths and a growing criminal element. Mercer County is not immune to this problem.

For all of these reasons, new practices and guidelines for collecting and handling unwanted or unused pharmaceuticals are emerging. Organized and controlled collection events, sponsored by local governments and conducted under the

supervision of licensed pharmacists and law enforcement officials, are easier to conduct than in the past. Grant funding and co-sponsorships from retailers, hospitals and similar organizations are often available to lessen the cost of collecting and processing the materials. Providing periodic events would not only protect the health and safety of local residents, but it could serve as a deterrent to crime in Mercer County.

RECYCLING AT COMMUNITY ACTIVITIES

Several municipalities are mandated by Act 101 to require recycling at community activities, which draw 200 or more attendees. Events held in other areas of the County could also benefit from this practice. Municipalities are often unsure of how to promote and enforce this requirement. Event organizers charged with a long list of demands necessary to make the day a success, tend to overlook recycling as an essential component. Sometimes they are ill informed of the steps to establish a recycling program; many don't have ready access to equipment such as portable recycling containers that could be placed throughout the footprint of the event; others don't recognize how recycling can reduce litter and disposal cost for the event. By providing education, sample ordinances and enforcement ideas, shared resources and promoting success stories, Mercer County could help facilitate the practice of recycling at community activities and support the efforts of local municipal officials.

TABLE 4-4 ENVIRONMENTAL IMPACT OF MERCER COUNTY RECYCLING

Area Name	Year	Net GHG Savings from Recycling (MTCE)	Net Energy Savings from Source Reduction, Reuse and Recycling (Million BTUs)	Gas Saved (Gallons)	Landfill Space Saved by Recycling	Iron Ore Saved from Recycling Steel and Glass (Tons)	Coal Saved from Recycling Steel and Glass (Tons)
Mercer County	2009	9,170.54	182,700.24	1,470,565.37	31,232.85	244.63	136.99

ENVIRONMENTAL BENEFITS

Recycling offers a host of benefits that are not always tracked and monitored at the local level. It is important to recognize the impact that recycling has on the environment and our natural resources. Recycling plays a huge role in the reduction of green house gas emissions. Table 4-4 lists a few of the savings resulting directly from the efforts of Mercer County recycling programs. The figures were calculated using actual reported tonnages from the PADEP 2009

Annual Report submitted by the County. The data was entered into the Environmental Benefits Calculator developed by the Northeast Recycling Council and Abt Associates.

CONCLUSIONS

Glass, aluminum, and plastic beverage containers are easily recoverable. Yet, recyclable items are a common source of illegal dumping and littering in Mercer County. Although recycling is available, minimal participation and low recovery persists. Recycling is not integrated into enough waste collection programs and, when it is, the economic incentives to drive recycling are absent from the collection contracts. It has been demonstrated in at least one community, the City of Hermitage, that by providing an improved program and rate structure, recycling performance can increase immediately. The County needs to work together with the municipalities to create an environment that encourages and rewards recycling behaviors. Detailed recommendations and implementation actions are provided in Chapter 5.

Chapter 5

A Sustainable Future for Mercer County

PROTECTING THE ENVIRONMENT FOR A HIGHER QUALITY OF LIFE

Solid waste management is not an isolated issue. It should be considered as part of the comprehensive goals and aspirations of the community in general. As such, its impact on economic development, property values and social standards become more obvious and important. The 2006 Mercer County Comprehensive Plan recognized this correlation and established certain solid waste infrastructure goals for the future growth and development of the County. These objectives included providing an adequate solid waste disposal and collection system to serve all Mercer County residents; maintaining public health, environmental and land use standards; promoting the proper handling and disposal of hazardous materials; and supporting the development of recycling programs. It charged the Mercer County Municipal Solid Waste Management Plan with establishing the guidelines and coordinating all levels of government to achieve these goals.

This chapter presents the key municipal solid waste management issues facing Mercer County and its communities. It recommends a course of action for each that evolved from the planning process. It offers the indicators that brought certain elements to the forefront and determining factors that prompted these decisions. It also provides a time frame by which specific elements of the Plan are to be attained and implemented.

CORE ISSUES AND RECOMMENDED PROGRAMS

Improper waste disposal practices are still prevalent in Mercer County even after decades of solid waste management planning. The existence of illegal dumping and littering in Mercer County has been demonstrated and discussed throughout the Plan. Related issues include open burning, accumulation and storage of junk, and mishandling of hazardous materials. Systematically resolving these problems in a logical and collaborative fashion is the focus of the Plan's implementation scheme. Following are categorized recommendations offered to address the problems identified along with an action plan. None of the

suggestions can be implemented unless the costs are covered by a combination of contributions from the County, the municipalities and the direct users of the services. Alternative funding mechanisms to sustain the solutions are also provided.

ANTI-LITTER INITIATIVE

Littering is visible on a daily basis in Mercer County. Litterers typically lack awareness of the consequences of their behavior. The limited availability of waste and recycling receptacles in public places can trigger littering behavior even in the most conscientious individuals.

Recommendation: Education, enforcement and convenient disposal and recycling containers could help alleviate the issue.

Action Item: To achieve this goal the County will assist communities by developing anti-litter campaigns. The County will seek out education tool kits and funding for public access containers, which is often available thru programs like the Coca Cola/Keep America Beautiful Bin program. The County will foster grassroots efforts to prevent and correct the results of littering by supporting the Shenango River Watchers and Keep Pennsylvania Beautiful , and other like-minded organizations.

COMMUNITY EVENT RECYCLING NETWORK

The Cities of Sharon, Farrell, Hermitage, and the Boroughs of Grove City and Greenville are all mandated by Act 101 to require recycling at community events. Festival and fair organizers in other municipalities should also consider recycling as an integral part of their events. Recycling provides an outlet for both vendors and participants to properly handle paper, packaging materials and beverage containers.

Recommendation: By providing the tools to accomplish community event recycling the County could help local municipalities and civic organizations comply with Act 101, reduce litter and promote conservation.

Action Item: To achieve the community event recycling goal, the County will seek grant funding for event recycling containers and a trailer that can be shared with local community event organizers. The Recycling Coordinator will establish procedures to schedule and coordinate the utilization of the equipment. In addition, the County will design and provide brochures outlining the steps necessary to implement a recycling program.

MUNICIPAL OFFICIALS WASTE COLLECTION WORKSHOPS

Although residents in all areas of Mercer County have access to waste collection service many residents have no service provider. Because subscribing to service is voluntary or municipal contract rate structures allow residents to avoid paying, improper disposal of municipal waste occurs. With a sporadic customer base, the incentives for haulers to offer curbside recycling are fewer, thus placing the cost of drop-off recycling on County and local governments.

Recommendation: The enactment of stricter municipal ordinances for waste storage and mandatory collection of municipal waste and recycling are recommended to alleviate this problem. Improving the specifications and structures of municipal contracts is also advised.

Action Item: To achieve this goal, the County will conduct a study on the status and effectiveness of the solid waste, recycling, burning, and other related zoning ordinances and regulations, which currently exist in the municipalities. In addition, the County will examine the variety of existing municipal collection contract specifications. The information will be used to develop a data base to assist the Recycling Coordinator in addressing calls and questions from local residents. In addition, the study will target specific strengths and weaknesses in compliance, enforcement, and cost effectiveness of collection methods for use in an educational campaign.

Action Item: The County will conduct a series of informational seminars for municipal officials. The sessions will offer insight into the economic and environmental benefits of moving away from a voluntary collection system. Model ordinances and regulations will be offered. Guidelines on how to develop bid specifications and contracts to ensure cost effective results will also be featured.

SPECIAL MATERIALS COLLECTIONS

Mercer County has a history of residents that have remained at the same location for many years. Paints, pesticides, cleaners and other materials commonly classified as household hazardous waste have accumulated in their homes. Also found are tires, old appliances and other electronic devices that have remained past their useful life. HHW presents serious problems for everyone and can be a liability in the community. Many of these materials present a serious health and safety hazard in homes especially to children and the elderly. Removal and disposal of these materials can be inconvenient. They are often items found in illegal dump sites and waterways.

Significant quantities of prescription and over the counter medications go unused and remain in Mercer County homes. When improperly disposed they

can have a negative effect on the environment. Storing unwanted medicines in the home increases the risk that these drugs may be stolen and abused for non-medical reasons. Mercer County has evidence of the crimes and accidental deaths and overdoses caused by illicit prescription drug use.

Recommendation: Providing regularly scheduled special collection events and increasing awareness of local commercial outlets is recommended to reduce accidents, prevent pollution and serve as a deterrent to crime in Mercer County.

Action Item: To achieve this goal the County will create a directory of regional facilities that accept and properly manage HHW and electronic waste.

Action Item: The County will leverage state funding to coordinate with Keep Pennsylvania Beautiful to host affordable periodic special collection events.

Action Item: The County will seek the support of local law enforcement, medical institutions and commercial water companies in sponsorship of unwanted pharmaceutical collections.

CONSTRUCTION AND DEMOLITION RECYCLING EDUCATION

With the advent of *Leadership in Energy and Environmental Design (LEED) Green Building Rating System*, there is more demand for green building and for the recycling of C&D material. Local governments often qualify for greater economic development funding for LEED certified projects similar to LindenPointe in the City of Hermitage. Therefore, more interest in green buildings is anticipated. No C&D recycling facilities exist in Mercer County. Uninformed contractors and waste management companies are often ill prepared to bid and acquire contracts for LEED projects.

Recommendation: By providing education on the benefits and practices of C&D recycling, the County could help improve job opportunities along with diverting a greater portion of its municipal waste stream from disposal.

Action Item: To achieve this goal the County will coordinate with the Mercer County Builders Association to promote green building practices with educational brochures, manuals and seminars. Additionally, the County will offer similar materials and sessions to all County registered waste haulers.

PUBLIC AWARENESS AND ENFORCEMENT

The acts of roadside littering, illegal dumping, and contaminating recyclables all stem from the public's ignorance of the adverse affects of these behaviors. Traditional approaches to remediate the issues focus primarily on clean-ups and

have minimal impact on recurrence. Changing attitudes and influencing behavior are proven to have a more profound and lasting effect. The same is true in attempts to incentivize people to recycle.

Education serves as the foundation of behavioral change. It is most effective when conducted on multiple levels within a community. Starting in elementary schools is a way to initially drive home the message. Following through with the same message to civic and chamber groups, local governments and at community events reinforces the lesson. When affordable, the repetitive nature of radio and cable television ad campaigns can be extremely effective.

Although education takes a reward approach to modify behavior, certain individuals make more dramatic and lasting changes when penalized for poor behavior. Therefore, enforcement is an essential element in preventing dumping activities. Violators are often cited, fined, and identified in local papers. This same approach has been used in certain communities to increase recycling participation.

Mercer County has not initiated an organized public education program on the benefits of recycling and proper waste disposal practices for some time. Neither has it actively enforced against illegal dumping. Sufficient personnel, resources and funding are required to do both. However, when conducted in a systematic and planned approach, the mission can be accomplished. Savings are often realized by local governments that experience fewer instances of illegal dumping. Additionally, as the contamination in recyclables lessens the marketable value of the material increases. Less contamination at drop-off sites can reduce the frequency of collection and the incidence of disposal resulting in direct savings.

Recommendation: Developing and implementing an education and enforcement program are essential in achieving all other objectives of the Plan.

Action Item: To achieve the education goal the County will plan and implement a multi faceted waste and recycling public education program, which includes community outreach utilizing speakers and corresponding print and media materials.

Action Item: To achieve the education goal the County will work with school administrators to reinforce the value of hands on school recycling programs in establishing lifelong environmental attitudes and behaviors .

Action Item: To achieve the enforcement goal the County will work in conjunction with the municipalities. The County will randomly install portable surveillance cameras to monitor the recycling drop-off sites and known illegal dumping grounds. Offenders will be notified and penalized under applicable codes.

COUNTY LEVEL LEADERSHIP AND PRACTICES

There is no better way for Mercer County's elected officials and employees to demonstrate their roles as environmental stewards than through a commitment to waste minimization and recycling in the County's own facilities. If for no other reason, Mercer County should establish waste reduction goals in its departments and agencies, because it results in direct costs savings. The initiation of waste audits and process evaluation communicates a desire to increase the efficiency of County government. Buying products manufactured from recycled and reclaimed materials creates jobs. It also increases outlets for municipal recycling programs.

The Mercer County Board of Commissioners supports an ongoing process that expects employees to conduct future business in ways that continually improve the County's environmental performance. They recognize the value of local recycling programs as a potential tool in future economic development and job creation. Incorporating the elements of source reduction, reuse, recycling, and environmentally friendly product procurement activities into daily operations does not happen overnight. It begins by examining day-to-day practices and asking why specific processes are performed. It also reveals behaviors and physical obstacles that deter recycling and waste minimization in specific departments and facilities. It includes identifying which products are purchased and how they are actually utilized. These elements can be achieved systematically over the course of several years.

Recommendation: Recycling should commonly be implemented by each County agency and facility.

Action Item: To achieve the recycling goal the County Recycling Coordinator will conduct waste audits of County facilities to identify the types and volume of materials currently collected and to determine if a greater quantity of materials could be cost effectively added to the program. Participation levels will also be evaluated.

Action Item: The County Recycling Coordinator will establish the service requirements of each location. A system of tracking and monitoring the performance at each location will be introduced to assist in the development of appropriate education and enforcement mechanisms. Suggestions will be solicited from participating offices to improve the overall program.

Recommendation: The County should institute a recycled content preferable procurement policy.

Action Item: To achieve the procurement goal the County Fiscal Officer will work with purchasing agents to incorporate a recycled content procurement

policy that includes the standard statement “Recycled content is preferred” in all bid specifications as an incentive to bidders to find and use price competitive recycled content material .

FUNDING THE PROGRAMS

A relatively meager budget has been available for recycling and solid waste programs in Mercer County. To date, programs have been kept to a minimum because the County’s shrinking tax base offers little to subsidize such ventures. This scenario is unlikely to change during the implementation of the Plan and could even impact the County’s current level of commitment. While recycling does generate revenue from the resale of material, rarely does it cover the entire cost of operation. Mercer County has experienced the difficulties and budgetary shortfalls that can occur when relying on some percentage of material sales to fund a program. It is incumbent upon government agencies to determine other sources of funding to sustain such programs. It is equally important to eventually integrate services and shift costs closer to the actual users. Multiple options exist.

GRANTS

A Recycling Fund was established by the provisions of Act 101 to help support at least a portion of the mandates. The Fund is fed by landfill tipping fees. Fifty-percent of the Recycling Coordinator’s salary and expenses is eligible for Act 101, Section 903 Grant funding. The County is also eligible for Act 101, Section 901, Section 902 and Section 904, Planning, Equipment and Performance Grants. The amount of money in the Act 101 Recycling Fund has dwindled over time and thus the level of competition for 902 grants has increased. Likewise, changing formulas by which 904 grants are calculated have resulted in smaller payouts for similar demonstrated results. Section 901 grants are still offered for planning, analysis and feasibility studies, but at a decreased monetary level than in the past. Nevertheless, the Fund still offers some level of support to Mercer County and its communities. Act 190 of 1996, the Small Business and Household Pollution Prevention Program is also a source of available funding. It offers 50% reimbursement for Household Hazardous Waste and related collection events. The USEPA , the USDA and other agencies and organizations also make grant funds available periodically for various educational and operational expenses.

Recommendation: The County should always be prepared to pursue, apply for and utilize Act 101, Act 190 and other sources of grant funding on a regular basis.

DIRECT USER FEES

Studies have shown that consumers place a higher value on goods and services for which they pay over those that are offered free of charge. Program managers typically fear that charging for services will be a deterrent to participation. Yet, in Pennsylvania, evidence exists that collection events with user fees meet and often exceed the results of those without. Similarly, when a nominal registration fee is required for seminars and other programs potential attendees perceive the information to be of a higher quality.

Special collection events implemented in Mercer's surrounding counties all impose user fees. A portion of the fees covers the cost of collection, processing, promotion, administration and traffic control. Consumers may be charged by the carload, by the item, or by the weight of the material. User fees ensure that collection events can be offered more frequently and efficiently.

Recommendation: The County should require consumers to pay a fair portion of the costs associated with special collection events.

It is not uncommon to require small registration fees for seminars, roundtables, and other forums to defray the costs of meeting facilities, food, printed materials and speakers. This is particularly true when offered in conjunction with non-profit organizations, trade or civic groups or other agencies.

Recommendation: The County should consider registration fees as it develops educational events and seminars.

INTEGRATION OF SERVICES AND COSTS

Another form of user fee is when added services are included as part of the municipal waste collection service and bill. These could be for recycling and/or yard waste collection. Typically this applies to curbside collection. However, rural municipalities with collection contracts can alternately require the contractor to provide a recycling drop-off container or one for brush. Butler County municipalities have required the bundling of services for 20 years and provide a local model for such a system. Residents in Mercer County could have more convenient and sustainable opportunities to recycle if municipalities required these services to be bundled with waste collection.

Recommendation: Municipalities should utilize user fees to expand recycling and other services by incorporating them as part of local waste collection service requirements that are billed to residents.

SPONSORSHIPS

Many corporations and local businesses have performance goals that require contributions to community projects. Many of these criteria are specific to environmental programs. It is not unusual for companies to have sustainability coordinators on staff who are responsible for community outreach and public relations. Sponsorships are commonly offered for onetime events; seminars; the design and distribution of printed materials; or other in-kind services. While not as lucrative as grant funding, sponsorships can be useful for specific expenditures.

Recommendation: The County Recycling Coordinator should research corporate policies and develop relationships with the local business community in order to communicate opportunities for program sponsorships.

LANDFILL HOST FEES

Act 101 offers counties in which landfills are located the ability to negotiate a host fee. Nearly all of the Pennsylvania host counties have taken advantage of this privilege to compensate the County's residents for the impact of the landfill's operations. Fees range in value depending upon local market conditions. Services are sometimes offered in lieu of fees. Host fees provide a steady and sustainable stream of revenue that is difficult to replicate from any other source. Mercer County has the potential to host a permitted and operating landfill. The Solid Waste Advisory Committee discussed and confirmed that a host fee would be a value and benefit for all Mercer County residents.

Recommendation: The Board of County Commissioners should negotiate with any current or future local landfill operators to secure a host tipping fee to be used to support solid waste and other environmental programs in Mercer County.

PRIORITIZING THE IMPLEMENTATION SCHEDULE

The Plan Revisions suggest a variety of actions, which the County could take, to improve upon its existing solid waste management program. In order to maximize those efforts, the County must determine when it will achieve the greatest benefit and results. Therefore, a suggested prioritized timeline for implementing the recommendations and revisions is shown in Table 5-3. The table also offers suggestions for more in depth investigations, surveys and analysis of emerging trends that were identified as having future influence on waste management practices in the County.

TABLE 5-3 PROJECTED IMPLEMENTATION SCHEDULE

Mercer County Municipal Solid Waste Plan Proposed Implementation Schedule										
ACTIVITY	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ANTI LITTER INITIATIVE	Establish Partnerships with Shenango River Watchers and Keep Pennsylvania Beautiful	Conduct grassroots survey and document findings of communities to identify areas of high traffic and history of littering	Research and determine tools and resources necessary to decrease problem including collection containers and educational tool kits	Present findings to local officials	Launch Media Campaign and Distribute Receptacles					Measure Performance and Make Adjustments
			Identify sources of funding and program support	Enlist interested communities in joint venture						
				Assist interested communities to obtain funding and other support						

Mercer County Municipal Solid Waste Plan Proposed Implementation Schedule

ACTIVITY	2011	2012	2013	2014	2015		2016	2017	
MUNICIPAL OFFICIALS WASTE COLLECTION WORKSHOPS	Survey municipalities and compile data base of laws, regulations and contracts for solid waste services	Notice of Grant Award and Contract	Prepare Presentations and Materials for Workshops		Outreach and Support to Facilitate Change		Follow-Up survey to determine status of revised ordinances and contracts	Universal Waste and Recycling Collection Requirements Attained	
		Determine the effectiveness of municipal laws , regulations and contracts for solid waste services					Outreach and Support to Lagging Communities		
	Application for Act 101 Section 901 Planning Grant	Develop Curriculum for Municipal Officials Workshops	Schedule and Conduct Workshops						
CONSTRUCTION AND DEMOLITION RECYCLING EDUCATION			Outreach to Mercer County Builders Association	Application for Act 101 Section 901 Planning Grant for C&D Study		Study to Determine Feasibility of Expanding C&D Recycling and Deconstruction Opportunities			
				Notice of Grant Award and Contract					

Mercer County Municipal Solid Waste Plan Proposed Implementation Schedule										
ACTIVITY	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
PUBLIC AWARENESS AND ENFORCEMENT	Begin random monitoring of drop-off sites with mobile surveillance camera, Prosecute offenders based on county code	Initial Outreach to School Administrators			Outreach to Local Colleges					
	Initiate Hauler Reporting System	Follow-up on Hauler Reporting System	Enlist and Coordinate Schools in Greensylvania Competition							
	Update Local Media to Showcase changes resulting from new intergovernmental partnership	Seek Radio Talk Show Opportunities		Begin Speakers Program for Chambers, Civic Organizations						
	Create and Develop County Web Site		Initiate Earth Day Event			Survey Commercial Businesses for Recycling				
	Design County Information and Fact Sheets		Initiate Presence at Fair			Establish Presence at other Community Events				
	Add municipal information to web site		Target County and Municipal Offices and Facilities Recycling							
	Initial Outreach to COG, Planning Commission,			Initiate America Recycles Day Event						
SPECIAL MATERIALS COLLECTIONS	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis	Materials Designated on Alternating Basis

Mercer County Municipal Solid Waste Plan Proposed Implementation Schedule											
ACTIVITY	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
COMMUNITY EVENT RECYCLING		Application for Act 101 902 Grant Funding		Notice of Grant Award and Contract	Scheduling and Utilization Procedures Established	Community Event Recycling Network Implemented					
				Containers and Trailer Purchased	Outreach to Community Event Organizers						
MSW PLAN UPDATE								Application for Act 101 Section 901 Planning Grant	SWAC appointed and established		
									SWAC meetings and discussions		
								Notice of Grant Award and Contract	Research and Analysis		
									Findings and Recommendations		
										Advertise for Disposal Capacity and Secure Contracts	
										Public Review and Comment	
										Approve and Adopt Plan Revisions	

Chapter 6

Disposal Guarantees

ASSURANCES FOR FUTURE CAPACITY

Under the guidelines of Act 101, comprehensive municipal waste management includes the responsibility for Mercer County to secure sufficient disposal capacity for the next decade. Although entering into agreements with disposal and processing facilities is an important component of the planning process, another element with equal, if not greater, impact on waste management practices is whether or not to control where the waste generated within the County is ultimately disposed.

This chapter describes the procurement process used to solicit for disposal and processing capacity. It also presents the criteria used in analyses of the proposals submitted from disposal and processing facilities, and identifies those designated to contract with Mercer County for future capacity. Lastly, it discusses the factors impacting waste flow control and the County's decision regarding this policy.

IMPACT OF FLOW CONTROL

Waste flow control has always played a role in the existing Mercer County Municipal Waste Management Plan. A licensing condition established by ordinance, (allowable at the time) limited to some extent the landfills, which haulers collecting Mercer County municipal waste could use for disposal. Because the Mercer Plan offered numerous disposal locations, factors such as price, proximity and access to capacity, current market conditions, vertical integration of collection and disposal operations and business relationships all had greater influence on the flow of waste than the licensing condition itself. Haulers could opt to use some of the facilities for economic reasons and others for convenience.

Consolidation in the waste industry through the past decade has resulted in

ownership changes of hauling operations and disposal facilities. Many small independent operations have been consumed, by acquisition. It is understandable that once companies have made an investment in both collection and disposal operations, they would desire to direct waste to their own facilities. Therefore, a noticeable, but explainable shift in waste flow occurred over time. To accommodate the acquired customers, routes were adjusted and redirected to new disposal sites. Many of the landfills designated in the original plan failed to receive the volume of waste, which was anticipated. In fact, some never received any waste.

Although flow control was not necessarily a key factor in attaining proper waste management practices, its implementation provided the County with reasonable tracking and monitoring of the market participants. Therefore, continuance of the waste flow requirement was recommended by the Solid Waste Planning Advisory Committee. An ordinance and reporting process will be utilized to ensure compliance.

FACILITY SELECTION PROCESS

Mercer County issued a Request for Proposals to solicit for future disposal capacity. Not only those facilities that had contracted for disposal under the existing Plan but also any additional disposal or processing facilities, interested in making capacity available to the County were invited to submit offers. In order to reach all of those who might be potentially interested in supplying such services to the County, the request for proposals was posted once in a display advertisement in Waste and Recycling News, a national industry trade journal, as well as the PA Bulletin.

In this non-discriminatory procurement process, equal consideration and opportunity was given to both in state as well as out-of-state facilities. Proposals were expected to adhere to specific submission guidelines in providing the information for administrative and technical merit review

Established criteria was utilized to evaluate proposals submitted by the candidate facilities. The components used to review the proposals follow. The order in which the items are listed have no significance or correlation to the value or importance each had in the selection process.

FINANCIAL STABILITY

The overall financial strength and credit worthiness as well as the public and environmental liability protection was considered as an indication of the operator's ability to establish and maintain a financially sound disposal system.

REGULATORY COMPLIANCE

The compliance history of the facility and, when applicable, the parent organization was reviewed. Particular attention was given toward the severity of violations, consistency of violations and the ability of the facility or operator to achieve resolution and disposition of any such incidents.

OPERATING PERMIT STATUS AND CAPACITY

The current status, terms, and conditions of the facility's operating permit as well as the life expectancy of the facility and its available capacity was considered as an indication of its ability to provide adequate disposal service for the needs outlined by the County. Pending permits were considered for future designation.

TECHNICAL DESIGN AND OPERATIONAL PLAN

The criteria included an evaluation of the effectiveness of the facility's design and overall operation to provide a sound and reliable environmental solution to the County's disposal needs as well as its ability to meet Federal, State and Local regulatory standards for municipal solid waste management.

SOLID WASTE MANAGEMENT EXPERIENCE

Demonstrated management experience of personnel in the successful operation of the proposed disposal technology or process and their demonstrated successful performance in providing disposal services through municipal contracts was considered in the evaluation.

MINIMUM AND MAXIMUM WASTE VOLUME EXPECTATION

The evaluation took into consideration the ability of the facility to accept all or some of the municipal solid waste generated by Mercer County on a daily, and annual basis for a period covering ten years. Minimum guarantees of waste required from the County, and "Put or Pay" contract requirements were considered objectionable to the County as they were considered disincentives to recycling.

TIPPING FEES AND ANNUAL COSTS

Disposal methods and processes were evaluated based on the cost charged per ton for the disposal service including any and all fees and surcharges resulting from Act 101, host municipality agreements or other federal, state, and local statutes. Any partnerships or investments on the part of the County proposed by

the contractor(s) were also evaluated. The total annual cost to the County was reviewed.

CONTRACTUAL COMMITMENT

The final and most important criteria was for the organization to indicate their guarantee of disposal capacity and acceptance of the terms and conditions required by the County by signing the Contract provided in Appendix B.

DESIGNATED FACILITIES

Based upon the previously described criteria, the facilities were selected to provide disposal capacity to Mercer County for the next decade. Several of the facilities are operating with a soon to expire permit and/or diminishing capacity. Each is in some stage of permit modification, renewal or review. It is anticipated that each of these permit renewals and modifications are forthcoming. Therefore, these facilities will be designated to receive Mercer County municipal solid waste upon approval of the Plan. One of the facilities currently has no active permit but is waiting for a final decision on its application. If and when that facility receives permit approval it will be considered a designated facility.

All of the facilities otherwise met the selection criteria. Table 6-1 shows the results of the proposal evaluation.

In summary the facilities that were ultimately selected are listed here.

ALLIED/REPUBLIC
Imperial Landfill
Carbon Limestone Landfill

CLINTON COUNTY AUTHORITY
Wayne Township Landfill

INTERSTATE WASTE SERVICES
Mostoller Landfill
Sandy Run Landfill

J.P. MASCARO
Brooke County Landfill

VEOLIA ENVIRONMENTAL
Greentree Landfill

VOGEL HOLDING
Seneca Landfill
Tri County Landfill*

*Designation upon permit approval:

WASTE MANAGEMENT
USA Valley Landfill
Northwest Sanitary Landfill
Lakeview Landfill

Figure 6-1 shows the geographical locations of the designated facilities.

FIGURE 6-1 MAP OF DISPOSAL /PROCESSING LOCATIONS



TABLE 6-1 REVIEW OF PROPOSALS FOR DISPOSAL & PROCESSING CAPACITY

Facility			Contacts		Permit and Operational Status			
Site Name	Owner	Location	Technical	Operational	Permit # Issuing State Expiration Date	Operating Days	Operating Hours	Current operational Constraints
Brooke County Landfill	J.P. Mascaro	Morton Lane Colliers WV 26035	Ryan Inch	Michael D'Auora	WVA SWF-1013 6/22/2014	Monday-Saturday (260)	6:00AM-6:00PM	NONE
Carbon Limestone Landfill	Allied/Republic Waste Services	8100 S State Line Rd Lowellville , OH 44436	Timothy Nytra	Alan Marino	OH 28726 12/31/2010 (License renewed annually)	Monday-Saturday (310)	12:00 AM-4:00 PM (Sat-3:00AM -11:00 AM)	NONE
Greentree Landfill	Veolia Environmental Services	635 Toby Road Kersey, PA 15846	William Binnie	Don Henrichs	PA 101397 12/8/2018	Monday-Saturday (260)	7:00AM-4:00PM Monday-Friday (Sat-7:00 AM-11:00 AM)	NONE
Imperial Landfill	Allied/Republic Waste Services	11 Boggs Road, Imperial , PA 15126	Timothy Nytra	Brett Bowker	PA 100620 9/22/2015	Monday-Saturday	12:00 AM-3:00 PM (Sat-6:00AM -10:00 AM)	NONE
Lakeview Landfill	Waste Management	851 Robison Road Erie, PA 16509	Keith Doverspike	Rich Carniewski	PA 100329 3/22/2010	Monday-Friday (260)	7:30AM-4:00PM Monday-Friday	Permit expansion modification . Pending PADEP approval
Mostoller Landfill	Interstate Waste Services	7095 Glades Pike Somerset, PA 15501	Mark Harlackner	Kevin Bush	PA 101571 12/30/2014	Monday-Saturday (310)	7:00AM-6:00PM Monday-Friday (Sat-7:00 AM-noon)	NONE
Northwest Sanitary Landfill	Waste Management	1436 West Sunbury Road West Sunbury, PA 16061	Keith Doverspike	Jerry Sabatini	PA 100585 3/23/2011	Monday-Saturday (260)	6:00AM-6:00PM Monday-Friday (Sat-6:00 AM-noon)	NONE
Sandy Run Landfill	Interstate Waste Services	956 Landfill Rd Hopewell , PA 16650	Mark Harlackner	Kevin Bush	PA 101538 6/1/2011	Monday-Saturday (310)	7:00AM-4:00PM Monday-Friday (Sat-7:00 AM-noon)	Permit renewal modification . Pending PADEP approval
Seneca Landfill	Vogel Holding Inc.	421 Hartman Road Evans City, PA 16033	Edward R. Vogel	Edward R. Vogel	PA 100403 10/5/2010	Monday - Saturday (313)	12:00AM - 7:00PM	Permit renewal modification . Pending PADEP approval
Tri County Landfill	Vogel Holding Inc.	159 TCI Park Drive Grove City, PA 16127	Edward R. Vogel	Edward R. Vogel	PA 101295 Pending Approval	Monday-Saturday (310)	7:00AM-3:00PM Monday-Friday (Sat-7:00 AM-11:00 AM)	Permit application submitted. Pending PADEP approval
USA Valley Landfill	Waste Management	6015 Pleasant Valley Road, Irwin, PA 15642		Jerry Sabatini	PA 100280 7/21/2016	Monday-Friday (260)	5:00AM-:00PM Monday-Friday	NONE
Wayne Township Landfill	Clinton County Solid Waste Authority	264 Landfill Lane PO Box 209 McElhattan, PA 17748	Jay Alexander	Jay Alexander	PA 100955 10/3/2010	Monday - Saturday (311)	7:00AM-4:00PM	Permit renewal modification. Pending PADEP approval

Facility		Meets Federal, State, Local Standards			Regulatory Compliance			
Site Name	Host Agreements	Design, Leachate Treatment	Waste Plan for Emergency Disasters	Waste Plan for Facility Emergencies	#Violations	#Serious Violations	# Repeat Violations	Unresolved Violations
Brooke County Landfill		Double composite liner/ Treatment Off site at POTW	YES	YES would haul to other County designated facilities	13	1 Civil Penalties or Consent Agreements	3	0
Carbon Limestone Landfill	Poland Township Mahoning County	Double composite liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for back-up landfill	59	1 Civil Penalties or Consent Agreements	16	0
Greentree Landfill	Fox Township Elk County	Double composite liner/ Treatment Onsite	YES	YES but need to submit capacity agreements for back-up landfills	13	5 Civil Penalties or Consent Agreements	7	0
Imperial Landfill	Findlay Township West Allegheny Schools Allegheny County	Double composite liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for back-up landfill	1	1	0	1
Lakeview Landfill	Erie County	60 mil double liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for back-up landfills	4	0	1	0
Mostoller landfill	Brothers Valley Township Somerset Township Somerset County	Double composite liner/ Treatment Off site at Somerset SCI	YES	YES submitted capacity agreements for back-up landfills	10	3 Civil Penalties or Consent Agreements	3	0
Northwest Sanitary Landfill	Clay Township Butler County	60 mil double liner/ Treatment On site	YES	YES submitted capacity agreements for back-up landfills	7	1 Civil Penalties or Consent Agreements	3	0
Sandy Run Landfill	Broad Township Coaldale Borough Wells Township Six Mile Run	Double composite liner/ Treatment Onsite	YES	YES submitted capacity agreements for back-up landfills	13	2 Civil Penalties	2	0
Seneca Landfill	Jackson Lancaster Townships Butler County	60 mil double liner/ Treatment On site	YES	YES submitted capacity agreements for proposed back-up landfill	26	4 Civil Penalties or Consent Agreements	12	0
Tri County Landfill	TBD	60 mil double liner/ Treatment On site	YES	YES submitted capacity agreements for back-up landfill	0	0	0	0
USA Valley Landfill	Penn Township	60 mil double liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for back-up landfills	2	0	0	0
Wayne Township Landfill	Wayne Township Clinton County	60 mil double liner/ Treatment Off site POTW	YES	YES would haul to other County designated facilities	1	1 Consent Agreement	0	0

Facility	Financial Assurances			Capacity Agreement		Guarantees for Northumberland Waste Volumes			
Site Name	Financial Disclosure	Public Liability Protection	Environment Pollution & Liability Protection	Agrees to Mercer's Contract Terms and Conditions	Requires Put or Pay or Minimum Tonnage	Maximum Daily Volume in Tons	Maximum Annual Volume in Tons	Remaining Permitted Capacity in cubic yards 2009	% County Waste will accept
Brooke County Landfill	Privately Held Company/ provided upon request	\$2 million	Surety Bond \$840,000	YES	NO	100	26,000	14.3 million	26.50%
Carbon Limestone Landfill	Publicly Held Company Shareholders Report	\$20 million	Insurance \$16.7 million	YES	NO	600	107100	28,576,239	101%
Greentree Landfill	Publicly Held Company Shareholders Report	\$1 million	Irrevocable Letter of Credit \$20.4 million	YES	NO	350	107,800	36,554,563	102%
Imperial Landfill	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$15.7 million	YES	NO	155	40,300	23,872,037	11.68%
Lakeview Landfill	Publicly Held Company Shareholders Report	\$5 million		YES	NO	250	75,000	682,441 current 18,000,000 with expansion	71%
Mostoller landfill	Provided Independent Auditor's Report	\$2 million	Surety Bond \$14.7 million	YES	NO	60	18,900	8,112,659	17.52%
Northwest Sanitary Landfill	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$10.6 million	YES	NO	50	65,000	2,383,895	61%
Sandy Run Landfill	Provided Independent Auditor's Report	\$2 million	Surety Bond \$5.4 million	YES	NO	40	12,400	436,070	12%
Seneca Landfill	Privately Held Company/ provided upon request	\$2 million	Surety Bond \$6.2 million	YES	NO	166	51,958	9,197,323	49%
Tri County Landfill	Privately Held Company/ provided upon request	\$2 million	Surety Bond Current \$704,000	YES	NO	166	51958	TBD	49%
USA Valley Landfill	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$13.9 million	YES	NO	125	35,750	11,796,629	33.68%
Wayne Township Landfill	Provided Independent Auditor's Report	\$1 million	Irrevocable Letter of Credit \$6.4 million	YES	NO	240	74,880	1,382,450	71%

Facility		Maximum Tipping Fees 1st Year						
Site Name	Owner	MSW	C&D	SEWAGE SLUDGE	ICW	OTHER	Add -On Fees, Taxes Surcharges	Total Maximum MSW rate with fees
Brooke County Landfill	J.P. Mascaro	\$28.25	\$28.25	N/A	N/A	N/A	\$8.75	\$37.00
Carbon Limestone Landfill	Allied/Republic Waste Services	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$8.00	\$38.00
Greentree Landfill	Veolia Environmental Services	\$36.01	\$36.01	\$36.01	\$36.01	N/A	\$7.99	\$44.00
Imperial Landfill	Allied Waste Systems of PA LLC	\$50.00	\$50.00	\$50.00	N/A	N/A	\$9.31	\$59.31
Lakeview Landfill	Waste Management	\$65.00	\$65.00	\$65.00	\$65.00	N/A	\$7.50	\$72.50
Mostoller Landfill	Interstate Waste Services	\$25.60	\$25.60	N/A	N/A	N/A	\$12.40	\$38.00
Northwest Sanitary Landfill	Waste Management	\$52.40	\$52.40	\$52.40	\$52.40	N/A	\$7.60	\$60.00
Sandy Run Landfill	Interstate Waste Services	\$39.58	\$39.58	N/A	N/A	N/A	\$9.41	\$48.99
Seneca Landfill	Vogel Holding Inc.	\$91.90	\$91.90	\$91.90	\$116.90	\$116.90	\$8.10	\$100.00
Tri County Landfill	Vogel Holding Inc.	\$91.90	\$91.90	\$91.90	\$116.90	\$116.90	\$8.10	\$100.00
USA Valley Landfill	Waste Management	\$62.50	\$62.50	\$62.50	\$62.50	N/A	\$7.50	\$70.00
Wayne Township Landfill	Clinton County Solid Waste Authority	\$39.50	\$39.50	\$39.50	\$39.50	\$49.50	\$13.50	\$53.00

DESIGNATING ADDITIONAL FACILITIES

The past decade demonstrated that businesses decisions and regulatory requirements affect the number and identities of local market participants. It is reasonable to consider that landfills, transfer stations and hauling companies currently identified in the revised Plan may change owners or cease to exist. New ownership may influence how and where waste can be transported. Improved technologies or permitted facilities may operate that do not currently exist. Thus, Mercer County could find a need to utilize a disposal or processing facility that is not presently included in the Plan.

To facilitate and expedite the process of incorporating any additional disposal/processing facilities into the Plan Mercer County has established guidelines. Adding one or more facility(s) to a plan is not considered a substantial Plan revision. Therefore, it does not require review and ratification by each of the municipalities. This allows the County to respond to requests quickly and with lower costs than if a full-scale revision of the overall Plan was necessary.

To simplify inclusion of a new facility Mercer County created a petitioning process. Initially, either a hauler, transfer station or the facility itself must file a request with the County. Official forms provided by the Lawrence-Mercer Recycling/Solid Waste Department must be submitted by the petitioner. The Processing/Disposal Facility Petition for Designation in the Mercer County Municipal Solid Waste Management Plan can be found in Appendix C.

Once the petitioner submits the form, the County will notify the PADEP that a Plan revision may be forthcoming. Mercer will then send to the facility an information packet, which outlines the requirements for designation as a disposal facility. Without exception, all facilities must meet the same criteria as those responding to the initial Request for Proposals for Disposal Capacity. These include the technical qualifications, compliance history, managerial experience and permitted status. A copy of the contractual agreement, which includes a set fee structure, shown in Appendix B, will be included for the facility to review and execute.

It will be the responsibility of the Petitioner or the Facility to cover any and all costs associated with the Plan revision. The costs shall be established by the County based on but not limited to the following expenses: staff, legal and consulting time; reproduction; postage; distribution to municipalities; and other related items.

Chapter 7

Implementation and Enforcement

ASSIGNMENTS OF RESPONSIBILITY

The powers and duties assigned to counties to develop and attain the terms and conditions dictated by their solid waste management plans are clearly defined in Act 101. There are a number of ways that counties can manage those responsibilities. By the very nature of the position, the responsibility is assumed to fall to the reigning board of commissioners. It can, however, be delegated to another individual, agency, department or similar entity. This chapter identifies the manner in which Mercer County will authorize the programmatic, administrative and enforcement duties associated with the Plan.

DESIGNATED ENTITY

Since 1991 the Mercer County Solid Waste Authority was responsible for developing and implementing the Mercer County Municipal Solid Waste Management Plan. The Mercer County Regional Planning Commission (MCRPC) also had involvement by housing and providing shared oversight of the Authority's staff. These organizations were utilized primarily because it was thought to be of benefit to keep solid waste activities at arm's length from county government. However, awareness, attitudes, conditions and financial resources change over time. Most recently, the Mercer County Board of Commissioners determined that it was in the best interest of the County to take a more active role in solid waste management decision making. The Authority was deemed inactive. MCRPC temporarily assumed the duties but primarily as an administrative entity. A summary of the transpiring issues and events that contributed to this transition is provided in Appendix I.

The County explored a variety of options that would offer support in fulfilling the requirements of Act 101 and the Plan. The creation of a new Mercer County department and/or incorporating these duties into an existing department or onto a current staff member was considered. During that review and in keeping

with current statewide policy trends to regionalize and share resources, a timely opportunity to partner with neighboring Lawrence County presented itself. The pros and cons of the partnership were discussed and analyzed. After careful consideration, the County determined that while ultimate responsibility for compliance is retained by Mercer County, an ordinance and an intergovernmental agreement, delegates the entity to administer and enforce the Mercer County Municipal Solid Waste Management Plan as the Lawrence-Mercer County Recycling/Solid Waste Department. (LMCRSW) Details of the ordinance and the agreement are provided in Chapter 9.

LMCRSW will be responsible for monitoring the disposal capacity agreements and reviewing the reports submitted by each facility. Public education, enforcement and coordination of County sponsored programs will be initiated by LMCRSW staff. Seeking out, obtaining and administering grant funding from varied sources will be a high priority.

Staff members will answer to the Mercer County Board of Commissioners for all programs, functions, and activities that are related to Mercer County. Additionally, LCRSW staff must obtain budgetary approvals from Mercer County for all associated expenses and revenues.

COMMUNITY LIAISON

One of the LMCRSW staff will be designated as the Mercer County Recycling Coordinator. However, Mercer County will benefit from the fully staffed office of LMCRSW and their experience in developing and executing successful solid waste and recycling programs and events. The Coordinator will be expected to interact directly with members of the community, municipal officials, and the private sector. The Coordinator must see that the guidelines and recommendations set forth in the Plan are implemented according to schedule. Communicating and cooperating with the contractor, which operates the County's Drop-off Recycling Collection program will be of prime importance. Outreach programs, special collection events and feasibility studies are originated and supervised by the Recycling Coordinator. LMCRSW staff will have the responsibility to secure grants to fund those programs and the Recycling Coordinator will be expected to administer the grants properly.

Serving as the County's liaison with the Pennsylvania Department of Environmental Protection the Coordinator is ultimately responsible for regulatory compliance and reporting, including submission of the County's Annual Report. The Coordinator should also be active in the regularly scheduled Western Pennsylvania Recycling and Sustainability Forum, coordinated in part by PADEP, to foster a peer to peer network and develop a solid working relationship with the Department.

Most Recycling Coordinators benefit from membership and participation in the Professional Recyclers of Pennsylvania. This organization provides continuing education opportunities and up to date information on solid waste, composting and recycling. Additionally, participating in and promoting the efforts of the local chapter of Keep Pennsylvania Beautiful and the Shenango River Watchers would support the advancement of their efforts to remediate illegal dumpsites.

It is important that LMCRSW maintain an open line of communication with the Mercer County Board of Commissioners regarding solid waste and recycling issues. As the implementing entity, LMCRSW should keep the Commissioner's informed of the program's achievements and constraints; provide updates on pending regulatory changes that could impact the County's programs; communicate funding needs; and offer suggestions for program improvements. In turn, for the Plan to be implemented successfully, the Commissioners will need to support the efforts of their delegate.

EXPECTED BENEFITS

It has been demonstrated that there are cost savings when duplication of efforts can be avoided by local governments. These same savings are anticipated as the long term effect of the Mercer/Lawrence intergovernmental agreement. Initially, Mercer County could see a slight increase from its current budget. This would occur if it opts to add one or more of the same programs, which Lawrence County currently has in place. However it is important to note that the cost will be significantly less than if Mercer County would have initiated those same programs on its own. Programs such as Household Hazardous Waste and Electronic Waste collection events were identified in the planning process as value added services. Educational pieces, advertising, reporting, and other procedures can all be mirrored. Design, printing and other labor costs are thus cooperatively shared reducing the line item cost for each County. Immediate savings will be realized in its recycling drop-off collection program. Because both counties operate the same type of program and share similar equipment, Mercer County is able to share in the contractor use of Lawrence County's collection vehicles and thus experience lower rates.

Chapter 8

Public Ownership and Function

THE ROLE OF THE COUNTY AND MUNICIPALITIES

Mercer County has an important role in the advancement of solid waste and recycling technologies and processes. The public function of the County will continue to be one, which supports the efforts of private industry through open communication, education, and enforcement of proper waste management practices. Just as it promotes economic development by providing incentives that attract and retain private investments and businesses from other industries, the County has assumed a similar public function regarding the business of waste management and recycling.

By developing sound regulatory policies that promote participation in waste and recycling collection, the County could provide a steady feedstock to an industry, which relies on recyclables as raw materials for its manufacturing process. Not only does recycling provide jobs to those in the business of collecting the material, it has the potential to bring new manufacturing jobs to the community.

COUNTY OPERATIONS

Mercer County does not own or operate any type of disposal or processing facility. It was determined during the former and recent planning process that adequate disposal capacity can be secured through agreements with private sector facilities. Similarly, a variety of options exist for processing and marketing of recyclable materials.

The County has acquired a series of recycling drop-off containers, made possible by Act 101, Section 902 Equipment and Implementation Grants. These containers are used in conjunction with the County's recycling collection program, which is operated under contract by a private sector service provider.

MUNICIPAL OPERATIONS

Municipalities in Mercer County do not utilize public works crews to collect and transport municipal solid waste or recyclables. In some instances, however, public workers do collect leaves, leaf waste and yard debris. These materials are processed at public compost facilities. The Boroughs of Greenville and Grove City each have an approved composting site. Processing equipment for the yard waste programs was purchased in part with 902 Grant funds

FUTURE CONSIDERATIONS

Mercer County has no desire, need or intention of developing or investing in a public sector municipal solid waste infrastructure. There is no indication from any of the municipalities that such interests or plans exist. It is anticipated that these roles or attitudes will not change during the Plan's implementation period.

Chapter 9

Policies and Procedures

TOOLS FOR IMPLEMENTATION AND ENFORCEMENT OF THE PLAN

Counties were granted greater powers by Act 101 to establish local goals and objectives in their municipal solid waste management plans. However, certain mechanisms are still necessary to clarify Mercer County's authority to implement the Plan. Additionally, ordinances, contracts and other legal documents empower the County's implementing entity to enforce these policies. Rules and regulations help residents, businesses and service providers understand their roles and responsibilities in municipal solid waste management. Such guidelines are valuable deterrents to illicit waste management practices and are useful in resolving conflicts and disputes regarding solid waste issues.

The tools designed for implementation of this Plan are discussed in the following narratives. The documents are provided in separate sections of the Appendices, with the specific location noted below.

During the Plan implementation period, forms for transporter reporting, as well as other documents may be developed and revised over time to simplify and improve the procedures associated with implementation. However, these changes will not alter the legal or contractual content of the Plan.

MUNICIPAL WASTE DISPOSAL CAPACITY AGREEMENT

The Municipal Waste Disposal Capacity Agreement (Appendix B) is the contract, which assures disposal capacity for Mercer County municipal wastes at the facilities designated in this Plan. The agreement establishes the types and volumes of waste; the maximum tipping fees; and the reporting requirements for each site. Each and every facility currently included in the Plan, as well as any in the future, must agree to the provisions of this Agreement. This ensures consistent and non-discriminatory terms, conditions and standards among all facilities.

PETITION TO ADD A PROCESSING/DISPOSAL FACILITY IN THE PLAN

The County recognizes that new facilities or technical processing opportunities may become available. To accommodate such opportunities, the Plan provides a mechanism to add facilities in the future. Appendix C includes the Petition to add a Processing/Disposal Facility in the Plan. The requirements for completing that process are also described. Each facility petitioning the County will be subject to the same criteria set forth in the original Request for Proposals. The PADEP must be notified of the inclusion of the new facility.

SOLID WASTE AND RECYCLING TRANSPORTERS ORDINANCE

The County drafted the Solid Waste and Recycling Transporters Ordinance to ensure that those collecting and transporting municipal waste and recyclables in Mercer County report their activities. Transporter reporting facilitates the County's annual reporting requirements to PADEP. By more thoroughly tracking and monitoring the activities of those engaged in handling and transporting recyclables, the County increases its opportunities to obtain Act 101, Section 904 Performance Grants. The ordinance is located in Appendix D, Section 1.

ORDINANCE FOR IMPLEMENTING ENTITY

Prior to entering into intergovernmental agreements, counties are required to adopt ordinances that establish the County's authority to make certain commitments. The Mercer County Board of Commissioners passed such an ordinance to validate the delegation of the Lawrence-Mercer Recycling/Solid Waste Department as the implementing entity of the Mercer County Municipal Solid Waste Plan. The ordinance is located in Appendix D, Section 2.

INTERGOVERNMENT AGREEMENT FOR IMPLEMENTING ENTITY

The Boards of County Commissioners from Lawrence and Mercer Counties have determined that by sharing resources both counties can develop and implement more overall cost effective solid waste and recycling programs. The official agreement between the two Counties is provided in Appendix E.

RESOLUTION TO ADOPT THE PLAN REVISIONS

Upon completion of this Plan revision, the Mercer County Board of Commissioners adopted the revised Plan in the form of a resolution contained in Appendix F.

Chapter 10

Changes and Modifications

IMPACT ON EXISTING PROGRAMS

Representatives from the cities, boroughs and townships in Mercer County were consulted during the development of the Plan. Additionally agencies and institutions, as well as the waste and recycling industry offered input. Outreach to these diverse groups was sought to ensure that policies resulting from the Plan were fair and reasonable. This chapter provides a brief outline of the modifications made to philosophies and programs presented in the former Plan. It discusses how those changes might affect the various stakeholders. None of the revisions are anticipated to have any effect on existing contracts and business relationships.

LEADERSHIP

The Plan reflects changes in the delegation of responsibilities from a municipal authority to a shared county level department. A direct line of reporting to the Board of County Commissioners is reflective of a renewed interest in environmental initiatives at the County level. It also provides the County with a more informative approach to decision-making and budgetary allocations regarding solid waste and recycling issues.

PRIVATIZATION

The countywide recycling drop-off collection program first proposed and operated as a public function was privatized. Additionally, sites were removed from municipalities mandated to provide curbside collection and relocated to rural areas with lesser opportunities for recycling. These changes resulted in significant savings to the County. The cost reductions provided the funds to extend the life of the program.

RULES AND REGULATIONS

With the advent of Act 90 and the Waste Transporter Authorization program, Mercer County abandoned its waste hauler-licensing program. A simplified but more inclusive reporting program was recommended to facilitate the County's PADEP reporting requirements and to increase the return on Act 101 Section 904 Performance Grants. The reporting system includes not only waste haulers, but also those hauling recyclables.

DISPOSAL OPTIONS

An updated array of disposal facilities has been designated to receive Mercer County municipal solid waste. This menu of disposal options ensures a higher level of competition for municipal and commercial collection contracts, thus controlling costs for residents and business owners. Additionally, more opportunities to responsibly dispose of special handling and hard to recycle materials will result from recommendations made in the Plan.

UNIVERSAL COLLECTION

Assurances that all homes utilize proper municipal waste and recycling collection services was the primary recommendation of the Solid Waste Advisory Committee. The Plan sets forth a timeline to educate municipal officials, and provide model ordinances to institute mandatory waste collection with options to mandate recycling either at the curb or via drop-off, depending on what works best for each municipality. An improvement in general public health and safety resulting from the decrease in illegal dumping and littering is expected to occur.

Chapter 11

Non-Interference of Commerce

GUARANTEES FOR INDUSTRY PARTICIPANTS

All counties within the Commonwealth of Pennsylvania are required by Act 101 to develop a municipal solid waste management plan, which provides for secured disposal capacity and attainment of recycling goals. Similar requirements are common throughout the nation. Those involved in providing solid waste management services in Mercer County play an important role in serving not only local needs, but also those of other counties and states. Disposal facilities are provided protection from potentially restrictive terms and conditions that could otherwise be written into county plans and their implementing documents. This chapter addresses how this Plan adheres to those guidelines.

EQUAL RIGHTS TO CAPACITY

Mercer County currently exports all types of waste to disposal and processing facilities located in other areas. Butler, Erie Clinton, and Allegheny Counties are all recipients of Mercer County municipal and/or residual waste. A significant amount of the County's waste actually travels across state lines and is disposed in Ohio.

The Mercer County Municipal Solid Waste Management Plan approved in 1991 and subsequently amended in 1997 as well as its revisions designate a broad offering of disposal and processing facilities that can accept Mercer County waste. At this point in time all of the disposal facilities are located outside of the County's borders. As discussed previously in this document, the provision of multiple facilities allows for a fair and open market and sufficient capacity available to the County. The same approach was utilized in other county plans. It is possible that many of them and/or their municipalities could contract to export material to Mercer County facilities. In fact, transfer stations in Mercer County already handle material from remote sources.

Mercer County respects the contractual obligations of other counties and municipalities. It also recognizes and understands the need for facilities to design, finance and construct to meet the required capacity specifications.

Therefore, the County will not interfere with the normal operational and regulatory process involved with such permits. The County will neither inhibit the free enterprise of these facilities nor prevent them from generating the necessary profits to support those projects.

Chapter 12

The Solid Waste Advisory Committee

CONTRIBUTIONS FROM CITIZENS, BUSINESSES, INDUSTRIES AND MUNICIPALITIES

To develop the Plan stakeholders from varying community sectors offered their perspectives and visions of how solid waste should be managed in the County. At scheduled meetings, these individuals discussed successes and shortcomings of previous initiatives. They reviewed current conditions that impact waste and recycling. Programs and service offerings that could be made available in the County were explored. Recommendations to enhance waste management at the County and municipal levels were offered. Additionally, the group identified political hurdles and anticipated public response to needed changes. All of these comments were weighed against the regulatory obligations and constraints of the Municipal Waste Planning, Recycling and Waste Reduction Act. In addition, public health and safety, economics and operational feasibility were evaluated.

The opinions and ideas of this group were incorporated into the final selection and justification of the programs in the Revised Plan.

BALANCED REPRESENTATION

Six people were invited to accept positions on the Solid Waste Advisory Committee. Each person was selected to fill a representative segment of Mercer County. Some of the representatives qualified for more than one stakeholder group and therefore brought to the table a broader experience and understanding. Specific classes of the County's townships, boroughs and cities each had representation. The private waste and recycling industry, an environmental interest group, local business and industry, and educational interests all had voices on the committee.

PRIORITIES AND CONCERNS

Lawrence-Mercer County Recycling/Solid Waste personnel and the Project Consultant facilitated the meetings and introduced the varied issues required for

consideration as part of the planning process. In addition, they presented data, seen throughout this document, which is illustrative of the status of the existing programs and present potential future solutions. From this information, they initiated forums for discussion.

Comments were offered on the prevalence of litter, illegal dumping and overall lack of enforcement for proper waste collection throughout the County. Views were offered on the ability to eliminate open burning and enact uniform zoning ordinances regulating the accumulation of waste at local properties. Public understanding and awareness of the negative impact of these activities was considered low. The lack of local outlets for hard to recycle and special handling materials was acknowledged. A desire to improve these conditions while keeping the cost affordable for all citizens was stressed. Overall, providing reasonable enforcement measures; preventing pollution; and improving the quality of life in local communities was a common thread in all discussions. Explanations of how each comment related to the federal and state environmental regulations as well as county and municipal codes were offered to clarify how each idea could or could not be implemented.

GOALS

The Committee reached strong consensus on the need to mandate all residents of the County to have proper waste and recycling collection services, whether through municipal contracts or personal subscription. A requirement for all service providers of residential waste collection to include recycling as part of their service was urged. A commitment to educate municipal officials on the benefits of mandated collection and cooperative municipal contracting was stressed as an essential priority. Overall, the Committee agreed that the County should ensure proper management of Household Hazardous Waste, E-Waste and Unwanted Pharmaceuticals. It was agreed that better information from transporters and processors of solid waste and recyclables was needed to establish benchmarks and make informed decisions in the future. Lastly, the need to implement reasonable funding mechanisms at the County, municipal and user level was essential in order to sustain all programs. Therefore, the SWAC concluded that revisions to the Plan should focus on those goals.

MEETING CONTENT

Agendas and/or Minutes highlighting the topics and issues considered and discussed at the Solid Waste Advisory Meetings along with comments received from municipalities, PADEP and the public are located in Appendix H.

WE ARE RECYCLING NOT ONLY TO
PROTECT THE ENVIRONMENT, BUT
FOR ECONOMIC REASONS AS WELL.

THE CHALLENGE IS TO REDIRECT
THE FLOW OF RAW MATERIALS
GOING TO LANDFILLS INTO

STRENGTHENING
OUR DECLINING
LOCAL
ECONOMIES.

THE
SOLUTION
TO
POLLUTION
IS SELF-
RELIANT
CITIES AND
COUNTIES.

*-Neil Seldman, Institute for Local Self-
Reliance, 1990*



Appendix A

Definitions

DEFINITIONS AND ACRONYMS

The following words, terms and acronyms are commonly used in discussions of municipal solid waste management and recycling. Throughout this plan, those words, terms and acronyms have the following meanings, unless the context clearly indicates otherwise:

Act—The Solid Waste Management Act (35 P. S. §§ 6018.101–6018.1003).

Agricultural utilization—The land application of sewage sludge for its plant nutrient value or as a soil conditioner as part of an agricultural operation.

Agricultural waste—Poultry and livestock manure, or residual materials in liquid or solid form generated in the production and marketing of poultry, livestock, fur bearing animals, and their products, if the agricultural waste is not hazardous. The term includes the residual materials generated in producing, harvesting and marketing of agronomic, horticultural and silvicultural crops or commodities grown on what are usually recognized and accepted as farms, forests or other agricultural lands.

Aluminum—Refers to cans comprised of 100% aluminum.

Association—A corporation, partnership, limited liability company, business trust or two or more persons associated in a common enterprise or undertaking.

Autoclave—A pressure vessel in which infectious waste is disinfected using high temperature steam, directly or indirectly, to maintain specified temperatures for retention times consistent with the waste being processed.

Beneficial use—Use or reuse of residual waste or residual material derived from residual waste for commercial, industrial or governmental purposes, where the use does not harm or threaten public health, safety, welfare or the environment, or the use or reuse of processed municipal waste for any purpose, where the use does not harm or threaten public health, safety, welfare or the environment.

C&D— Construction Demolition Waste

Chemotherapeutic waste—Waste resulting from the production or use of antineoplastic agents used for the purpose of inhibiting or stopping the growth of malignant cells or killing malignant cells. The term does not include waste containing antineoplastic agents that are hazardous wastes under Chapter 261a (relating to identification and listing of hazardous waste) and 40 CFR Part 261 (relating to identification and listing of hazardous waste) to the extent that Part

261 is incorporated in § 261a.1 (relating to incorporation by reference, purpose and scope).

Clean fill—Uncontaminated, nonwatersoluble, nondecomposable inert solid material used to level an area or bring the area to grade. The term does not include material placed into or on waters of this Commonwealth.

Closure—The date on which a municipal waste processing or disposal facility permanently ceases to accept waste, and access is limited to activities necessary for postclosure care, maintenance and monitoring.

COG — Council of Governments

Commercial establishment—An establishment engaged in nonmanufacturing or nonprocessing business, including, but not limited to, stores, markets, office buildings, restaurants, shopping centers and theaters.

Commercial infectious or chemotherapeutic waste facility—A facility that processes infectious or chemotherapeutic waste not generated primarily onsite. The term includes facilities where one of the following exists:

(i) Of the waste processed, less than 50% on a monthly average was generated onsite.

Greater than 50% of the waste processed on a monthly average is not generated from entities that are wholly-owned by the owner of the waste processing facility.

Community activities—Events sponsored in whole or in part by a municipality, or conducted within a municipality and sponsored privately, which include, but are not limited to, fairs, bazaars, socials, picnics and organized sporting events that will be attended by 200 or more individuals per day.

Composting—The process by which organic solid waste is biologically decomposed under controlled anaerobic or aerobic conditions to yield a humus-like product.

Composting facility—A facility using land for processing of municipal waste by composting. The term includes land thereby affected during the lifetime of the operations, including, but not limited to, areas where composting actually occurs, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility. The term does not include a facility for composting residential municipal waste that is located at the site where the waste was generated.

Composting pad—An area within a general composting facility where compost or solid waste is processed, stored, loaded or unloaded.

Construction/demolition waste—Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete. The term does not include the following if they are separate from other waste and are used as clean fill:

(i) Uncontaminated soil, rock, stone, gravel, brick and block, concrete and used asphalt.

Waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material.

Construction/demolition waste landfill—A facility using land exclusively for the disposal of construction/demolition waste. The term includes land affected during the lifetime of the operations, including, but not limited to, areas where disposal activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to the operation of the facility.

Construction material—The engineered use of municipal waste as a substitute for a raw material or a commercial product in a construction activity, if the waste has the same engineering characteristics as the raw material or commercial product for which it is substituting. The term includes the use of municipal waste as a roadbed material, for pipe bedding and in similar operations. The term does not include valley fills, the use of municipal waste to fill open pits from coal or other fills or the use of municipal waste solely to level an area or bring the area to grade when a construction activity is not completed promptly after the placement of the solid waste.

Container—A portable device in which waste is held for storage or transportation.

Corrugated paper—A structural paper material with an inner core shaped in rigid parallel furrows and ridges.

DEP— Department of Environmental Protection

Department—The Department of Environmental Protection of the Commonwealth, and its authorized representatives

Disposal—The deposition, injection, dumping, spilling, leaking or placing of

solid waste into or on the land or water in a manner that the solid waste or a constituent of the solid waste enters the environment, is emitted into the air or is discharged to the waters of this Commonwealth.

Disposal area—The part of the site where disposal is occurring or will occur.

EPA—The United States Environmental Protection Agency.

Environmental protection acts—The act, The Clean Streams Law (35 P. S. §§ 691.1–691.1001), the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. §§ 4001.101–4001.1904), the Hazardous Sites Cleanup Act (35 P. S. §§ 6020.101–6020.1305), the Low-Level Radioactive Waste Disposal Act (35 P. S. §§ 7130.101–7130.906), the act of July 13, 1988 (35 P. S. §§ 6019.1–6019.6), known as the Infectious and Chemotherapeutic Waste Disposal Law, the Air Pollution Control Act (35 P. S. §§ 4001–4015), the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1–1396.31), the Noncoal Surface Mining Conservation and Reclamation Act (35 P. S. §§ 3301–3326), the Dam Safety and Encroachments Act (32 P. S. §§ 693.1–693.27), and other State or Federal statutes relating to environmental protection or the protection of public health, including statutes adopted or amended after April 9, 1988.

Environmental Stewardship and Watershed Protection Act—27 Pa.C.S. §§ 6101–6113.

Facility—Land, structures and other appurtenances or improvements where municipal waste disposal, processing or beneficial use is permitted or takes place.

Feasibility study—A study which analyzes a specific municipal waste processing, recycling or disposal system to assess the likelihood that the system can be successfully implemented, including, but not limited to, an analysis of the prospective market, the projected costs and revenues of the system, the municipal waste stream that the system will rely upon and various options available to implement the system.

Final closure—The date after which no further treatment, maintenance or other action is or will be necessary at a municipal waste processing or disposal facility to ensure compliance with the act and this article.

General composting facility—A composting facility other than an individual backyard composting facility or yard waste composting facility operating under § 271.103(h) (relating to permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements).

General permit—Except as provided in Subchapter J (relating to beneficial use

of sewage sludge by land application), a regional or Statewide permit issued by the Department for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

Generator—A person or municipality that produces or creates a municipal waste.

Hazardous waste—Garbage, refuse or sludge from an industrial or other waste water treatment plant; sludge from a water supply treatment plant or air pollution control facility; and other discarded material, including solid, liquid, semisolid or contained gaseous material resulting from municipal, commercial, industrial, institutional, mining, or agricultural operations, and from community activities; or a combination of the above, which because of its quantity, concentration or physical, chemical or infectious characteristics may do one of the following:

(i) Cause or significantly contribute to an increase in mortality or increase in morbidity in either an individual or the total population.

(ii) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51–30.101). The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under The Clean Streams Law (35 P. S. §§ 691.1–691.1001). The term does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act (33 U.S.C.A. § 1341) or source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C.A. §§ 2011–2284).

HDPE—High Density Polyethylene

HHW— Household hazardous waste

High-grade office paper—Bond, copier, letterhead or mimeograph paper typically sold as “white ledger” paper; and computer paper.

Household hazardous waste— Waste generated by a household that could be chemically or physically classified as a hazardous waste under the standards of Article VII (relating to hazardous waste management).

For the purpose of this definition, the term “household” includes those places described as “households” in 40 CFR 261.4(b)(1) (relating to exclusions).

ICW— Infectious Chemotherapeutic Waste

Incinerator—An enclosed device using controlled combustion for the primary purpose of thermally breaking down solid waste, and which is equipped with a flue as defined in § 121.1 (relating to definitions).

Industrial establishment—An establishment engaged in manufacturing or processing, including, but not limited to, factories, foundries, mills, processing plants, refineries, mines and slaughterhouses.

Infectious waste— (i) General. Municipal and residual waste which is generated in the diagnosis, treatment, immunization or autopsy of human beings or animals, in research pertaining thereto, in the preparation of human or animal remains for interment or cremation, or in the production or testing of biologicals, and which falls under one or more of the following categories:

(A) Cultures and stocks. Cultures and stocks of infectious agents and associated biologicals, including the following: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines except for residue in emptied containers; and culture dishes, assemblies and devices used to conduct diagnostic tests or to transfer, inoculate and mix cultures.

(B) Pathological wastes. Human pathological wastes, including tissues, organs and body parts and body fluids that are removed during surgery, autopsy, other medical procedures or laboratory procedures. The term does not include hair, nails or extracted teeth.

(C) Human blood and body fluid waste.

(I) Liquid waste human blood.

(II) Blood products.

(III) Items saturated or dripping with human blood.

(IV) Items that were saturated or dripping with human blood that are now caked with dried human blood, including serum, plasma and other blood components, which were used or intended for use in patient care, specimen testing or the development of pharmaceuticals.

(V) Intravenous bags that have been used for blood transfusions.

(VI) Items, including dialysate that have been in contact with the blood of patients undergoing hemodialysis at hospitals or independent treatment centers.

(VII) Items saturated or dripping with body fluids or caked with dried body fluids from persons during surgery, autopsy, other medical procedures or laboratory procedures.

(VIII) Specimens of blood products or body fluids, and their containers.

(D) Animal wastes. Contaminated animal carcasses, body parts, blood, blood products, secretions, excretions and bedding of animals that were known to have been exposed to zoonotic infectious agents or nonzoonotic human pathogens

during research (including research in veterinary schools and hospitals), production of biologicals or testing of pharmaceuticals.

(E) Isolation wastes. Biological wastes and waste contaminated with blood, excretion, exudates or secretions from:

(I) Humans who are isolated to protect others from highly virulent diseases.

(II) Isolated animals known or suspected to be infected with highly virulent diseases.

(F) Used sharps. Sharps that have been in contact with infectious agents or that have been used in animal or human patient care or treatment, at medical, research or industrial laboratories.

(ii) Mixtures.

(A) The term also includes materials identified under subparagraph (i) that are mixed with municipal and residual waste, including disposable containers.

(B) The term also includes mixtures of materials identified in subparagraph (i) with quantities of radioactive waste not subject to regulation.

(iii) Exceptions. The term does not include the following:

(A) Wastes generated as a result of home self-care.

(B) Human corpses, remains and anatomical parts that are intended for interment or cremation, or are donated and used for scientific or medical education, research or treatment.

(C) Etiologic agents being transported for purposes other than waste processing or disposal pursuant to the requirements of the United States Department of Transportation (49 CFR 171.1–190), the Department of Transportation (67 Pa. Code Part I) and other applicable shipping requirements.

(D) Samples of infectious waste transported offsite by Commonwealth or United States government enforcement personnel during an enforcement proceeding.

(E) Body fluids or biologicals which are being transported to or stored at a laboratory prior to laboratory testing.

(F) Ash residue from the incineration of materials identified in subparagraphs (i) and (ii) if the incineration was conducted in accordance with § 283.402 (relating to infectious waste monitoring requirements). The ash residue shall be managed as special handling municipal waste.

(G) Reusable or recyclable containers or other nondisposable materials, if they are cleaned and disinfected, or if there has been no direct contact between the surface of the container and materials identified in subparagraph (i). Laundry or medical equipment shall be cleaned and disinfected in accordance with the United States Occupational Safety and Health Administration Requirements in 29 CFR 1910.1030 (relating to blood borne pathogens).

(H) Soiled diapers, which do not contain materials identified in subparagraph (i).

(I) Mixtures of hazardous waste subject to Article VII (relating to hazardous waste management) and materials identified in subparagraph (i) shall be managed as hazardous waste and not infectious waste.

(J) Mixtures of materials identified in subparagraph (i) and regulated radioactive waste shall be managed as radioactive waste in accordance with

applicable Commonwealth and Federal statutes and regulations, including, but not limited to, § 236.521 (relating to minimum requirements for classes of waste).

Mixtures of materials identified in subparagraph (i) and chemotherapeutic waste shall be managed as chemotherapeutic waste in accordance with this article.

Institutional establishment—An establishment engaged in service, including, but not limited to, hospitals, nursing homes, orphanages, schools and universities.

Keep Pennsylvania Beautiful—A statewide grassroots organization affiliated with Keep America Beautiful a national organization dedicated to eliminating littering and illegal dumping, and which promotes recycling. The group enlists volunteers to identify and remediate open dumpsites; provides educational programming; and advocates for proper waste management practices. PA CleanWays merged with Keep Pennsylvania Beautiful and they now function under the Keep America Beautiful name.

Land application—Agricultural utilization or land reclamation of solid waste. The term does not include the disposal of solid waste in a landfill or disposal impoundment.

Land disposal—The land application of sewage sludge for purposes other than agricultural utilization or land reclamation.

Landowner—The person or municipality in whom legal title to the surface of the land is vested.

Land reclamation—The land application of sewage sludge for its plant nutrient value or as a soil conditioner, in order to establish vegetative growth or restore or enhance the soil.

Leachate—A liquid that has permeated through or drained from solid waste.

Leaf composting facility—A facility for composting vegetative material, including leaves, garden residue and chipped shrubbery and tree trimmings. The term does not include a facility that is used entirely or partly for composting grass clippings.

Leaf waste—Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Liquid waste—A waste that contains free liquids as determined by Method 9095 (paint filter liquids test), as described in the EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication No. SW-846).

Management—The entire process, or a part thereof, of storage, collection, transportation, processing, treatment and disposal of solid wastes by a person engaging in the process.

Marketed—The transfer of ownership of recyclable materials for the purpose of recycling the materials into a new product or use.

Maximum daily volume—The maximum daily volume limit that is permitted to be received for disposal at the facility on an operating day.

Municipality—A city, borough, incorporated town, township, county or an authority created by any of the foregoing.

Municipal recycling program—A source separation and collection program for recycling municipal waste or source-separated recyclable materials, or a program for designated drop-off points or collection centers for recycling municipal waste or source-separated recyclable materials, that is operated by or on behalf of a municipality. The term includes a source separation and collection program for composting yard waste that is operated by or on behalf of a municipality. The term does not include a program for recycling construction/demolition waste or sludge from sewage treatment plants or water supply treatment plants.

Municipal waste—Garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility.

Municipal waste disposal or processing facility—A facility using land for disposing or processing of municipal waste. The facility includes land affected during the lifetime of operations, including, but not limited to, areas where disposal or processing activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility.

Municipal waste landfill—A facility using land for disposing of municipal waste. The facility includes land affected during the lifetime of operations including, but not limited to, areas where disposal or processing activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and

water pollution control and treatment systems, access roads, associated onsite and contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility. The term does not include a construction/demolition waste landfill or a facility for the land application of sewage sludge.

Municipal waste management plan—A comprehensive plan for an adequate municipal waste management system in accordance with Chapter 272, Subchapter C (relating to municipal waste planning).

Municipal Waste Planning, Recycling and Waste Reduction Act—53 P. S. §§ 4000.101—4000.1904.

OCC— Old corrugated cardboard

ONP— Old newsprint

Onsite—The same or geographically contiguous property owned or leased or used by a generator or waste management facility, which may be divided by public or private right-of-way, if the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along the right-of-way. Noncontiguous properties owned or leased by the same person or municipality but connected by a right-of-way under the control of the person or municipality and to which the public does not have access, are also considered onsite property. A facility that does not meet the requirements of this definition is an offsite facility.

Operate—To construct a municipal waste management facility in anticipation of receiving solid waste for the purpose of processing or disposal; to receive, process or dispose of solid waste; to carry on an activity at the facility that is related to the receipt, processing or disposal of waste or otherwise affects land at the facility; to conduct closure and postclosure activities at a facility.

Operator—A person or municipality that operates a municipal waste processing or disposal facility.

Owner—The person or municipality who is the owner of record of a facility or part of a facility.

PA CleanWays—A statewide grassroots non-profit organization dedicated to eliminating littering and illegal dumping in Pennsylvania. The group enlists volunteers to identify and remediate open dumpsites; provides educational programming; and advocates for proper waste management practices. The group merged with Keep Pennsylvania Beautiful and now functions under that name.

Pennsylvania Used Oil Recycling Act—58 P. S. § § 471—480.

Permit—A permit issued by the Department to operate a municipal waste disposal or processing facility, or to beneficially use municipal waste. The term includes a general permit, permit-by-rule, permit modification, permit reissuance and permit renewal.

Permit area—The area of land and water within the boundaries of the permit, which is designated on the permit application maps as approved by the Department. The area includes the areas, which are or will be affected by the municipal waste processing or disposal facility.

Permit-by-rule—A permit which a person or municipality is deemed to have for the operation of a facility or an activity upon compliance with § 271.102 or § 271.103 (reserved).

Person—An individual, partnership, corporation, association, institution, cooperative enterprise, municipal authority, Federal Government or agency, State institution and agency—including, but not limited to, the Department of General Services and the State Public School Buildings Authority—or another legal entity which is recognized by law as the subject of rights and duties. In the provisions of this article pertaining to a fine or penalty, the term includes the officers and directors of a corporation or other legal entity having officers and directors.

PET—Polyethylene Teraphthalate

Plan revision—A change that affects the contents, terms or conditions of a Department approved plan under the Municipal Waste Planning, Recycling and Waste Reduction Act.

Pollution—Contamination of air, water, land or other natural resources of this Commonwealth that will create or is likely to create a public nuisance or to render the air, water, land or other natural resources harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other life.

Postclosure—Activities after closure which are necessary to ensure compliance with the act and this article, including application of final cover, grading and revegetation; groundwater, surface water and gas monitoring; erosion control and gas control; leachate treatment, and abatement of pollution or degradation to land, water, air or other natural resources.

Post consumer material—A product generated by a business or consumer

which has served its intended end use, and which has been separated or diverted from solid waste for the purposes of collection, recycling and disposition. The term includes industrial byproducts that would otherwise go to disposal or processing facilities. The term does not include internally generated scrap that is commonly returned to industrial or manufacturing processes.

Principal shareholder—A person or municipality that owns, holds or controls at least 5% of the stock of a publicly held corporation or at least 10% of the stock of a privately held corporation.

Processing—Technology used for the purpose of reducing the volume or bulk of municipal or residual waste or technology used to convert part or all of the waste materials for offsite reuse. Processing facilities include, but are not limited to, transfer facilities, composting facilities and resource recovery facilities.

Project development—Activities required to be conducted prior to constructing a processing or disposal facility that have been shown to be feasible, including, but not limited to, public input and participation, siting, procurement and vendor contract negotiations, and market and municipal waste supply assurance negotiations.

Reasonable expansion—A municipal waste landfill that meets the following:

(i) The facility represents growth of an existing permitted municipal waste landfill to land, which is contiguous to the existing landfill.

(ii) The contiguous land meets one of the following:

(A) The land is owned in fee by the owner of the municipal waste landfill.

(B) The land is subject to an irrevocable option exercisable within 1 year of one of the following:

(I) If the land is located in a county that will be submitting a plan under § 272.211(a) (relating to general requirement), the date that the first written notice of plan development is given under § 272.203 (relating to notice to municipalities).

(II) If the land is located in a county that had a plan approved under § 272.211(b), the date that the first written notice of proposed revision of the approved plan is given under § 272.203.

(iii) The contiguous land contains the same geological features as are present at the existing municipal waste landfill.

(iv) A complete permit application for the expansion is filed with the Department within 1 year of one of the following:

(A) If the land is located in a county that will be submitting a plan under § 272.211(a), the date that the first written notice of plan development is given under § 272.203.

(B) If the land is located in a county that had a plan approved under § 272.111(b), the date that the first written notice of proposed revision of the approved plan is given under § 272.203.

Recycling—The collection, separation, recovery and sale or reuse of metals, glass, paper, plastics and other materials which would otherwise be disposed or processed as municipal waste.

Recycling facility—A facility employing a technology that is a process that separates or classifies municipal waste and creates or recovers reusable materials that can be sold to or reused by a manufacturer as a substitute for or a supplement to virgin raw materials. The term does not include transfer facilities, municipal waste landfills, composting facilities or resource recovery facilities.

Recycling Fund—The fund established under section 706 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.706).

Related party—A person or municipality engaged in solid waste management that has a financial relationship to a permit applicant or operator. The term includes a partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor, agent or principal shareholder of another person or municipality, or a person or municipality that owns land on which another person or municipality operates a municipal waste processing or disposal facility.

Remaining available permitted capacity—The remaining permitted capacity that is actually available for processing or disposal to the county or other municipality that generated the waste.

Remaining permitted capacity—The weight or volume of municipal waste that can be processed or disposed of at an existing municipal waste processing or disposal facility. The term includes weight or volume capacity for which the Department has issued a permit under the act. The term does not include a facility that the Department determines, or has determined, has failed and continues to fail to comply with the act, the regulation thereunder, an order issued thereunder or permit conditions.

Residential septage—Liquid or solid material removed from a septic tank, cesspool or similar treatment works that receives only waste or wastewater from humans or household operations. The term includes processed residential septage from a residential septage treatment facility. The term does not include liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

Residual waste—Garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations; and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment

facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51–30.66). The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under The Clean Streams Law (35 P. S. §§ 691.1–691.1001).

Resource recovery facility— (i) A processing facility that provides for the extraction and utilization of materials or energy from municipal waste.

(ii) The term includes a facility that mechanically extracts materials from municipal waste, a combustion facility that converts the organic fraction of municipal waste to usable energy and a chemical and biological process that converts municipal waste into a fuel product.

(iii) The term includes a facility for the combustion of municipal waste that is generated offsite, whether or not the facility is operated to recover energy.

(iv) The term includes land affected during the lifetime of operations, including, but not limited to, areas where processing activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility.

(v) The term does not include:

(A) A composting facility.

(B) Methane gas extraction from a municipal waste landfill.

(C) A separation and collection center, drop-off point or collection center for recycling, or a source separation or collection center for composting leaf waste.

A facility, including all units in the facility, with a total processing capacity of less than 50 tons per day.

Salvaging—The controlled removal or recycling of material from a solid waste processing or disposal facility.

Sewage sludge—Liquid or solid sludges and other residues from a municipal sewage collection and treatment system; and liquid or solid sludges and other residues from septic and holding tank pumpings from commercial, institutional or residential

establishments. The term includes materials derived from sewage sludge. The term does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of sewage sludge at a municipal sewage collection and treatment system, or grit, screenings and nonorganic objects from septic and holding tank pumpings.

Sharps—Broken glass that has been in contact with pathogenic organisms, hypodermic needles and syringes to which a needle can be attached, with or

without the attached needle, suture needles, disposable razors, Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, culture dishes, suture needles, slides, cover slips and other broken or unbroken glass or plastic ware.

Shenango River Watchers—A local grassroots organization established to prevent and eliminate pollution in the Shenango River Watershed.

Site—The area where municipal waste processing or disposal facilities are operated. If the operator has a permit to conduct the activities, and is operating within the boundaries of the permit, the site is equivalent to the permit area.

Small business—A commercial establishment producing hazardous waste in amounts not regulated under the Resources Conservation and Recovery Act of 1976 (42 U.S.C.A. § § 6901–6986). For acutely hazardous wastes under 40 CFR 261.33, incorporated in § 261a.1, the term means commercial establishments producing less than 220 pounds per calendar month. For all other hazardous wastes, the term means commercial establishments producing less than 2,200 pounds per calendar month.

Small Business and Household Pollution Prevention Program Act—35 P. S. § § 6029.201–6029.209.

Soil additive or soil substitute—Municipal waste which is beneficially used at specified loading or application rates, to replace soil that was previously available at the site, to enhance soil properties or to enhance plant growth. The term does not include structural fills, construction material, valley fills or the use of municipal waste to fill open pits from coal or noncoal mining or the disposal of coal ash.

Solid waste—Waste, including, but not limited to, municipal, residual or hazardous wastes, including solid, liquid, semisolid or contained gaseous materials.

Solid Waste Abatement Fund—The fund established under section 701 of the act (35 P. S. § 6018.701).

Source reduction—The reduction or elimination of the quantity or toxicity of residual waste generated, which may be achieved through changes within the production process, including process modifications, feedstock substitutions, improvements in feedstock purity, shipping and packing modifications, housekeeping and management practices, increases in the efficiency of machinery and recycling within a process. The term does not include dewatering, compaction, reclamation or the use or reuse of waste.

Source separated recyclable materials—Materials that are separated from municipal waste at the point of origin for the purpose of recycling. The term is

limited to clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper, plastics and other marketable grades of paper.

Special handling waste—Solid waste that requires the application of special storage, collection, transportation, processing or disposal techniques due to the quantity of material generated or its unique physical, chemical or biological characteristics. The term includes dredged material, sewage sludge, infectious waste, chemotherapeutic waste, ash residue from a solid waste incineration facility, friable asbestos containing waste, PCB containing waste and waste oil that is not hazardous waste.

Sponsor—The definition from section 203 of the Small Business and Household Pollution Prevention Program Act is incorporated by reference.

Stabilized sewage sludge—Sewage sludge that has been treated to reduce odor potential and the number of pathogenic organisms. Treatment methods include anaerobic and aerobic digestion, composting, lime stabilization and chlorine stabilization.

Storage—The containment of any waste on a temporary basis in such a manner as not to constitute disposal of the waste. It shall be presumed that the containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

Surety bond—A penal bond agreement in a sum certain, payable to the Department, executed by the operator and a corporation licensed to do business as a surety in this Commonwealth and approved by the Department, and which is supported by the guarantee to payment on the bond by the surety.

SWAC— Solid Waste Advisory Committee

Thermal processing—A method, technique or process, excluding incineration and autoclaving, designed to disinfect infectious waste by means of exposure to high thermal temperatures through methods such as ionizing radiation or electric or plasma arc technologies.

Transfer facility—A facility which receives and processes or temporarily stores municipal or residual waste at a location other than the generation site, and which facilitates the transportation or transfer of municipal or residual waste to a processing or disposal facility. The term includes a facility that uses a method or technology to convert part or all of the waste materials for offsite reuse. The term does not include a collecting or processing center that is only for source-separated recyclable materials, including clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics.

Transportation—The offsite removal of solid waste at any time after generation.

Treatment—A method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of waste to neutralize the waste or to render the waste nonhazardous, safer for transport, suitable for recovery, suitable for storage or reduced in volume. The term includes an activity or processing designed to change the physical form or chemical composition of waste to render it neutral or nonhazardous.

Used oil—A petroleum-based or synthetic oil which is used in an internal combustion engine as an engine lubricant, or as a product for lubricating motor vehicle transmissions, gears or axles which, through use, storage or handling has become unsuitable for its original purpose due to the presence of chemical or physical impurities or loss of original properties.

USEPA— United States Environmental Protection Agency

Waste—A material whose original purpose has been completed and which is directed to a disposal, processing or beneficial use facility or is otherwise disposed of, processed or beneficially used. The term does not include source separated recyclable materials, material approved by the Department for beneficial use under a beneficial use order issued by the Department prior to May 27, 1997, or material which is beneficially used in accordance with a general permit issued under Subchapter I or Subchapter J (relating to beneficial use; and beneficial use of sewage sludge by land application) if a term or condition of the general permit excludes the material from being regulated as a waste.

Waste oil—Oil refined from crude oil or synthetically produced, used and as a result of the use, contaminated by physical or chemical impurities. The term includes used oil.

Waste reduction—Design, manufacture or use of a product to minimize weight of municipal waste that requires processing or disposal, including, but not limited to:

(i) Design or manufacturing activities which minimize the weight or volume of materials contained in a product, or increase durability or recyclability. The use of products that contain as little material as possible, are capable of being reused or recycled or have an extended useful life.

WWTP— Waste Water Treatment Plant

Yard waste—Leaves, grass clippings, garden residue, tree trimmings, chipped shrubbery and other vegetative material.

Yard waste composting facility—A facility that is used to compost leaf waste, or leaf waste and grass clippings, garden residue, tree trimmings, chipped shrubbery and other vegetative material. The term includes land affected during the lifetime of the operation, including, but not limited to, areas where composting actually occurs, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection and transportation activities, and other activities in which the natural surface has been disturbed as a result of or incidental to operation of the facility

Sources

PA Title 25. ENVIRONMENTAL PROTECTION Article VIII. MUNICIPAL WASTE

CHAPTER 271. MUNICIPAL WASTE MANAGEMENT—GENERAL PROVISIONS

Appendix B

Disposal Contracts

CONTRACT PROVISIONS

The following Draft Contract/Agreement is provided as an example of the type of document, expected to be executed between the County and the contractor. Mercer County reserves the right to amend the sample agreement prior to execution of a contract including but not limited to fee structures and increases.

MUNICIPAL WASTE DISPOSAL SERVICE CONTRACT

THIS MUNICIPAL WASTE DISPOSAL SERVICE CONTRACT (hereinafter referred to as the "Contract") entered this _____ day of _____, by and between

THE COUNTY OF MERCER, Mercer County,
Pennsylvania, hereinafter referred to as the "County"

AND

"_____ " hereinafter referred to as the "Contractor"

Name of Facility/Parent Company

WITNESSETH:

WHEREAS, the Board of County Commissioners, have developed and adopted the 1990 Municipal Waste Management Plan for Mercer County and its revisions in 2001 and 2010 in accordance with the requirements of the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 ("Act 101-"); and,

WHEREAS, the municipalities in Mercer County have duly approved and ratified this 1990 Municipal Waste Management Plan for Mercer County pursuant to the requirements of section 501 of Act 101; and,

WHEREAS, this 1990 Municipal Waste Management Plan for Mercer County and its revisions in 2000 and 2010 requires that all municipal waste generated within Mercer County must be disposed only at a municipal waste processing or disposal facility that is designated by the County pursuant to this plan to insure the availability of adequate permitted processing and disposal capacity for the municipal waste generated in Mercer County; and

WHEREAS, the Municipal Waste Planning, Recycling and Waste Reduction Act, Act 101, requires the county, as part of its plan, to provide for assurance for capacity or the processing and disposal of all municipal waste expected to be generated within the County for a period of at least the next ten (10) years, and further requires the County to execute and submit to the Department, contracts evidencing the implementation of its approved Plan and insuring sufficient available processing or disposal capacity; and,

WHEREAS, the Contractor wishes to be designated by the County as one of the municipal waste processing or disposal facilities or transfer stations where the municipal waste generated within Mercer County must be disposed; and,

WHEREAS, the Contractor is willing to guarantee the availability of adequate, permitted processing or disposal capacity for such waste and the costs for such services for a ten-year contract period in exchange for such designation by the County; and,

WHEREAS, the County and the Contractor now desire to enter into this Contract in order to effectuate the goals of the Municipal Waste Management Plan for Mercer County and to further set forth the agreements between the parties with respect thereto;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby agrees as follows:

DEFINITIONS

Unless the context clearly indicates otherwise, the following words and terms, as used in this Contract, shall have the following meanings:

Acceptable Waste -Waste that (Contractor) _____ is permitted to manage, process, store and/or dispose at the Landfill, in accordance with its Permit for a Solid Waste Disposal and/or processing Facility, Permit No. _____, which was issued by the Pennsylvania Department of Environmental Protection ("DEP") or the equivalent regulatory agency in the state where the facility is located in _____, and under applicable Pennsylvania law or that in which the facility is located, including, but not limited to, the Pennsylvania Solid Waste Management Act and the rules and regulations promulgated thereunder; and waste which is not inconsistent with the Landfill's Waste Acceptance Policy as defined herein. Act 101 - The Pennsylvania Municipal Waste Planning Recycling and Waste Reduction Act of 1988.

Affiliate Any individual or entity that controls, is controlled by, or is under common control with a party to this Contract, or in the case of a sole proprietor, any blood relative or employee of the contractor, as designated by this Contract.

Bulky Waste (White Goods) -Large items of refuse, including, but not limited to, appliances, furniture, auto parts, trees, branches or stumps which may require special handling due to their size, shape or weight.

Commercial Waste -All solid waste originating from commercial establishments engaged in non-manufacturing or non-processing business, including, but not limited to, stores, markets, office buildings, restaurants, shopping centers and theaters.

Construction Demolition Waste – Municipal Solid waste resulting from the Construction or Demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete.

Contract -The Municipal Waste Disposal Service Contract, between the County and the Contractor.

Contractor- _____ or any permitted successors, assigns, or affiliates.

County -The County of Mercer, Pennsylvania, the Mercer County Board of County Commissioners, or their designated representative.

Department or DEP The Pennsylvania Department of Environmental Protection (DEP).

Domestic or Residential Waste -Solid waste comprised of garbage and rubbish, which normally originates from residential private households or apartment houses.

Garbage -Putrescible animal or vegetable wastes resulting from the handling, preparation, cooking, serving or consumption of food and food containers.

Hauler and Waste Collector -Any person, firm partnership, association or corporation, including any municipality, engaged in the business of collecting and transporting municipal solid waste to processing or disposal facilities.

Hazardous Waste -A solid waste or combination of solid wastes which, because of its quantity, concentration or physical, chemical or infectious characteristics may: (1) cause or significantly contribute to an increase in mortality or an increase in morbidity in either an individual or the total population; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed or otherwise managed; or (3) is otherwise defined as "hazardous" by any Federal or State statute or regulation.

Industrial Waste -Solid waste resulting from manufacturing and industrial processes, including, but not limited to, those carried out in factories, foundries, mills, processing plants, refineries, mines and slaughter houses.

Institutional Waste Solid waste originating from institutions including, but not limited to, public buildings, hospitals, nursing homes, orphanages, schools and universities.

Landfill -The Contractor's permitted landfill located in _____(Municipality)(ies), County, _____ State.

Leaf Waste -Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Municipal Recycling Program A source separation and collection program for recycling municipal waste, or a program of designated drop-off points or collection centers for recycling municipal waste, that is operated by or on behalf of a municipality. The term shall include any source separation and collection program for composting leaf waste that is operated by or on behalf of a municipality. The term does not include any program for recycling construction and demolition waste or sludge from sewage treatment plants or water supply treatment plants.

Municipality -Any city, borough, incorporated town, township or county or any municipal authority- created by any of the foregoing.

Municipal Waste or Solid Waste -Garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semi-solid or contained gaseous material, (but excluding Hazardous waste) resulting from operation of residential, municipal, commercial or institutional establishments or from community activities; and any sludge not meeting the definition of residual or hazardous waste from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. The term does not include source separated recyclable materials or material approved by DEP for beneficial use.

Operator Any person or municipality that operates a municipal solid waste processing or disposal facility.

Owner - The person or municipality who is the owner of record of a solid waste processing or disposal facility.

Permit -A permit issued by the Pennsylvania DEP to operate a municipal waste disposal, processing or transfer station facility.

Permit Area -The area of land and water within the boundaries of the permit, which is designated on the permit application maps as approved by the Pennsylvania DEP, or equivalent regulatory agency in the state in which the facility is located

Proposal – Complete response to the ____ (Month) _____ 2010 Request for Proposals for Municipal Waste Processing and Disposal Services that was submitted by Contractor to the County.

Recycling - The collection, separation, recovery and sale or reuse of metals, glass, paper, leaf waste, plastics and other materials which would otherwise be disposed or processed as municipal waste.

Refuse -Discarded waste materials in a solid or semi-liquid state, consisting of garbage, rubbish or a combination thereof.

Remaining Permitted Capacity -At any time the remaining weight or volume of municipal waste that can be disposed at a permitted municipal waste disposal or processing facility. The term shall only include the weight or volume capacity for which the Pennsylvania DEP (or the equivalent regulatory agency in state which the facility is located) has issued a permit.

Residual Waste -Any garbage, refuse, other discarded material or other waste, including solid, liquid, semi-solid or contained gaseous material resulting from industrial, mining and agricultural operations and any sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous.

Resource Recovery Facility -A facility that provides for the extraction and utilization of materials or energy from municipal waste that is generated off-site, including, but not limited to, a facility that mechanically extracts materials from municipal waste, a combustion facility that converts the organic fraction of municipal waste to usable energy and any chemical or biological process that converts municipal waste into a fuel product or other usable material. The term does not include methane gas extraction from a municipal waste landfill, nor any separation and collection center, drop-off point or collection center for recycling municipal waste, or any source separation or collection center for composing leaf waste.

Rubbish -Non-putrescible solid wastes consisting of combustible and non-combustible materials including leaf wastes.

Sewage Sludge -The coarse screenings, grit and dewatered or air-dried sludges, septic and holding tank pumpings and other residues from municipal and residential sewage collection and treatment systems.

Stabilized Sewage Sludge -Sewage sludge that has been treated to reduce odor potential and the number of pathogenic organisms. Treatment methods include anaerobic and aerobic digestion, composting, lime stabilization and chlorine stabilization.

Tipping Fee -The schedule of fees established by the owner or operator of a transfer station, sanitary landfill, processing and/or resource recovery facility for accepting various types of solid waste for processing or disposal.

Unacceptable Waste -Any material that by reason of its composition, characteristics or quality, is ineligible for disposal at the landfill pursuant to the provisions of the Resource Conservation and Recovery Act of 1976, 42 U.S.C. S2605 (e), the Pennsylvania Solid Waste Management Act, 35 P.S. S6018.101, et seq., or other applicable Federal, State or local law; or any other material that the Contractor concludes would require special handling or present an endangerment to the landfill, the public health or safety, or the environment.

II. SCOPE OF CONTRACT

1. Designation as Disposal site

In consideration of Operator's Covenants and this Agreement, the County hereby agrees to include operator's landfill in its Plan as a designated non-exclusive processing or disposal facility for municipal waste generated in the County.

2. Effective Date

This Contract shall become effective on the date set forth below. The contractor shall begin providing municipal waste (processing) (disposal), service for the County under the terms and conditions of this Contract on January 1, 2011 or such earlier date as the landfill is approved by the DEP (or the equivalent regulatory agency in state which the facility is located) for receipt of municipal waste under the Permit.

3. Term of contract

A term of this Contract shall commence on the effective date, and shall terminate on the earlier of (a) any event, the effect of which is to permanently terminate the validity of the DEP (or the equivalent regulatory agency in state which the facility is located) Permit for the Landfill, or (b) until new contracts are executed unless terminated in writing.

4. Compliance with Applicable Laws

The parties to the Contract agree that the laws of the Commonwealth of Pennsylvania shall govern the validity, construction, interpretation and effect of the Contract. The Contractor shall conduct the service of municipal waste (processing) (disposal) as provided by for by the Contract in compliance with all applicable federal and state regulations and laws. The contract and the work to be performed as described herein is also subject to the provisions of all pertinent municipal ordinances which shall be made a part thereof with the same force and effect as if specifically set out therein.

5. Breach of Contract

If the Contractor fails to materially perform in a satisfactory manner in accordance with applicable Permit requirements or regulations the County shall have the right to demand in writing adequate assurances from the Contractor that steps have been or are being taken to rectify the situation. Within ten (10) days of receipt of any such demand the Contractor must submit to the County a written statement that explains the reasons for the non-performance or delayed, partial or substandard performance during that period and any continuance thereof. The Contractor shall also have the option to appear before the County to present any such explanation. Upon the failure of the contractor to submit a statement or failure of the Contractor to correct any such condition within fifteen (15) days after responding to the demand by the County, unless the County has agreed to a longer period (which agreement will not be unreasonably withheld), the County may, except under the conditions of force majeure, as defined herein, assess liquidated damages to the Contractor in accordance with the provisions stated herein and/or to terminate the Contract, and as a remedy make demands under the term of the Contractor's performance bond, in addition to any other remedy available to the County as provided by law.

6. Penalties and Liquidated Damages

A. It is hereby understood and mutually agreed by and between the Contractor and the County that the municipal waste (processing) (disposal) services to be performed under this Contract are vital for the protection of public health and welfare *and* it is further understood and agreed that the services to be performed under this Contract will be commenced on the date specified in this Contract.

B. It is hereby understood and mutually agreed by and between the Contractor and the County that reporting of complete and accurate data in the format required by this Contract is vital to evidence the implementation of Mercer County's approved Plan and the continued availability of sufficient processing or disposal capacity *and* it is further understood and agreed that the reports to be submitted under this Contract in the format required will be received by the County on the dates specified in this Contract.

C. If the Contractor neglects, fails or refuses to provide the municipal waste (processing) (disposal) services in accordance with the terms and provisions of the Contract, and as a result thereof there is a disruption or termination of the municipal waste (processing) (disposal) services to be performed by Contractor under this Contract, then the Contractor does hereby agree, as a partial consideration for the awarding of the Contract, to pay to the County an amount to be determined as hereinafter set forth as liquidated damages for such breach of Contract for each and every calendar day that such service is disrupted or terminated.

D. The amount of liquidated damages shall be equal to any additional total waste disposal cost {i.e., any disposal cost in excess of the amount that haulers normally would have paid for disposal of the same amount of waste at the Contractors' landfill under the contract}, if any, plus any additional total waste transportation costs {i.e., any transportation cost in excess of the amount that haulers normally would have paid for transporting the same amount of waste to the Contractors' Landfill} if any, that the haulers have incurred for transportation and disposal of the Municipal Waste to an alternative processing or disposal facility or transfer station.

E. The Contractor shall not be responsible for the payment of any liquidated damages whenever the County determines that the Contractor was without fault and the Contractor's reasons for the breach of Contract are acceptable. Furthermore, the Contractor shall not be responsible for any liquidated damages under the conditions of force majeure as defined herein.

F. If the Contractor neglects, fails or refuses to provide the complete and accurate reports. in the format required by the County in accordance with the terms and provisions of Section IV of the Contract, then the Contractor does hereby agree, as a partial consideration for the awarding of the Contract, to pay to the County an amount to be determined as hereinafter set forth as penalties for such breach of Contract for each and every calendar day that such reports in the format required by the County are late, incomplete, inaccurate or insufficient.

G. The amount of penalties shall be calculated at the rate of \$300 per day for each and every calendar day past the required date for submission. If more than one report required in Section IV of the Contract is to be submitted on the same calendar day then the amount of penalties shall be calculated separately for each and every report that is late, incomplete, inaccurate or insufficient or improperly formatted for a total not to exceed \$1,000 for each offense.

7. Force Majeure

Neither the Contractor nor the County shall be liable for the failure to perform their duties and obligations under the Contract or for any resultant damages, loss or expense, if such failure was the result of an act of God, riot, insurrection, war, catastrophe, natural disaster or any other cause which was beyond reasonable control of the Contractor or the County and which the contractor or County was unable to avoid by exercise of reasonable diligence.

8. Assignment of Contract

No transfer or assignment of the Contract or any right accruing under the Contract shall be made in whole or in part by the contractor without prior express written approval by the County (which

approval shall not be unreasonably withheld) .The delegation of any Contract duties will require the written consent of the surety for the Contractor's performance bond, since such delegation will not relieve the Contractor or his surety of any liability and/or obligation to perform. In the event of any delegation of a duty, the delegate shall assume full responsibility and liability for performance of that duty without affecting the Contractor's liability, and shall be responsible for compliance with and performance of all terms and conditions of this contract including but not limited to provisions for sureties and assurances of availability of 10-year service.

9. Change of ownership

In the event of any change of control or ownership of the Contractor's facilities the County shall maintain the right to hold the original owner solely liable. However, the County, at its option may determine that the new ownership can adequately and faithfully perform the duties and obligations of the Contract for the remaining term of the contract, and elect to execute a novation, which will allow the new ownership to assume the rights and duties of the Contract and release the former ownership of all obligations and liabilities. The new ownership would then be solely liable for the performance of the Contract and any claims or liabilities under the Contract.

10. Waivers

A waiver by either party of any breach of any provisions of the Contract shall not be taken or held to be a waiver of any succeeding breach of such provisions or as a waiver of any provision itself. No payment or acceptance of compensation for any period subsequent to any breach shall be deemed a waiver of any right or acceptance of defective performance.

11. County's Obligations

County shall not be obligated by the terms of this Agreement to guarantee the delivery to Contractor's landfill of any minimum quantities of municipal waste.

12. Illegal and Invalid Provisions:

In the event any term, provision or other part of the Contract should be declared illegal inoperative, invalid or unenforceable such term or provision shall be amended to conform to the appropriate laws or regulations. In the case of illegal or invalid provisions, the remainder of the Contract shall not be affected and shall remain in full force and effect.

13. Joint and severable Liability

If, after the date hereof, the Contractor is comprised of more than one individual, corporation or other entity, each of the entities comprising the Contractor shall be jointly and severally liable.

14. Binding Effect

The provisions, covenants and conditions of the Contract shall apply to and bind the parties, their legal heirs, representatives, successors and assigns.

15. Amendments to the Contract

No amendment or modifications of the terms and conditions of the Contract shall be effective unless such amendment or modification is in writing and signed by authorized representatives of all parties entitled to receive a right or obligated or perform a duty under the Contract. A signed original amendment to the Contract shall be furnished to all parties to be attached to the original Contract.

16. Merger Clause

The Contract shall constitute the final and complete agreement and understanding between the parties. All prior and contemporaneous agreements and understandings, whether oral or written, shall be without effect on the construction of any provisions or terms of the final contract if they alter, vary or contradict the Contract.

17. Notices

All notices, demands, requests and other communications under this contract shall be deemed sufficient and properly given if in writing and delivered in person, or by recognized carrier service to the following addresses, or sent by certified or registered mail, postage prepaid, with return receipt requested, at such addresses: Provided, if such notices, demands, requests or other communications are sent by .ail, they shall be deemed as given on the third day following such mailing, which is not a Saturday, Sunday or day on which United States mail is not delivered:

County: Mercer County Commissioners

Mercer County Courthouse

Mercer, PA 16137

Contractor: _____

Address: _____

Attention: _____

With a copy to: _____

Attention: _____

Either party may, by like notice, designate any further or different addresses to which subsequent notices shall be sent. Any notice under this Contract signed on behalf of the notifying party by a duly authorized attorney at law shall be valid and effective to the same extent as if signed on behalf of such party by duly authorized officer or employee.

III. SERVICE, OPERATIONS AND PERFORMANCE

1. Services of the Contractor

The Contractor agrees to accept and (process) (dispose) specified quantities and types of Municipal Waste originating from sources located in Mercer County, in accordance with all applicable Federal, state and local regulations. Nothing herein shall prohibit any Contractor from entering into any separate Contract with another person or municipality to provide such waste collection and/or transportation services.

2. Types and Quantities of Municipal Waste

The specific types and quantities of municipal waste that will be accepted at the Contractor's facility under this contract shall be those as listed in Form B:

3. Maximum Tipping Fees or Rate Schedule

The maximum rate or tipping fee to accept the various types of municipal waste shall be as listed on Form A:

Annual adjustments to the acceptable Municipal Waste quantities will be allowed if the adjustments are made within sixty (60) days of the anniversary of the effective contract date. Any quantity adjustments will be contained in a registered letter from the County to the Contractor. After the letter is signed by authorized representatives of the county and the contractor, it will be considered an amendment to this Contract and the adjusted quantities will supersede those previously in effect.

4. Delivery of Wastes

The Municipal Waste to be accepted at the Contractor's facility under this Contract will be delivered to the Contractor's facility by municipal and/or private waste haulers. The waste haulers responsible for delivering the municipal waste that will be accepted under the contract will be authorized by the Pennsylvania Waste Transportation Safety Act 90 and/or registered with the County. Only municipal waste materials delivered to the Contractor's facility by waste haulers registered with the County by the County shall count towards any maximum waste quantity limits under the Contract. The County will provide the Contractor with a current list of the registered waste haulers for the purpose of this Contract.

5. Minimum Hours of Operation

Unless mutually agreed upon otherwise by the Contractor and the County, the Contractor will accept delivery of municipal waste from waste haulers authorized by the Pennsylvania Waste Transportation Safety Act 90 and/or registered with the County during the/ hours from _____ to _____ Monday through Friday and from _____ to _____ on Saturdays, excluding generally recognized business holidays, including without limitation (President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas and New Year's Day). In the event of any lengthy travel time from sources in the County to an out-of-county disposal facility, the Contractor will be required to exhibit flexibility in the operating hours for accepting wastes from Mercer County. The Contractor shall have complete discretion to make additional arrangements for accepting waste at any earlier or later hours and/or on Sundays.

6. Complaints

The Contractor shall receive and respond to all complaints from waste transporter authorized by the Pennsylvania Waste Transportation Safety Act 90 and/or registered with the County regarding the acceptance of waste materials at his facility. Any complaints received by the County will be directed to the Contractor. In the event the Contractor cannot satisfactorily resolve a complaint within five (5) days after receipt of the complaint, the County shall have the right to demand a written explanation or satisfactory resolution of the complaint pursuant to the breach of contract provisions herein.

7. Municipal Recycling Programs

The County and individual municipalities in Mercer County shall have the right to establish and operate any municipal recycling programs, including drop-off recycling centers and curbside collection programs, to source separate and remove recyclable materials from the municipal waste stream prior to the delivery of the waste to the Contractor's facility.

8. Title to Solid Waste

Except in the case where any unacceptable waste or Hazardous Waste is delivered to the Contractor's facility, the title to the Municipal Waste and any benefits of marketing any materials or

energy recovered from the Municipal Waste shall pass to the Contractor upon delivery of the waste to the Contractor's facility and acceptance of the waste by the Contractor.

9. Unacceptable or Hazardous Waste

The Contractor shall have the right and discretion to inspect and reject any such hazardous and/or unacceptable waste delivered to the facility by the haulers registered by the county. The waste haulers authorized by the Pennsylvania Waste Transportation Safety Act 90 and/or registered with the County shall be responsible for the prompt removal and disposal of any such unacceptable waste and shall bear all costs associated with the subsequent removal, transportation and disposal of such hazardous and/or unacceptable waste. The failure of the hauler to promptly to remove or dispose of unacceptable waste may, after hearing, result in the County's revocation of the hauler's registration.

10. Basis and Method of Payment

A. The County shall not be responsible for the direct payment of any tipping fees to the Contractor under the Contract. All tipping fees shall be paid directly by the municipal and/or private waste haulers, which deliver the waste to the Contractor's facility.

B. The Contractor shall be responsible for the billing and collection of all tipping fees from the waste haulers. The method of billing and collection arrangements between the waste haulers and the Contractor shall comply with all applicable Federal and State laws governing such commerce and business activities.

C. The County shall not be responsible for failure of any waste hauler, registered or otherwise, to pay the Contractor's tipping fees and no such fees will be paid by the County. In the event County is notified of repeated delinquency or non-payment by any waste hauler of Contractor's tipping fees, County may enforce any remedies, which may be available under the terms of the issuance of registrations by County to waste haulers.

D. The Contractor shall not charge a tipping fee to any waste hauler authorized by the Pennsylvania Waste Transportation Safety Act 90 and/or registered with the County that is greater than the maximum rates established by this Contract for each type of waste. Nothing in this Contract shall be construed to prevent or preclude the Contractor from negotiating alternate tipping fees with any waste hauler provided such fees do not exceed the maximum rates under this Contract.

11. Rate Escalation and Adjustments

A. The maximum rate or tipping fee for disposal of each type of municipal waste under the Contract may be adjusted on an annual basis. The Contractor must petition the County at least 60 days in advance of such a proposed increase and the County must grant written approval prior to implementation of the proposed increase.

B. Unless the County and Contractor mutually agree to an alternate date, all annual rate adjustments shall become effective on January 1st of each year of the Contract to be consistent with the starting dates and new contract periods of most municipal waste collection contracts.

C. The Contractor may also petition the County at any time for additional rate or fee adjustments on the basis of unforeseen changes in operating costs resulting from any new or revised federal, state or local laws, ordinances, regulations or permit requirements, which were not in effect at the time when the original Contract was awarded. The Contractor shall have the burden of preparing and submitting any necessary information to support and document any such rate adjustments. The County shall evaluate the evidence submitted and approve all reasonable and justifiable cost

adjustments. The County shall have the right to inspect, by itself or by an independent auditor, any pertinent financial records that document the need for a rate adjustment using audit standards similar to the Federal procurement regulations. The county shall also have the right to modify the amount of a rate increase requested, modify the effective date of a rate adjustment or to reject a rate increase petition for lack of justification.

D. In the event that any one rate adjustment petition for unforeseen changes in the operating costs of the processing or disposal facility, as set forth in paragraph C above, or the cumulative impact of several such rate adjustment petitions, results in a rate increase greater than 25 percent of the base tipping fee or first year unit disposal cost under this contract, the County at its discretion shall have the right to solicit new municipal waste transportation, processing and/or disposal service proposals and the right to terminate this contract, if in the judgment of the County, more favorable disposal contracts can be secured from other facilities.

E. All annual rate adjustments shall be calculated on only the actual operating cost for the Contractor's (processing) (disposal) facility. All annual rate adjustments as set forth in the table in section III (3) represent the total tipping fee including any and all fees, taxes, and surcharges as described. Any fixed pass-through or add-on surcharges or costs, such as the \$3.25/ton surcharge for the recycling fund, post-closure trust fund and host municipality benefit fee imposed on Pennsylvania landfill facilities by Act 101 (\$3.00/ton surcharge for resource recovery facilities), or any other surcharge or pass-through cost imposed by any host county or municipality, will be deducted from the maximum rate or tipping fee prior to calculating any annual rate adjustment.

13. RESERVED County Administration/Recycling Surcharge

In the event that legislation should be enacted during the period of this contract authorizing the County to assess fees or surcharges for the administration and implementation of its solid waste and recycling programs the County reserves all such rights and privileges to negotiate and collect such fees from the Contractor

IV. RECORD KEEPING AND REPORTING REGULATED WASTE

1 The contractor will be required to install and maintain a scale to weigh all incoming waste to the contractor's municipal waste processing or landfill facility or, in the case of a transfer station, to weigh all municipal waste delivered to the county designated processing or disposal facility by the transfer station. The scale used to weigh municipal waste shall conform to the Weights and Measurement Act of 1965 (73 P.S. sections 1651- 1692) and applicable regulations thereunder; the operator of the scale shall be a licensed public weighmaster under the Public Weighmasters Act (13 P.S. sections 1771-1796) and any regulations.

2. Daily Operational Records

The Contractor shall make and maintain an operational log for each day that Municipal Waste is received, processed or disposed. At a minimum, the following information shall be recorded in the daily operational log:

- A. The total weight of each type of Municipal Waste received at the facility from all sources;
- B. The county from which the Solid Waste originated, or if the waste originated from outside the state, the state from which the waste originated; and
- C. The name of each waste hauler or transporter delivering Municipal Waste to the facility.

3. Quarterly Operation Reports

The Contractor shall prepare and submit on forms provided by the County a quarterly operation report. The quarterly operation reports shall be submitted to the County on or before the 20th day of April, July, October and January of each year for the preceding three (3) month calendar period ending on the last day of March, June, September and December, respectively. At a minimum, the following information shall be included in each quarterly operation report:

- A. The total weight of each type of Municipal Waste received from all sources within the County during each month of the quarterly reporting period;
- B. The names of the waste haulers or transporters and self-haulers that delivered waste originating from sources in Mercer County.
- c. A summary of the total weight, by municipality, of each type of Municipal Waste received each month from each waste hauler or transporter and self-hauler delivering waste originating from sources in Mercer County;
- D. A summary of the total weight of each type of Municipal Waste received each month from all waste haulers and self-haulers delivering waste originating from sources in Mercer County; and
- E. A summary of the total weight, by municipality, of Municipal Waste received from each municipality in Mercer County delivering Municipal Waste to the Contractor during each month.

4. Annual Operation Report

The Contractor shall prepare and submit on forms provided by the County an annual operation report for each calendar year or other fiscal year approved by the County. The annual operation report shall be submitted to the County on or before June 30th of each year unless an alternate submission date is approved by the County. At a minimum, the following information shall be included in the annual operational report:

- A. The total weight of each type of Municipal Waste received from all sources during the annual reporting period;
- B. The names of the waste haulers or transporters and self- haulers that delivered waste originating from sources in Mercer County;
- C. A summary of the total weight, by municipality, of each type of Municipal Waste received each month from each waste hauler or transporter and self-hauler delivering waste originating from sources in Mercer County; and
- D. A summary of the total weight, by municipality, of each type of Municipal Waste received each month from all waste haulers delivering waste originating from sources in Mercer county;
- E.. For municipal waste landfills, a description of the capacity or volume used during the past year and the remaining permitted capacity based upon the annual topographic survey information;
- E. A current Certificate of Insurance as evidence of continuing insurance coverage for public liability insurance as required under the Contract;
- G. For resource recovery or municipal waste processing facilities, the name and the location of the landfill disposal facilities where any bypassed wastes, unprocessable waste and waste by-products, such as incinerator ash, were ultimately disposed;

H. Copies of all notices of violation, civil penalty assessments and/or administrative orders issued by federal, state or county regulatory authorities to the owner and/or operator of the facility during the year; and

I. If available to the Contractor, Certificate of -good standing- for the bonding company.

J. The annual operating reports that must be prepared and submitted to the DEP by Pennsylvania processing and disposal facilities (or equivalent regulatory agency in the state in which the facility is located) may constitute acceptable information for portions of the annual operating report for the purposes of the Contract, provided they are accompanied by completed and accurate forms provided by the County along with any required supporting information.

5. Administrative Inspections

Upon reasonable notice, and during regular business hours, the County and its authorized representatives shall have access to Contractors' logs and records pertaining to the quantities and sources of Municipal Waste for the purpose of verifying compliance with the terms and conditions of this Contract.

6. Special Reporting Requirements

The Contractor shall provide written notification to the County of any permit modification applications for the following types of permit changes, on the same date the application is first submitted to the Pennsylvania DEP (or equivalent regulatory agency in the state in which the facility is located):

- A. Changes in the permitted site volume or capacity,
- B. Changes in the permitted average and/or maximum daily waste volume or loading rates,
- C. Changes in the excavation contours or final contours, including the final elevations and slopes,
- D. Changes in the permitted acreage, and
- E. Changes in ownership.

V. PUBLIC LIABILITY INSURANCE REQUIREMENTS

1. Insurance Requirement

The Contractor shall be required to maintain in full force and effect throughout the term of the Contract, and any renewal or extension thereof a general liability insurance policy to provide continuous coverage against third party claims for property damage and personal injury, as specified in Chapter 271 of the DEP's Municipal Waste Management Regulations (Pennsylvania Bulletin, Vol. 18, No. 15, April 9, 1988) and the following section. The effective date of the required insurance policy shall be prior to the initiation of any waste disposal services under this Contract. Contractor shall cause county to be added as an additional insured on all policies of insurance required under the terms of this Contract.

2. Proof of Insurance Coverage

The Contractor shall be required to submit to the County proof of insurance coverage upon execution of the Contract. At a minimum, the proof of insurance shall consist of a certificate of insurance which:

- A. States the name of the insurance company, the insured owner and facility covered by the policy.

B. Identifies the kinds of coverage provided by the policy and the amounts of coverage, exclusive of legal costs.

C. Identifies the beginning and ending dates for the policy.

D. Specifies that a minimum 120-day period written notice shall be given by the insurer to the county and the owner, by certified mail, before any cancellation or other termination of the policy becomes effective.

E. States that the insurer is liable for payment on the policy without regard for the bankruptcy or insolvency of the insured.

F. Be signed by an authorized, licensed agent of the insurance company.

3. Maintenance of Insurance Coverage

The Contractor shall be required to submit to the County a current certificate of insurance as evidence of continuous insurance coverage as part of the annual operation report required under the Contract. The annual certificate of insurance shall contain the same information and provisions as specified in the original proof of insurance certificate under the requirements of the preceding paragraph. Failure to submit the required proof of insurance or to maintain the required minimum insurance coverages may result in forfeiture of the performance bond and would be considered a default by the Contractor in accordance with the provisions of the Contract.

VI. NONDISCRIMINATION

Neither the contractor nor any subcontractor nor any person(s) acting on his behalf shall discriminate against any person because of race, sex, age, creed, color, religion or national origin.

VII. INDEMNIFICATION

The Contractor or its successors and assigns shall indemnify and save harmless the county, their officers, agents, servants and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorney fees resulting from any willful or negligent act or omission of the Contractor or its successors or assigns, its officers, agents, servants and employees in the performance of this Contract; provided however, that the Contractor or its successors and assigns shall not be liable for any suits, actions, legal proceedings, claims, demands, damages, costs, expenses and other attorney fees arising out of the award of this Contract or the willful or negligent act or omission of the County, their officers, agents, servants and employees.

VIII. PERMITS

The Contractor shall be responsible for obtaining any and all permits necessary for the construction and operation of the Municipal Waste (processing) (disposal) facilities required to comply with the terms and conditions of the Contract, and any and all costs or expenses of obtaining such permits. Failure to obtain and maintain permits shall constitute a breach of this contract.

WITNESS the execution hereof, as of the date and year first written.

COUNTY OF MERCER,

BOARD OF COMMISSIONERS

ATTEST: _____

CHIEF CLERK

(SEAL)

CONTRACTOR: _____

Title: _____

WITNESS;

Form A – Cost of Disposal

The maximum rate or tipping fee to accept the various types of municipal waste shall be as listed below. **The maximum rate shall not exceed the posted gate rate.**

Tipping Fees per ton						
Include all applicable surcharges, fees, taxes from Legislation, Regulation, or Programs of State, Federal County or Host Municipalities						
Show a breakdown of those fees in following table						
	MSW	Construction Demolition	Sewage Sludge	Approved ICW	Other	Other
Base Tipping Fee (without taxes, and other fees)						
Fees, Taxes, Surcharges that will apply to Mercer County MSW						
List Name of Fee, Tax, Surcharge below.						
Total Tipping Fee including all fees and surcharges						

Form B -Reserved Capacity

Mercer County Municipal Solid Waste

FACILITY:_____.

The specific types and quantities of municipal waste that will be accepted at the Contractor's facility under this contract shall be those as listed in the table below:

Types and Quantities of Municipal Solid Waste .Specify tons per day and tons per year																				
	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020	
Municipal Solid Waste Stream	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year	Day	Year
MSW																				
Construction Demolition																				
Sewage Sludge																				
Other																				
Other																				
TOTAL																				

Form B - Part II Reserved Capacity

Types and Quantities of Municipal Waste

Year	Total Mercer MSW tons Per Year	Reserving Capacity for % of Mercer MSW Annually	Reserving Capacity for #Tons Mercer MSW Annually	Facility's Estimated Annual Working Days	Reserving Capacity for #Tons Mercer MSW Daily
2011					
2012					
2013					
2014					
2015					
2016					
2017					
2018					
2019					
2020					



"WHAT WE DO TODAY,
RIGHT NOW, WILL HAVE
AN ACCUMULATED
EFFECT ON ALL OF OUR
TOMORROWS."

— *Alexandra Stoddard, 20th Century Philosopher and Author*

Appendix C

Petition to Add a Processing/Disposal Facility

**Mercer County Municipal Solid Waste Management Plan
Petition for Designation as Processing/Disposal Facility**

Mercer County has secured Disposal Capacity Agreements for a sufficient amount of disposal capacity for all municipal waste generated within the County. However, the County recognizes that new disposal and processing opportunities may present themselves from time to time. Therefore, Mercer County has established guidelines to include added facilities during the ten-year period of its current Municipal Solid Waste Management Plan. Municipalities, haulers, and/or transfer stations must use this form to notify the County of a party's interest in using another facility. Information provided in this form will be used by the County to contact a facility representative and send the requirements necessary to qualify the facility as a participant in the Plan. The facility must meet all of the same criteria required in the original Request for Proposals for Disposal Capacity, including execution of the Contract as presented. Any and all costs associated with the Plan revision to add a facility shall be the responsibility of either the Petitioner or the Facility as indicated and authorized by a signature on this form.

Please complete and submit the form to:

Lawrence-Mercer County Recycling and Solid Waste Department
Lawrence County Government Center
430 Court Street
New Castle, PA 16101-3593
Phone: 724-658-6925

Petitioner

Name: _____
Organization: _____
Address: _____
_____ Phone Number: _____
Fax Number: _____
E-Mail Address: _____

Facility

Name of Facility: _____
Contact Person: _____
Address: _____
_____ Phone Number: _____
Fax Number: _____
E-Mail Address: _____

Explain the need to have this facility included in the Plan: (Attach Additional Sheets if Necessary)

Party responsible for total costs of Plan Revision to add facility:

Name _____ Title _____	
Signature _____ Date _____	

PROCEDURES AND INSTRUCTIONS TO PETITIONER

- A disposal/processing facility, a hauler, a municipality or a business must complete and submit the petition form to the Lawrence-Mercer County Recycling/Solid Waste Department.
- Within 15 working days of the receipt of a petition, Lawrence-Mercer County Recycling/Solid Waste will send to the petitioner or the facility, a request for proposal for disposal capacity outlining the same requirements and format for submission as the original document utilized in the selection of those facilities currently designated in the Plan.
- Upon receipt of the completed proposal from the petitioning facility, Lawrence-Mercer County Recycling/Solid Waste will notify the Pennsylvania Department of Environmental Protection of its intentions to add a facility.
- Lawrence-Mercer County Recycling/Solid Waste will review and respond to the information in the proposal within 45 working days.
- If information in the submitted proposal is complete, accurate and meets the accepted criteria, , Lawrence-Mercer County Recycling/Solid Waste will notify by letter all municipalities within the County of the intent to add a facility to the Plan. The County will accept comments for a period of thirty days.
- After the thirty day comment period , the , Lawrence-Mercer County Recycling/Solid Waste will formally submit the addition of the facility to the Pennsylvania Department of Environmental Protection for approval.
- Upon approval by the Pennsylvania Department of Environmental Protection, , Lawrence-Mercer County Recycling/Solid Waste will notify by letter all County municipalities that a facility has been added to the Plan.
- At that time the requesting facility, hauler, municipality or business will also be notified that the facility is formally designated in the Plan for disposal of Mercer County generated municipal waste.

Appendix D

Ordinances

TRANSPORTERS ORDINANCE

COUNTY SOLID WASTE AND RECYCLING TRANSPORTERS ORDINANCE

ORDINANCE NO. COUNTY OF MERCER, PENNSYLVANIA

AN ORDINANCE OF THE COUNTY OF MERCER, PENNSYLVANIA, ESTABLISHING STANDARDS AND REPORTING REQUIREMENTS FOR ALL PERSONS THAT COLLECT AND TRANSPORT MUNICIPAL WASTE AND/OR RECYCLABLES GENERATED FROM SOURCES LOCATED IN MERCER COUNTY; PROVIDING WASTE FLOW CONTROL REQUIREMENTS TO DIRECT WASTE TO DESIGNATED PROCESSING AND/OR DISPOSAL SITES; AND PROVIDING PENALTIES FOR VIOLATION OF THIS ORDINANCE.

WHEREAS, Act 101 of 1988, the Municipal Waste Planning, Recycling and Waste Reduction Act 101 requires that counties accept responsibilities including the preparation and implementation of municipal waste management plans that provide for the processing and disposal of the municipal waste generated within their boundaries for at least ten years; and ensure maximum feasible waste reduction and recycling of municipal waste or source separated recyclable material.

WHEREAS, it is the position of the Pennsylvania Department of Environmental Protection that counties may implement a waste flow control mechanism ensuring that the municipal waste generated within the county is disposed at the disposal sites designated in the county plan; and

WHEREAS, the Board of County Commissioners has adopted and approved the 1990 Mercer County Municipal Waste Management Plan, amended in 1997 and a non-substantial revision in 2000 in accordance with the requirements of Section 501 of Act 101, and said Plan has been duly ratified by the municipalities of Mercer County; and

WHEREAS, the County adopted the County Ordinance No. 6-1991 on December 5, 1991, which Ordinance is being repealed and replaced by this Ordinance; and,

WHEREAS, the County has the power and duty to adopt any such ordinances deemed necessary to implement this Plan and its revisions by the authority vested to the County pursuant to section 303 of Act 101, including requirements that all persons must register to collect and transport municipal waste subject to the plan to a municipal waste processing and/or disposal facility designated by the County pursuant to Subsection 303(3) of Act 101.

NOW, THEREFORE, the Board of County Commissioners of Mercer County hereby enact and ordain as follows:

SECTION 1- SHORT TITLE

This Ordinance shall be known and referred to as the "County Solid Waste and Recycling Transporters Ordinance."

SECTION 2- DEFINITIONS

The following words and phrases as used in this Ordinance shall have the meaning ascribed to them herein, unless the context clearly indicates a different meaning:

Act 90 -- The Pennsylvania Waste Transportation Safety Program (HB 2044, Act 2002-90, June 29, 2002)

Act 97 -- The Pennsylvania Solid Waste Management Act of 1980 (P.L. 380, No.97, July 7, 1980)

Act 101 -- The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (SB 528, Act 1988-101, July 28, 1988)

Construction/Demolition Waste — Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete. The term does not include the following if they are separate from other waste and are used as clean fill:

- (i) Uncontaminated soil, rock, stone, gravel, brick and block, concrete and used asphalt
- (ii) Waste from land clearing, grubbing and excavation

County --Mercer County or any agency designated as the County's representative for the purposes of this Ordinance.

Department or DEP --The Pennsylvania Department of Environmental Protection.

Disposal - The deposition, injection, dumping, spilling, leaking or placing of solid waste into or on the land or water in a manner that the solid waste or a constituent of the solid waste enters into the environment, is emitted into the air or is discharged to the waters of the Commonwealth of Pennsylvania

Institutional Establishment Any establishment or facility engaged in services, including, but not limited to, hospitals, nursing homes, schools and universities.

Leaf Waste Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Marketed— The transfer of ownership of recyclable materials for the purpose of recycling the materials into a new product or use.

Municipality --Any local municipal government within Mercer County. A city, borough, incorporated town, township, county or an authority created by any of the foregoing.

Municipal Waste --Any garbage, refuse, industrial lunchroom or office waste and other material including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and any sludge not meeting the definition of residual or hazardous waste under Act 97 from any municipal, commercial or institutional water supply treatment plant, wastewater treatment plant, or air pollution control facility. The term does not include any source-separated recyclable materials. For the purposes of this Ordinance, the term "Municipal Waste" shall include all types of municipal waste except infectious and chemotherapeutic waste and septage waste since all haulers of infectious and chemotherapeutic waste are licensed and regulated by the DEP under special regulations.

Municipal Waste Disposal or Processing Facility—A facility using land for disposing or processing of municipal waste. The facility includes land affected during the lifetime of operations, including, but not limited to, areas where disposal or processing activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility

Municipal Waste Landfill – A facility using land for disposing of municipal waste. The facility includes land affected during the lifetime of operations including, but not limited to, areas where disposal or processing activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite and contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility. The term does not include a construction/demolition waste landfill or a facility for the land application of sewage sludge.

Municipal Waste Management Plan— A comprehensive plan for an adequate municipal waste management system in accordance with Chapter 272, Subchapter C (relating to municipal waste planning).

Municipal Waste Management Plan Revision — A change that affects the contents, terms or conditions of a Department approved plan under the Municipal Waste Planning, Recycling and Waste Reduction Act.

Pennsylvania Waste Transporter Authorization – An authorization issued by the Pennsylvania Department of Environmental Protection pursuant to Act 90 of 2002, the Waste Transportation Safety Act.

Person -- Any individual, partnership, corporation, association, institution, cooperative enterprise, municipal authority, municipality, state institution and agency, or any other legal entity recognized by law as the subject of rights and duties. In any provisions of this Ordinance prescribing a fine, penalty or imprisonment, or any combination of the foregoing, the term "person" shall include the officers and directors of any corporation or other legal entity having officers and directors.

Processing - Any technology used for the purpose of reducing the volume or bulk of municipal or residual waste or any technology used to convert part or all of such materials for off-site reuse. Processing facilities include, but are not limited to, transfer stations, composting facilities and resource recovery facilities.

Recyclables – All metals, glass, paper, leaf waste, plastics and other materials, which would otherwise be disposed or processed as municipal waste. that are collected, separated, recovered for sale or reuse.

Recyclables – All metals, glass, paper, leaf waste, plastics and other materials, which would otherwise be disposed or processed as municipal waste, that are collected, separated, recovered for sale or reuse

Recycling --The collection, separation, recovery and sale or reuse of metals, glass, paper, leaf waste, plastics and other materials which would otherwise be disposed or processed as municipal waste,

Recycling Facility—A facility employing a technology that is a process that separates or classifies municipal waste and creates or recovers reusable materials that can be sold to or reused by a manufacturer as a substitute for or a supplement to virgin raw materials. The term does not include transfer facilities, municipal waste landfills, composting facilities or resource recovery facilities.

Sewage Sludge—Liquid or solid sludges and other residues from a municipal sewage collection and treatment system; and liquid or solid sludges and other residues from septic and holding tank pumpings from commercial, institutional or residential establishments. The term includes materials derived from sewage sludge. The term does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of sewage sludge at a municipal sewage collection and treatment system, or grit, screenings and nonorganic objects from septic and holding tank pumpings

Source Separated Recyclable Materials --Materials that are separated from municipal waste at the point of origin or generation for the purpose of recycling.

Street --A strip of land, including the entire right-of-way, intended for use as a means of vehicular and pedestrian circulation, includes street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct and any other ways used or intended to be used by vehicular traffic or pedestrians whether public or private.

Transfer Facility—A facility which receives and processes or temporarily stores municipal or residual waste at a location other than the generation site, and which facilitates the transportation or transfer of municipal or residual waste to a processing or disposal facility. The term includes a facility that uses a method or technology to convert part or all of the waste materials for offsite reuse. The term does not include a collecting or processing center that is only for source-separated recyclable materials, including clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics.

Transportation --The off-site removal of any municipal waste and/or recyclables at any time after generation.

Transporter Any person, firm, partnership, corporation or public agency who is engaged in the collection and/or transportation of municipal waste and/or recyclables.

For the purposes of this ordinance, the singular shall include the plural and the masculine shall include the feminine and neuter.

SECTION 3 -STANDARDS FOR COLLECTION AND TRANSPORTATION

1. All Transporters operating within the County must comply with the following minimum standards and regulations:

- A. All trucks or other vehicles used for collection and transportation of municipal waste must comply with the requirements of Act 97, Act 90, and Act 101 as currently enacted or hereafter amended, and Department regulations adopted pursuant to Act 97, Act 90 and Act 101, including the Title 25, Chapter 285, Subchapter B Regulations for the Collection and Transportation of Municipal Waste.
- B. All collection and transportation vehicles conveying municipal waste and/or recyclables shall be operated and maintained in a manner that will prevent creation of a nuisance or a hazard to public health, safety and welfare.
- C. All collection and transportation vehicles conveying putrescible municipal waste and/or recyclables shall be watertight and suitably enclosed to prevent leakage, roadside littering, attraction of vectors and the creation of odors and other nuisances.
- D. All collection and transportation vehicles conveying nonputrescible municipal waste and/or recyclables shall be capable of being enclosed or covered to prevent roadside litter and other nuisances.
- E. All collection and or transportation vehicles conveying municipal waste and/or recyclables shall bear signs identifying the name and business address of the person or municipality, which utilize said vehicle in the collection and or transportation of municipal waste and/or recyclables and the specific type of municipal waste and/or recyclables transported by the vehicle. All such signs shall have lettering, which is at least six inches in height as required by Act 101.

SECTION 4- PROHIBITED ACTIVITIES

- 1. It shall be unlawful for any person to collect and or transport municipal solid waste from any sources within Mercer County in a manner that is not in accordance with the provisions of this Ordinance and the minimum standards and requirements established in Chapter 285 of the DEP's Municipal Waste Management Regulations, (as amended) or any other applicable state law.
- 2. It shall be unlawful for any person to transport any municipal waste collected from sources located within Mercer County to any processing or disposal facility other than the facilities that are designated disposal sites under the approved Mercer County Act 101 Municipal Waste Management Plan. Municipal waste collected from sources located within Mercer County may be delivered to a transfer facility provided the transfer facility transports the waste to any processing or disposal facility other than the facilities that are designated disposal sites under the approved Mercer County Act 101 Municipal Waste Management Plan. The following types of municipal waste and materials are

exempt from this sub-section:

- a. Transporters of infectious/chemotherapeutic waste shall be exempted from use of the designated disposal facilities.
 - b. Transporters of sewage sludge shall be exempted from use of the designated disposal facilities if proof of an approved land application or composting facility is provided.
 - c. Transporters of septage shall be exempted from use of the designated disposal facilities but must provide proof of use of a DEP approved land application or permitted wastewater treatment facility for disposal.
 - d. Transporters of recyclables shall be exempted from use of the designated disposal facilities but must provide proof that the recyclables are taken to a material recovery processing facility or marketed for end use.
3. It shall be unlawful for any person to commingle source separated recyclables and municipal waste, collected from sources located within Mercer County, in the same vehicle compartment.
 4. It shall be unlawful for any transporter to dispose of source separated recyclables collected from sources located within Mercer County except at a recycling facility.

SECTION 5- EXEMPTED ACTIVITIES

- A. The transportation of less than 500 pounds of municipal waste and/or recyclables collected and/or transported as part of a non-commercial activity occasionally occurring at an individual residence shall not be subject to the provisions of this ordinance with respect to standards for collection and transportation, and reporting requirements.

SECTION 6- REPORTING REQUIREMENTS

1. All Transporters shall maintain current, up-to-date records of the customers serviced within Mercer County. Such records and customer list shall be subject to inspection by the County or its authorized agents upon request.
2. Each Transporter shall prepare and submit on forms provided by the County, a typewritten or legibly printed quarterly report to the County or its designated agent. The report shall be submitted on or before the last day of the following months: April, July, October, and January. At a minimum, the following information shall be included in each quarterly report
 - A. The total weight of each type of municipal waste and/or recyclables collected from all sources located in Mercer County during each month of the reporting period;
 - B. The name of each processing or disposal facility and/or material recovery or end market the hauler used during the reporting period and the total weight

of each type of municipal waste and/or recyclable that was delivered to each site during each month of the reporting period;

- C. The name of each municipality in Mercer County in which the hauler collected municipal waste and/or recyclables from any source during the reporting period; and
- D. A summary for each municipality of the total weight of each type of municipal waste and/or recyclables collected from each municipality during each month of the reporting period;

SECTION 8- PENALTIES

- 1. Any person who violates any provision of this Ordinance shall, upon conviction, be guilty of a summary offense punishable, by a fine of not more than three hundred (\$300.00) dollars, or by imprisonment for a period of more than thirty (30) days, or both. "Each violation and each day that a violation continues shall be considered a separate and distinct offense punishable under the provisions of this Ordinance.

SECTION 9- INJUNCTIVE POWERS

The County or its designated agency may petition the Court of Common Pleas of Mercer County for an injunction, either mandatory or prohibitive, in order to enforce any of the provisions of this Ordinance.

SECTION 10 -SEVERABILITY

In the event that any section, paragraph, sentence, clause, or phrase of this Ordinance, or any part thereof, shall be declared illegal, invalid or unconstitutional for any reason, the remaining provisions of this Ordinance shall not be affected, impaired or invalidated by such action.

SECTION 11 -CONFLICT

Any ordinances or any part of any ordinances, which conflict with this Ordinance are hereby repealed insofar as the same is specifically inconsistent with this Ordinance. This Ordinance specifically repeals and vacates the County Ordinance No. 6-1991 adopted on December 5, 1991.

SECTION 12- EFFECTIVE DATE

This Ordinance shall take effect on _____ORDAINED AND ENACTED into an Ordinance this_____ day of 2011.

COUNTY OF MERCER BOARD OF COUNTY COMMISSIONERS

ATTEST:

Brian Bader, Chairman

Timothy Hofius

(County Seal)

Ken Amman, Commissioner

John Lechner, Commissioner

INTERGOVERNMENTAL COOPERATION AGREEMENT ORDINANCE

INTERGOVERNMENTAL COOPERATION AGREEMENT ORDINANCE

ORDINANCE NO. 2010-

AN ORDINANCE AUTHORIZING THE COUNTY OF MERCER, PENNSYLVANIA TO ENTER INTO AN INTERGOVERNMENTAL COOPERATION AGREEMENT WITH THE COUNTY OF LAWRENCE TO SERVE AS THE IMPLEMENTING ENTITY FOR BOTH COUNTIES' SOLID WASTE MANAGEMENT PLANS AND MANAGE AND COORDINATE MUNICIPAL SOLID WASTE AND RECYCLING ACTIVITIES FOR BOTH COUNTIES.

WHEREAS, the Act of December 19, 1996, P.L. 1158, No. 177, referred to as the Intergovernmental Cooperation Law, 53 Pa. C.S. §2301, *et seq.*, provides that two or more counties may jointly cooperate in the exercise or in the performance of their respective governmental functions, powers, or responsibilities, and

WHEREAS, the Board of Commissioners of Mercer County deem it to be in the best interest of and for the general welfare of the citizens and the residents of Mercer County to enter into an agreement to provide solid waste and recycling programming for Lawrence and Mercer Counties, and

WHEREAS, the Board of Commissioners will negotiate the terms and provisions of an Intergovernmental Agreement with the County of Lawrence, and

WHEREAS, the Board of Commissioners desires to enter into an Intergovernmental Agreement with the County of Lawrence pursuant to the said Intergovernmental Cooperation Act;

NOW THEREFORE BE IT ORDAINED AND ENACTED by the Board of County Commissioners of the County of Mercer, Pennsylvania, and it is hereby ordained and enacted by the authority of the same as follows:

SECTION 1: Title

This Ordinance shall be known and may be cited as the Mercer County Pennsylvania Intergovernmental Cooperation Agreement for Solid Waste and Recycling with Lawrence County.

SECTION 2: Terms

- A. The conditions, duration, purpose, and objectives of the Lawrence-Mercer intergovernmental Agreement, including the powers and scope of authority delegated

therein, manner and extent of financing, organizational structure necessary to implement, and manner in which property and equipment will be acquired, managed, and disposed of are set forth in the Agreement, a copy of which is attached to this Ordinance as Exhibit "A" and incorporated herein as if set forth in full.

- B. No real estate will be acquired, managed, licensed or disposed of under this Ordinance.
- C. Each County has the power to enter into contracts for policies of group insurance and employee benefits, including social security, for all of their employees, including those whose duties further the purposes of this Agreement.
- D. Each County will provide the funding necessary to finance the Agreement in accord with the annual budget which has been agreed upon by both Counties.

SECTION 3: Severability

If any sentence, clause, phrase or section of this Ordinance is for any reason found to be unconstitutional, illegal, or invalid, such unconstitutionality, illegality, or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, phrases, sections or parts of this Ordinance.

It is hereby declared as the intent of the Board of Commissioners of the County of Mercer that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, phrase, section, or part thereof not been included therein.

SECTION 4: Repealer

Any other Ordinance or parts thereof inconsistent with this Ordinance be and are hereby expressly repealed.

SECTION 5: Effective Date

This Ordinance shall become effective immediately.

ENACTED AND ORDAINED this _____ day of _____, 2010

ATTEST:

Administrator/Chief Clerk

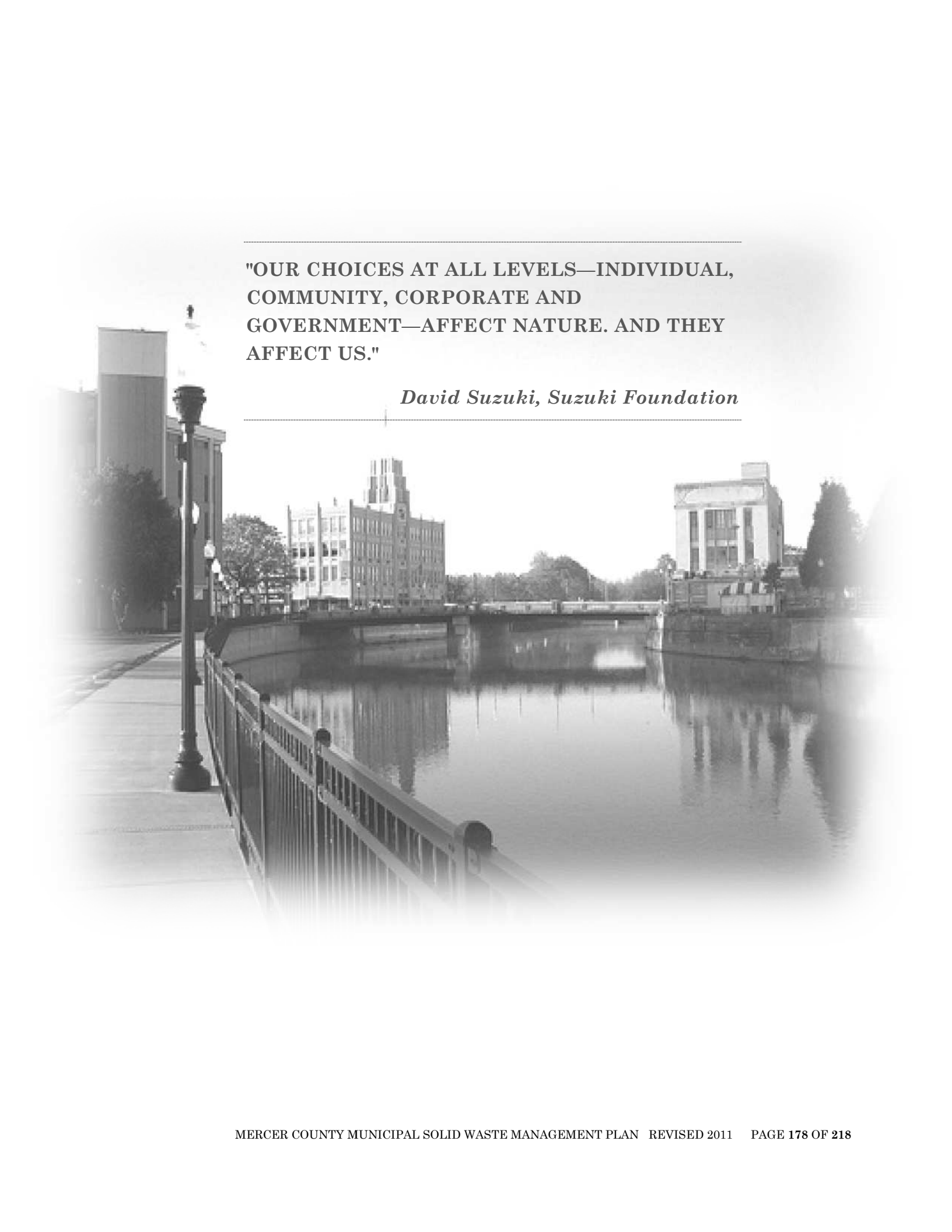
COUNTY OF MERCER

By: _____

Chairman

By: _____

By: _____



"OUR CHOICES AT ALL LEVELS—INDIVIDUAL,
COMMUNITY, CORPORATE AND
GOVERNMENT—AFFECT NATURE. AND THEY
AFFECT US."

David Suzuki, Suzuki Foundation

Appendix E

Intergovernmental Agreement

AGREEMENT

THIS AGREEMENT is made this _____ day of _____, 2010 pursuant to the authority set forth in the Intergovernmental Cooperation Act of December 19, 1966, 53 Pa. C.S.A. §§ 2301 et seq., by and between the COUNTY OF LAWRENCE, a Fifth Class County of the Commonwealth of Pennsylvania with its office located at 430 Court Street, New Castle, PA 16101, hereafter called "Lawrence County," and the COUNTY OF MERCER, a Fifth Class County of the Commonwealth of Pennsylvania with its office located at 104 Courthouse, Mercer, PA 16137, hereafter called "Mercer County."

WHEREAS, Lawrence County has implemented a comprehensive recycling program through the development of the Recycling/Solid Waste Department, and

WHEREAS, the Recycling/Solid Waste Department serves as the implementing entity for its Municipal Solid Waste Management Plan, and

WHEREAS, Mercer County desires to have a similar program, and

WHEREAS, Mercer County is working to update its Municipal Solid Waste Management Plan and needs an entity for its implementation, and

WHEREAS, the Commonwealth of Pennsylvania, funding entities, and partners look favorably at Intergovernmental Cooperation, and

WHEREAS, Lawrence County and Mercer County have met and discussed the environmental, community, and financial benefits of utilizing one office to direct solid waste management and recycling activities, planning, programs, and responsibilities, and

WHEREAS, Lawrence County already has such an office established with experienced, professional, and capable staff, and

WHEREAS, Lawrence and Mercer counties desire to share the use and services of the Lawrence County Recycling/Solid Waste Department to provide solid waste management and recycling planning and services for both counties, as described in the sections hereafter.

NOW THEREFORE, in consideration of the covenants set forth, Lawrence County and Mercer County agree as follows:

EFFECTIVE DATE

This agreement shall be effective upon the date of signing by the Board of Commissioners of both Lawrence County and Mercer County subsequent to the adoption of Ordinances as required by 53 PaCSA.2305..

PROVISION OF SERVICE

The Lawrence County Recycling/Solid Waste Department will be contracted to Mercer County by Lawrence County to provide services and shall be deemed to be an independent contractor of Mercer County.

STAFFING

The staff of the Lawrence County Recycling/Solid Waste Department will be employees of Lawrence County and shall exclusively adhere to, comply with and be subject to all personnel and other applicable policies of Lawrence County.

Lawrence County shall be responsible to provide and issue all compensation, benefits, and insurances associated with Lawrence County Recycling/Solid Waste Department staff positions. The initial salaries and staffing levels will be jointly established by Lawrence County and Mercer County with all benefits being those as currently offered by Lawrence County. Thereafter, any “across the board” increase and/or change in salary or change in benefits offered by Lawrence County to its salaried employees is deemed as jointly approved by the Counties as part of this Agreement, to be effective 90 days after notice of same is submitted to the Mercer County Board of Commissioners. For any increases and/or change to the staff positions that are other than “across the board” increases and/or changes as mentioned above, the Counties must jointly approve such increases and/or changes.

Increases or decreases in shared staff and their terms of employment must be mutually agreed upon between both counties.

COST SHARING

For Mercer County’s share of staff compensation, Lawrence County will issue itemized requests for reimbursement to Mercer County on a quarterly basis. Said reimbursements to be paid by Mercer County to Lawrence County within thirty (30) days of Mercer County’s receipt of said reimbursement requests.

To the greatest extent possible, Lawrence County and Mercer County shall equally share the costs of travel and other related non-salary expenses in accordance to the following guidelines.

- Payment of mileage reimbursement expenses incurred solely within either of the Counties or expenses that plainly pertain to one county and not the other shall be the responsibility of the County in which said travel and/or expenses occurred.

- Mercer County and Lawrence County shall jointly approve all requests associated with attendance at conferences, seminars, training sessions, out of town meetings, and similar travel and shall equally share the costs associated therewith. In the event that Lawrence County and Mercer County do not jointly approve such attendance, then the County which approves such attendance shall be solely responsible for the payment of associated expenses.

Expenses for programs specific to one county and not the other shall be the responsibility of the county for which the program was provided. This includes, but is not limited to, countywide recycling drop-off programs and hard-to-recycle/dispose programs for materials such as electronics, household hazardous wastes, tires, and residential pharmaceutical wastes.

EQUIPMENT

The Lawrence County Recycling/Solid Waste Department is fully furnished with the equipment necessary to provide programming in Lawrence County and Mercer County.

Any equipment provided to the Recycling/Solid Waste Department by either County shall remain the property of the County that purchased it.

GRANTS AND FUNDRAISING

The Recycling/Solid Waste Department will prepare grant proposals for Lawrence County and Mercer County programs and administer awarded grants, with credit therefore being allocated to the appropriate County.

Grant funds received for Mercer County's portion of reimbursed expenses will be forwarded to Mercer County within thirty (30) days of receipt from the grantor.

In the event of the termination of this Agreement, equipment purchased through awarded grants and designated specifically for use in Mercer County will become the property of Mercer County. Joint use of equipment purchased through awarded grants shall be sold and the proceeds divided equally between the Counties.

COMMUNICATIONS

The Recycling/Solid Waste Department will provide quarterly updates to Mercer County, detailed with regard to each program being conducted in Mercer County.

DISPUTES

In the event of a dispute between Lawrence County and Mercer County which the counties are unable to resolve, the Counties agree to arbitration in accords with the rules of the American Arbitration Association with costs thereof to be equally shared by the Counties and the decision resulting there from to be binding upon the Counties.

AMMENDMENTS

This agreement may be amended, in writing, by the mutual agreement of the parties.

LENGTH OF AGREEMENT

The initial term of this Agreement shall be two years. Thereafter, unless terminated in accordance with the terms of this Agreement, this Agreement shall automatically renew on an annual basis, through December 31st of any given renewal year.

TERMINATION

Lawrence County or Mercer County may terminate this agreement, whole or in part, at any time upon ninety (90) days prior notice. Said notice shall be in writing and delivered to the Office of the Commissioners for the respective County.

INSURANCE

Lawrence County and Mercer County shall continue to provide applicable insurance coverage for their owned automobiles, equipment, programs, and normal business operations. Each county shall provide the other with a Certificate of Insurance.

INDEMNIFICATION

Lawrence County shall indemnify and hold harmless Mercer County and any person who shall be an officer, employee or agent of Mercer County from and against any and all claims, lawsuits, demands and actions, including reasonable attorney's fees and expenses of defending the same, that may arise or be asserted by a third party against Mercer County or such person by reason of the negligence of Lawrence County, its officers, agents, or employees, or the willful misconduct by Lawrence County, its officers, agents, or employees, in the provision of services or activities under this Agreement.

Mercer County shall indemnify and hold harmless Lawrence County and any person who shall be an officer, employee, or agent of Lawrence County from and against any and all claims, lawsuits, demands and actions, including reasonable attorney's fees and expenses of defending the same, that may arise or be asserted by a third party against Lawrence County or such person by reason of the negligence of Mercer County, its officers, agents, or employees, or the willful misconduct by Mercer County, its officers, agents, or employees, in the provision of services or activities under this Agreement.

IN WITNESS WHEREOF AND INTENDING TO BE LEGALLY BOUND HEREBY, the parties hereto by the hands and seals of their duly empowered officers and/or agents have caused this Agreement to be duly executed the day and year first written above.

Attest:

County of Lawrence

By: _____
James Gagliano, County Administrator

By: _____
Steve Craig, Chairman

By: _____
Richard DeBlasio

By: _____
Daniel Vogler

By: _____
Timothy M. Hofius, Chief Clerk

By: _____
Brian Beader, Chairman

By: _____
Kenneth R. Ammann, Vice-Chairman

By: _____
John Lechner, Secretary

Appendix F

Resolution to Approve the Plan

DRAFT RESOLUTION TO ADOPT PLAN
RESOLUTION NO. _____
RESOLUTION BY THE MERCER COUNTY BOARD OF COMMISSIONERS
ADOPTING THE REVISED MUNICIPAL SOLID WASTE MANAGEMENT
PLAN

WHEREAS, the Mercer County Board of Commissioners have undertaken the development of a revised Municipal Solid Waste Management Plan for Mercer County in accordance with the requirements of the Solid Waste Management Act of 1980 (Act 97) and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) ; and

WHEREAS, this revised Municipal Solid Waste Management Plan for Mercer County will be financed by a grant from the Pennsylvania Department of Environmental Protection and local funds and services provided by the Mercer County Commissioners; and

WHEREAS, upon the recommendations of the Mercer County Solid Waste Advisory Committee, the Board of County Commissioners have reviewed and approved the recommendations of this proposed plan to insure the availability of adequate permitted processing and disposal capacity for the municipal waste generated within Mercer County.

NOW, THEREFORE, BE IT RESOLVED, that the Mercer County Board of Commissioners do hereby approve and adopt the 2010 Revised Municipal Solid Waste Management Plan for Mercer County pursuant to the requirements of Section 501 of the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101).

PASSED AND APPROVED on the day of , 2010,

COUNTY OF Mercer

ATTEST: County Clerk

BOARD OF COUNTY COMMISSIONERS

Chairman Brian Bader, Chairman
 Kenneth Amman, Vice

 John Lechner, Secretary

Appendix G

References and Acknowledgements

The following books, documents, articles and other publications were used as professional sources of information during the development of the Plan revisions.

A Guidebook for Rural Solid Waste Management Services. 2002 Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, Oklahoma State University. Stillwater Oklahoma

Barriers to Changing Waste Management Practices in Rural Areas and Small Towns. 1992. Prepared for the National Recycling Coalition's Rural and Small Town Recycling Council and the Tennessee Valley Authority's Valley Resource Center by Susan Schmidt. First National Symposium on Rural Waste Management Issues Gatlinburg, Tennessee.

Biosolids Disposal in Pennsylvania, 2007 . Penn State University Department of Agriculture

Case Studies in Rural Solid Waste Recycling. 1987. Susan Schmidt. The Ford Foundation and the Minnesota Project, St. Paul, Minnesota.

County Population Projections: Pennsylvania 2010-2030. 2008. Pennsylvania State Data Center. Harrisburg, Pennsylvania

Decision Makers Guide to Solid Waste Management, Second Edition. 1995. Prepared for the United States Environmental Protection Agency by ICF Incorporated, Fairfax, Virginia

Evaluation of Emissions from the Open Burning of Household Waste in Barrels: Volume 1. Technical Report. 1997. Prepared for the United States Environmental Protection Agency

Handbook for the Collection, Transportation, Disposal and Land Application of Residential Septage in Pennsylvania. 2004. Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

Household Hazardous Waste Handling Procedures to Prevent Environmental Contamination. Oklahoma State University Extension. Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, Oklahoma.

How to Price Residential Solid Waste Collection Services for Profit. 1997. Tim Clark Consulting, Inc. Hanover, Pennsylvania

Illegal Dump Survey of Mercer County. 2005. Keep Pennsylvania Beautiful (formerly Pa CleanWays). Greensburg, PA

Mercer County Comprehensive Plan. 2006. Mercer County Regional Planning Commission. Hermitage, PA

Municipal Solid Waste Generation, Recycling and Disposal in the United States: Facts and Figures for 2008. Prepared for the United States Environmental Protection Agency by Franklin Associates, Prairie Village, Kansas

Municipal Waste Landfill Annual Operation Reports. 2008 Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management. Harrisburg, Pennsylvania.

Open Burning in Rural Northeastern Wisconsin: An Analysis of Potential Air Pollution. 1996 Pieper, Cindy Kay. University of Wisconsin. Green Bay, Wisconsin

Pennsylvania County Data Book ,Mercer County. 2008 Pennsylvania State Data Center, Institute of State and Regional Affairs, Harrisburg, Pennsylvania

Pennsylvania Infectious and Chemotherapeutic Waste Plan. 1990 Prepared for the Pennsylvania Department of Environmental Resources by Jack Faucett Associates, Inc.

Pennsylvania Licensed Infectious and Chemotherapeutic Waste Transporters. 2009. Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management. Harrisburg, Pennsylvania

Population Census 2000. 2001 U.S. Bureau of the Census, Washington, D.C.

Practical Recycling Economics: Making the Numbers Work for Your Program. 1999 Prepared for the New Jersey Department of Environmental Protection, Division of Solid and Hazardous Waste by Cook College Office of Continuing Professional Education Rutgers, the State University of New Jersey, New Brunswick, NJ

Residential Open Burning in Pennsylvania. Fact Sheet. Pennsylvania Department of Environmental Protection, Bureau of Air Quality. Harrisburg, Pennsylvania

Sewage Sludge and Septage Management in Pennsylvania. 1998 Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

Statewide Waste Composition Study. 2003. prepared for the Pennsylvania Department of Environmental Protection by R.W. Beck. Harrisburg, Pennsylvania.

The American State Litter Scorecard: A Sociopolitical Inquiry into Littering and The Response Role of 50 American States. 2008. Steve Spacek. Prepared for the American Society of Public Administration Conference. Dallas, Texas.

The Determinants of Household Recycling: A Material Specific Analysis of Recycling Program Features and Unit Pricing. April 2000 Robin R. Jenkins, Salvador A. Martinez, Karen Palmer, and Michael J. Podolsky. Resources for the Future 1616 P Street, NW Washington, D.C. 20036

Appendix H

Meeting Minutes and Public Comments

ADVISORY COMMITTEE MEETING JULY 22, 2010

Mercer County SWAC Meeting

July 22, 2010

Mercer County Courthouse, Mercer, PA

1:00 p.m.

Present:

Tom Amundsen, Shenango River Watchers

George Gerhart, Mercer County Resident (Business/Chamber Representative)

Todd Hittle, Hempfield Township

John Logan, Mercer County Fiscal Officer

Michele Nestor, Nestor Resources, Consultant

Joseph Pisano, Grove City Borough

Lorraine Ranchod, Lawrence-Mercer Counties Recycling/Solid Waste Department

Ed Vogel, Tri-County Industries (Waste & Recycling)

Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Overview of MSW Plan (Municipal Solid Waste), Nestor Resources, Inc.
- Draft versions of MSW plan introduction and chapters 2, 3, and 11
- PowerPoint presentation by Jerry Zona: overview of Lawrence County Recycling/Solid Waste Department programming, and
- Special Collection data spreadsheet of Keep Pennsylvania Beautiful (formerly Pa CleanWays) events 1997-2009

Michele Nestor opened the meeting with an introduction of the members of the SWAC committee, as well as herself and the service provided to the committee by her consulting firm.

Michele gave an overview of the recycling program and oversight of that program in Mercer County, as well as the planning process and purpose of the SWAC committee. She emphasized that, for a variety of reason, the committee is on an unusually fast track for

completion of the plan by an October 2010 deadline, and that the role of the committee is to serve in an advisory capacity.

This is the second revision of the plan, and it is not anticipated that the current plan revision will call for significant changes. The role of the committee is also to suggest desired solid waste services for Mercer County. Michele will provide analysis of topics covered by the plan. The Mercer County Commissioners will consider the recommendations of the committee in their approval of the plan, which will then be submitted to the Department of Environmental Protection (PA DEP) which has final rights of approval.

The composition of the plan is done within the parameters of a PA DEP technical guidance document, although the committee has leeway in suggesting programs. The plan must ensure the securing of disposal capacity for Mercer County waste for ten years.

Disposal Issues [Michele Nestor]:

Mercer County is a significant exporter of waste with 25% of its waste going to landfills in Ohio, and the rest to other PA counties. It is important to note that the county must compete for landfill airspace with industrial waste. Thirty-five percent of Mercer County municipalities contract for trash service; many of the remaining municipalities do not mandate collection, and the delinquency rates overall are dramatic.

Other significant issues in Mercer County include problems with: illegal dumps, litter, and open burning which is typical in counties where garbage collection is not mandated. These are issues of concern to the county because they negatively impact public health, tourism, property values, and business.

The committee may add to the plan: model ordinances; recommendations for joint bidding processes; and comments on the benefits of recycling programs.

At the next meeting, the committee will have proposals for review from landfills interested in accepting Mercer County's waste. The committee will ask for and/or require: guarantee of ten-year capacity; a "not to exceed" price; reporting obligations; and a reserve clause to re-assess the administrative fee.

Upon completion, the plan will be available to municipalities and public for a 30-day comment period. No ratification will be required as the recommended changes will not be considered "significant."

Michele explained how the recent partnership agreement between Mercer and Lawrence Counties came to be.

Jerry Zona gave a presentation on Lawrence County programs.

Suggestions, Questions, Ideas from the Committee:

- To come up with an education plan to address the solid waste challenges facing Mercer County
- Include examples of zoning that has proved effective in other communities for the abatement of illegal dumping, littering, and open burning, and for mandating recycling and licensing of haulers
- It was suggested to look at examples from Hermitage and municipalities in Butler County that have put curbside trash and recycling and have seen drops in trash disposal and simultaneous increase in recycling rates
- Work with the COG to explore inter-municipal cooperation on mandating and contracting for residential curbside trash and recycling services
- Propose a hauler-transporter ordinance to require no-fee reporting
- Discussion of the drop-off recycling sites centered on the challenges posed by sites in mandated communities and at commercial locations, including illegal dumping and use of sites by businesses that are mandated to contract for services
- Can the plan address what can be done to abate dumps on private properties?

Next meeting will be August 16, 2010 at 1:00 p.m.

ADVISORY COMMITTEE MEETING AUGUST 16, 2010

Mercer County SWAC

August 16, 2010

Mercer County Courthouse, Mercer, PA

1:00 p.m.

Present:

Jerry Bowser, George Gerhart, Todd Hittle, John Logan, Lorraine Ranchod, Jerry Zona

Jerry Zona called the meeting to order at 1:08.

Old Business

Members of the committee asked if handouts could be e-mailed prior to the meetings. Jerry will ask Michele Nestor about the schedule of handouts in advance of meetings.

George Gerhart asked if the topic of bio-solids for capture and sale is a topic this committee should address, and noted that the City of Hermitage and Dean's Dairy have new or upgraded systems to treat their bio-solids before sending it on to the local municipal waste water treatment plant. Jerry Bowser explained the concept of "beneficial end use" of these bio-solids. Jerry Zona agreed that this is a topic we should consider, and will refer the issue to Michele Nestor.

Todd Hittle asked, in reference to Chapter Two of the Plan, if the County should consider a registration/licensing program. Jerry Zona explained the history of past licensing and the court case that ended it. Zona noted that the program was useful in limiting illegal dumping by illegitimate haulers. In explaining the waste transportation safety act he pointed out that lighter trucks are not regulated due to weight limitations and there is no way to currently track where they are taking their waste. T. Hittle said that it seems like a "no brainer" to reconsider the registration process to track the smaller haulers. J. Bowser noted that without regulation, using lighter trucks for hauling is a quick, easy way for people who are unemployed to make easy money. The consensus of the group is to revisit the topic of registration.

New Business:

Michele Nestor has issued the RFP for disposal capacity. Last Friday was the deadline. The committee will go over responses at the next meeting.

George Gerhart asked about available landfill capacity, and what would our options be if we do not receive adequate responses to the RFP. J. Zona responded that, for the first time in a long time, there is a downward trend of waste generation with the result that landfills are competing for trash and that trash is regarded as commodity.

George Gerhart asked about the status of Tri-County's landfill application in Mercer County and if it would accept Mercer County's waste. J. Bowser answered that it has been a long process and that the last issue remaining is a zoning issue. He added that the landfill would accept Mercer County's waste which is currently going to Seneca Landfill.

The committee discussed the affect of the economic recession on trash. J. Zona explained how the recession has influenced the composition of recyclable material, specifically noting the shift away from paper to bottle and cans.

Chapter 7 & Sustainability Chapters:

J. Zona will ask Michele to e-mail the material to the SWAC members

Updating the Solid Waste Ordinance:

Copies of the ordinances need to be sent to the committee members for review.

J. Zona: noted that the ordinance will not constitute a "substantial" plan revision and will not need approval by municipalities. An ordinance could mandate trash and recycling collection. DEP has stated that counties have the authority to do this, but it has to mandate the county in its entirety with no exceptions, something that Mifflin County has done. George Gerhart questioned whether the commissioners would approve this in the ordinance. J. Zona suggested a common sense approach such as using a drop-off site to satisfy the mandate for the more rural, sparsely populated areas. George asked about community compost facilities where leaves are dropped off and compost is picked up, and could this be part of our plan. J. Zona replied, "yes," and explained that mandated communities are required to have leaf waste collection. J. Bowser questioned the legality of taking yard waste across state lines to something other than a composting facility. George would like to discuss this topic further. Todd noted that this touches on the open burning topic, where some communities allow it while neighboring communities don't.

George – would it be helpful for the committee to know what the Mercer municipalities have as solid waste ordinances. Todd guesses that 75% of them have no ordinances, especially the rural ones. Zona explained the air quality regulations/clean air act and how materials such as plastics and leaves cannot be burned because they give off potentially toxic emissions. Mandated communities that allow burning are ineligible for recycling performance grants.

John Logan asked if the State yet used the liquid fuels funding as a hammer yet? Zona wasn't aware of that happening yet. Hittle asked if the Dept of Health requires restaurants to recycle. Zona stated no. Hittle stated that they've had complaints about

restaurant owners burning at 2:00 a.m. after closing. Zona noted that there are no allowances for businesses to burn at all whether in a mandated community or not.

The group discussed the myth that there is a lot of money to be made with recyclables. Zona stated that they have included that as part of their public education program in Lawrence County.

John Logan recommended that public education be included as part of the plan.

Open Discussion:

Bowser brought up the topic of mandatory trash and recycling collection. Many municipalities have mandatory collection but not contracted services. The economic advantages of contracted services were discussed as well as efforts to convey this to the municipalities.

It was suggested to mandate that all haulers offer the same service (whether the municipality goes out for bid or not.) Fee must include the collection of recycling. There is a cost in collecting recyclables. Require licensed haulers doing business in Mercer County offer recycling collection. The pros and cons as well as methodologies for implementing a fair but thorough system were discussed. Todd asked about the possibility of putting the entire county out for one contractor. Bowser and Zona explained how this could hurt the haulers by limiting competition. There is a possibility that it could be done by breaking the county into hauling regions. The concept can be incorporated into the plan.

It was asked to what extent the State will dictate that counties have the option to mandate waste and recycling collection. Zona responded that the current interpretation is that it must be across the board and not piece mail.

The group requested that the chapters and ordinance be e-mailed to the members.

Next meeting: Wednesday, September 1 at 1:00 at the MC Courthouse.

ADVISORY COMMITTEE MEETING SEPTEMBER 1, 2010

Mercer County SWAC

September 1, 2010

Mercer County Courthouse, Mercer, PA

1:00 p.m.

Present:

Tom Amundsen; Jerry Bowser; Jeremy Cox; George Gerhart; Michele Nestor; Lorraine Ranchod; Jerry Zona

Michele Nestor called the meeting to order at 1:05.

Old Business

Ordinances:

Michele Nestor gave clarification on the previous SWAC meeting minutes regarding the limitations and powers of an ordinance, and that an ordinance must be advertised for 30 days. While DEP has indicated that counties can pass an ordinance mandating trash collection, the legal authority for counties to do so remains a gray area. Municipalities can pass ordinances for mandatory trash collection, and counties can mandate that municipalities pass an ordinance.

Michele explained that a county can, in theory, contract for collection with the existence of a solid waste authority to which municipalities have delegated that responsibility. Without a billing mechanism, however, contracted collection is not a viable option. That option was tried in Green County and ended up in court, and she does not recommend it for Mercer County. Butler County has a hybrid of these options whereby the county mandated that the Butler County municipalities pass an ordinance requiring haulers who provide residential trash service to also offer recycling service at no additional charge.

A strong consensus emerged from the committee to recommend that mandatory trash and recycling collection be included in the county's solid waste plan.

New Business:

Funding Mechanisms:

Regarding the issue of funding mechanisms, George Gerhart asked for clarification on the authority delegated by the Commonwealth to counties versus the authority delegated to municipalities for collecting fees from landfills.

Michele said that counties have limited ability to assess fees other taxes.

Tom Amundsen added that the county can only access fees through property taxes. He noted that the county's lack of authority to assess fees was the reason that Mercer County's recycling program fell through.

Michele pointed out that the county is also limited as to how much the millage can be raised, and that it cannot simply assess a different tax for solid waste services such as a library tax. Politically, municipal officials are generally not interested in lobbying for a new tax.

Landfill host fees:

Michele noted that one funding mechanism could be to assess a host fee on the landfill if the landfill site in Mercer County is approved. There are only two counties in the commonwealth that do not do this -- one is an extremely rural site, and the other county now admits that not assessing a host fee was a mistake. The committee could recommend that a host fee is put into the plan. That fee would not be mandated, but would be negotiated.

Discussion on the topic of assessed fees on landfills ensued to address the following questions: how are fees extracted; what is the impact on the landfills; what are the ramifications; what are the fees used for?

Michele explained that the fees are a pass-through, and are built into the tipping fee, so that it is passed down to the residents or customers. Jeremy Cox noted that the municipality that hosts the landfill can assess a fee as well. Michele said that most landfills are open to negotiating host fees because it is a "good corporate neighbor" policy, and it could make them non-competitive if the fee is dictated and not negotiated. While generally the host fee is generally paid as money, in lieu of a fee services could be negotiated. Host fees can go into the county's or municipality's general fund, although landfills usually prefer that the fees be used for special services including special collections, education and so on. If the committee recommends a fee, Michele suggested that the committee should put a qualifier on it. Jeremy Cox stated that he likes the idea of collection services and expanded services, rather than money passing hands. The Solid Waste Advisory Committee did come to a consensus that the Board of Commissioners should negotiate some type of host fee/service focused on environmental or solid waste/recycling services.

Jerry Bowser noted that there is a competitive challenge for haulers doing business in a border situation where PA's costs of doing waste business is generally higher than OH's.

Michele referred to an attached draft fee chart and pointed out that, historically, there is a wide variation among county administration and host fees, ranging from \$1-7 per ton.

Landfill Responses to Request for Capacity:

Referring to the attached list of landfills that had responded to the request for landfill capacity, Michele noted that all of the landfills met the selection criteria. The only deficiencies are with landfills reaching the end of their permits; however, approval for permits is pending and expected to be approved by DEP. Also pending is approval for the Tri-Co landfill application. The plan may state the following: that a facility “will become a designated facility pending permit approval”; that the prices listed are “not to exceed”; and that lower rates can be negotiated. Regarding landfill rates, Michele explained that: gate rates are posted at landfills; that not everyone pays the gate rate; that haulers can be charged less; and that escalators are built in and are permitted.

The issue of transportation costs was discussed. Michele noted that transportation costs are a significant factor to haulers, and that generally haulers like to “internalize disposal,” meaning to take waste to their own landfills. She stated that it is a good idea to have a number of landfills in the plan so as to have a wide range of open options. Jeremy Cox asked if the contracts are similar to the previous plan. Michele answered that there is a reserve clause to reassess the county fee if it gets re-approved. It was noted that the committee should recommend to commissioners to sign the contract.

Recommendations:

The consensus of the committee was to recommend that mandatory trash and recycling services should be included in the plan. Various options were discussed to have the process of mandating waste services done in a way that would allow time to set achievable goals, to establish consensus building, and to disseminate public education. Butler County’s plan was noted as a possible model in which an ordinance was passed that required waste haulers offering service in Butler County to offer residential recycling services at no additional cost. In the Butler County example, haulers are allowed to set up their collection system how they want, and so are able to control their costs. Michele said that, consistently, communities with mandatory waste collection services have higher property values.

Jerry Zona noted that mandated recycling does not necessarily mean curbside recycling in the most rural portions of the county, and that recycling service could be satisfied through the Big Blue Bin recycling drop-off sites. He added that there is a cost associated with the drop-off sites, and suggested that at some point the County will want to scale these sites back to use in only the most sparsely populated communities as curbside recycling programs become established throughout the county.

Special Collection

It was noted that Mercer County is one of the few counties in the Commonwealth that does not hold special collections for hard-to-dispose materials. The committee recommends that special collections be included in the plan. A number of options for addressing the

issue were discussed, including: inclusion of permanent drop-off sites or special collection events in municipal contracts for waste services; and creating a partnership with Keep Pennsylvania Beautiful (formerly PA CleanWays.) Jerry Zona said that during the PA CleanWays of Butler-Lawrence Counties' recent strategic planning meeting, the board indicated that it wants to explore opportunities for a partnership with Mercer County.

Administrative Ticket Program to Combat Illegal Dumping:

Jerry Zona recommended that the committee consider including an administrative ticket program as a means of addressing illegal dumping and littering. A question was raised whether this is permissible under county code; Michele said she would look into this. Zona explained that under an Administrative Ticket program, a violator would be administered a "scattering rubbish violation" ticket for \$25. The alternative would be for the violator to risk a \$300 fine if he/she went to court, and so generally the ticket is paid up front. It was noted that a strong education program would be a key component to the program. A suggestion was made to recommend municipal zoning ordinances to prevent dumps in residential yards.

Transporters Ordinance

Michele provided an explanation of a hauler registration program as a means of tracking waste, as well as preventing illegal hauling activities. The committee agreed to include this in the plan.

Compost Sites

Tom Amundsen asked about the inclusion of composting sites, including options for Christmas tree disposal in the plan. The committee agreed to include in the plan a recommendation that there is a need to address the issue of composting.

Effective Education Program

The committee strongly advised that an effective education plan is critical to all aspects of the plan, particularly in the context of the above mentioned priorities: mandated trash and recycling collections; special collections for hard-to-dispose materials; and a possible administrative ticket program to combat illegal dumping and littering.

Michele added that an education program needs to include municipal officials in addition to residents. Tom Amundsen said that COG could be an effective vehicle for that. As an alternative to COG, it was also noted that Erie County has had held successful educational workshops for municipalities.

Next meeting: Wednesday, September 27 at 1:00 at the MC Courthouse.

ADVISORY COMMITTEE MEETING SEPTEMBER 27, 2010

Present:

Ken Ammann, Tom Amundsen, Brian Beader, Jerry Bowser, Jeremy Coxe, George Gerhart, John Logan, Michele Nestor, Lorraine Ranchod, Jerry Zona

Overview:

The intention of this meeting was to provide committee members an opportunity to share with the Mercer County Commissioners ideas that have been discussed as part of the Solid Waste Planning process.

Michele noted that the committee's discussions have centered on: the county's municipalities that continue to lack proper waste management and recycling services; the overall need for special collections for hard-to-dispose materials; and funding issues.

George Gerhart and Tom Amundsen stated that because this plan covers the significant time period of 10 years, they feel that the plan should strongly state goals that are realistic, achievable, and fiscally responsible, and that will lead the county's municipalities toward mandating waste and recycling services.

Waste Collection Mandate:

On the topic of a waste-service mandate, Michele Nestor explained that the committee explored the option of a countywide mandate, but came to the conclusion that it would be more effective to encourage municipalities to phase in mandates over the duration of the plan. The recommended phase-in would be accomplished through a series of municipal workshops and other educational programs. An implementation timeline is included in the draft plan.

George Gerhart said that while he understands the politically sensitive nature of mandates, he encouraged the Commissioners to allow the plan to move in the direction of mandates rather than relying on voluntary programs. He said that members of the committee learned that residents become more accepting of waste and recycling programs if the programs are convenient, and that the acceptance grows as residents begin to see the value in the program. Tom Amundsen added that committee also discussed the fact that mandated curbside recycling programs are more cost effective than voluntary programs because of a guaranteed route density for the hauler.

Michele said that the statistics in Mercer County show that its municipalities are below the national average for what would be expected for recycling tonnages. She added that it

has been shown that mandated service does increase residential recycling, and that voluntary programs just don't produce the same results.

Michele explained that in communities with a "pay by the bag" program that does not include a base rate to cover collection costs, the opt out rate by people who do not participate can be as high as 30%. It is this segment of the population that creates an outcry when services become mandated, because they suddenly have to pay for waste services they were previously avoiding.

Efficiencies:

In response to a question from Commissioner Beader for a hauler's perspective on mandates, Jerry Bowser explained that he favors mandates as long as they are implemented with good business sense. He noted that mandated communities allow for a number of efficiencies with waste and recycling services because of route density, and even more so when communities tie together for shared contracts. He stated that he would like to see all communities have curbside recycling programs, and noted that in communities with mandated curbside recycling, the volume of trash decreases significantly. A further aid in increasing efficiency in contracted communities is the use of split-body trucks which allow haulers to make one pass through a neighborhood picking up both trash and recycling simultaneously. Residents, as well as municipal officials concerned with road maintenance, prefer less truck traffic, and favor the split-body truck option.

In response to a question about a potential problem of out-of-community trash being illegally dumped curbside in mandated communities, Jerry Bowser said that a cart system generally eliminates that problem.

John Logan noted to the commissioners that the committee appreciated Jerry Bowser's openness in helping the committee understand the challenges facing haulers.

Commissioners' Responses:

Commissioner Ammann expressed concern with a countywide recycling mandate. He noted that currently Mercer County has a number of communities with voluntary recycling programs, and asked how a mandate would impact these programs. Lorraine Ranchod said that a mandate would not cause any existing voluntary program to discontinue, and Michele Nestor added that any mandates would likely strengthen current programming. Jerry Zona said that, for sparsely populated, rural municipalities, where route density does not exist, a curbside program would not be feasible, but that a drop-off program in these areas could satisfy a mandate.

Commissioner Beader said that the County's reluctance to issue mandates stems from experience with unfunded mandates handed down from the state and federal levels. He said that while he understands that mandated waste and recycling programs are cost-effective, he would prefer that the county focus its effort on educating municipalities on the benefits of self-mandating. He asked if the committee had discussed ways to explore

up-front funding such as lobbying the state to enact a bottle bill. [See *Funding Issues* below.]

Other Municipal Examples:

Examples of mandates from other communities, including Butler County and the City of Hermitage, were discussed. Michele explained that Butler County's situation was unique in that, at the time it passed its plan, the county was allowed to license haulers. Haulers providing waste services in Butler County were required to offer residential recycling services at no additional cost. A county's ability to license haulers no longer exists, so this will not be a tool available to Mercer County at this time. There is a possibility of registering haulers, however, which could be a tool to accomplish a similar goal, and is an option that Michele is looking into; this would also facilitate getting more comprehensive reports from the landfills.

Jeremy Coxe talked about the new contract for waste services in the City of Hermitage, an Act 101 mandated community. He explained that, while there have been some challenges with implementation, the program works very well for the vast majority of residents. People are now seeing that they have more in their recycling and yard waste containers than in their trash. The city got a lower cost because of contracting the entire city. One challenge facing Hermitage is that it has both rural and urban areas, and so there are wide differences in residents' attitudes towards waste issues, specifically rural residents who previously did not have trash collection. Jeremy noted that, overall, the city is now getting more services than before for a low cost. Michele pointed out that because this was Hermitage's first contract, their initial costs had to cover new carts, a cost that will not be part of future contracts, which could be even lower.

Funding:

Landfill Host Fees:

John Logan emphasized that the issue of funding is not only a critical aspect of the plan, but offers the county an opportunity to identify new funding sources, specifically regarding the potential for a new landfill in Mercer County. If a landfill site is approved, John said that he would like to see the county negotiate a landfill host fee designated to fund future programming, including special collections and community cleanup projects. In this way, good programs would be funded with the money in place upfront, and program budgets would not need to come out the county's general fund. He added that it is a positive thing for the county to capture its own waste here and manage it. Michele said that this was also the consensus of the committee, and that currently all of Mercer County's waste is exported outside of the county, leaving it at the mercy of other regions' cost structures and regulations.

The consensus of the committee is that any potential landfill host fees would be kept separate from the county's general fund and would be designated specifically for waste and recycling programs.

Michele pointed out that regarding host fees, the county gets an amount for every ton of waste brought in, not just for its own waste. Because of this, it would be in the municipalities' best interest to ensure that waste is actually collected, making mandated waste services a more attractive option.

User Fees and Other Sources:

Michele explained that sustainable waste and recycling programs are user-fee based. The Big Blue Bin drop-off recycling program is funded through the county budget, and so its expansion is limited. However, by encouraging municipalities to take on waste collection, it is easy to include recycling as part of a curbside program in which the user pays for the services.

Jeremy Coxe noted that in Hermitage it was determined that the City should consider waste collection as an essential service, similar to a utility, and that the burden of cost should be borne by the consumer/resident.

Michele advised for any program, it is important to have user fees to make the program sustainable. She noted that the Lawrence County special collections charge user fees to cover half the cost of the program with grants making up the other half, and that these programs have historically been well received and well attended. Other funding sources are available through corporations such as Wal-Mart and the PA American Water Company, which are required to set aside money for community events.

In reference to the question about bottle bills, Jerry Zona explained that states with bottle-bill legislation have their recycling infrastructure set up to deal with the bottle-return program. In states without a bottle bill, the perception is that a new bottle bill would essentially kill curbside programs.

Michele added that legislation is being considered for a producer responsibility bill for electronics, as well as for pharmaceuticals.

Financial Incentive to Municipalities:

Commissioner Beader asked about the feasibility of setting recycling benchmark goals for municipalities, and of offering municipalities financial incentives to mandate curbside recycling. He suggested that funding could come through future 904 performance grants, similar to a program administrated through the county's former Solid Waste Authority.

Michele said that some counties do have successful mini-grant programs to create recycling incentives to municipalities, and that this could be funded through 904 performance grants and/or potential landfill fees. Jerry Zona pointed out that municipalities that are not in compliance with Act 101 would not be eligible for performance grant funding, and so work would need to be done upfront with some municipalities to bring them into compliance.

Enforcement/Compliance:

George asked about available mechanisms for the county or municipalities to either enforce potential mandates or to provide municipalities an incentive to go in the direction of mandates.

Michele explained that DEP gives notice to municipalities that are not in compliance with Act 101 and that that is often enough incentive to move towards a mandate or contracted service. Once one municipality moves in that direction, neighboring municipalities are often more open to it. Approaching the municipalities from the county level and through educational programs could be effective as well.

In response to a question on enforcement of businesses that do not recycle in mandated communities, Michele said that municipalities can mandate that haulers providing waste services in that municipality must also offer recycling services. Jerry Bowser noted that, from a hauler's perspective, it is a challenge for the hauler himself to push the issue of recycling with customers.

Jeremy said that the Borough of Greenville has a solid waste contract that ties residential collection with commercial. He noted that a lot of businesses in Hermitage were happy with the new contracted services because they now have access to services that they could not get before.

John noted that Mercer County now has access to recycling staff members to help with educational efforts to address the issues of enforcement, specifically with businesses in mandated communities that do not want to recycle. Jerry Zona said that he and Lorraine have a grant to conduct a number of business seminars on waste and recycling issues; these workshops will be conducted through local Chambers of Commerce.

Additional Issues and Comments, Questions and Next Steps:

Michele emphasized that it is essential that education for municipalities be done up front through forums or workshops to prevent political push back on new programs or recommendations for mandates. The educational programming should be done in stages; and financial incentives help.

George asked about previous plans to explore waste incinerators for waste-to-energy projects. Jerry Zona responded that Lawrence County conducted a study in the 1990's and concluded that, even as a regional project, enough waste is not generated to make an incinerator economically viable.

Tom said that he would like to see the plan address issues of illegal dumping and open burning, but added that he agrees that these issues must be approached as a process and through a strong educational program.

In response to a question from Commissioner Beader, Jerry Bowser said that illegal curbside dumping tends to happen more in communities with unlimited curbside programs as opposed to those with a cart program.

George asked about the issue of illegal dumping of construction and demolition waste, and suggested that acceptable options for contractors' CD waste be included in the plan. Commissioner Beader noted that most legitimate contractors factor legal disposal of CD waste into their cost structure.

Michele said that she included other recommendations in the plan that she gleaned from the committee's discussions, and that these issues will be addressed through funded educational programming.

Commissioner Beader asked about the rules on reopening the plan to make adjustments once it has been adopted. Michele responded that the plan could be reopened and amended at any time, but noted that it has been written to allow the county considerable flexibility to make adjustments throughout its duration. State funding to pay for more significant revisions could be limited.

Michele reminded the committee that the next step for the planning process is to get feedback on the draft plan from DEP.



SOCIAL OBLIGATION IS MUCH
BIGGER THAN SUPPORTING
WORTHY CAUSES. IT INCLUDES
ANYTHING THAT IMPACTS
PEOPLE AND THE QUALITY OF
THEIR LIVES."

William Ford Jr., Chairman, Ford Motor Co.

Appendix I

Summary of Sustainability Study

PURPOSE OF THE SUSTANABILITY STUDY

In 2006, the Mercer County Board of Commissioners commissioned Nestor Resources, Inc. to perform a study to ensure the long term sustainability of recycling and other waste minimization programs within the County. A series of court rulings culminating in 2005 contributed to the instability of revenue sources previously available to support the County's programs. That coupled with wildly fluctuating markets and the uncertainty of future grant funding prompted the County to evaluate its programs.

The study examined the cost effectiveness of operations; recommended opportunities to minimize expenses; and offered alternative methods to achieve similar or improved net results. The private sector, nonprofit agencies, as well as those implementing the program at that point in time were all engaged in the problem solving process. Extensive fieldwork; data collection; analyses; and relationship building were utilized to affect change and preserve the accomplishments already made by the County.

Evaluation of equipment needs and design modifications were performed. Privatization of services occurred, resulting in substantial savings. Administrative, operational and financial responsibilities were reassigned and the County's leadership role in program development was enhanced. The following narrative provides a synopsis of the study and the resulting recommendations.

BACKGROUND

The Mercer County Solid Waste Management Authority was formed in the early 1990's to plan, develop and provide oversight for solid waste programs in the County. For years, the Authority served more of an advisory role and acted as the County's primary liaison to the general public, the municipalities, regulatory agencies and the waste industry. The Authority also served as the administrator of grants and fulfilled the County's reporting requirements to the PADEP.

During the process to revise the Mercer County Municipal Waste Management Plan in 2000, the Authority initiated steps to become an operating authority with recommendations to conduct a drop-off recycling collection program and a consolidation center to facilitate transport of materials directly to market. The program was to function in semi partnership with the Crawford County Solid Waste Authority's Recycling Center. Additionally, Lawrence County's participation in the program was expected. The Plan projected that revenues from materials sales would partially fund the program. Fees obtained from landfill disposal capacity agreements, with progressively increasing escalators, were anticipated to cover the remaining expenses. Act 101 Section 902

Equipment and Implementation grant funding was awarded to Mercer County to purchase collection equipment. Lawrence County was awarded funding for equipment at the consolidation center. Because a study conducted for Lawrence County determined that participation in the joint program was not advantageous, they entered into an agreement with Mercer County to transfer the grant funds and the Authority proceeded to build the consolidation center on its own. Over \$2 million in Act 101 grants were dedicated to equipment purchases for the program. The Authority in turn used the equipment purchased by Mercer County as collateral to secure a loan for approximately \$500,000 for the remaining cost of developing the consolidation center. By 2003 the Mercer County Solid Waste Authority was operating a drop-off collection program and by 2006 the consolidation center was ready for operation.

OPERATING ISSUES

The Authority opted to purchase proprietarily designed equipment manufactured in Canada for implementation of the drop-off collection program. Because the containers were unique, in order to service them, purchase of specialized collection vehicles was also necessary. The capacity of the collection vehicles was lesser than that of standard industry equipment. A limited number of containers and thus insufficient capacity was available at the sites. The system required source separation of recyclables in the drop-off containers. This combination of operational criteria served to increase the transportation costs significantly, particularly in a rural area. The recyclables were collected in routes designated by material type. Less container and vehicle capacity dictated more frequent collection. Nine drop-off sites were regularly serviced by two vehicles which each made 4.5 full circuits per week. Often vehicles were deployed for extra pickups because of overflowing containers or inadequate capacity on the vehicle.

The Authority contracted with the Mercer County Council of Governments (COG) to operate the collection vehicles. With no experience in this type of collection system, the COG offered low hourly rates for their services. In short time, it became evident that these rates would not be sufficient to cover the actual operating costs. All of the loads were initially hauled directly to the Crawford County Recycling Center. Once the consolidation center was constructed, more than half of the loads continued to be hauled direct and minimal loads were diverted to the consolidation center. Only one load per week was transferred by trailer from the consolidation center to the Crawford County site. None of the materials ever was transported directly to market in spite of attempts to find end user outlets.

FUNDING ISSUES

At about the time the Authority's program began to operate, the waste industry challenged the ability of counties to impose fees through the disposal capacity agreements. In 2005, the courts ruled that Act 101 did not provide counties with the statutory authority to collect the fees. As a result, the major funding mechanism for the Mercer program suddenly was removed. Because the operation was based on increasingly higher fees over the course of time, this placed the program in immediate jeopardy. Loss of the landfill fees was not the only circumstance that threatened the program.

The available quantities of materials collected were never substantial enough and the distance to market was too great for the system to function cost effectively as planned by the equipment vendors. Therefore, the only revenue ever realized by the program was in the form of a profit sharing formula offered by the Crawford facility. To make matters worse, the Crawford operation had difficulty accepting and processing full trailer loads of materials. Therefore, the savings promised by the operation of the consolidation center never materialized. In fact, the nearly two million-dollar facility provided less than \$77 in transportation savings per month. The Authority had consistently resisted the COG's attempts to negotiate higher collection rates. Once it became evident that the consolidation center would not provide the cost relief expected the COG gave notice that it would no longer have interest in renewing its contract. This presented the potential of even more costly overhead for the Authority.

A downturn in the market, loss of material from third party sources, along with the elimination of landfill fees resulted in operating deficits for Crawford also. So, rather than having profits to share, the Crawford facility began to operate at a loss. Not only were the rebates withdrawn from Mercer, but also the facility considered assessing processing fees. Eventually, the Crawford County Solid Waste Authority cut its losses and closed its facility.

At this point, the Authority sought assistance from the Mercer County Board of Commissioners. Rather than abandon the program, the Commissioners pledged short-term financial support while the potential for a more cost effective solution was explored.

FINDINGS AND RECOMMENDATIONS

A cost analysis of the collection system demonstrated that savings could be realized with equipment changes, site consolidation and privatization of the collection and processing system. It was recommended that Mercer County transition to a more traditional dual stream collection program utilizing industry standard compaction vehicles and front loading containers. It was also suggested

that the County take fuller control of the program. The switch to this system reduced the annual operating costs by 66%.

During this process, it was necessary to negotiate a reduction in the financial obligation to PADEP for grant funding for the original equipment. It was also crucial to secure monies to provide for the transition in services and pay down the Authority's debt. Nestor Resources coordinated the physical equipment transition; organized an auction for the sale of the consolidation center; developed collection contract and equipment procurement specifications; and helped negotiate rates for processing of the recyclable materials. The County entered into an agreement with PADEP to continue operation of the collection program and reduce its repayment to the Recycling Fund. The debt load of the Authority was resolved. The Authority was removed from its responsibility for implementing and enforcing the County's MSW Plan. The County's program continues to operate successfully after the change.

"WE PROTECT NATURE NOT FOR
NATURE'S SAKE BUT FOR OUR OWN SAKE
BECAUSE IT'S THE INFRASTRUCTURE OF
OUR COMMUNITIES.

IF WE WANT TO MEET THE OBLIGATIONS
OF OUR CIVILIZATION AND OUR
CULTURE . . . TO CREATE COMMUNITIES
FOR OUR CHILDREN THAT PROVIDE
THEM WITH THE SAME OPPORTUNITIES
AS THE COMMUNITIES THAT OUR
PARENTS GAVE US . . . WE'VE GOT TO
START BY PROTECTING THAT
INFRASTRUCTURE; THE AIR THAT WE
BREATHE, THE WATER THAT WE DRINK,
THE LANDSCAPES THAT ENRICH US.

WE'RE NOT PROTECTING NATURE FOR
NATURE'S SAKE. WE'RE PROTECTING IT
BECAUSE IT ENRICHES US. YES, IT
ENRICHES OUR ECONOMY AND WE
IGNORE THAT AT OUR PERIL.

Robert F. Kennedy Jr., 2004

Appendix J

Addendums

No addendums have been added at this time.

