

Developed by the
Mercer County Board of Commissioners
Lawrence-Mercer Counties Recycling/Solid Waste Department
Solid Waste Advisory Committee

Mercer County Municipal Solid Waste Management Plan 2020



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(INSIDE COVER)

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MERCER COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN 2020

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Statutory Requirements

The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) requires Pennsylvania counties to plan for the management of municipal solid waste generated within their borders. The law describes the format, organization and content required in the plans. Each chapter serves a specific purpose and the information provided there covers a certain context in time.

Of primary importance in the planning process is for counties to secure guarantees for enough capacity to dispose of or process this municipal waste over ten years. Many of the other aspects of the plans are affected by the selection of the facilities and methods to manage the waste. Equally significant is whether a county opts to own and operate a facility or rely on outside operations. Contractual agreements with landfills or other processing facilities are typically used to attain this goal.

In addition to the disposal concerns, Act 101 requires a county to demonstrate how the countywide recycling efforts of all relevant stakeholders will attain the state's recycling goals. The law stops short of mandating counties to provide recycling programs and services. On the other hand, municipalities of certain populations and densities are required to implement such programs.

Historical Timeline of the Plan and Revisions

In 1990, the County launched the development of its first ten-year plan in accordance with the provisions of Act 101. The final Plan was reviewed and ratified by the municipalities. The Plan was adopted on December 5, 1991 by the Board of County Commissioners. It was subsequently approved by the Pennsylvania Department of Environmental Protection (PADEP). 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. The last revision to the Plan was approved on April 6, 2012. This project represents the fourth update and revision to the original Plan.

Fundamental Concepts

Since 1990, the Mercer County Municipal Solid Waste Management Plan evolved to be compatible with the changing needs of the local communities, market conditions, and the availability of new collection and processing technology. Other influencing factors originated at the state level. These include legal challenges, court rulings and changing regulatory interpretations of Act 101.

Despite adjusting its approach with the times, the Plan's updates and revisions continue to focus on a number of basic issues. Reducing the prevalence of illegal dumping and its resulting damage has remained a key objective. Likewise, a perennial goal promoting equal access and opportunities for residents to recycle regardless of the municipality where they reside. Removing toxic materials and difficult to manage items from the waste stream before landfill disposal is also important.

To fulfill its primary responsibility under Act 101, Mercer County has and will continue to utilize a contractual approach to secure guarantees for disposal capacity for the ten-year planning period. Through a fair, open, and competitive procurement exercise the County selects and enters into capacity agreements with a number of landfills, which are then designated as the only sites that can receive Mercer County municipal solid waste for disposal.

Select Accomplishments Under the Previous Plan Update

Each update and revision to the Mercer County Municipal Solid Waste Management Plan included new goals and objectives complete with recommendations and calls to action to achieve them. Table 0-1 lists goals and objectives from the 2010 Plan Update along with activities and efforts taken to support those issues.

Figure 0-1 2011 Plan Goals and Objectives Attained

<p>Anti-Litter Initiative</p>	<p>Education, enforcement, and convenient disposal and recycling containers.</p>	<p>Partnerships with Tri County Cleanways, Shenango River Watchers, Keep Pennsylvania Beautiful</p> <hr/> <p>Tri-County Cleanways Litter Survey</p> <hr/> <p>Supported Annual Spring Clean-ups</p>
<p>Community Recycling Network</p>	<p>Provide municipalities with tools to accomplish community event recycling.</p>	<p>Acquired Pop Bottle Recycling Containers for Shared Use</p> <hr/> <p>Acquired Recycling Bin Covers for Shared Use</p> <hr/> <p>Obtained Funding for Curbside Recycling Carts, 95 gallon for Partnering Municipalities.</p>
<p>Municipal Waste Collection Workshops</p>	<p>Informational seminars on municipal waste and recycling contracting.</p> <hr/> <p>Offer model ordinances & sample contract specifications.</p> <hr/> <p>Waste Reduction and Energy conservation Seminars</p>	<p>Technical assistance provided to Municipal Officials on Request</p> <hr/> <p>Database created of current municipal waste and recycling contracts.</p> <hr/> <p>Developed model samples of each</p> <hr/> <p>Technical Assistance provide to Commercial and Institutional Establishments</p>

Public Awareness and Enforcement	Implement a waste & recycling public education campaign.	<u>Residential and Commercial Brochures</u> <u>Fact Sheets n Materials and Programs</u> <u>New signage at BBB sites.</u> <u>Launched R/SW Department webpage.</u> <u>Seminars-Recycling, Reduction,Energy</u> <u>America Recycles Day events.</u>
	Promote school recycling programs.	<u>Greenville High School</u> <u>Mercer elementary paper recycling Program.</u> <u>Conducted student tour of landfill/recycling center, and activity kits.</u>
	Monitor & enforce recycling drop-off and illegal dump sites.	Initiated camera surveillance and enforcement program.
County Level Leadership and Practices	Recycling implemented at each county agency and facility.	Courthouse Recycling Courthouse station for hard-to-recycle items.

Economic and Environmental Benefits

Obvious benefits to Mercer County have resulted from the recommendations made in the original Plan.

Safe and Affordable Disposal

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.

Pollution Prevention and Mitigation

Regular efforts to clean-up illegal dumpsites remove toxic materials from potentially polluting our streams and groundwater. Ongoing collection events have been successful in reducing illegal dumping and ensuring the proper handling of hazardous materials.

Energy Conservation and Greenhouse Gas Reduction

Despite often limited resources, recycling has always been an important component in the Mercer County Municipal Solid Waste Management Plan. The County recognized from the onset that there are other advantages derived which are not immediate and financially direct to the recycler. The impact of these benefits is often overlooked and ignored.

Measuring and quantifying the environmental effects of recycling is complicated. Sharing this information with the community is an effective way to demonstrate the value of their recycling efforts.

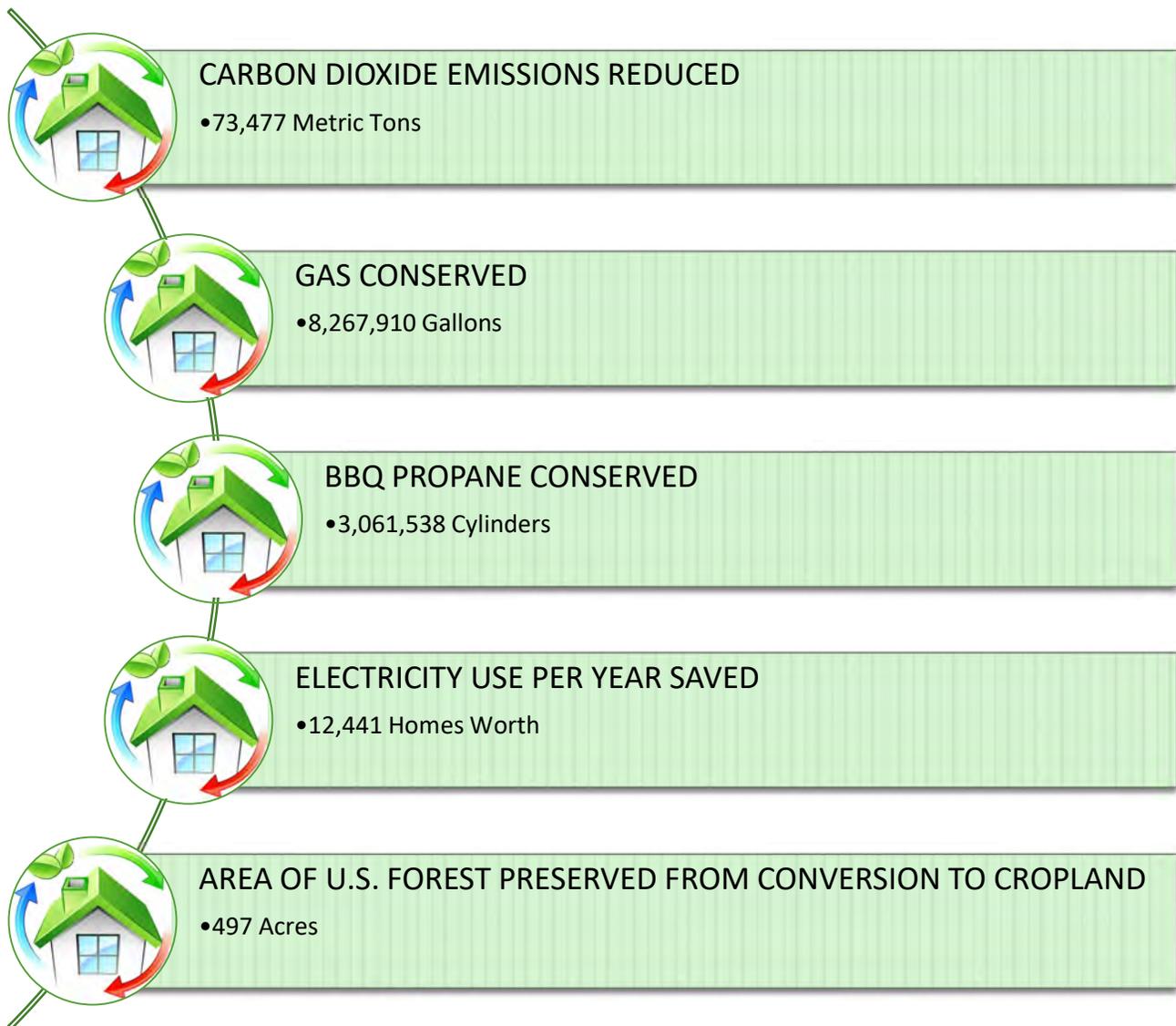
The Waste Reduction Model (WARM) is a tool created by the USEPA to simplify this process. It can track and evaluate greenhouse gas (GHG) emissions reductions. It can

be used to assess the performance of a variety of waste management practices. These include source reduction, recycling, combustion, composting, and landfilling.

WARM is an example of a life cycle greenhouse gas (GHG) accounting tool. It evaluates and reports the full life cycle GHG emissions associated with the raw materials extraction, manufacturing or processing, transportation, use, and end - of - life management of a good or service. WARM accounts for all emissions connected to the good or service, regardless of which industrial or economic activities or sectors produce these emissions (e.g., energy, mining, manufacturing, or waste sectors) and when these benefits occur over time. In WARM, the recycling emission factors reflect the difference between making a product with virgin inputs and making a product with recycled raw material inputs. This means that the virgin inputs that would have been necessary to create the specific material are no longer required because this material is being recycled. The emission factors represent the GHG emissions savings associated with recycling one short ton (2000 lbs.) of MSW.

Figure 0-2 shows the environmental benefits of recycling in Mercer County based on WARM. The model calculated emissions in metric tons of carbon dioxide equivalent (MTCO₂E), and energy units (million BTU) based on material types commonly found in municipal solid waste in Mercer County. GHG savings for Mercer County were calculated by comparing the emissions associated with landfilling versus recycling for all materials reported in 2017.

Figure 0-2 Environmental Benefits of Mercer County's Recycling Efforts



Building Upon Current Achievements

The 2011 Mercer County Municipal Solid Waste Management Plan had ambitious goals. A surprising amount of them were fully accomplished. For others, efforts were launched but the available time and resources were insufficient to address all of the objectives. In some cases, priorities set in 2011 no longer present a need or a problem has corrected itself.

The lingering tasks from 2011 listed below will be incorporated into the new goals and objectives for the 2020 Mercer County Municipal Solid Waste Management Plan Update.

- A concentration on Construction and Demolition waste recovery and recycling.
- Further study into local construction practices.
- Workshops conducted for local contractors.
- Educating municipal officials through workshops for drafting better ordinances and bid specifications.
- Development of a toolkit for post workshop use.
- Conduct waste audits at county facilities.
- Implement a recycled content procurement policy.

During the 2011 Plan implementation period a few weaknesses and omissions surfaced. The issues to be considered for this Plan Update include:

- Repeal the Transporter Ordinance and replace with an MSW Ordinance that mirrors that of Lawrence County.
- Provide Recycling/Solid Waste Department with enforcement powers for illegal dumping and improper recycling.
- Require haulers to offer residential curbside recycling service to customers.

Throughout this planning process new technologies, opportunities and needs were examined. These ideas will influence the ultimate goals of the 2020 Plan Update and Revisions. Some of the programs and service recommendations are continuums of initiatives started in the previous Plan. Providing universal access to waste and recycling services will continue to be a top priority. Minimizing the occurrence of and thus reducing the need for remediation of illegal dumping is equally important. Of course, building upon the existing public outreach and education efforts are crucial.

The potential to recover new materials, as well as increase the recovery of others already collected is a focus of the plan. The ability to reduce or eliminate County programs that duplicate services widely available from the private sector is a topic of consideration. The best value for County dollars spent on programs and services is also explored. Additionally, defining the County and municipal roles and responsibilities for programming and services is examined.

Public Input and Participation

A Solid Waste Advisory Committee was appointed by the Mercer County Board of Commissioners. Appointees were selected based on Act 101 guidelines which require representation by each class of municipal government, the waste and recycling industry, civic organizations, and manufacturers. Comments were also solicited from the general public.

Content and Structure

The following chapters are organized and formatted to conform to the PADEP Technical Guidance Document 254-2212-504. Each chapter is dedicated to a specific aspect of the process. Some chapters contain historic data while the purpose of others is to project future needs. The remaining chapters offer justifications for decisions made and recommendations to implement new policies and programs.

A number of key socio-economic indicators are used in planning for municipal solid waste management. These statistics enable planners to measure performance, make projections, and identify trends. Of all of the data available to municipal solid waste management planners, population is the most significant because it drives waste generation. Greater numbers of people produce larger amounts of waste.

How the population is distributed is equally important. The types of homes in which we reside and where they are located influences how our waste is collected. Since time and distance affect collection costs, population density and housing density must be evaluated in the planning process.

Other considerations include employment and personal wealth which can dictate purchasing power, consumption and in turn how much we discard. Even our education and heritage can sway our waste management perceptions and practices.

Of all the data available to municipal solid waste management planners, population is the most significant because it drives waste generation.

Similar information from the commercial business community is equally important in municipal solid waste planning. The types of businesses, their sales revenue, the number of employees, and their products and services all affect the types and amounts of waste produced.

Chapter 1 examines the demographic profile of Mercer County. It provides background data from a countywide and municipal perspective. The chapter defines municipal solid waste by type and the sources where it is generated in Mercer County. The similarities and differences in the waste originating from residential and commercial sources are considered.

An Overview of Municipal Solid Waste

Essentially, things we purchase or acquire become municipal solid waste when they are discarded. Each discarded item proportionately affects the overall composition of the total municipal waste stream. Municipal solid waste is relatively consistent across the nation. From region to region, a number of factors may cause the content of municipal solid waste to fluctuate slightly. Income, education, geography, weather, and other demographics influence the types and number of items people purchase and ultimately discard. Those differences are becoming lessened compared to the past.

With the growth of big box retailers like Walmart and the popularity of online shopping sites like Amazon, our purchasing habits are more homogenous than ever before. There is no longer lag time for trends to make it from the coasts to the heartland. New products and goods can be introduced online and arrive on retail shelves in Los Angeles, Phoenix, Detroit, and New York City, etc. on the same day.



With the growth of big box retailers like Walmart and the popularity of online shopping sites like Amazon, our purchasing habits and thus the waste we generate are more homogenous than ever before.

The advancements in product distribution affect the make-up of our discards as well. Not only do product trends shift rapidly, but also packaging. Unfortunately, material recovery facilities can be ill-equipped to collect, process and market the continually changing types and volumes of resulting material.

Understanding what is in the waste stream is the first step in determining the best methods for handling and processing various materials, and targeting those that can be recovered for recycling, composting, or energy production. Knowing the components of the waste stream also serves to identify how waste might be minimized through product and packaging design, purchasing habits, and greater consideration for reuse and repurposing.

Municipal Solid Waste in the United States

The United States Environmental Protection Agency (USEPA) collects and analyzes data on waste generation, disposal, and diversion. Its database of information dates from 1960 through the present. The Franklin Associates of Kansas conducts this ongoing study and issues a series of publications on behalf of USEPA.

This wealth of accumulated information establishes historic trends and changes. It is a useful tool to make initial assumptions and to reveal significant differences and/or anomalies in local programs based on national behaviors and performance. Because USEPA also documents detailed findings for each year, it is possible to compare local data from specific years to actual performance at the national level.

2017 Trends in Generation, Recovery , and Disposal

USEPA's most recent published data "*Advancing Sustainable Materials Management: Facts and Figures 2017*" will be referenced throughout the Plan and used as a basis to compare Mercer County's reported performance.

In 2017, with an estimated population of 325.5 million people, the United States generated approximately 268 million tons of municipal solid waste. That is the equivalent of 4.51 pounds per person per day. Of the municipal solid waste generated, approximately 94 million tons, or 1.58 pounds per person per day, were recycled and composted. 67 million tons were recycled, and 27 million tons were composted. Together, this represents a 35.2 percent combined recovery rate. In addition, more



than 34 million tons of municipal solid waste were combusted with energy recovery, and more than 139 million tons of MSW were landfilled for a combined total of 173 million tons, or 2.93 pounds per person per day of municipal solid waste disposed.

Although the waste generation rate per person is lower than the 4.74 pounds per person per day seen in 2000, it resembles the rate in 1990 at the height of a thirty-year escalation in consumerism. What differs is the amount of material recovered which in 1990 was only 0.69 pounds per person per day. So, while due to increases in population overall we generate more waste, we recover a greater portion of it than in the past.

Basic Composition of Municipal Solid Waste

There are a number of categorized subsets of solid waste. In general, USEPA considers discards from residential, commercial, and institutional establishments to be the “municipal” subset of solid waste. It is commonly referred to as “MSW.”

Municipal solid waste consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, and batteries. In addition to identifying specific groups of materials like metals, glass, paper, or plastic, broad categories of products are also used in analyses of municipal solid waste. These include durable goods, non-durable goods, containers and packaging, organic wastes such as food and yard trimmings, and miscellaneous inorganic wastes. Although each may consist of one or more recyclable materials,

categorizing them by product is a more accurate way of describing what we purchase, discard, and recycle.

For instance, we all have windows, mirrors, and decorative glassware in our homes. Yet when we talk about recycling “glass” in municipal programs, we mean glass bottles and jars. Similarly, when “aluminum” is mentioned in the context of municipal recycling programs, we mean aluminum cans and foil, not siding and scrap metal.

Using the product categories clearly illustrates the relationship between product design, purchasing habits, and waste generation. With the emergence and growth of product stewardship and extended producer responsibility legislation and regulations, there is increasing demand for sustainable design that allows for remanufacturing, reuse, and recycling.

Table 1-1 and Figure 1-1 show the changing composition of the municipal solid waste stream from the point of generation to recovery and finally disposal. The impact of recycling on diverting waste from disposal is clearly demonstrated in each.

Table I-I 2017 USA Municipal Waste Composition and Management

	Percentage of Total Generated	Percentage of Total Recovered	Percentage of Total Landfilled	Percentage of Total Combusted
<i>Paper and Paperboard</i>	5.0%	46.9%	13.1%	13.2%
<i>Glass</i>	4.2%	3.2%	4.9%	4.3%
<i>Total Metals</i>	9.4%	8.8%	9.9%	8.6%
<i>Plastics</i>	13.2%	3.1%	19.2%	16.4%
<i>Rubber and Leather</i>	3.4%	1.8%	3.5%	7.3%
<i>Textiles</i>	6.3%	2.7%	8.0%	9.3%
<i>Wood</i>	6.7%	3.2%	8.7%	8.4%
<i>Other</i>	2.0%	1.5%	2.2%	2.0%
<i>Food</i>	15.2%	2.7%	22.0%	22.0%
<i>Yard Trimmings</i>	13.1%	25.9%	6.2%	6.2%
<i>Miscellaneous Inorganic Wastes</i>	1.5%		2.3%	2.3%
<i>Major Appliances</i>	1.90%	3.3%	1.5%	0.0%
<i>Small Appliances</i>	0.80%	0.1%	1.2%	1.1%
<i>Furniture and Furnishings</i>	4.60%	0.0%	7.0%	7.0%
<i>Carpets and Rugs</i>	1.30%	0.3%	1.8%	1.8%
<i>Rubber Tires</i>	2.40%	0.3%	0.9%	8.0%
<i>Batteries, Lead-Acid</i>	1.20%	3.4%	neg	0.0%
<i>Selected Consumer Electronics</i>	1.10%	1.1%	neg	neg
<i>Other Miscellaneous Durables</i>	8.10%	0.5%	neg	neg

Regulatory Influences

How municipal waste is defined and regulated differs from state to state as well as from the federal interpretation. Lacking another reliable benchmark, the Plan uses USEPA's database as a reference and base of comparison throughout its analyses. Slight differences exist between the federal criteria and Pennsylvania's laws and regulations.

Defining Solid Waste By Its Source

Defining a waste by who generates it or by where it was generated, rather than by its chemical or physical characteristics or environmental impact is often a more practical way for regulatory agencies to monitor and enforce proper waste management practices. Therefore, there are items commonly found in industries and households alike that are regulated differently and require different disposal methods for each source.

The USEPA definition of municipal solid waste encompasses the materials discarded by residents, commercial businesses, offices, and institutions. It excludes materials generated by manufacturing processes and industrial activities. A further distinction is made in planning for and managing municipal waste based on whether the source is commercial or residential.

It is important to understand the regulatory and practical basis for categorizing the sources of municipal waste because, while the overall contents of the waste stream remain the same, the proportion of the materials differs in each category. This becomes a major consideration in developing recycling and other waste management technologies and diversion programs.

Components Unique To Pennsylvania

There are some other subsets of the solid waste stream with unique characteristics or which require special handling. USEPA, along with many states, do not factor these particular types of materials into the overall quantities of municipal waste. In Pennsylvania, however, waste from construction and demolition activities, medical waste from health care facilities, biosolids, and sludges from wastewater treatment all fall within the regulatory framework of municipal solid waste. Therefore, in the planning process, Pennsylvania counties must address how each is managed.

For comparative purposes, in Pennsylvania it is only the data in disposal facility reports categorized as “municipal” that correlate to USEPA’s definition of municipal solid waste. These reports are discussed in more detail in Chapter 2. It should be noted that discussions of and projections for residential and commercial/institutional municipal waste generation and recycling within the Plan do not include special handling wastes. Estimates for these types of municipal solid waste and detailed discussions of how they are managed are provided separately.

Sources of Municipal Solid Waste

Every household, commercial establishment, government facility, and institution produces municipal solid waste each day. Although similar materials are found in the municipal solid waste generated by all of these entities, the proportion that each material represents in the total waste stream changes based on which of these sources produces it.

Residential

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.

Commercial

Retailers, wholesalers, and a wide variety of service industries are considered commercial generators of municipal waste. Office complexes, government facilities, schools, and institutions also fall within this category. Commercial sources typically generate less than half of the total municipal solid waste produced annually.

Although commercial sources are more varied than residential generators, materials in the commercial waste stream remain similar to those found in residential municipal solid waste. What fluctuates is the proportional mix of the materials by weight and volume. The inconsistencies are driven by a variety of factors. The nature of the operation, the volume of sales, and the number of employees ultimately affect the composition of the municipal waste each generator produces.

Waste generated by commercial generators differs from the more toxic materials commonly produced by manufacturing processes in industrial settings. If, however, commercial generators do not manage this waste properly environmental consequences can occur.

Local ordinances should ensure that business owners are accountable for proper storage and removal of waste generated on site. Minimum standards for service frequency and storage capacity help to prevent environmental pollution and protect public health and safety.

When taking inventory of local commercial establishments, a useful step is to determine where strong similarities or differences exist in the waste stream. The ability to target and prioritize material with high potential for recovery increases the performance of commercial recycling programs.

Following is a brief description of the various segments that comprise the commercial category of municipal waste generation.

Business Establishments

The Mercer County Data Book 2016 compiled by the Pennsylvania State Data Center reports 2,494 commercial business establishments that would be considered commercial municipal solid waste generators. The retail trade comprises the largest category of commercial businesses. Health care, and other service-oriented organizations follow in close ranks. A broad spectrum of businesses generates commercial municipal solid waste. Banks, office complexes, restaurants, hotels, hair salons, plumbers, department stores, and other similar operations fall within this category. Each are sources of materials that lend themselves to recovery, and thus where successful commercial recycling programs could be developed.

Other Business Establishments Excluded From The Category

Employers in the categories of agriculture, mining, manufacturing, utilities, construction, and other industrial related operations are not considered commercial waste generators under the federal or state municipal solid waste regulations. Therefore, they have been excluded here.

Select Types Of Commercial Municipal Waste Generators

Aside from retailers, office buildings, and other service-oriented businesses, Act 101 specifically mentions three commercial municipal solid waste generators. Following is a brief description of each.

Government Facilities

The functions of the federal, state, and local government are conducted in offices and facilities throughout Mercer County. Agencies and organizations representing social services, economic development, the military, the environment, and agriculture are all housed here. The day-to-day operations of township, borough, and county government are located in offices and other facilities throughout the County. Police and fire departments, municipal authorities, libraries, recreational facilities and even prisons are included. Government facilities generate materials that are easily recoverable from the municipal solid waste stream. Regardless of location government

agencies should demonstrate environmental stewardship by recycling, whether it is mandated by ordinance or not.

Educational Institutions

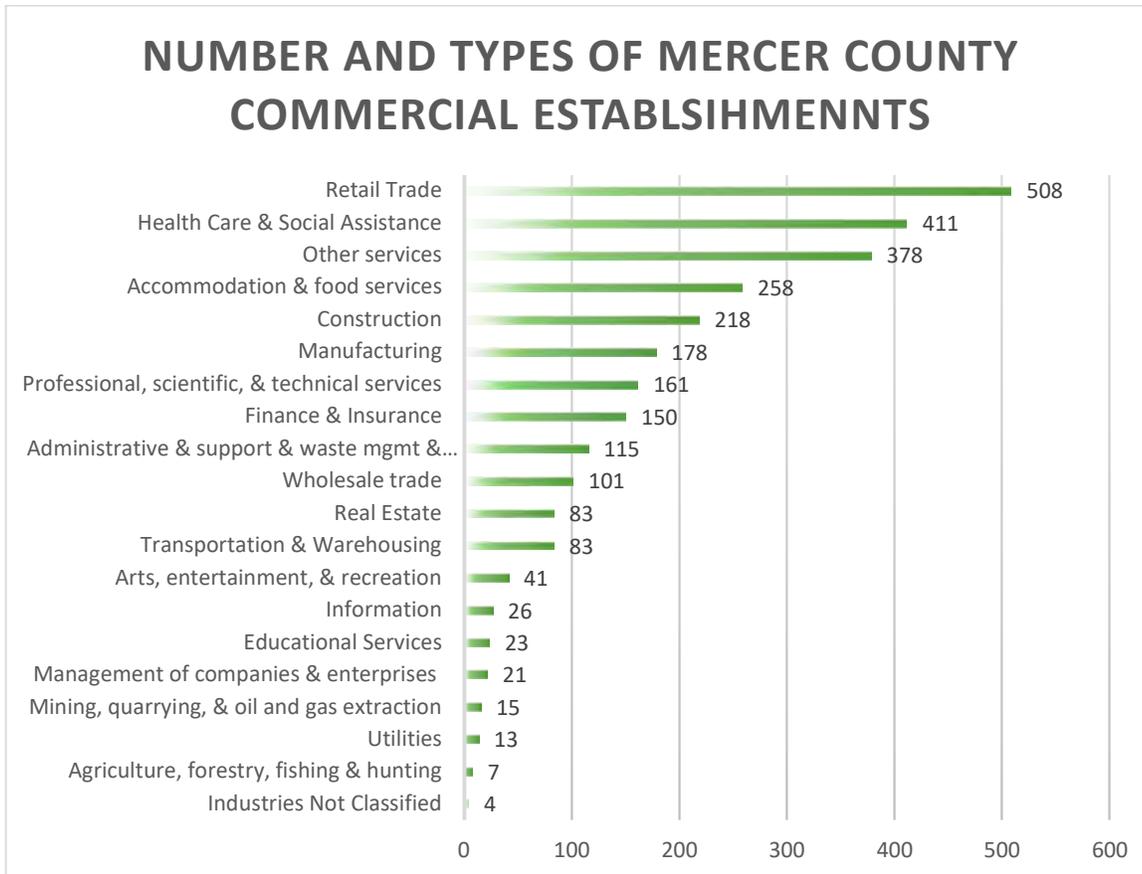
Thirteen major public school districts, with facilities from primary through secondary, represent the largest segment of educational institutions in Mercer County. Other learning centers also exist. These include three colleges, technical and vocational schools, and numerous private schools.

Residential Care Facilities

Another group of institutional facilities include skilled nursing, personal care, and assisted living facilities. All are considered commercial municipal waste generators. Overall, these facilities produce municipal waste with a composition similarly found in most residences. Residential care facilities 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 of regulated medical waste, previously known as infectious chemotherapeutic waste. Chapter 1 discusses this, and other special handling wastes later in a dedicated section.

Figure 1-2 shows the types and numbers of commercial establishments operating in Mercer County based on estimates from the Pennsylvania State Data Center and the US Census Bureau.

Figure 1-2 Commercial Waste Generators in Mercer County



Community Events

Communities commonly come together to socialize and celebrate long standing traditions. These occasions may occur in conjunction with holidays of national importance or those of local cultural heritage. Sometimes the events are focused on the activities of local sports teams. Mercer County hosts several fairs, festivals, and other events during the year. Each draws a large volume of people that can tax the capabilities of local services and significantly increases the amount of waste and recyclable materials generated.

In spite of their seeming similarities, in reality, each event is unique in character. Exactness is virtually impossible when predicting the volume of waste expected from any given event.

Nestor Resources, Inc. prepared a special event manual for the Butler County Department of Recycling and Waste Management. As part of the project, a search of reported results from events in Pennsylvania and the nation found the current average rate of event waste generation is approximately 0.66 pounds per attendee. Much of the event waste is organic and a considerable portion of the materials generated can be recycled or composted. Informational flyers, food scraps, packaging, beverage containers, etc. are some of the potential discarded materials. Leaves and manure are also common at fairs and other events that include livestock and other animals.

MOBILITY AND WASTE GENERATION

Organized events are not the only instances when people produce waste away from home. Take-out food, single serve beverage containers, and similar items provide the option of dining as we drive or walk along the streets. Fast food and convenience stores are common in Mercer County. As a destination for leisure travelers, including day-trippers, who visit outdoor recreational areas and shopping venues, the need for receptacles to prevent littering is essential.

Applying National Trends to Local Conditions

The findings of the USEPA over the past 50 years present a reliable snapshot of the average waste generation, recycling, and disposal trends in the United States. It is reasonable to expect that from region to region a number of demographic variables could cause local statistics to differ somewhat from those reported by USEPA. The source of the material can also influence locally reported results. For instance, waste from strictly residential settings tends to differ slightly in composition from waste

generated only by commercial establishments. These variables are identified in the national study to help program managers better interpret their data.

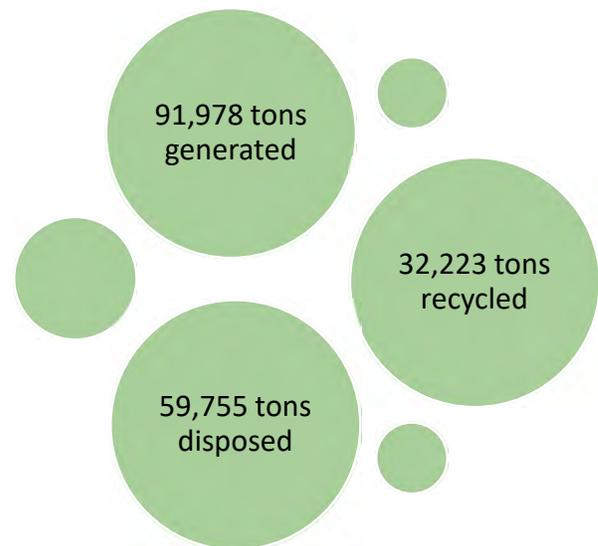
Understanding what is common or normal in the majority of communities across the nation provides a sufficient benchmark for evaluating local data and examining current conditions in Mercer County. It also provides a baseline to determine future solid waste management capacity needs and the development of treatment and processing methodologies.

Expected Local Municipal Waste Quantities

Mercer County's generic municipal solid waste profile can be defined by applying these assumptions from USEPA's national studies and surveys combined with local demographics.

Using 2017 population estimates, and applying the USEPA rates for generation , recovery , and disposal we can calculate the expected results for Mercer County. According to the Pennsylvania State Data Center, Mercer County's estimated population in 2017 was 111,750 people. If Mercer County's generation rate is the same as reported by USEPA, Mercer County would generate 91,978 tons of municipal solid waste in 2017. Likewise, the County would be expected to recycle 32,223 tons and dispose 59,755 tons.

As noted, USEPA's definition of municipal solid waste is narrower than Pennsylvania's. Likewise, the types of materials and sources USEPA measures differ from the broad list



Mercer County 2017 estimated municipal solid waste generation, recovery and disposal using national rates reported by USEPA

of items reported by Pennsylvania counties. Finally, there are often anomalies in the data reported by Pennsylvania landfills and transfer stations. Therefore, when necessary the Plan makes slight adjustments to the reported disposal data discussed in Chapter 2 and the reported recycling data discussed in Chapter 4 to portray the County more accurately in comparison to national standards.

Sources and Quantities of Special Handling Municipal Solid Waste

Certain types of municipal waste have properties or characteristics that require them to be managed in a different fashion or may provide opportunities for enhanced reuse or recycling. The physical nature of the waste may not be appropriate to transport in a conventional collection vehicle. The composition or amounts may present risks to those using traditional collection practices. Therefore, these categories of municipal solid waste are controlled and regulated differently.

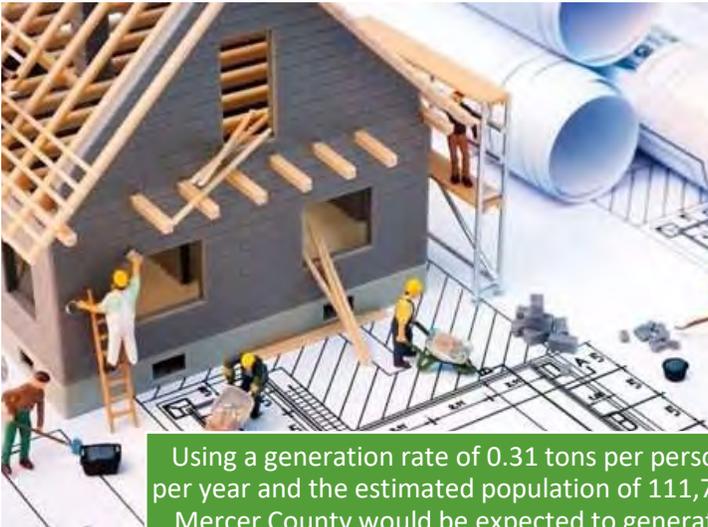
Construction Demolition

Construction and Demolition (C&D) waste is a perfect example of a waste stream Pennsylvania defines and regulates as municipal waste, but USEPA and other states view differently.

Construction and demolition projects in residential, commercial, and industrial establishments generate a highly variable composite waste stream. The name itself suggests the different activities that can occur depending on the specific project or job site. Work may include construction, renovation, demolition, and any or all of a number of related activities.

Overall C&D waste generation is less consistent than municipal waste as a whole. In fact, the amounts of C&D waste can vary from month to month and year to year.

On a load-by-load basis, C&D waste can differ dramatically based on the mix of materials and physical characteristics. The materials generated by demolition projects tend to include asphalt, concrete, earth, sand, trees, steel, brick, lumber, roofing materials, flooring, plaster, dry wall, and other similar materials. Alternatively, new construction projects generally are comprised of trimmings from dry wall, framing, carpet remnants, etc.



Using a generation rate of 0.31 tons per person per year and the estimated population of 111,750, Mercer County would be expected to generate approximately 34,642 tons of C&D waste in 2017.

Overall C&D waste generation is less consistent than municipal waste as a whole. In fact, the amounts of C&D waste can vary from month to month and year to year. While the quantities of municipal waste are now known to barely fluctuate with the economy, C&D waste is highly vulnerable to conditions that stimulate or deter new development and construction.

All of these factors make it difficult to project C&D quantities for the long term. For the purpose of characterizing the C&D waste stream and calculating a generation rate, planners often rely on two studies conducted in the Northeastern United States. The first study was conducted by the Northeast Waste Management Officials' Association (NEWMOA). The Massachusetts Department of Environmental Protection commissioned the second study. Using the median generation rate of 0.31 tons per person per year derived from the two studies, and using the 2017 estimated population of 111,750, Mercer County would be expected to generate approximately 34,642 tons of C&D waste per year. The reported landfill data for C&D waste will be examined in more detail in comparison to these estimates.

Sewage sludge

A number of wastewater treatment plants (WWTP) service the needs of Mercer County communities. Most of the facilities are dedicated to the needs of a single municipality. However, some serve one or more municipalities or portions of municipalities.

Where the cost of connecting sewage lines is prohibitive, on-lot septic systems must be installed by private homeowners. Septic systems must be periodically pumped by septic system service companies and the septage is either land applied or transported to a WWTP for treatment. Multi-family dwellings, such as mobile home parks and residential care facilities, as well as industrial operations may operate private pre-treatment systems, with the sewage being transported for final treatment.

Both the raw sewage and septage, which is treated at WWTP's eventually, is dewatered sufficiently to become sewage sludge. These materials require a management outlet. In Mercer County, sewage sludge is typically disposed in landfills. The type of treatment system, the timing of septic cleanouts, rainfall, and other factors that place short-term, rapid demands on the treatment capacity can affect sewage sludge generation.

Table 1-2 lists the municipalities and the WWTP which each is served by. It also shows the estimated tons of biosolids generated annually. According to USEPA and PADEP approximately 45 percent of biosolids are disposed as sewage sludge at Pennsylvania Landfills.

Table 1-2 Estimated Bio-Solids Generation per Municipality with Associated Public Wastewater Treatment Plants

Geography	Served by Wastewater Treatment Facility	Occupied Housing Units	Tons Per Year
Mercer County		51,189	12797.25
Clark Borough	Hermitage Municipal Authority	244	61
Coolspring Township	Coolspring Jackson Lake Latonka Joint Authority	983	245.75
Deer Creek Township		232	58
Delaware Township		939	234.75
East Lackawannock Township		700	175
Fairview Township		361	90.25
Farrell City	Farrell Wastewater Treatment Plant	2,560	640
Findley Township		485	121.25
Fredonia Borough	Fredonia Municipal Authority	240	60
French Creek Township		399	99.75
Greene Township		438	109.5
Greenville Borough	Greenville Sanitary Authority	2,505	626.25
Grove City Borough	Grove City Wastewater Treatment Plant	2,899	724.75
Hempfield Township	Greenville Sanitary Authority	1,657	414.25
Hermitage City	Hermitage Municipal Authority	7,628	1907
Jackson Township	Coolspring Jackson Lake Latonka Joint Authority	595	148.75
Jackson Center Borough	Coolspring Jackson Lake Latonka Joint Authority	85	21.25
Jamestown Borough	Jamestown Municipal Authority	296	74
Jefferson Township	Hermitage Municipal Authority	867	216.75
Lackawannock Township		1087	271.75
Lake Township	Lakeview Joint Sewer Authority	300	75
Liberty Township	Grove City Wastewater Treatment Plant	558	139.5
Mercer Borough	Mercer Borough Sewage Treatment Plant	956	239

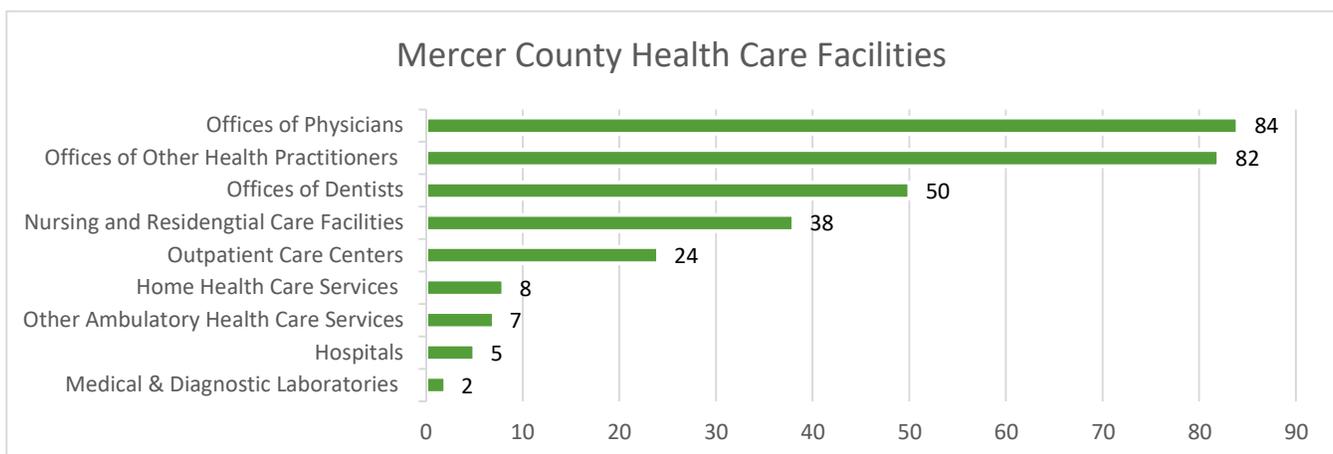
Mill Creek Township		366	91.5
New Lebanon Borough		90	22.5
New Vernon Township		199	49.75
Otter Creek Township		253	63.25
Perry Township		674	168.5
Pine Township	Grove City Wastewater Treatment Plant	1,994	498.5
Pymatuning Township		1,461	365.25
Salem Township		294	73.5
Sandy Creek Township		326	81.5
Sandy Lake Borough	Lakeview Joint Sewer Authority	300	75
Sandy Lake Township	Lakeview Joint Sewer Authority	532	133
Sharon City	Sharon Wastewater Treatment Plant	7,559	1889.75
Sharpsville Borough	Sharon Wastewater Treatment Plant	2,113	528.25
Sheakleyville Borough		63	15.75
Shenango Township	Shenango Township Municipal Authority	1,750	437.5
South Pymatuning Township	Hermitage Municipal Authority	1,226	306.5
Springfield Township	Grove City Wastewater Treatment Plant	784	196
Stoneboro Borough		546	136.5
Sugar Grove Township		445	111.25
West Middlesex Borough	Shenango Township Municipal Authority	378	94.5
West Salem Township	West Salem Township Municipal Sewage Authority	1,494	373.5
Wheatland Borough	Hermitage Municipal Authority	425	106.25
Wilmington Township		543	135.75
Wolf Creek Township		360	90
Worth Township		415	103.75

Regulated Medical Waste

Similar to other institutional settings hospitals and resident care facilities generate significant quantities of municipal waste. Much of the material resembles waste found in the hospitality industry, where people are temporarily housed and fed. However, due to the nature of their operations, hospitals and other health care facilities also produce waste, which is required by federal and state regulations to be treated and handled separately from other materials. This waste is identified in Pennsylvania as “regulated medical waste,” and is a direct result of medical procedures, treatments, and other activities. Regulated medical waste generated in Mercer County is typically transported to commercial treatment facilities.

Typically, hospitals generate the bulk of the regulated medical waste, with outpatient care facilities also among the largest sources. However, given an ever-increasing aging population, the County should anticipate a growing demand for skilled nursing and resident rehabilitation centers. This in turn will increase the amount of waste generated in these facilities. Figure 1-3 shows the number and types of health care facilities that generate regulated municipal waste.

Figure 1-3 Health Care Facilities and Generators of Regulated Medical Waste



Source US Census Bureau, 2016 County Business Patterns

Local Planning

Although municipal solid waste is part of our everyday lives, how it is managed is not something the average person considers much. However, when local governments fail to plan for the types and quantities of waste generated, municipal solid waste can and has caused environmental and public health and safety problems. This first step in the planning process is designed to familiarize stakeholders with municipal solid waste and to create an awareness of the individual components.

Because the waste stream continues to evolve, it is important to look at it granularly to recognize new opportunities to capture materials and divert them to a better use than disposal. Throughout the planning process, the Solid Waste Advisory Committee was presented with local examples of both outdated and innovative approaches to waste management in general and for some specific components of municipal solid waste. In addition, statewide and national trends were discussed. Their findings and conclusions are discussed throughout the Plan.

County Characteristics

Mercer County is a fifth-class county located in Western Pennsylvania, approximately mid-way between the cities of Erie and Pittsburgh. It borders the Pennsylvania counties of Crawford to the north, Lawrence to the south with Venango and Butler situated to the east and southeast respectively. The Ohio counties of Trumbull and Mahoning are on the western border of Mercer County.

Fed by numerous tributaries, the Shenango River is the major body of water. Via the Beaver and Ohio Rivers it drains into the overall Mississippi River watershed. The river was vital to local development. Now part of the Army Corps of Engineers flood control projects via construction of a dam and formation of the Shenango River Lake, the waterway is a haven for recreation and tourism.

The transportation network includes two segments of the Federal Interstate Highway System. Interstate 79 flows north and south while Interstate 80 serves eastbound and westbound traffic. Local businesses and residents are dependent on these highways to facilitate the transport of goods and products into and out of the County.

State roadways are equally important. SR 19 and SR18 provide north/south access at opposite ends of the County. SR 62 flows vertically through the County connecting the Borough of Mercer, the county seat, with the cities of the Shenango Valley, Hermitage, Sharon, and Farrell. SR58 provides a direct route between Grove City and Greenville.

Transporting waste to disposal facilities is a major expenditure. An adequate highway system can minimize the impact of time and distance on these expenditures.

Local Economy

In a broad sense, Mercer County is within a great swath of geography known as the “Rust Belt.” The particular segment of the Rust Belt that includes Mercer County sweeps from Buffalo, New York, across to Cleveland and Youngstown, Ohio, then extends south of Pittsburgh and into the panhandle of West Virginia.

Rust Belt communities are characterized by the collapse of the local economy once dominated by major manufacturing. The promise of prosperity for well-paid blue-collar workers faded as factories closed. The recovery and transition process remains painfully slow and challenging. Consider the fate of residents who were born shortly before or after 1995. That’s the year the Sharon Steel Corp.’s No 2 blast furnace was imploded into a 15,000-ton mass of scrap steel. The events and circumstances leading up to the demolition of the furnace on that Friday afternoon still cast a shadow on their economic opportunities.

Education, healthcare, social services, retail, and restaurant work are now Mercer County’s primary sources of employment. Many of these jobs are low-skilled and pay meager wages.

Those who remain chronically unemployed, as well as retirees who lost pensions and benefits in the factory closures, have very limited incomes. Consequently, more than 50 percent of Mercer County household incomes are less than \$50,000. The poverty

rate in 2016 was not only higher than in 1980, but also higher than in 1990 which was the height of the steel industry’s downturn.

Figure 1-4 Shows the average household incomes in the County. Figure 1-5 Shows the changes in Mercer County’s poverty rate .

Figure 1-4 Average income by percent of households

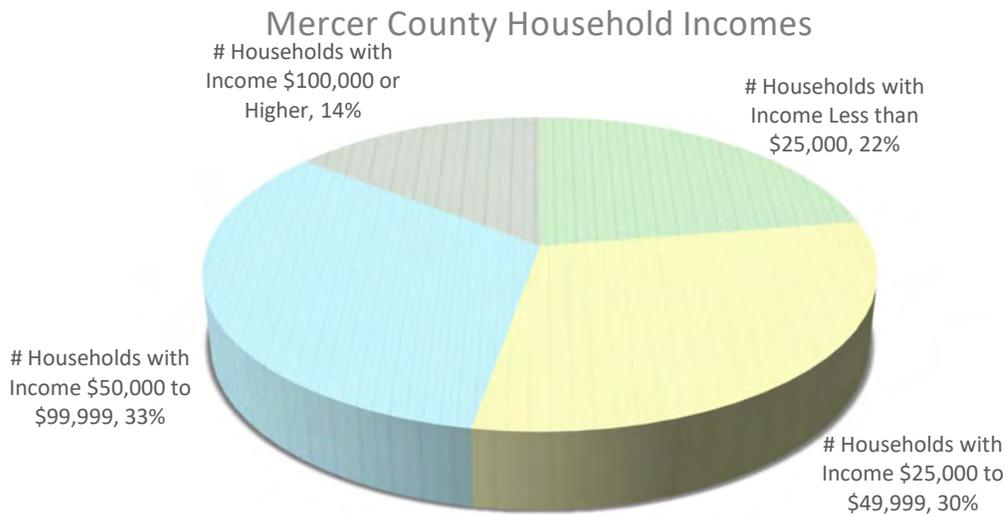


Figure 15 Changes in the Poverty Rate 1980-2016

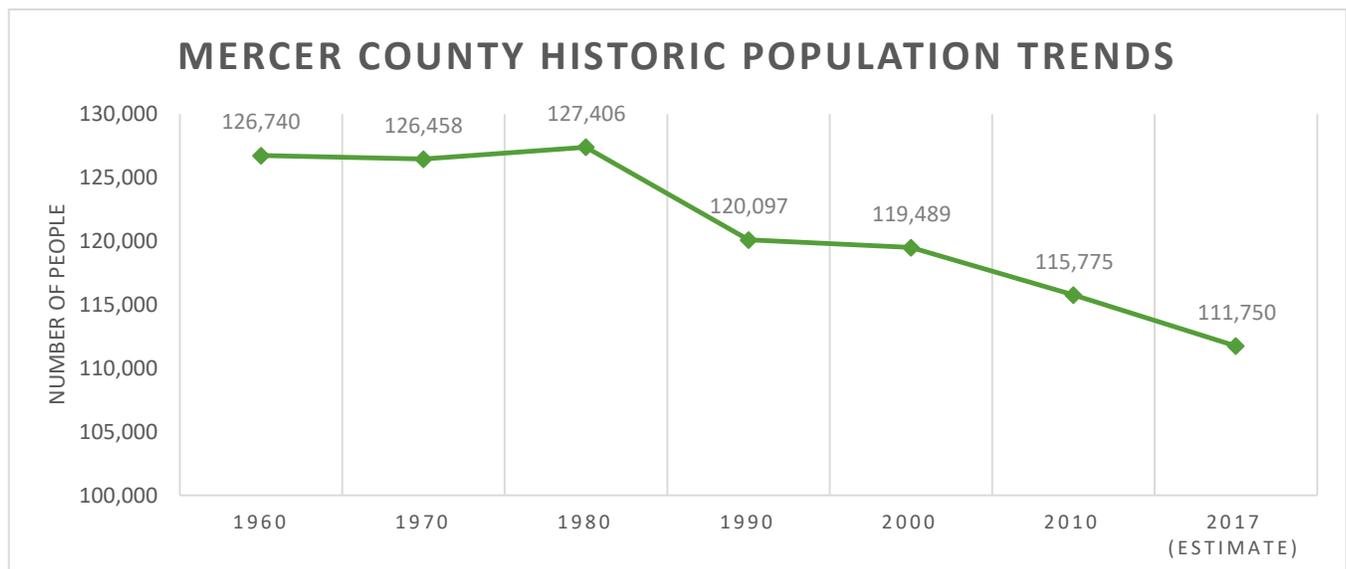


Population and Housing

As a whole, the population of Mercer County has been on a steady decline starting with the demise of the steel industry in the 1980's. Since population is the driver of waste generation, the number of residents in a community directly influences the amount of municipal solid waste produced there and subsequently which must be managed.

Figure 1-6 shows the dramatic and steady population decrease countywide.

Figure 1-6 Mercer County Historic Population Trends

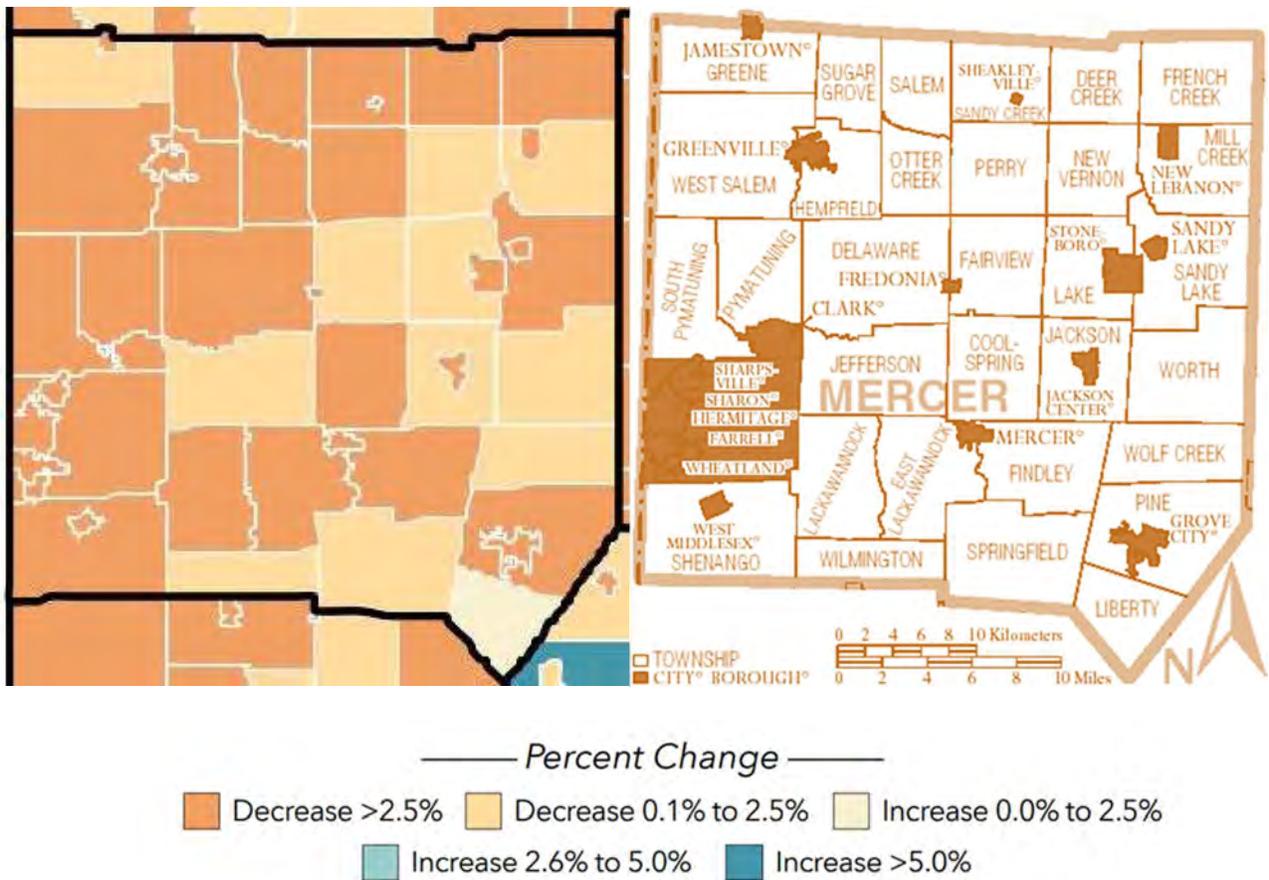


For planning purposes, it is important to not only understand the collective population trends, but also the trends from one municipality to another. This is particularly true in a county whose communities have diverse socio-economic characteristics. Highlighting population movement within a county is helpful in forecasting needs and service requirements.

Once the residential growth center of Mercer County, even the City of Hermitage has fewer inhabitants than ten years ago. The only municipality showing some growth in

population, albeit a modest increase, is Liberty Township. Figure 1-7 illustrates the losses in population by municipality.

Figure 1-7 Percent Change in Population by Municipalities, 2010-2017



In conjunction with the number of people living in an area, how closely they reside to one another factors into waste management planning decisions. Another influencing factor is the type of homes in which people reside.

Figure 1-8 Illustrates the prevalence of the various types of housing units available throughout Mercer County.

Table 1-3 Shows by municipality the land area, the Pennsylvania State Data Center estimated population for 2017 , the total number of housing units, and the population density for each municipality.

Figure 1-8 Types of Available Housing units

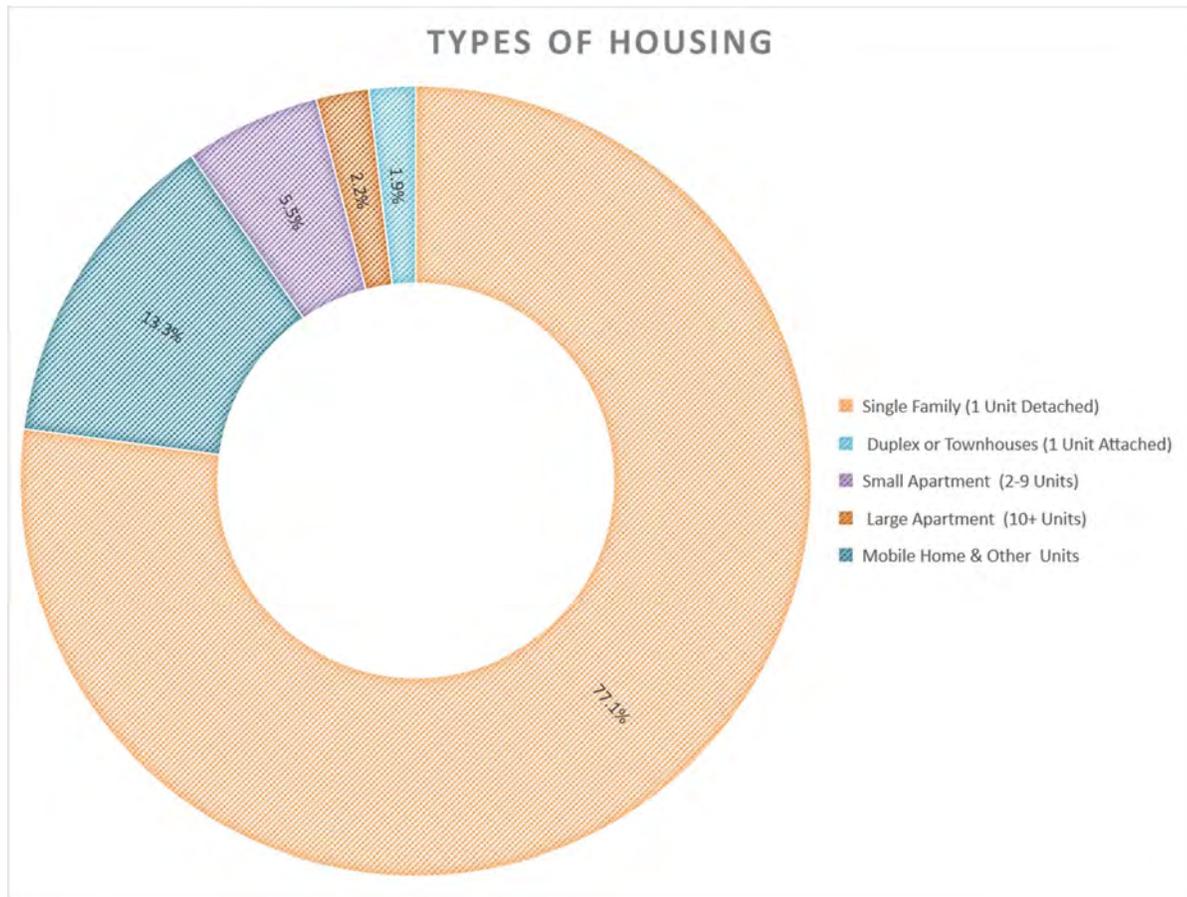


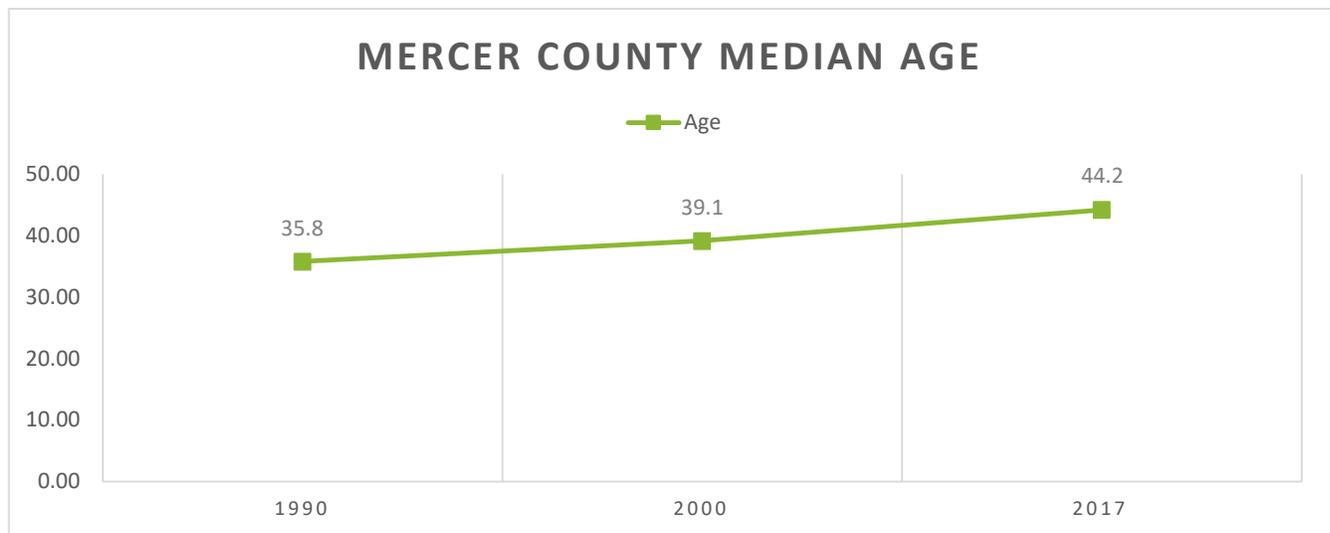
Table I-3 Mercer County Housing Units and Population Density 2017 by Municipality

Geography	Population	Housing units	Area in Square Miles	Population per Square Mile
Clark Borough	606	244	3.1	213
Coolspring Township	2,200	983	19.2	121
Deer Creek Township	477	232	14.5	35
Delaware Township	2,203	939	32.5	70
East Lackawannock Township	1,636	700	21.2	79
Fairview Township	1,059	361	18.7	59
Farrell City	4,687	2,560	2.3	2,164
Findley Township	2,826	485	21.1	137
Fredonia Borough	473	240	0.4	1,406
French Creek Township	741	399	20.7	37
Greene Township	1,064	438	21.9	50
Greenville Borough	5,529	2,505	2.0	3,156
Grove City Borough	8,011	2,899	2.7	3,091
Hempfield Township	3,631	1,657	14.2	264
Hermitage City	15,635	7,628	29.5	560
Jackson Township	212	595	17.1	197
Jackson Center Borough	1,262	85	1.1	73
Jamestown Borough	582	296	0.8	741
Jefferson Township	1,835	867	24.5	76
Lackawannock Township	2,587	1,087	20.8	128
Lake Township	765	300	15.9	48
Liberty Township	1,428	558	14.6	96
Mercer Borough	1,891	956	1.2	1,758
Mill Creek Township	712	366	18.9	38
New Lebanon Borough	177	90	1.3	148
New Vernon Township	502	199	15.1	34
Otter Creek Township	573	253	11.8	50
Perry Township	1,382	674	18.0	81
Pine Township	4,993	1,994	25.7	203
Pymatuning Township	3,113	1,461	16.5	203
Salem Township	725	294	13.3	56
Sandy Creek Township	761	326	15.9	50
Sandy Lake Borough	638	300	0.8	792
Sandy Lake Township	1,175	532	24.5	50
Sharon City	13,259	7,559	3.8	3,724
Sharpsville Borough	4,165	2,113	1.4	3,174
Sheakleyville Borough	134	63	0.2	723
Shenango Township	3,745	1,750	29.9	130
South Pymatuning Township	2,570	1,226	19.3	138
Springfield Township	1,933	784	27.2	72
Stoneboro Borough	997	546	2.8	371
Sugar Grove Township	926	445	12.3	78
West Middlesex Borough	821	378	1.0	1,021
West Salem Township	3,420	1,494	37.0	96
Wheatland Borough	597	425	0.9	731
Wilmington Township	1,385	543	13.1	108
Wolf Creek Township	829	360	16.6	49
Worth Township	878	415	24.8	35

The ages of the people in a community also influence public policies and their acceptance. Mercer County has an aging population. Since 1990, the median age of the population has increased by nearly ten years. This is an indicator that the fraction of the population which is decreasing is youth rather than the elderly.

Figure 1-9 shows the trend in the median age of residents from 1990 to 2017.

Figure 1-9 Median Age of Mercer County Residents



Socio-economic Influences on Municipal Waste Management

In varying degrees generational differences can impact the amount of waste produced, the composition of the waste, and the overall importance of waste management services and policies to local residents. Depending on when a person was born, their expectations for public services like waste and recycling collection may differ dramatically based on their life experiences.

The ability and willingness to pay for services might be the key determining factors in whether residents opt to manage their municipal waste and recycling properly. Taking economic conditions into consideration is crucial when designing successful waste management plans and programs. Affordability combined with convenience and other user-friendly features are vital for public acceptance.

Municipal officials have a responsibility to encourage greater participation in sound waste management practices. One way to accomplish this is to ensure that residents have the lowest cost available for the level of services desired. Policies that allow for voluntary subscription to secure collection services typically have higher per home pricing than waste and recycling services secured via a competitive bidding process. For communities that already enter contractual agreements for these services, costs may be lowered by modernizing the bid specifications, partnering in joint municipal collection contracts, and being realistic with their expectations for material recovery. Sharing the risk of the recycling commodities market by using a fair and equitable formula is another way to control overall costs.

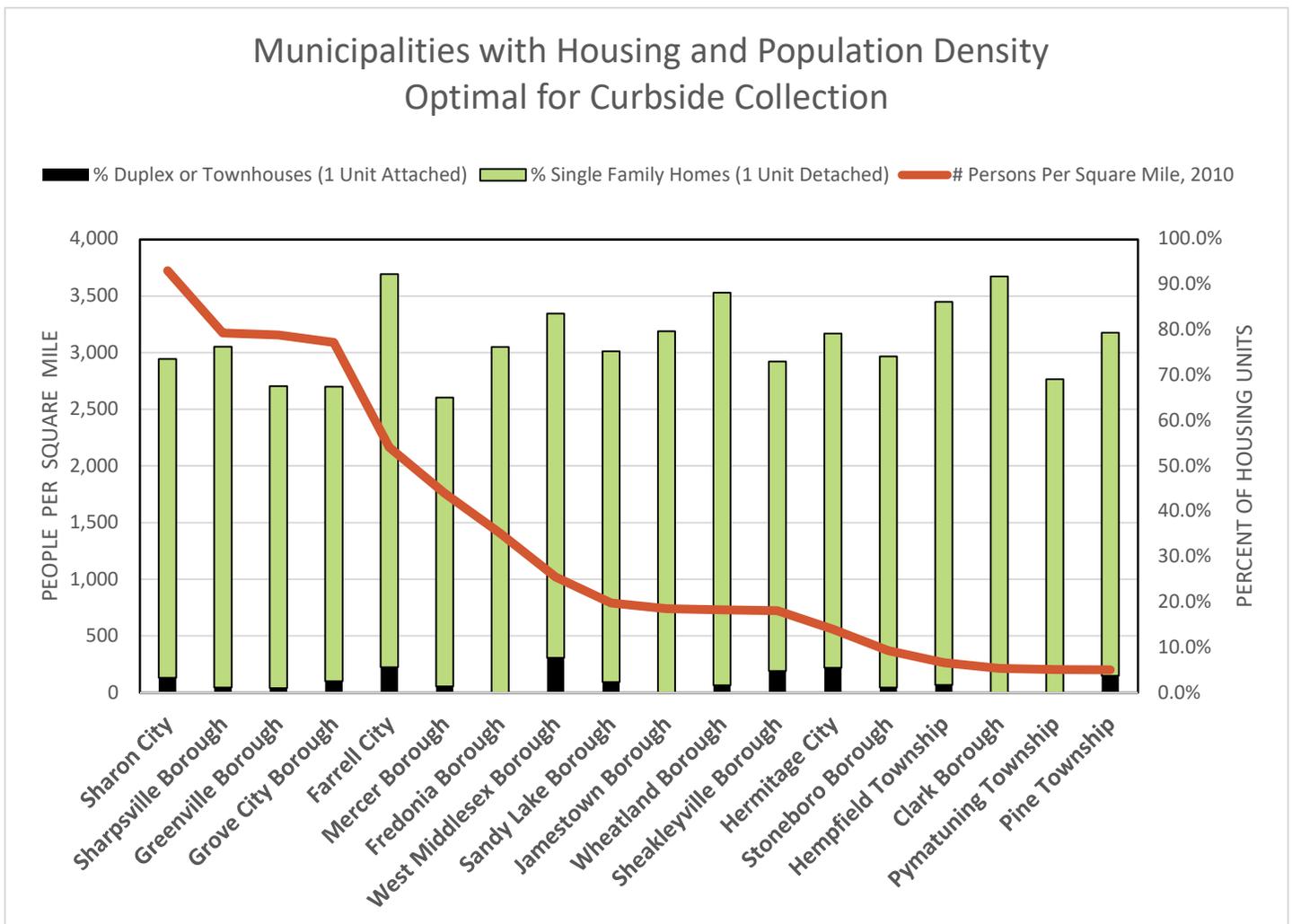
Technically, where waste is collected at the curb or side of the road, recycling can be collected in the same manner. The cost to do so however differs from one community to another. Clusters of population are easier and less expensive to access and service than those which are spread over wider geographic areas. Single family detached homes are more conducive to curbside collection than are multi-family dwellings where there may be multiple floors of attached units with no direct outside entrance.

Where single family housing units are densely clustered in one community, or when a greater number of units are guaranteed to participate from joint municipal programs, the result is lower costs. Because the fixed costs of providing service can be distributed among a greater number of units, homeowners experience lower service rates than if each were to negotiate for the same level of service on their own. Figure 1-? shows the municipalities in Mercer County with the most optimal conditions for curbside

collection programs. Each has a high population density, and the majority of the housing units are single family detached homes.

Figure 1-10 illustrates where there is relatively no excuse to not include the curbside collection recycling option. This does not preclude other municipalities from pursuing curbside collection services. There are ways to structure services to control costs in townships with lower population densities.

Figure I-10 Mercer County Municipalities Optimal for Curbside Collection



Economic Impact of Coronavirus Pandemic

The 2019-2020 coronavirus global pandemic had a devastating impact on employment and overall economic conditions throughout the nation. Pennsylvania and Mercer County did not escape these consequences. The fully long-range influence of these events is currently unknown, however, there is certainty that permanent changes are inevitable.

Quarantine and social distancing policies altered the way we acquire goods and services. The popularity of on-line shopping grew at an accelerated rate exceeding all previous measurements. Home delivery and curbside pick-up services presented opportunities for new business models for restaurants and retail establishments.

Grocers stock fewer choices and generally maintain lower inventories of all products. Large retail chains are closing or downsizing their brick-and-mortar locations. Contemporary predictions estimate that more than 40 percent of all small businesses will be unable to survive the economic shift and will close permanently. If these patterns prevail the commercial municipal waste stream will continue to decrease .



In 2019-2020 on-line shopping grew at an unprecedented pace resulting in an increase in corrugated cardboard from residential sources greater ever seen than before the pandemic.

These preliminary indicators are also creating a transition in the composition of both the commercial and residential waste streams. Packaging material such as corrugated cardboard, once the mainstay of commercial recycling, continues to increase in the residential sector at a greater pace than before the pandemic.

Summary

The key indicators reviewed in Chapter 1 form the foundation of the 2020 Mercer County Municipal Solid Waste Management Plan. As discussed, socio-economic factors can affect the amounts and types of waste to manage. They reveal changes and trends that could impact the existing policies and programs and point to needs not previously considered. While the Plan relies on national standards and performance metrics, circumstances, and conditions unique to Mercer County influence the conclusions and recommendations.

A mixture of transporters, processors, and disposal facilities form the infrastructure to manage the municipal waste generated in Mercer County. Each plays a uniquely important role. The Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101) establishes securing disposal capacity as the priority for counties in the planning process. These additional factors, however, are vital building blocks and influence the outcome of all policies and programs for the management of municipal solid waste. Assessing the availability of services is necessary to gain a realistic view of current needs. More importantly is knowing to what extent Mercer County residents and businesses use these services. Another critical factor is to determine if the infrastructure has the capacity to meet the desired level of services for future programs, which could identify business development opportunities.

Chapter 2 provides an inventory of the facilities that received waste generated in Mercer County. It also examines the types of transporters that handle specific segments of the municipal waste stream and explores disposal trends since the last planning initiative. Additionally, it considers how these trends could impact the availability of disposal capacity in the future, particularly if alternative processing methods become available. This section looks at the effectiveness of flow control and how waste is managed in local municipalities. Included is a review of the current system's strengths and weaknesses and a discussion of progress made toward decreasing undesirable disposal practices in Mercer County.

Collecting and Transporting Municipal Waste

At the core of all waste management programs is the ability to cost effectively move waste from the point of generation to the point of processing and disposal with the least impact on the environment.

To meet the varied demands of waste generators, different types of municipal waste collection and transportation service providers operate in Mercer County. Private and public sector service offerings may include collection from residential curbside, commercial containers, large detachable open top containers for construction, demolition, and industrial waste, and enclosed containers for food and other types of organic wastes. Special remediation projects and large demolition jobs generate enough waste to warrant the services of dump trucks or trailers. The availability of each type of service is dependent on the transporter. Larger companies have the resources to address most, if not all, collection and transportation needs.



Certain segments of the municipal waste stream must be segregated from others because they are physically and/or are characteristically difficult to handle. Specialized transportation equipment and expertise is often necessary.

Regulating Transportation And Collection

Tracking and monitoring collection and transportation activities is frequently used as a tool in measuring the effectiveness of local waste management programs. Mercer

County implements a registration program for all municipal solid waste haulers under the Solid Waste and Recycling Transporters Ordinance. The purpose is to track flow control, facilitate reporting requirements, and enforce safety provisions. In Pennsylvania, a state implemented program places greater emphasis on vehicle and driver safety, however, it fails in providing counties and municipalities with the data necessary to evaluate their programs and fulfill their reporting requirements. The following section outlines the state's requirements.

Transporter Authorization

In Pennsylvania, certain transporters of municipal and residual waste must obtain Waste Transporter Authorization. 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 processing or disposal facilities in Pennsylvania have been regulated by the Waste Transportation Safety Act (Act 90 of 2002). 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 exempt from the license.

Authorization is not limited to only those who collect municipal solid waste from residences and businesses. Those who haul construction demolition debris and significant quantities of materials from their own operations also meet the criteria. Therefore, commercial businesses, builders, developers, roofers, and remodeling contractors can fall into this category. Because they control a significant and important portion of the municipal waste stream, their practices must be considered in policies that result from the planning process. Mercer County is in close proximity to Ohio where pricing for construction demolition debris disposal is highly competitive. Therefore, a number of these transporters may go unrecognized since they haul material solely to out of state facilities.

Separate Regulations for Special Handling Municipal Solid Waste

A certain portion of the municipal solid waste generated within Mercer County requires specialized methods of transporting, processing, and disposal. These wastes are not typically hauled directly to landfills. In Pennsylvania, transporters of special handling wastes are licensed and regulated separately from the Act 90 Waste Transporter Authorization Program. Often customized equipment is used to deliver these wastes to treatment or pretreatment facilities specifically designed for their management. In some instances, wastes are actually conveyed directly to the facility via pipelines and pumping stations. Special handling wastes include: biosolids, septage, sludges resulting from treated wastewater, and regulated medical wastes.

Management Of Biosolids And Residential Septage

Wastewater from residences and businesses flows through pipelines to the extensive network of wastewater treatment plants throughout Mercer County. Dues to the cost of construction and maintenance, this network services the more densely populated areas of Mercer County. In rural areas of the County, where the housing density is low, wastewater is held in a septic tank and 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 obtain approval for beneficial use of the septage by land application at an agricultural or reclamation site.

Septage Transporters

In Pennsylvania, transporters of residential septage must register with the PADEP. The transporter records information for each load of septage collected and transported. 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. Mercer County currently requires septage haulers to register as part of its Transporter Ordinance.

Regulated Medical Waste Management

Transporters of regulated medical waste (formerly known as 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 to PADEP. The County does not have any regulatory powers related to medical waste. Most companies operate within a wide service area, if not the entire state; therefore, due to contractual arrangements that continually change, it is impossible to accurately show which companies operate within Mercer County.

Waste Collection Policies and Practices

Legislators and industry representatives often point out that all waste management is local. In other words, collection and disposal services should be tailored to meet local needs. In addition, the laws, rules, and regulations that dictate how citizens manage municipal solid waste are enforced most successfully when they are adopted by a consensus of municipal officials and local residents.

Municipal Contracts and Ordinances

Municipalities establish the standards for municipal waste management by adopting ordinances. These laws can cover a broad array of issues that are directly or indirectly associated with municipal solid waste. The most common ordinances dictate how waste is stored, collected, transported, and disposed. Some may designate certain

materials to be segregated and recycled. They may mandate participation in waste and recycling collection services. Constraints on open burning limits the most popular option residents use to avoid the cost of disposal. Building codes typically restrict the accumulation of waste and the duration of time it can remain on a property, as do those that prohibit junk yards. All of these ordinances are common in Mercer County, although not in every municipality.

THE LAWS, RULES, AND REGULATIONS THAT DICTATE HOW CITIZENS MANAGE MUNICIPAL SOLID WASTE ARE ENFORCED MOST SUCCESSFULLY WHEN THEY ARE ADOPTED BY A CONSENSUS OF MUNICIPAL OFFICIALS AND SUPPORTED BY LOCAL RESIDENTS.

Procurement of Waste Collection Services

Waste collection services are available throughout Mercer County. Local requirements and service offerings vary from town to town. Several municipalities use a competitive bidding process to select one contractor who is granted exclusive rights to collect waste from residential households that are required to participate and pay for these services. A few others use a similar competitive bidding process, however, while there is an exclusive service provider, residents are not mandated to participate in the program. In contrast to the contracted municipalities, the remainder of Mercer County has a subscription waste collection system. In subscription service areas, residents, commercial, and institutional establishments are free to contract directly with the hauler of their choice.

Paying for Waste Collection Services

For the most part, Mercer County residents are billed directly for waste collection. This is true regardless of whether the municipality contracts for collection services or homeowners are free to select a service provider of their choice. In some instances, garbage collection is included in the property owner's taxes.

An issue often ignored where participation is voluntary is that residents and businesses are also free to have no service at all, fostering the opportunity for undesirable disposal practices. Historically, evidence shows an unwillingness to pay plays a great role in the avoidance of waste collection service.

Variables That Affect Price

Comparing collection pricing from one municipality to another can be misleading and result in inaccurate conclusions. Too many variables impact the cost from one municipality to another, even when the contract specifications are the same. Housing density, population, socio-economic demographics, politics, and a host of other items all impact the final price.



In Mercer County, forty-eight percent of the municipalities with seventy-one percent of the estimated population have some form of contract collection services.

Service offerings differ from town to town. Slight differences in service can increase or decrease the cost. While the collection of unlimited volumes of waste for one flat fee is still common, in some instances, residents also have the option to opt for the limited volume that can be contained in a specific sized wheeled cart. Another choice that may be offered as a stand-alone or in conjunction with the other options is a pay by the bag program. Other service options include recycling, leaf waste,

and bulky waste collection. Each of these options require different levels of labor and equipment to perform the service. In addition, one town may desire more frequent collections for one or more of the services offered.

A key influencer of price is whether residents are mandated to participate (i.e. pay for the service) or if subscribing is voluntary. Because fixed costs for collection are shared among all of the homes on the service route, the greater number of homes guaranteed

to participate the lower the service cost per unit. Despite all of the service and demographic differentials, in general, it is reasonably safe to say that under similar circumstances residents in voluntary subscription areas typically experience higher prices than in a mandatory all-inclusive contract scenario.

Survey of Municipal Waste Collection Practices and Policies

Mercer County's municipalities responded to a request from the Lawrence-Mercer County Solid Waste/Recycling Department for information on their waste and recycling collection programs as well as the types of ordinances related to waste management. In Mercer County, forty-eight percent of the municipalities have some form of contract collection services. These municipalities represent seventy-one percent of the County's 2017 estimated population of 111,750. The remaining fifty-two percent of the municipalities where twenty-nine percent of the population live, have voluntary subscription service. The degree at which certain classes of municipal government favor contract collection programs differs. Population density has a significant influence on these choices.

A KEY INFLUENCER OF PRICE IS WHETHER RESIDENTS ARE MANDATED TO PARTICIPATE (I.E. PAY FOR THE SERVICE) OR IF SUBSCRIBING TO THE SERVICE IS VOLUNTARY.

All of the cities have contract services. Due to their concentration of homes and people, boroughs in general are more likely to regulate waste and have a formal collection program. Sixty-four percent of Mercer County's boroughs use a contract for their collection program. Townships in Pennsylvania are less likely to use a competitive bidding process and contractual agreements to provide residential waste collection services. Mercer County townships follow that trend. Only thirty-five percent of the townships have contracted service.

Nevertheless, subscription collection service remains available in non-contract communities. The price, however, tends to be considerably higher when one considers

NEED FOR SERVICE STANDARDS

Studies show that in municipalities without contracted services and minus the proper ordinances and enforcement mechanisms to establish standards for waste management illegal dumping tends to be a greater issue.



that the service offerings are often less than those required in contracts. Voluntary subscription service policies inadvertently punish the residents trying to manage their waste properly. Not only does it result in higher costs but in turn the higher pricing deters more homes from participating.

An unfortunate consequence of voluntary subscription policies is the significant number of homes which do not subscribe and subsequently use illegal methods to manage their waste. These include open burning, illegal dumping, and theft of service (placing one's waste in another's container without permission.)

Overall, approximately 25% of the municipalities either do not have ordinances to govern municipal solid waste and associated activities. Another forty percent were unaware of any ordinances in their jurisdiction or were unable to provide any information on the topic.

Mercer County cities had the highest percentage of municipalities with ordinances and. Surprisingly, seven percent of the boroughs in Mercer County reported having no ordinances, and fifty percent of them were unaware or could provide no information on the issues. Likewise, thirty-five percent reported having no waste management related ordinances and

thirty-nine percent were unaware of or had no information on the issue.

Studies show that in municipalities without contracted services and minus the proper ordinances and enforcement mechanisms to establish standards for waste management, illegal dumping tends to be a greater issue.

Table 2-1 Lists the municipalities in Mercer County according to their classification as a city, borough, or township. The table shows population by municipality and also indicates how local residents obtain waste collection services. Finally the table shows the types of ordinances each town has adopted that in some way regulates municipal solid waste.

Table 2-1 Mercer County Waste Collection Programs and Related Ordinances by Municipality

Classification Municipality	Population* 2017 Estimated	Collection Programs**		Ordinances**						
		Municipal Contract	Subscription Service	Garbage	Burning	Yard Waste	Recycling	Junk Yard	None	No Information
CITIES										
Farrell City	4,687	x		X	X		X			
Hermitage City	15,635	x		X		X	X			
Sharon City*	13,259	x		X	X	X	X			
Number of Cities		3	0	3	2	2	3	0	0	0
Percent of Cities		100%	0%	100%	67%	67%	100%	0%	0%	0%
BOROUGHS										
Clark Borough	606	x		X	X	X				
Fredonia Borough	473	x		X						
Greenville Borough	5,529	x		X	X	X	X			
Grove City Borough	8,011	x					X			
Jackson Center Borough	212		x							X
Jamestown Borough	582	x								X
Mercer Borough	1,891	x		X						
New Lebanon Borough	177		x							X
Sandy Lake Borough	638		x							X
Sharpsville Borough	4,165	x		X			X			
Sheakleyville Borough	134		x						X	
Stoneboro Borough	997		x							X
West Middlesex Borough	821	x								X
Wheatland Borough	597	x								X
Number of Boroughs		9	5	5	2	2	3	0	1	7
Percent of Boroughs		64%	36%	35%	14%	14%	21%	0%	7%	50%

Classification Municipality	Population* 2017 Estimated	Collection Programs**		Ordinances**						
		Municipal Contract	Subscription Service	Garbage Refuse	Burning	Yard Waste	Recycling	Junk Yard	None	No Information
TOWNSHIPS										
Coolspring Township	2,200	X							X	
Deer Creek Township	477		X						X	
Delaware Township	2,203	X			X			X		
East Lackawannock Township	1,636	X								X
Fairview Township	1,059	X								X
Findley Township	2,826	X								X
French Creek Township	741		X							X
Greene Township	1,064		X						X	
Hempfield Township	3,631		X		X					
Jackson Township	1,262		X							X
Jefferson Township	1,835	X		X				X		
Lackawannock Township	2,587	X								X
Lake Township	765		X						X	
Liberty Township	1,428		X						X	
New Vernon Township	712		X							X
Mill Creek Township	502		X						X	
Otter Creek Township	573		X						X	
Perry Township	1,382		X						X	
Pine Township	4,993		X						X	

Classification	Population*	Collection Programs**		Ordinances**						
		Municipal Contract	Subscription Service	Garbage Refuse	Burning	Yard Waste	Recycling	Junk Yard	None	No Information
Municipality	2017 Estimated									
Pymatuning Township	3113	x			X					
Salem Township	725		x							X
Sandy Creek Township	761		x							X
Sandy Lake Township	1175		x							X
Shenango Township	3745	x		X	X	X				
South Pymatuning Township	2570	x		X	X					
Springfield Township	1933		x							X
Sugar Grove Township	926		x							X
West Salem Township	3420		x						X	
Wilmington Township	1385	x		X						
Wolf Creek Township	829		x	X						
Worth Township			x						X	
Number of Townships		11	20	5	5	1	0	2	11	12
Percent of Townships		35%	65%	16%	16%	3%	0	6%	35%	39%
Total		23	25	13	9	5	6	2	12	19
Percent of Total Municipalities		48%	52%	27%	19%	10%	13%	4%	25%	40%

*Source US Census Bureau and Pennsylvania State Data Center

** Source LMCRSWD Municipal Survey

Illegal Dumping and Littering

Where fewer homes participate in a formal collection program, studies and surveys demonstrate that illegal dumping occurs more frequently. Likewise, poor availability of outlets for hard to manage items like tires, bulky waste, appliances, and electronics also contributes to illegal dumping. In 2005, Keep Pennsylvania Beautiful (KPB) conducted a survey of illegal dumping sites in Mercer County. The project identified 143 sites where materials had been disposed illegally. It is likely that the information in that report is dated. Some of the sites may have been remediated while new locations may have developed.

Pedestrians and motorists are more likely responsible for littering. Take-out food containers, single serving beverage containers, and cigarette butts are among the items most frequently found in littered areas.

To the greatest extent possible, illegal dumping in Mercer County is monitored by the Lawrence/Mercer Counties Solid Waste/Recycling Department (LMCRSWD). Groups like Shenango River Watchers identify and remediate streams, riverbeds, roadways, and public lands where improperly disposed waste has accumulated. According to Shenango River Watchers, due to their clean-ups 1.3 million pounds of illegally dumped trash has been removed within the last 15 years. The data gathered through their efforts is useful in illustrating the environmental and economic impact of illegal dumping activity.



The Sharon Beautification Commission is an example of how local governments attack both illegal dumping and littering. Recognizing that littered parcels contribute to blight and its negative effect on property values, the Commission regularly schedules clean-up events that target

specific areas of the city. Likewise the Sharon Pride Neighborhood Revitalization Committee advocates for code enforcement to prevent accumulation of waste on residential properties. In 2019, they conducted the largest crowd-sourced neighborhood conditions collection survey ever attempted in Pennsylvania.

The organizations are responsible for preventative measures. LMCERSWD and Tri-County Cleanways host collection events for many of these problem items throughout the year and often rotate to different locations within Mercer County. Statistics from these events support the effectiveness of providing proper outlets for waste management. The information also demonstrates public desire for these services.

An often-overlooked dumping ground for opportunists looking to avoid the cost of disposal is the County's Big Blue Bin recycling drop-off sites. Violators frequently cause closures at sites similar to the Big Blue Bin program. Garbage they deposit at the drop-off locations contaminates the valuable recycling commodities rendering them of little to no value for resale. Misuse of the bins also causes overflow and unsightly conditions. Communities that host these sites grow weary of removing excess items on an ongoing basis. Consequently, it is common for them to request removal of collection containers. Areas with voluntary subscription for waste and recycling collection services tend to have higher incidents of illegal dumping at recycling drop-off locations.



Regular and consistent enforcement is a proven and effective deterrent to illegal dumping and littering.

Enforcement

Regular and consistent enforcement is a proven and effective deterrent to illegal dumping and littering. The key is to have the proper ordinances in place which empower a designated agent to issue citations for violations. Of equal, if not greater importance, is awareness of the problem by local magistrates along with their cooperation in prosecuting offenders. Mercer County's current solid waste ordinance

lacks these components. The Solid Waste Advisory Committee discussed the need to prevent illegal dumping by revising the law.

Flow Control of the County's Waste

Flow control is a policy which allows a jurisdiction to require waste to be disposed at specified sites. Flow control has always been a major component of Mercer County's municipal solid waste management scheme. The County has maintained agreements with facilities to meet the obligation under Act 101 to ensure disposal capacity for the municipal solid waste generated within the borders. Ordinance No. 6-1991 was repealed and replaced in 2012 by the Solid Waste and Recycling Transporters Ordinance. Both stipulate that transporters are required to dispose of municipal solid waste generated in Mercer County at sites designated for this purpose during the 10-year duration of the agreement and the corresponding version of the Mercer County Municipal Solid Waste Management Plan.

Table 2-2 Lists the sites which entered disposal capacity agreements with Mercer County and were designated as the only landfills that could receive municipal solid waste from the County during the period of the 2012 iteration of the Plan.

Table 2-2 Disposal Facilities with Contractual Guarantees for Mercer County Disposal Capacity and Designated to Receive Waste in the 2012 Plan

Landfill	Permit	Municipality/County	Address	Owner/Operator in 2012
Brooke County Landfill	WVA SWF-1013		Morton Lane Colliers WV 26035	J.P. Mascaro
Carbon Limestone Landfill	OH 28726	Poland Township Mahoning County	8100 S State Line Rd Lowellville , OH 44436	Allied/Republic Waste Services
Greentree Landfill	PA 101397	Fox Township Elk County	635 Toby Road Kersey, PA 15846	Veolia Environmental Services (now GFL Environmental)
Imperial Landfill	PA 100620	Findlay Township Allegheny County	11 Boggs Road, Imperial , PA 15126	Allied Waste Systems of PA LLC (now Republic Waste Services)
Lakeview Landfill	PA 100329	Summit Township Erie County	851 Robison Road Erie, PA 16509	Waste Management
Mostoller Landfill	PA 101571	Brothers Valley Township Somerset Township Somerset County	7095 Glades Pike Somerset, PA 15501	Interstate Waste Services (now Waste Management)
Northwest Sanitary Landfill	PA 100585	Clay Township Butler County	1436 West Sunbury Road West Sunbury, PA 16061	Waste Management
Sandy Run Landfill	PA 101538	Broad Township Coaldale Borough Wells Township Six Mile Run	956 Landfill Rd Hopewell , PA 16650	Interstate Waste Services (now Waste Management)
Seneca Landfill	PA 100403	Jackson Township Lancaster Township Butler County	421 Hartman Road Evans City, PA 16033	Vogel Holding Inc.
USA Valley Landfill	PA 100280	Penn Township Westmoreland County	6015 Pleasant Valley Road, Irwin, PA 15642	Waste Management
Wayne Township Landfill	PA 100955	Wayne Township Clinton County	264 Landfill Lane PO Box 209 McElhattan, PA 17748	Clinton County Solid Waste Authority

Reported Disposal Data

Landfills in Pennsylvania are required to report the county of origin and the amount of waste they accept for disposal. These reports are submitted to PADEP quarterly and annually. Counties and the PADEP rely on the information from these reports as a benchmark for a number of different issues. The data in the reports can be a measure that waste is being disposed properly by comparing it to the expected quantities of waste disposed based on population and national trends. The reports are an indicator of how well flow control policies are observed and enforced. Examining disposal data is a way to determine the effectiveness of diversion and recycling programs.

In Pennsylvania, municipal solid waste includes waste from households, businesses, and institutions, along with construction and demolition waste, sewage sludge, regulated medical waste, and incinerator ash. The USEPA considers only the waste from households, businesses, and institutions as municipal solid waste. Pennsylvania landfills report waste separately in each of these categories. Due to sophisticated scale systems these reports are fairly accurate representations of the disposal activity at a certain facility.

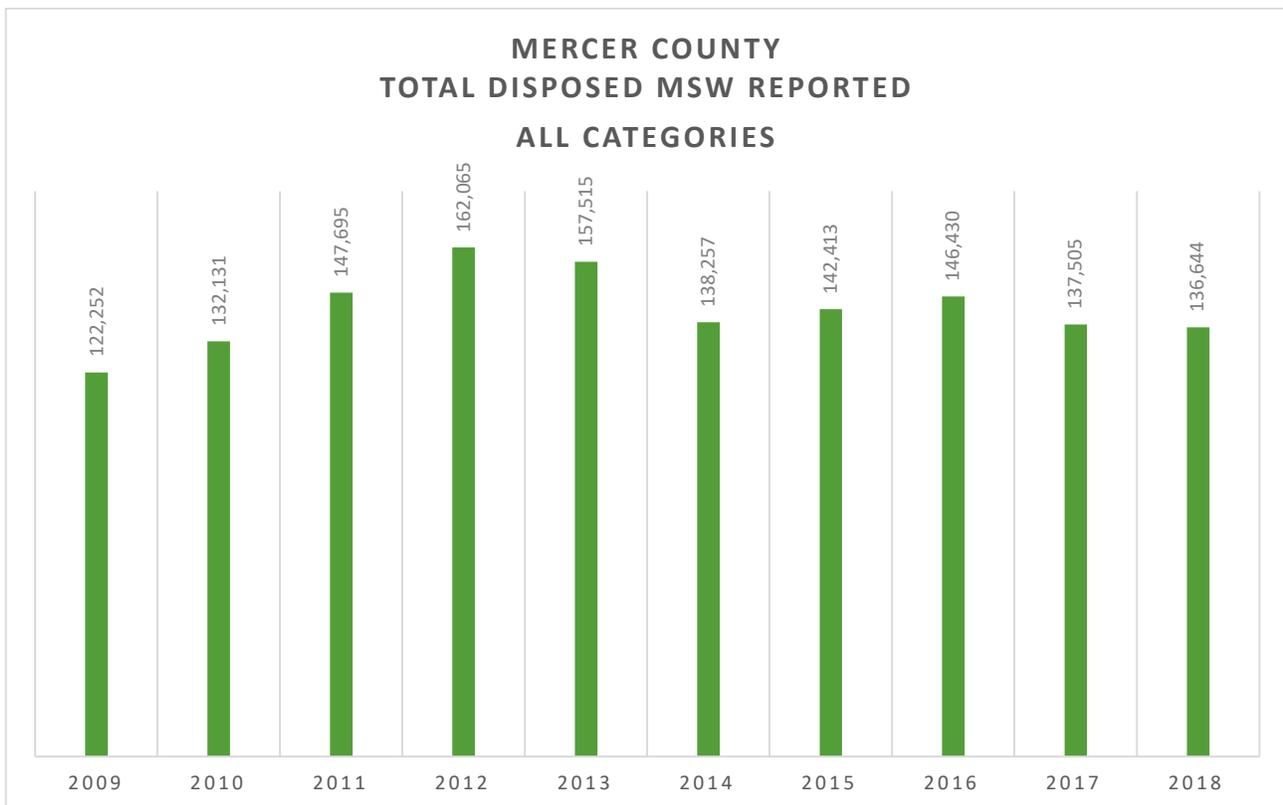
Experience tells us, however, that the reports may not provide a comprehensive and accurate portrayal of all disposal activity associated with a county. For instance, out-of-state landfills do not submit these same reports. Construction and demolition landfills and processors are not required to report, either. Finally, whether waste is transported directly or indirectly to the facility can contribute to the origin being misidentified.

Mercer County deals with all of these circumstances. Some of the waste is transported directly to the landfills in the same vehicles that collected it from residents and businesses. A large majority of the municipal waste, however, is trucked to one of two intermediate facilities where it is consolidated, compacted, and transferred to the landfills in much larger transport vehicles. Additionally, Mercer County transporters are known to use out of state facilities for disposal. Therefore, it is prudent to closely

examine the reported data to determine if anomalies exist, which if left unchecked could render other assumptions in the planning process to be erroneous. It is also necessary to recognize the source and cause of those suspected irregularities to make the appropriate adjustments. This is important when more than one type of abnormality is present.

Figure 2-1 shows the amount of Mercer County disposed municipal solid waste reported by Pennsylvania landfills from 2009 through 2018. Despite some noticeable spikes, the reported amount of waste disposed has not fluctuated significantly in ten years. In fact, the reported amount of disposed municipal solid waste in 2010 is relatively the same as reported in 2017 and 2018.

Figure 2-1 Mercer County Reported Disposal in tons 2009-2018.

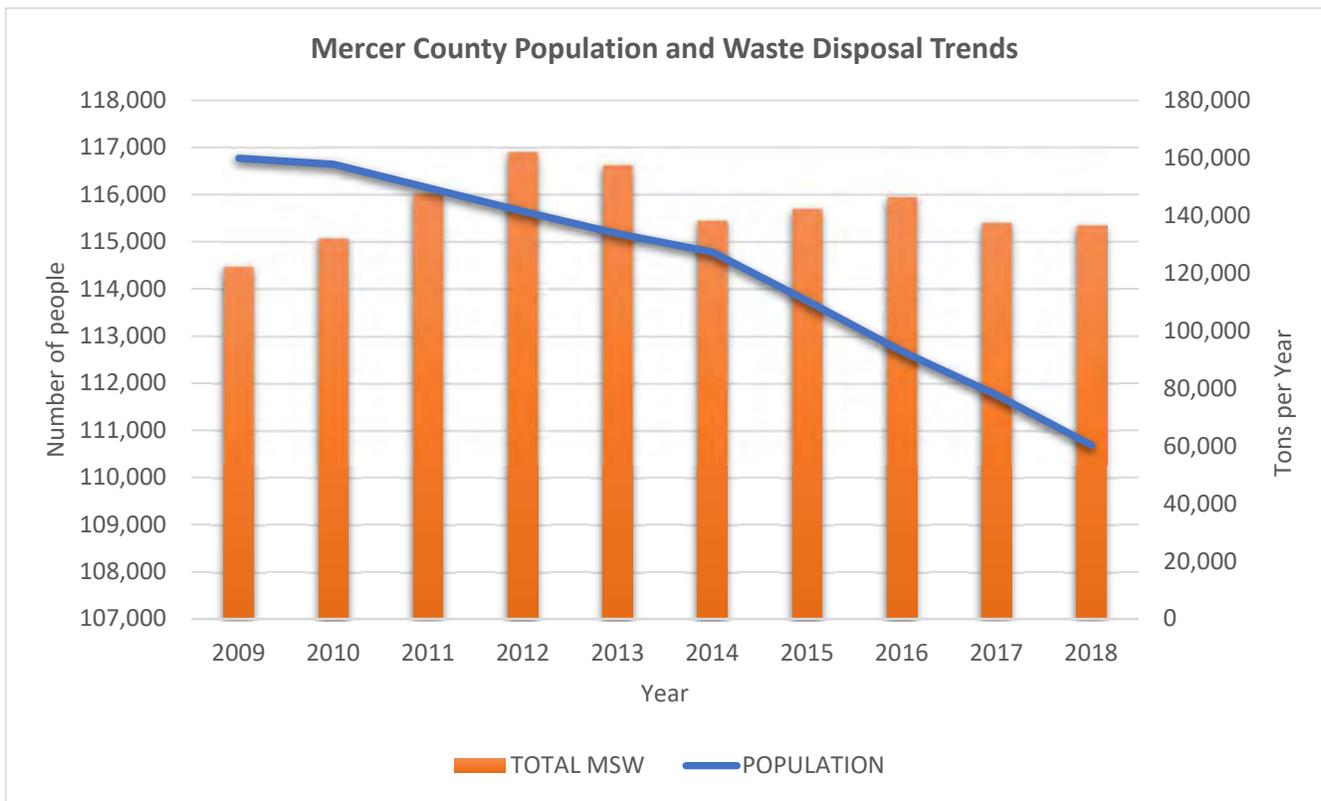


Population is the single most important driver of waste generation. In other words, where there are higher populations the total amount of municipal waste generated and disposed is greater than where the population is lower. Because zero waste is currently far from a reality and the recovery rate of municipal waste has been relatively flat for a number of years, population can also be used as a way to evaluate whether the reported amount of waste disposed is realistic.

It is easy to question the amounts of municipal solid waste reported by Pennsylvania landfills supposedly originating in Mercer County when population trends are considered. As discussed in Chapter 1, Mercer County's population has declined steadily since 1980. In fact, the decrease accelerated from 2014 to 2018. During that time, the reported data indicates that overall the number of tons of Mercer County's municipal solid waste disposed grew slightly. From 2009 to 2012, disposal reports show that the County's municipal solid waste disposal increased by approximately 40,000 tons. The most significant increases were due to the aftermath and destruction of Hurricane Sandy in 2012 and 2013. Then in 2014 tonnages dropped and remained at the same level through 2018. Interestingly the reported waste in 2018 was very similar to the tonnage reported in 2010. At face value, having the beginning and ending tonnage remain relatively unchanged over ten years may not attract attention. However, based on the dramatic decline in population the waste reports do not reflect a similar decrease in disposal activity that would be expected.

Figure 2-2 Compares the reported municipal solid waste disposed from Mercer County to the changes in population from 2009 through 2018. The data includes the Pennsylvania reporting categories of municipal waste, construction/demolition waste, and sewage sludge disposed at the reporting landfills.

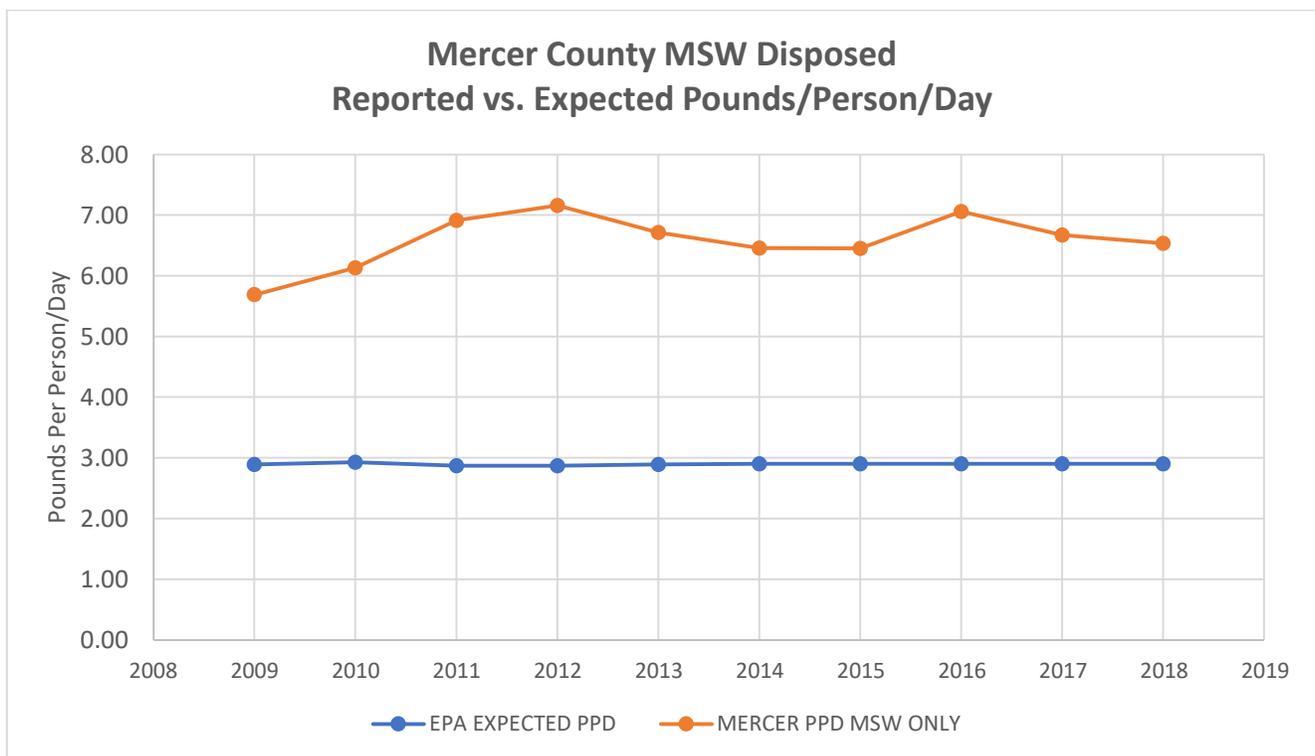
Figure 2-2 Mercer County Population and Waste Disposal Trends



Unlike USEPA, Pennsylvania includes construction/demolition waste and sewage sludge in its definition of municipal solid waste. One could argue that the higher reported amounts of waste are due simply to the inclusion of these additional materials, which are only partially influenced by population trends. In 2012 and 2013, the difference between the total tons reported and subtraction of the construction/demolition waste and sewage sludge was more than 10,000 tons each year. In the remaining years, however, there were 2,000 tons or less of these additional wastes.

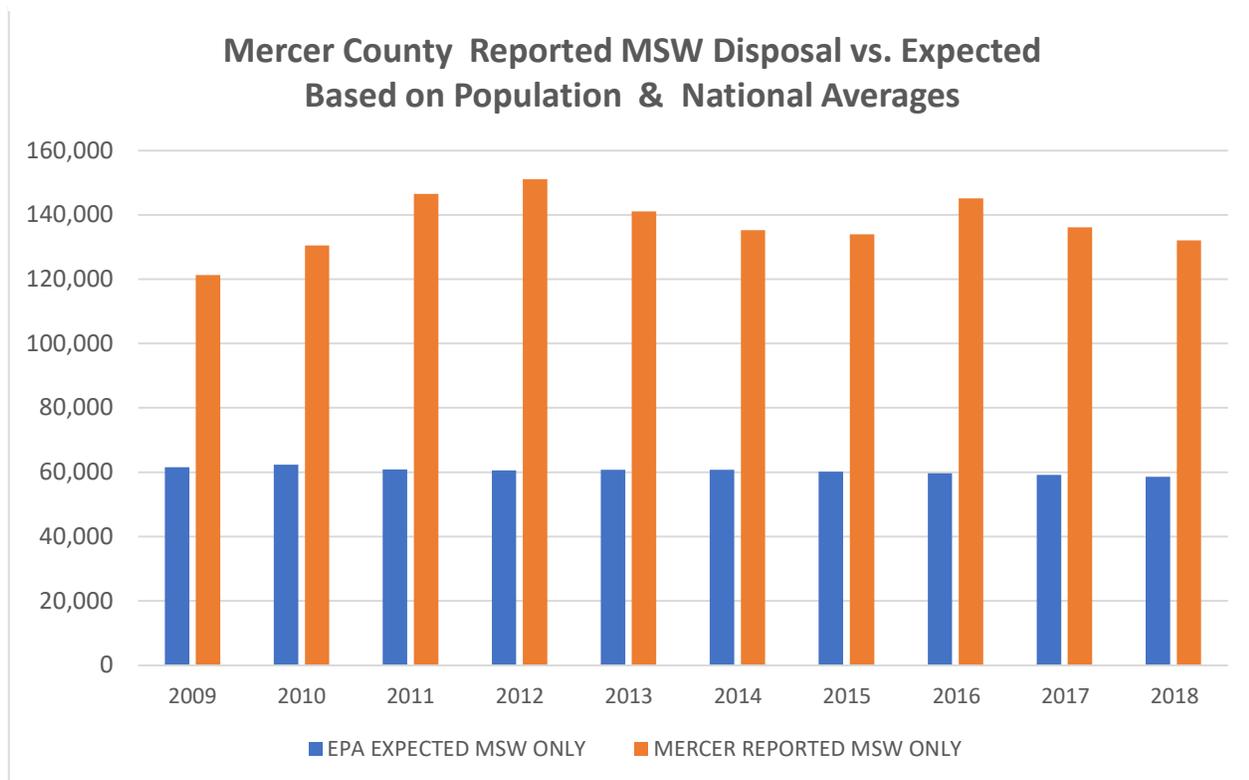
To determine if there were true abnormalities, the reported quantities of disposed municipal solid waste, excluding construction/demolition and sewage sludge, were compared to the amounts of waste which would be expected if Mercer County performed at the same rate as the national averages. First, Mercer County's population and the reported amounts of waste disposed were used to determine the pounds per person per day of municipal solid waste disposed. From 2009 through 2018 the national disposal rate hovered around 2.90 pounds per person per day. In contrast, if the landfill reports were accurate, Figure 2-3 Indicates that Mercer County's average disposal rate is closer to 6.45 pounds per person per day, more than twice the national average.

Figure 2-3 Mercer County Reported Disposal Rate per Person versus National Rate



The national disposal rate per person was used with Mercer County's estimated population for each corresponding year to determine the total amount of waste expected at the national rate. Those figures were compared to the reported data for Mercer County. The comparison in Figure 2-4 shows the significant difference between Mercer County and the national average.

Figure 2-4 Mercer County Reported Waste Disposal vs. Expected



There is no evidence that economic circumstances in Mercer County include a higher percentage of affluent residents with income to purchase and discard goods at a greater rate than normal. Since recycling is available for the majority of the population, even when the failure to recycle by certain portions of the population are considered, there is no reason to suspect it could create such a deviation. In addition, because

voluntary subscription service and open burning are prevalent in portions of the County, one would expect the disposal rate to be lower.

To sort out this anomaly, another area to examine is the amount of Mercer County municipal waste reported from each landfill. Both Table 2-3 And Figure 2-5 show historical data reported from the three landfills receiving quantities of Mercer County municipal waste from 2009 through 2018. Several interesting irregularities can be noted.



The most obvious anomaly in Mercer County's reported waste disposed is that as population shrinks, the amount of municipal waste per person increases.

Another oddity is when waste decreases at one landfill in any given year, a proportionate amount is not necessarily seen for that year in the reports of another facility. There appears to be some relationship between decreasing/increasing tons of Mercer County waste reported between Lakeview Landfill and Northwest Sanitary Landfill. Both landfills are owned by Waste Management, who also owns a transfer station in Greenville. Based on allowable daily volumes and other circumstances, it is likely that Waste Management simply shifts the waste

from one site to another as it makes business sense. There are a few years where it seems that common amounts of waste move between Seneca and Lakeview, probably the results of competition for a large municipal contract(s). Overall, however, there are increases and decreases that have no relationship to population or competition.

Both Waste Management and Tri-County Industries, part of Vogel Holdings, Inc. own transfer stations in Mercer County. Like Waste Management, Vogel Holdings also owns one of the facilities accepting waste from Mercer County - Seneca Landfill.

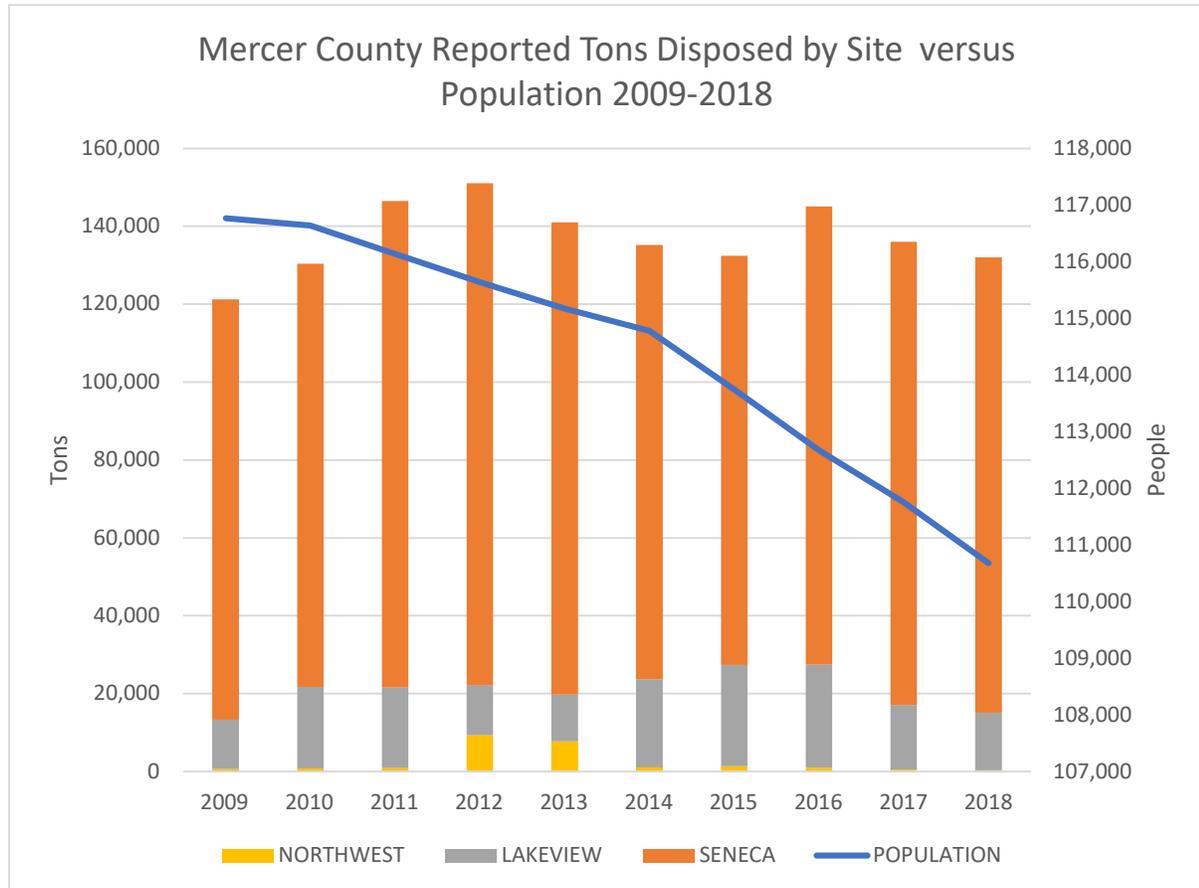
Misidentification of the origin of the waste is a common problem in data management when transfer stations are part of the transportation and disposal system. Drivers of the transfer trailers mistakenly offer the location of the transfer station when asked at the landfill scales where the waste is from. Consequently, counties in which transfer stations operate tend to have higher disposal rates and contiguous counties often have abnormally lower disposal rates. In Crawford County and Venango County where Waste is transported via a remote transfer station the disposal rates follow this trend.



Table 2-3 Mercer County Population Trends versus Reported Tons Disposed by Site

	POPULATION	SENECA	LAKEVIEW	NORTHWEST	Total Tons of MSW	Expected Tons of MSW
2009	116,769	107,934	12,662	635	121,231	61,587
2010	116,638	108,687	20,969	780	130,437	62,369
2011	116,139	124,891	20,731	864	146,486	60,831
2012	115,641	128,855	12,920	9,288	151,064	60,570
2013	115,170	121,252	12,018	7,783	141,053	60,744
2014	114,777	111,542	22,600	1,075	135,218	60,746
2015	113,746	105,006	26,048	1,346	132,399	60,200
2016	112,673	117,685	26,491	944	145,121	59,632
2017	111,750	119,026	16,528	518	136,072	58,940
2018	110,683	116,948	14,719	355	132,022	58,377

Figure 2-5 Mercer County Population Trends versus Reported Tons Disposed by Site



Comments and Observations

Despite years of municipal solid waste planning efforts, Pennsylvania counties, including Mercer, continue to battle illegal dumping and littering. Overall, Mercer County municipalities lack the proper ordinances and enforcement capabilities to address this problem. Action at the County level to, educate, regulate, and enforce against illegal dumping activity could be an effective approach to modify this behavior. In addition, providing regular accessible outlets for tires, construction debris, appliances, and Household Hazardous Waste could reduce the material commonly found in illegal sites.

A significant portion of Mercer County's population have regularly scheduled waste collection service provided through a competitively bid municipal contract. The majority of townships and at least one-third of the boroughs play no role in ensuring that residents have access to and participate in an official waste management program. In areas where residents have an option to not participate in a waste collection program, the number of illegal dumps and the frequency which they are used increases. Requiring local residents to contract for waste collection or participate in a municipal contracted program could reduce illegal dumping and the cost to remediate these sites.

Mercer County has a highly inflated disposal rate based on data gathered from landfill disposal reports. However, all other indicators used to calculate waste generation and disposal rates do not substantiate this abnormality. Therefore, throughout the Plan, the USEPA national averages will be used to calculate waste estimates and projections.

Flow control has been a component of the Mercer County Municipal Solid Waste Management Plan and its subsequent updates and revisions. Based on landfill reported disposal activity, the flow control mechanism is working and shall remain in effect in this Plan Update.

Pennsylvania counties have one primary responsibility under the provisions of Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988. Each county is tasked with securing guaranteed capacity for the disposal of municipal solid waste generated within its boundaries. A few counties opted to address this obligation by owning and operating their own waste management facilities. However, the vast majority of counties enter agreements with disposal facilities, which provide assurances that a pre-determined amount of capacity will be available to the county throughout the duration of the contract. In some instances, one landfill may provide all of the capacity necessary to meet a county's needs. However, it is more common for counties to enter contracts with multiple facilities with each guaranteeing various amounts of capacity.

Historically, to meet its disposal capacity needs Mercer County favored a contractual arrangement with facilities in conjunction with a flow control policy established via the Plan and a County ordinance. Contractors were selected through a fair, open, and competitive solicitation process. Facilities with executed capacity agreements were designated in the Plan as the only sites where municipal solid waste generated within Mercer County could be disposed. The capacity agreements from the 2012 plan were nearing expiration at the beginning of this planning process. Therefore, an important part of this project was to establish future disposal needs and determine how guarantees for that capacity should be obtained.

Projected Landfill Capacity Requirements

This chapter presents the estimated future disposal capacity required for Mercer County. It is based on current reported disposal quantities with some adjustments made to correct for suspected reporting errors.

Population

The quantities of municipal solid waste generated and disposed are largely dependent on population. Useful projections for future waste management needs are reliant on data derived from credible sources. The Pennsylvania State Data Center at the Pennsylvania State University produces state and county population projections for the Commonwealth of Pennsylvania. They work with the US Census Bureau to determine population trends and estimates between the official decennial US Census. Table 3-1 lists County totals from the 2010 Census and population projections for 2010 to 2030.

Table 3-1. Mercer County Population Projections: 2010-2040

	July 1, 2010 Estimate	July 1, 2020 Projection	July 1, 2030 Projection	July 1, 2040 Projection	Percent Change 2010- 2020	Percent Change 2010- 2030	Percent Change 2010- 2040
Pennsylvania	12,711,308	13,230,170	13,759,594	14,132,588	4.10%	8.20%	11.20%
Mercer	116,541	118,420	121,313	122,884	1.60%	4.10%	5.40%

The Center also publishes annual population estimates following these projections, which subsequently adjust the figures when circumstances change. Table 3-2 shows the most recent population estimates for Mercer County. Interestingly, the original projections taken from early results of the 2010 Census estimate growth in Mercer County. However, later adjustments actually show population decreases.

Table3-2 Mercer County Population Estimates: 2010-2018

Year(s)	July 1, 2010 Estimate	July 1, 2014 Estimate	July 1, 2018 Estimate	Percent Change 2010-2014	Percent Change 2014-2018	Percent Change 2010-2018
Mercer County	116,541	114,884	110,683	-1.42%	-3.66%	-5.03%

Estimated Future Generation Rate for Municipal Waste.

Facility destination reports for waste reported as originating in Mercer County indicate highly inflated results from what would be expected based on the demographics and shrinking population of the County. When transfer facilities are part of the overall regional waste transportation system, it is common for waste origins to be misidentified as the location of the transfer station when loads arrive at the landfill.



Contemporary USEPA waste generation and disposal estimates and adjusted population estimates from the Pennsylvania State Data Center were used to calculate Mercer County's future disposal capacity needs.

To prevent overestimating capacity needs, the County relied on contemporary USEPA waste generation and disposal estimates for MSW and adjusted population estimates from the Pennsylvania State Data Center to calculate its projected disposal quantities. For Sewage Sludge and Construction & Demolition that are not managed through a transfer station a disposal rate was assumed from 2018 reported data and population estimates.

The USEPA reports on 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. The discard rate has also been relatively constant at about 0.52 tons/person/year. Thus, for projection purposes, it was assumed that per capita generation rates will remain unchanged.

Table 3-3 presents projected disposal capacity requirements for the years 2018 through 2030. The figures are based on a constant per capita generation rate with adjustments due to projected population changes.

Table 3-3 Mercer County Estimated Future Disposal Capacity Needs

Year	Estimated Population	MSW	Sewage Sludge	Construction & Demolition	Total Projected Capacity
2018	110,683	57,555	1,796	2,825	62,177
2019	109,952	57,175	1,759	2,749	61,683
2020	109,226	56,798	1,748	2,731	61,276
2021	108,505	56,423	1,736	2,713	60,871
2022	107,789	56,050	1,725	2,695	60,470
2023	107,077	55,680	1,713	2,677	60,070
2024	106,370	55,312	1,702	2,659	59,674
2025	105,667	54,947	1,691	2,642	59,279
2026	104,970	54,584	1,680	2,624	58,888
2027	104,277	54,224	1,668	2,607	58,499
2028	103,589	53,866	1,657	2,590	58,113
2029	102,905	53,511	1,646	2,573	57,730
2030	102,225	53,157	1,636	2,556	57,348

Requesting Future Disposal Or Processing Capacity

With current contracts nearing expiration, it was determined that the County should advertise and accept proposals from facilities for additional disposal capacity. The PADEP was notified of the County's determination and a formal request was advertised nationally in the digital edition of the industry trade journal, Waste Advantage during multiple weeks in April 2020.

The public solicitation for proposals is included in Appendix A. The Request for Proposals which established the criteria for facilities to be considered for executed capacity agreements is included in Appendix B. Further discussion of the selection process and the results are in Chapter 6.

Act 101 was a milestone piece of legislation that established a framework for residential, commercial, and institutional recycling in Pennsylvania. The Act also provided a source of funding designed to support the recycling goals of the Commonwealth by helping municipalities create a recycling infrastructure. Operating a recycling collection route or processing facility is not a prerequisite for counties. They are expected at a minimum, however, to facilitate the growth of recycling opportunities and coordinate the efforts of public and private sector efforts to recover recyclable materials. In addition, because recycling education is a vital part of successful recycling ventures, counties often play a lead role in creating public awareness about the value of recycling as well as how to recycle right.

Chapter 4 provides a record of the collective recycling achievements in Mercer County. It includes a description of various programs and a snapshot of recent performance. In addition, it suggests improvements and enhancements to current practices, as well as elimination or downsizing of programs. Based on discussions and investigations that occurred during the planning process, new programs or recovery of additional materials are also presented.



REGULATORY COMPLIANCE AND EXPECTATIONS

In Pennsylvania, the expectations for counties and local municipalities to develop municipal waste management and recycling policies and programs are established by the Municipal Waste Planning, Recycling, and Waste Reduction Act (Act 101). The roles and responsibilities differ between each level of government. The Act directs counties to develop local ordinances and enforcement policies for proper waste management.

Under the law, mandates for recycling fall upon municipalities with populations of 10,000 or more, and those with populations of 5,000 or more with a population density of greater than 300 people per square mile. The Act requires these communities to implement mandatory residential curbside collection programs for recyclables and leaf waste. The municipality must also have mechanisms to ensure that commercial, institutional, and government establishments recycle and manage leaf waste accordingly. In addition to the original requirements, mandated communities are subject to recent amendments to the Act resulting from the provisions of Act 140.

ACT 101 AND ACT 140 MUNICIPAL REQUIREMENTS

The responsibilities of communities that meet the population criteria of the Act are direct and straightforward. To ensure compliance by residents and businesses, municipalities meeting the criteria are required to pass ordinances that mandate waste and recycling collection. Certain services and standards for collection frequency are required. Figure 4-1 lists the requirements for Act 101 mandated municipalities.

The Act allows municipalities choices in how these services can be provided. Municipal employees and equipment can be used to perform the collections or communities can enter into contracts with an outside service provider for these functions. To meet the Act 101 requirements, the PADEP has condoned private subscription service in which homeowner's contract directly with the service provider of their choice, provided that the municipality has a strong monitoring and enforcement program in place.

Provisions of the Act are inclusive of commercial, institutional, and municipal establishments, which are located in mandated municipalities. These entities must recycle and separate leaf waste for composting. The municipality is not required to ensure the service to commercial establishments; however, they are expected to enforce the mandate.

Table 4-1 Act 101 Minimum Requirements for Mandated Municipalities

Act 101 Minimum Requirements for Mandated Municipalities	An ordinance that requires all residents to have waste and recycling collection service.
	A program for curbside collection of residential recyclables must occur at least once per month.
	An ordinance that requires a commercial recycling program
	Collection of three recyclable materials designated in the Act (glass, aluminum, or bi-metal containers, plastics #1 or #2, newspaper, office paper and cardboard)
	Curbside collection of leaf waste must occur once per month, or alternatively, twice per year collection if a drop-off collection area for leaf waste is accessible between collections.
	Implementation of a residential and business recycling education program.
	Implementation of an enforcement program that monitors participation, receives complaints and issues warnings and provides fines, penalties, or both,
	Participation in a program for the recycling of special materials.
	Sponsors or facilitates a program to prevent illegal dumping and/or littering problems.
	Designation of a person or entity as the recycling coordinator

MUNICIPAL RECYCLING PROGRAMS

The PADEP uses the initial population data reported by the USA Census Bureau for the 2010 decennial census. Based on that data five Mercer County communities meet the Act 101 population and density criteria, triggering the mandates of the law shown previously in Table 4-1. These municipalities are listed in Table 4-2

Table 4-2 Population and Density of Mercer County Municipalities Impacted by Act 101 Mandates

	Population Census 2010	Population Estimated 2017	Population Density Persons Per Square Mile
<i>Hermitage City</i>	16,375	15,635	560
<i>Sharon City</i>	14,038	13,259	3,724
<i>Grove City Borough</i>	8,321	8,011	3,091
<i>Greenville Borough</i>	5,955	5,529	3,156
<i>Farrell City</i>	5111		

During the planning process, the SWAC discussed the need to expand curbside collection programs throughout Mercer County. They reviewed the conditions which could make it possible. The migration of population into once rural townships increases the practicality of collecting material at the curb. As the proximity of the population and housing units became denser, the cost becomes favorable for curbside service.

A recent Act 101 workgroup recommended to the PADEP that the criteria for mandated communities should be adjusted to include a greater number of municipalities. Rather than population, the workgroup suggested that population density should be the determining factor for the mandate. The workgroup concluded that the growth of the recycling infrastructure since 1988 made recycling collection and processing services available either within or in close proximity to the communities meeting these proposed criteria.

As of 2017, ten Mercer County municipalities have 2017 estimated populations slightly lower than the current threshold for Act 101 mandates or fall short of the current population requirements but do meet the proposed population density of 300 people per square mile. Pine Township met the population requirements according to the 2010 Census but not in the 2017 population estimates. It does not meet the current population density criteria. If population continues to decline when the results of the 2020 Census are published the township's failure to meet both of the measures will be confirmed.

The City of Farrell met the population requirements according to the 2010 Census; however, the data was adjusted under the Count Question Resolution process. The adjustment places the City well below the population threshold.

Transitioning to the role of a mandated municipality can be challenging for communities that have never regulated or controlled residential and commercial municipal solid waste practices and services. Communities, which already have some of the Act 101 required elements in place, will find it easier to comply.

Since a number of Mercer County municipalities that meet the proposed criteria were identified, their current policies and practices were compared to the basic expectations of Act 101. If and when these changes to Act 101 would be adopted and take effect is unknown. The planning process, however, is the perfect opportunity to consider the level of support these communities might need. A high percentage of the communities have some requirements for waste collection and secure collection services through a competitive bidding process, recycling is not a component in the vast majority of them.

Table 4-3 lists the potential Act 101 mandated municipalities in Mercer County based on proposed population density. It also shows the types of waste and recycling ordinances that may exist, as well as if the municipality uses a contracted provider for collection services.

Table 4-3 Potential Changes to Mercer County Act 101 Mandated Municipalities Based on Proposed Population/Density Criteria

	Population, 2010 *	Population, 2017 (Estimate)	# Persons Per Square Mile, 2010	Currently have solid waste ordinances that mandate collection?	Currently require recycling?	Currently contract for single hauler collection.
Pine Township	5,151	4,993	203	No	No	No
Farrell City**	4,954	4,687	2,164	Yes	Yes	Yes
Sharpville Borough	4,415	4,165	3,174	Yes	Yes	Yes
Mercer Borough	2,002	1,891	1,758	Yes	Yes	Yes
Fredonia Borough	502	473	1,406	No	No	No
West Middlesex Borough	863	821	1,021	?	No	Yes
Sandy Lake Borough	659	638	792	Yes	No	No
Jamestown Borough	617	582	741	Yes	No	Yes
Wheatland Borough	632	597	731	?	No	Yes
Sheakleyville Borough	142	134	723	No	No	No
Stoneboro Borough	1,051	997	371	Yes	No	No
<ul style="list-style-type: none"> July 10, 2010, Census US Census Bureau 						
<ul style="list-style-type: none"> **Source US Census Bureau and Pennsylvania State Data Center. 2010 population adjusted based on Count Question Resolution process 						

The vast majority of Mercer County’s municipalities allow residents to participate in recycling collection on a strictly voluntary basis. In many of these areas the opportunity to recycle is not available or even if it is available on a subscription basis from local service providers, it may be cost prohibitive. Table 4-4 shows all of the municipalities, the type of recycling collection available, and whether recycling services are mandated by Act 101 or self-mandated by a local ordinance, and those where collection remains voluntary.

Table 4-4 Mercer County Residential Recycling Collection Programs And Ordinances

Municipality	Drop-Off	Curbside	Recycling Ordinance
Cities			
Farrell City (Act 101)		X	X
Hermitage City (Act 101)		X	X
Sharon City (Act 101)		X	X
Boroughs			
Clark Borough	X		
Fredonia Borough			
Greenville Borough (Act 101)		X	X
Grove City Borough (Act 101)		X	X
Jackson Center Borough			
Jamestown Borough	X		
Mercer Borough		X	
New Lebanon Borough			
Sandy Lake Borough			
Sharpsville Borough		X	X
Sheakleyville Borough			
Stoneboro Borough			
West Middlesex Borough			
Wheatland Borough			
Townships			
Coolspring Township			
Deer Creek Township			
Delaware Township		X	
East Lackawannock Township			
Fairview Township			
Findley Township			

Municipality	Drop-Off	Curbside	Recycling Ordinance
French Creek Township			
Greene Township			
Hempfield Township			
Jackson Township			
Jefferson Township		x	
Lackawannock Township			
Lake Township			
Liberty Township			
New Vernon Township			
Mill Creek Township			
Otter Creek Township			
Perry Township			
Pine Township			
Pymatuning Township			
Salem Township			
Sandy Creek Township			
Sandy Lake Township			
Shenango Township	x		
South Pymatuning Township			
Springfield Township			
Sugar Grove Township			
West Salem Township			
Wilmington Township			
Wolf Creek Township			
Worth Township			

TRACKING MUNICIPAL RECYCLING PERFORMANCE

Most Mercer County residents have an opportunity to recycle. What differs is the level of service and the convenience factor. It is important for counties to consider how certain components of municipal collection systems ultimately affect the performance of the county as a whole.

The Lawrence-Mercer Counties Recycling/Solid Waste Department provides technical support to municipalities to further the growth and development of the recycling infrastructure. Moving forward and building upon the success of this service, the Department should continue to help municipalities focus not only on ensuring that opportunities for recycling are made available, but also on whether or not municipal collection systems cost effectively capture the optimal types and amounts of recyclable materials.

DATA COLLECTION AND MANAGEMENT

LMCRSWD already facilitates the capture, tracking and monitoring of recycling statistics from local municipalities. Information is collected from local haulers, businesses, brokers, and processors on an annual basis. Therefore, records of the total tons of material reportedly recovered were readily available through the PADEP's ReTRAC reporting system. The reports include data on all types of materials from a variety of sources including local residents.

MATERIALS TO INCLUDE

An exercise to determine how well municipal programs perform should include only those materials commonly designated in residential curbside and drop-off collection programs. These would include the materials specified for recovery in Act 101, which are similar to those defined by USEPA. Primarily, included are various types of packaging, and potentially yard waste. In some instances, items like white goods, carpeting, mattresses, and electronics are included in municipal programs. Data is

available to make such evaluations if desired. The most common categories of materials to consider, however, are glass, aluminum, and bimetal food and beverage containers, plastic bottles, jugs, tubs, and other related food containers. Paper and paperboard would be represented in the form of newspapers and magazines, junk mail, office paper, cardboard boxes, etc. These items are generated and recovered at different rates by residential and commercial sources.

Excluded items would be those commonly recovered by scrap dealers and industrial recyclers, such as aluminum siding, automotive parts, fencing, railing, steel and fiber drums, other forms of scrap metal and wood pallets, etc. Likewise, construction and demolition waste, sewage sludge

In 2017, 5,213 tons of material were reportedly recycled from Mercer County residential sources. Table 4-5 shows the reported types of materials and the weights collected for recycling by municipality for 2017. It also includes materials collected at the County's drop-off collection sites.

Table 4-5 Reported Residential Recycling Performance 2017

Local Government	SINGLE STREAM	COMMINGLED	Cardboard	High Grade Office Paper	White Goods	Aluminum Cans	Wood Waste	Yard & Leaf Waste	Total Residential
Clark Borough									0
Coolspring Township									0
Deer Creek Township		2							2
Delaware Township			9	1	0				11
East Lackawannock Township									0
Fairview Township									0
Farrell City		95						18	112
Findley Township									0
Fredonia Borough									
French Creek Township		5							5
Greene Township		1							1
Greenville Borough		175						2	177
Grove City Borough		305					207	593	1,105
Hempfield Township		50							50
Hermitage City		1,013				3		932	1,948
Jackson Township		20							20
Jackson Center Borough		2							2
Jamestown Borough		16							16
Jefferson Township			12	5	1				18
Lackawannock Township									
Lake Township		3							3
Liberty Township		92				1		5	98
Mercer Borough		22						16	38
Mill creek Township									
New Lebanon Borough		0							0
New Vernon Township		3							3
Otter Creek Township		2							2
Perry Township		8							8
Pine Township		139							139
Pymatuning Township									0
Salem Township		2							2
Sandy Creek Township		3							3
Sandy Lake Borough		11							11
Sandy Lake Township		12							12
Sharon City		489						31	520
Sharpsville Borough		158						3	161
Sheakleyville Borough		0							0

Local Government

SINGLE STREAM	COMMINGLED	Cardboard	High Grade Office Paper	White Goods	Aluminum Cans	Wood Waste	Yard & Leaf Waste		Total Residential	
Shenango Township		12	4	1					16	
South Pymatuning Township									0	
Springfield Township	32								32	
Stoneboro Borough	27								27	
Sugar Grove Township	4								4	
West Middlesex Borough	22						3		25	
West Salem Township	8								8	
Wheatland Borough	0						2		2	
Wilmington Township									0	
Wolf Creek Township	17								17	
Worth Township	19								19	
Municipal Totals	2,756	34	10	2	4	0	207	1,605	0	4,617
Mercer County (County-Wide Data)	15	305	179	29		64	4			596
Municipal and County Combined	2,771	338	189	31	4	64	211	1,605	0	5,213

COMMERCIAL RECYCLING

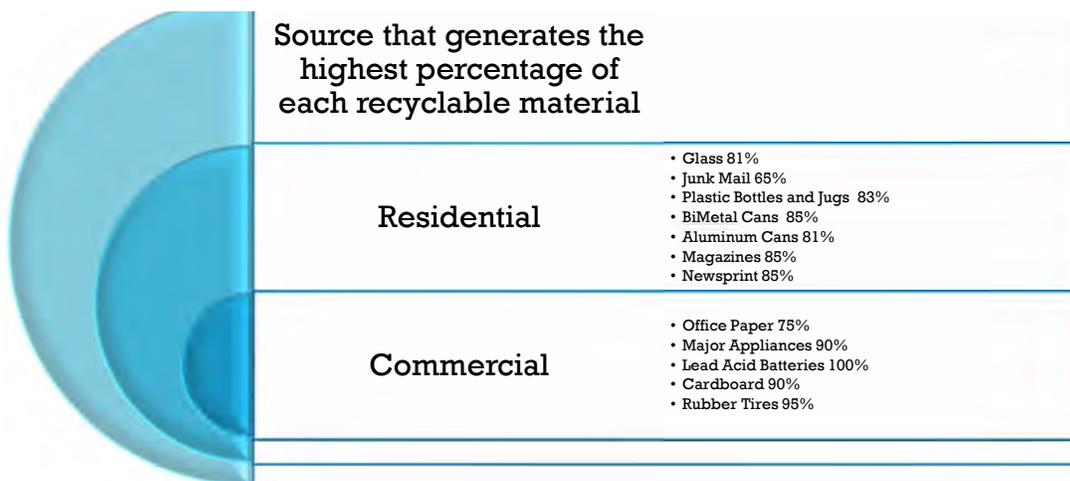
Commercial establishments are required to recycle in Act 101 mandated municipalities, as well as those that have enacted local ordinances that mirror the provisions of the Act. Thirty-three of the forty-eight municipalities in Mercer County reported some type of commercial recycling activity. LMCRSWD also reported commercial recycling activity from Mercer County sources not included in the data provided by municipalities.

Together a reported total of approximately 8,989 tons resulting from commercial efforts were recycled in 2017. The commercial material recovered is 3,776 tons more than the 5,213 tons reported in 2017 for residential sources. The ratio of recycled material recovered in Mercer County is 63% commercial and 37% residential.

Like the analyses of residential recycling, this exercise is designed to explore recycling that occurs under the realm of municipal programs. It examines only those materials commonly available from commercial sources such as retail stores, restaurants, offices, schools, institutions, and government facilities. Manufacturers and other industries fall under other categories and are not included. Scrap metal, construction and demolition waste, automotive parts, asphalt and concrete, and other materials recovered in industrial operations are excluded.

The composition of commercial materials specified for recovery in Act 101 is essentially the same as those targeted for residential recycling. The categories of materials were glass, aluminum, and bimetal food and beverage containers, plastic bottles, jugs, tubs, and other related food containers. Paper and paperboard were also represented in the form of newspapers and magazines, junk mail, office paper, cardboard boxes, etc. These items are generated and recovered at different rates by residential and commercial sources. The proportion of each material can differ significantly between residential and commercial sources. For instance, residential sources generate the largest quantities of glass, while commercial establishments generate more office paper, and for the present, more cardboard. The common sources are shown in Figure 4-5.

Figure 4-5 Sources that Generate Highest Percentage of Each Recyclable Material



REPORTED ACHIEVEMENTS



Commercial data reported by Mercer County municipalities with some of the lowest populations shows that even small businesses can make the effort to recycle.

It is possible that more commercial recycling occurs throughout the County than what is currently reported. The process of gathering and organizing data from local businesses can be low on the priority list for municipal staffs that have added functions besides oversight of the recycling program. In non-mandated areas, where no ordinances exist to stipulate recycling and/or where enforcement of reporting requirements is lax, businesses may have no incentive

to submit this information. That the majority of municipalities submitted reports is a positive indicator of the importance of recycling throughout Mercer County.

Franchised chains often have corporate standardized waste and recycling collection requirements. In many instances, one of a store's performance measures is the rate of recycling. Their demand for recycling services helps to establish and support the growth of the recycling collection and processing infrastructure. Consequently, in areas like the City of Hermitage with higher population density and where retail stores and services are typically clustered, commercial recycling is more prevalent and containerized recycling collection service is readily available. Because of their reliance on population and density to generate sufficient revenue, these commercial clusters also tend to be located in those municipalities in which commercial recycling is mandated by Act 101.

There are challenges in motivating small businesses, schools, and rural locations to recycle. For these operations, recycling can be perceived as an added cost. Space constraints for outside recycling containers can be limited in urban settings. With commercial data reported by municipalities with some of the lowest populations, it would appear that many small businesses are making an effort to recycle in Mercer County.

Table-4-6 shows the Mercer County 2017 reported commercial recycling by material, weight, and municipality.

Member	SINGLE STREAM	COMMINGLED	Mixed Glass	Cardboard	Gabled / Aseptic Cartons	Magazines & Catalogs	Mixed Paper Grades	High Grade Office Paper	#1 Plastic (PET)	#2 Plastic	#3 Plastic (PVC)	#4 Plastic (LDPE)	#5 Plastic (PP)	Mixed	Film Plastic	Aluminum Cans	Steel & Bimetallic (Tin) Cans	White Goods	Source Separated Foods	Wood Waste	Commercial Total Tons	
Jefferson Township				2																		2
Lackawannock Township																						0
Lake Township																						0
Liberty Township		12		18				3														34
Mercer Borough		8		13				2												118		141
Mill creek Township																						0
New Lebanon Borough																						0
New Vernon Township																						0
Otter Creek Township																						0
Perry Township																						0
Pine Township		187		575			2	25	0	0				1	8	0			6			805
Pymatuning Township		0		14				2												72		88
Salem Township																						0
Sandy Creek Township				27			0	0						0								28
Sandy Lake Borough				6				1														7
Sandy Lake Township				44			0	0						0		0						45
Sharon City	46	8		191			0	4							0					3		253
Sharpsville Borough		27		4				1														32
Sheakleyville Borough																						0
Shenango Township																						0
South Pymatuning Township		5		99	4			1	1	32				32	34							206

Member	SINGLE STREAM	COMMINGLED	Mixed Glass	Cardboard	Gabled / Aseptic Cartons	Magazines & Catalogs	Mixed Paper Grades	High Grade Office Paper	#1 Plastic (PET)	#2 Plastic	#3 Plastic (PVC)	#4 Plastic (LDPE)	#5 Plastic (PP)	Mixed	Film Plastic	Aluminum Cans	Steel & Bimetallic (Tin) Cans	White Goods	Source Separated Foods	Wood Waste	Commercial Total Tons	
Springfield Township	2			223				36														261
Stoneboro Borough				4				1														4
Sugar Grove Township																					2	2
West Middlesex Borough		11		45			0	0														56
West Salem Township		8																				8
Wheatland Borough		1		1			1	12														14
Wilmington Township			0	42			0							0		0						42
Wolf Creek Township		6																				6
Worth Township																						0
Municipal Totals	342	433	0	6,180	4	1	221	865	4	60	0	23	2	89	98	0	0	91	226	348		6,671
Mercer County (County-Wide Data)	122			1,264		1	184	692		8	0	17	2	27			0				0	2,317
Municipal and County Combined	464	433	0	7,445	4	2	406	1,556	4	68	0	40	4	116	98	0	0	91	226	348	0	8,989

TYPES AND PURPOSES OF STANDARD MEASUREMENTS

Comparing similar metrics for each municipality that offers a recycling collection program is a good way to determine which programs may be succeeding and which ones may need to be revised. There are numerous methods of measuring the data we collect. While all may be valid, the metrics that we select should reflect the specific goals and objectives we want to achieve. In addition, they should establish some benchmark. This serves as an indicator of progress made in relationship to new programs or improvements which may have been introduced.

One thing remains a constant in all the metrics, weight. The materials we collect, trade, process, and dispose are all priced and traded on a weight per unit basis. The weight-based data can be converted and translated to determine a host of other issues important to our decision making. Whether we are considering our success at capturing specific materials from pre-defined sources, calculating recovery or diversion, or evaluating operational productivity, weight is a common denominator. It allows us to compare on an equitable platform the available materials and the management methods across a wide range of values which may be economic, environmental, or operational.

Following are some simple methods using the same existing weight-based data with other known parameters to measure specific performance criteria. Although they are slightly similar, each method is used to look at the program in a different light, or more accurately portray the given objective.

RESULTS RELATED TO TOTAL POPULATION

One way to look at program performance is strictly by the total number of tons collected in a municipality. Population is a common driver of those results. We expect to see greater volumes of waste in locations that are more heavily populated than others.

PERCENTAGE BASED COMPARISONS

Recovering material for recycling is subject to a greater variety of influences than just population. Human behavior is a predominant factor. Consequently, having the largest population is no guarantee that a program will recoup the optimal amount of materials from the waste stream. Nor is it a given that it will collect more materials than its neighboring municipality that is considerably smaller.

To determine how local programs, measure up, the population and the reported tons of material recovered for recycling in individual Mercer County municipalities could be evaluated. A good first step to assess if a program functions well or if it needs fine-tuned is to compare their representative percentage of the County's total population to the representative percentage of the County's total weight of the same materials recovered.

A BENCHMARK FOR MATERIAL RECOVERY

Population also can be used as an indicator, along with other verifiable industry assumptions, to estimate the quantities of materials expected to be generated and recovered in a community. For instance, current and historic data on waste composition is widely available. Using weights and population, we can easily predict the quantities of materials generated. Based on years of data, we can comfortably determine from those estimates what and how much is available and likely to be recovered based on material or product type. Whether those same items end up being recycled or disposed largely depends on the quality of the local recycling program.

In its simplest form, benchmarking is a way to determine if and how a program has room to grow and improve. When done on a more detailed material specific basis, It readily exposes anomalies and points to ambiguities that may have been overlooked in the past.

Population largely determines the total quantities of waste generated, recovered, and disposed. Comparing local recycling and yard waste collection programs based solely on the total tons reported presents an unfair bias to larger municipalities. By establishing some common denominators, it is possible to measure all municipalities equally, regardless of size. To do so for Mercer County, two known factors were used, population and weights reported. The resulting measurements could then be applied in a fair comparative evaluation of material recovered in each municipality.

The criteria used to gauge success includes the number of pounds collected per person per day. The unit per person measure is helpful when considering program performance on a broader scope or when evaluating the effectiveness of a specific component like education. The per capita measurement makes small incremental changes in behavior to be easier to see and allow for better direct comparison between program variables than using the total weights.

A per home unit measure may be more applicable when operational and service issues are being considered, particularly when evaluating and costing collection methods. This helps transporters measure the number of vehicles and laborers needed to service the community. Based on vehicle capacity and weight expected per home, the number of homes that can be serviced before a trip to unload can be estimated. It is also a good measure to use when comparing program structures, mandates versus voluntary participation and other programs that depend on the household participating, (i.e. paying) before individual behaviors can even be considered.

INDIVIDUAL EXPECTATIONS.

Waste generation, recovery and disposal are commonly measured on a per person per day basis. National statistics, which are tracked and monitored in that manner, are readily available. This information is useful to benchmark local performance. At a minimum, it provides a standard that helps program managers see their own data in a

whole new perspective. Another way to benchmark using the same approach is to establish a point in time when all local programs are compared using the same metrics.

For 2017, the USEPA reports that material was recovered for recycling at the rate of 1.59 pounds per person per day. This includes material mutually identified by USEPA and Act 101 as municipal solid waste and recovered from residential and commercial sources. In Mercer County the reported combined recovery was 0.70 pounds per person per day, or roughly half of the national rate.

Table 4-7 Illustrates performance metrics by municipality based on percentages of population and material recovery. It also offers a unit-based metric per person. By using cross measurements the table offers a foundation to examine residential and commercial performance. It can be used to compare how the basic make-up and combination of municipal programs and ordinances as shown in Table 4-4 influences performance.

Table 4-7 points out often overlooked weaknesses in programs whose overall recovery based on total tons collected appears to outperform others. Program managers may ignore the issues in poorly performing residential programs because it is easier to rely on contributions from commercial sources to inflate the total recovery weights.

Overall, based on percentage of population or the unit measurement none of Mercer County's residential collection programs perform optimally or at the expected national average. Aside from expanding residential curbside collection, the results indicate that there is room for improvement in existing programs both in participation and the general service specifications.

Table 4-7 Performance Metrics	Population	% of Population	Total Residential	% of Residential Tons	Residential Lbs/Person/day	Commercial Total Tons	% of Commercial Tons	Commercial Lbs/Person/Day	Combined Total Tons	% of Combined Total Tons	Total lbs/person/lay
Clark Borough	606	0.54%	0	0.00%	0.00	1.02	0.01%	0.01	1.02	0.01%	0.01
Coolspring Township	2,200	1.97%	0	0.00%	0.00	31.86	0.35%	0.08	31.86	0.22%	0.08
Deer Creek Township	477	0.43%	2.07	0.00%	0.02	0	0.00%	0.00	2.07	0.01%	0.02
Delaware Township	2,203	1.97%	10.88	0.02%	0.03	0	0.00%	0.00	10.88	0.08%	0.03
East Lackawannock Township	1,636	1.46%	0	0.00%	0.00	11.33	0.13%	0.04	11.33	0.08%	0.04
Fairview Township	1,059	0.95%	0	0.00%	0.00	2.27	0.03%	0.01	2.27	0.02%	0.01
Farrell City	4,687	4.19%	112.47	0.22%	0.13	159.46	1.77%	0.19	271.93	1.91%	0.32
Findley Township	2,826	2.53%	0	0.00%	0.00	8.45	0.09%	0.02	8.45	0.06%	0.02
Fredonia Borough	473	0.42%		0.00%	0.00	0	0.00%	0.00	0	0.00%	0.00
French Creek Township	741	0.66%	4.96	0.01%	0.04	0	0.00%	0.00	4.96	0.03%	0.04
Greene Township	1,064	0.95%	1.27	0.00%	0.01	3.44	0.04%	0.02	4.71	0.03%	0.02
Greenville Borough	5,529	4.95%	177.37	0.34%	0.18	179.2	1.99%	0.18	356.57	2.51%	0.35
Grove City Borough	8,011	7.17%	1104.58	2.12%	0.76	293.94	3.27%	0.20	1398.52	9.85%	0.96
Hempfield Township	3,631	3.25%	49.62	0.10%	0.07	771.4	8.58%	1.16	821.02	5.78%	1.24
Hermitage City	15,635	13.99%	1948.13	3.74%	0.68	3,109.33	34.59%	1.09	5057.46	35.61%	1.77
Jackson Township	212	0.19%	20.17	0.04%	0.52	11.96	0.13%	0.31	32.13	0.23%	0.83
Jackson Center Borough	1262	1.13%	1.79	0.00%	0.01	9.31	0.10%	0.04	11.1	0.08%	0.05
Jamestown Borough	582	0.52%	15.61	0.03%	0.15	46.23	0.51%	0.44	61.84	0.44%	0.58
Jefferson Township	1835	1.64%	18.06	0.03%	0.05	1.51	0.02%	0.00	19.57	0.14%	0.06

Member	Population	% of Population	Total Residential	% of Residential Tons	Residential Lbs/Person/day	Commercial Total Tons	% of Commercial Tons	Commercial Lbs/Person/Day	Combined Total Tons	% of Combined Total Tons	Total lbs/person/ay
Lackawannock Township	2,587	2.31%		0.00%	0.00	0	0.00%	0.00	0	0.00%	0.00
Lake Township	765	0.68%	3.47	0.01%	0.02	0	0.00%	0.00	3.47	0.02%	0.02
Liberty Township	1,428	1.28%	97.82	0.19%	0.38	33.65	0.37%	0.13	131.47	0.93%	0.50
Mercer Borough	1,891	1.69%	37.66	0.07%	0.11	140.65	1.56%	0.41	178.31	1.26%	0.52
Mill creek Township	712	0.64%		0.00%	0.00	0	0.00%	0.00	0	0.00%	0.00
New Lebanon Borough	177	0.16%	0.31	0.00%	0.01	0	0.00%	0.00	0.31	0.00%	0.01
New Vernon Township	502	0.45%	2.55	0.00%	0.03	0	0.00%	0.00	2.55	0.02%	0.03
Otter Creek Township	573	0.51%	1.9	0.00%	0.02	0	0.00%	0.00	1.9	0.01%	0.02
Perry Township	1,382	1.24%	7.57	0.01%	0.03	0	0.00%	0.00	7.57	0.05%	0.03
Pine Township	4,993	4.47%	138.91	0.27%	0.15	805.2	8.96%	0.88	944.11	6.65%	1.04
Pymatuning Township	3,113	2.79%	0	0.00%	0.00	88.01	0.98%	0.15	88.01	0.62%	0.15
Salem Township	725	0.65%	2.09	0.00%	0.02	0	0.00%	0.00	2.09	0.01%	0.02
Sandy Creek Township	761	0.68%	3.18	0.01%	0.02	27.54	0.31%	0.20	30.72	0.22%	0.22
Sandy Lake Borough	638	0.57%	10.7	0.02%	0.09	6.69	0.07%	0.06	17.39	0.12%	0.15
Sandy Lake Township	1,175	1.05%	12.15	0.02%	0.06	44.5	0.50%	0.21	56.65	0.40%	0.26
Sharon City	13,259	11.86%	519.84	1.00%	0.21	252.97	2.81%	0.10	772.81	5.44%	0.32
Sharpsville Borough	4,165	3.73%	160.98	0.31%	0.21	31.63	0.35%	0.04	192.61	1.36%	0.25
Sheakleyville Borough	134	0.12%	0.3	0.00%	0.01	0	0.00%	0.00	0.3	0.00%	0.01
Shenango Township	3,745	3.35%	16.29	0.03%	0.02	0	0.00%	0.00	16.29	0.11%	0.02
South Pymatuning Township	2,570	2.30%	0	0.00%	0.00	206.18	2.29%	0.44	206.18	1.45%	0.44

Member	Population	% of Population	Total Residential	% of Residential Tons	Residential Lbs/Person/day	Commercial Total Tons	% of Commercial Tons	Commercial Lbs/Person/Day	Combined Total Tons	% of Combined Total Tons	Total lbs/person/day
Springfield Township	1,933	1.73%	31.91	0.06%	0.09	261.03	2.90%	0.74	292.94	2.06%	0.83
Stoneboro Borough	997	0.89%	27.05	0.05%	0.15	4.29	0.05%	0.02	31.34	0.22%	0.17
Sugar Grove Township	926	0.83%	3.76	0.01%	0.02	1.78	0.02%	0.01	5.54	0.04%	0.03
West Middlesex Borough	821	0.73%	25.11	0.05%	0.17	56.47	0.63%	0.38	81.58	0.57%	0.54
West Salem Township	3,420	3.06%	8.14	0.02%	0.01	7.94	0.09%	0.01	16.08	0.11%	0.03
Wheatland Borough	597	0.53%	2.43	0.00%	0.02	14.12	0.16%	0.13	16.55	0.12%	0.15
Wilmington Township	1,385	1.24%	0	0.00%	0.00	42.01	0.47%	0.17	42.01	0.30%	0.17
Wolf Creek Township	829	0.74%	16.96	0.03%	0.11	5.98	0.07%	0.04	22.94	0.16%	0.15
Worth Township	878	0.79%	18.96	0.04%	0.12	0	0.00%	0.00	18.96	0.13%	0.12
Municipal Totals	111,750	100%	4,617.02	8.86%	0.23	6671.35	74.22%	0.33	11,288.37	79.48%	0.55
Mercer County (County-Wide Data)	111,750	100%	595.95	1.14%	0.03	2317.44	25.78%	0.11	2,913.39	20.51%	0.14
Municipal and County Combined	111,750	100.00%	5,212.97	100%	0.26	8988.79	100%	0.44	14,201.76	100%	0.70

County Responsibilities Under Act 101

Counties play a different role than municipalities under the provisions of Act 101. Counties are largely responsible for ensuring that proper waste management policies and practices are developed and implemented. The development of a municipal solid waste management plan is focused on this endeavor. The most critical task in the planning process is for counties to provide for sufficient disposal capacity for the municipal solid waste generated in their jurisdiction.

There are no directives in the Act for counties to implement recycling programs. Collection and processing operations conducted by counties are done so on a purely voluntary basis. Counties, however, do have administrative assignments for reporting recycling activities or justify why it cannot. Additionally, counties are to assess the available recycling opportunities to determine if and how the county will attain the state's recycling goal. Act 101 provides counties with grant funding to support in part the salary and expenses of an individual to perform these duties and to facilitate the growth of recycling through the collective efforts of public and private sector stakeholders.

On behalf of Mercer County, LMCRSWD currently offers a variety of services to local municipalities, businesses, and residents. These programs are all dependent on the availability of grants, user fees, and local taxes. The uncertainty in funding can make the ability to plan for and sustain such services difficult. However, Mercer County has been able to offer quality programs that complement the efforts of the municipalities and leverage the resources of the private sector.

COORDINATION OF COUNTY EFFORTS

Although municipalities and commercial establishments have more direct responsibility for attaining recycling goals, Act 101 recognizes the need for a central force to facilitate these efforts and includes funding to support such a position. The

Assistant Director of LMCRSWD serves as the Mercer County Recycling Coordinator and is the primary contact for County related recycling issues. The Recycling Coordinator also orchestrates many of the County level programs.

ADMINISTRATIVE DUTIES

Data management is both necessary and time consuming. The PADEP relies on Counties to collect and provide annual reports regarding recycling activities. Reporting is actually a requirement of the law. Information helps track performance and identifies accomplishments. Collecting and organizing this information can be a year-round task.

EDUCATION AND COMMUNITY OUTREACH

Included among the valuable services organized by LMCRSWD is to inform and educate the residents and businesses of Mercer County. To accomplish this, the County uses a variety of outlets and mechanisms.

Newsletters, flyers, fact sheets and brochures continue to make-up the bulk of the educational materials. These are widely distributed throughout the County. In addition to traditional print media, LMCRSWD has expanded its presence on the Internet in an effort to be a good resource to locate basic material outlets. The website offers digital versions of the print media, which offer instructive information on the types of materials that can be recycled and the proper methods. Social media is used for updates and to broadcast current events. Of course, responding to citizen inquiries, whether via email or phone, remains the most frequent and demanding method of informing the public.

Presentations on waste and recycling related issues are offered to schools, civic and social organizations.

TECHNICAL ASSISTANCE

The needs of municipalities and businesses are often more complex than individual resident concerns. LMCERSWD is responsible for providing or arranging for technical guidance and assistance to resolve these challenges.

The Recycling Coordinator supports municipal officials in a variety of ways. The maze of regulatory requirements can be daunting for mandated communities or for those seeking to qualify for grant funding. Routine tasks like tracking and reporting data are intimidating at first. Municipalities often need a mentor who can simplify the steps necessary to meet the conditions of the law. Samples and explanations for practical local ordinances, contract reviews, and assistance with grant applications and submissions are all part of the County support system.

Perhaps the most practical service is an onsite waste audit to help identify waste materials and optimize diversion and waste reduction.

Recycling Initiatives Sponsored by Mercer County

Although Mercer County is not obliged by Act 101 to provide recycling services, the County has long sought to complement the services offered in the municipalities and by the private sector. The purpose of the County programs has always been to ensure that all residents have the opportunity to recycle or properly discard difficult to manage materials. Because there is no mandate under Act 101 for the County to offer recycling services, the programs are always vulnerable to shifting priorities and diminishing resources in the County's budget. It is crucial, therefore, for LMCERSWD to monitor the programs and make appropriate changes when necessary to ensure they are operating cost effectively.

The Big Blue Bin Program

Since 2000, Mercer County residents have benefitted from the development and expansion of a drop-off collection program currently managed by LMCRSWD . Over time, the service locations, the materials collected, and the method of collection have changed to accommodate contemporary circumstances such as funding, market conditions, and political will. Despite the service changes, the network of drop-off collection points historically experience broad public acceptance and support.

Commonly referred to as the “Big Blue Bin” program(BBB) the collection program’s operating costs are supported through the county’s general fund and monies received through Act 101 Section 904 performance grants. Equipment needed for the program such as signs and locks is purchased through Act 101 Section 902 recycling grants. The Recycling Fund created by Act 101 is shrinking due to legislative appropriations of the monies to outside interests. At the same time, competition for grant funding has increased in relation to the number of municipalities that currently meet the population criteria. there are no guarantees that the Act 101 Section 900 grants will be available for the long term. Consequently, the entire cost of the program would be borne by the County. Therefore, it is important to know if the funds expended on this service provide the anticipated benefit to the greatest number of Mercer County residents or if other recycling programs that could be County-funded are more desirable.

Operational Basics

The physical collection of material was once performed by public sector employees of the former Mercer County Solid Waste Authority. Cost overruns due to a labor-intensive collection system prompted the County to revamp the entire program. LMCRSWD currently oversees the program which utilizes the services of an outside contractor selected through a competitive bidding process. Although the County is still

subjected to price fluctuations from bid period to bid period, during the term of the collection contract the County can budget based on the fixed prices in the agreement.

Cost and Service Changes

Prior to 2019, the drop-off program accepted #1 and #2 plastic bottles/jugs, aluminum, tin, and steel cans, and brown, clear, and glass food/ beverage containers as well as cardboard, newsprint and magazines were accepted in the program. Due to market conditions, the BBB program currently accepts only newsprint, magazines, and cardboard.

Escalating costs have significantly reduced the number of sites compared to the original program. Other factors contributing to site reductions include contamination of the material from recyclables that do not meet the program criteria or from misuse of the bins from folks trying to avoid the cost of waste disposal. Currently, only three sites remain. They are located in Hempfield Township, Pymatuning Township, and Perry Township. This limited geographic coverage makes it difficult to label the BBB program a county-wide service at this point.

An unanticipated budgetary issue is the degree of usage by residents living in mandated municipalities and/or where curbside recycling is available from their commercial waste hauler. In many instances, these individuals opt to use the BBB rather than pay for curbside collection. The inappropriate use results in overflowing containers and the need for extra pick-ups and ultimately program cost overruns. Because of a limited budget, when certain sites need more service than normal other sites must be sacrificed.

The excess material also contributes to unsightly and unsanitary site conditions, which come with the inherent costs for enforcement and clean-up.

These issues are not unique to Mercer County. Drop-off collection programs throughout the nation, the state and this region have been downsized or eliminated

over the past decade. That's not to say that recycling opportunities have been eliminated. In many instances eliminating a drop-off program is the catalyst to introduce municipal curbside recycling collection.

Public Survey and Evaluation

In 2019, LMCRSWD commissioned a survey to evaluate the most recent changes to the program. The study measured public satisfaction and obtained input for possible improvements to the county-wide program. The survey also weighed public opinions about curbside recycling. Survey participants included users of the drop-off collection points who were interviewed on-site. Alternatively, site users were provided an opportunity to complete a digital survey and submit their answers on-line.

Findings and Conclusions

The study provided insight on several commonly accepted beliefs of the survey participants. Some of the most notable ones are listed here. It should be noted that the responses are biased from the standpoint that they come only from active users of the drop-off sites who also are presumed to be recyclers. Therefore, the interpretation of what the responses could mean is equally limited by those constraints.

- 1. There is no consistent ratio of users' origin to sites utilized.**
 - The sites are situated geographically along the same major roadways.
 - The roadways are commonly used by commuters and shoppers from multiple municipalities.
 - The roadways are commonly used by visitors to the recreation areas of the Shenango Reservoir and Pymatuning State Park.
 - The sites are comparatively close together when the whole County is considered.
- 2. Less than 5 percent of those surveyed admitted they did not have curbside trash collection.**
 - It suggests that curbside waste service is broadly available throughout the County.
 - It suggests that the drop-off program could be facilitating resident's ability to avoid the cost of disposal and recycling.

- If 5 of every 100 users of the drop-off sites, who make that effort to sort and deliver materials to a remote location, do not have trash collection service, it is likely the ratio is higher among folks who do not.
 - The degree of illegal dumping witnessed at the sites confirms there is reluctance to pay for trash and recycling services.
- 3. Despite the convenience of curbside recycling collection, 30 percent of those surveyed do not desire curbside recycling collection.**
- Within this 30 percent, none of the respondents mentioned the issue of free drop-off service versus pay for curbside service.
 - However, the answers were attempts to justify why this 30 percent of those surveyed were not participating in (i.e. paying for) a curbside program.
 - Perceived inconveniences posed by recycling at the curb included:
 - not having space for a bin (yet there is to accumulate material)
 - claiming it is easier to drive miles to a site than take things to the curb
 - not wanting to be on a pick-up schedule
- 4. There is widespread confusion and misinformation regarding recycling economics.**
- Survey participants believe that the drop-off sites should be buy-back sites.
 - Residents have an inflated perception of the value of recycled commodities.
 - Residents lack an awareness of the operational costs related to collection and processing.
 - To a certain degree, the belief that the program profits via the efforts of local residents is why some individuals can justify their abuses of the sites.
 - Anything that is free has a diminished value in the eyes of the user.

Summary

LMCRSWD should reevaluate the cost of the program. Using only the number of tons collected at the sites (300) as they are currently configured, the materials accepted, and 50 percent of the collective cost of the program shared with Lawrence County (approximately \$93,000), the drop-off collection program costs \$310 per ton excluding all administrative, enforcement, and clean-up costs. The program serves a limited number of residents at this point. These residents could have curbside recycling with little effort and a nominal monthly fee.

In today's local economy, it is likely that \$93,000 could provide greater waste management and recycling benefits to Mercer County stakeholders than the current Big Blue Bin system.

Special Collections Program

Certain components of the municipal solid waste stream are problematic to manage. For some materials it could be their physical characteristics, which makes handling and transporting them challenging. For others, the chemical composition may present public health and safety hazards. In yet other cases, laws and regulations may control how the materials must be managed.

DISCARDED ELECTRONICS

Electronic devices all become disposable commodities within extremely short time spans. Current trends show that items such as televisions, computers, and monitors are replaced by newer, better models every few years. For smaller devices like cell phones, digital cameras, etc., this happens as soon as every few months. Discarded electronics contain materials like lead, mercury, and other chemical additives, which present potential environmental hazards when disposed in a landfill. These chemicals can leach into the soil and groundwater.

COVERED DEVICE RECYCLING ACT

In 2010, Pennsylvania legislators adopted the Covered Device Recycling Act (Act 108 of 2010 or CDRA). This piece of legislation provides for extended producer responsibility for discarded electronics, including computers and televisions, and banned these items from landfill disposal beginning in 2013. The Act requires manufacturers to pay for the recycling of these items based on the weight of products they currently manufacture and sell. The promise of CDRA was that it would lift the physical and financial burden of managing discarded electronics from local governments. The promise was short lived. Because of insufficient quotas and

inadequate compensation to recyclers and government collection programs, CDRA created an unintentional unfunded mandate for many counties and municipalities. Consequently, rather than providing universal access to outlets for residents needing to manage electronic discards, in many instances, fewer collection programs remained in operation.

Even with recently introduced amendments to CDRA, it is anticipated that counties will still need to play a role in the collection of discarded electronics both covered and not covered by the Act. Clearly, for any future programs to succeed fair compensation to local government programs and those who handle the processing of the materials must be considered. Likewise, artificial quotas and caps must be eliminated to allow the flow of discarded electronics to continue year-round without interruption.

HOUSEHOLD HAZARDOUS WASTE

Most homeowners would be surprised to discover that many products which they use on a regular basis would be categorized as hazardous materials if found in an industrial setting. Because they are generated in a residential context, they are classified as Household Hazardous Waste (HHW). 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 an estimated population of 111,750 Mercer County could expect to produce approximately 224 tons of HHW per year.

Cleaning agents, pool chemicals, paints, herbicides, and pesticides are all considered HHW. Many of these materials may be ignitable and/or poisonous and therefore a serious health and safety hazard in homes especially to children and the elderly. They also pose threats to the community in general.

Unexpected dangers occur when HHW combines with regular household trash; for example, soft drinks mixed with swimming pool dry chlorine can ignite. More than 2%

of all garbage collectors are injured by chemical burns, explosions, etc. each year from HHW in trash.

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.

LOCAL EVENTS

LMCRSWD launched a series of special collection events during the last planning period. Materials collected included tires, Household Hazardous Waste, electronic waste, and appliances. Nearly 2,000 households participated in the events from 2011 to 2019. These efforts removed more than 1600 tires, almost 172,000 pounds of electronic discards and nearly 25,000 pounds of HHW from landfill disposal.

Table 4-8 Shows the results of the events on an annual basis.

Table 4- 8 Mercer County Special Collection Data

										TOTALS
Vehicles										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
114	49	149	243	170	202	296	250	304		1,777
Households Represented*										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
122	54	157	278	207	207	311	272	325		1,933
Tires Collected										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
322	45	153	107	134	202	356	115	200		1,634
Appliances Collected										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
48	25	32	66	49	70	96	62	74		522
Pounds of Electronics Collected										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
5,330	2,690	16,280	49,835	21,797	18,046	24,778	11,903	21,208		171,867
Pounds of Electronics/Vehicle										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
47	55	109	205	128	89	84	48	70		97
Pounds of HHW Collected										
2011	2012	2013	2014	2015	2016	2017	2018	2019		
					3,469	7,927	6,611	6,772		24,779

Opportunities for Improvement

Convenience Center

As popular as the drop off program and special collection events are, they fail to capture a large portion of materials. Yearlong availability and convenient access to outlets that manage recyclables and these special handling items are crucial in preventing illegal dumping and protecting public health and safety. Curbside type collection programs for HHW and electronic waste are available to some residents in the County, provided they live in a municipality with a residential waste collection contract. Mercer County should explore the feasibility of a permanent convenience center to service the majority of residents without such opportunities. The center could also collect recyclables and avoid the cost of hauling the current drop-off containers. Other materials like textiles and clothing could also be collected there.

Residential Cardboard

An increasing amount of corrugated cardboard is found in the residential municipal solid waste stream. While not yet produced at the volume of commercial generators, residential cardboard is apt to grow based on the popularity and convenience of online sales. Residential corrugated cardboard is still recovered at a lower rate than it is from commercial sources. Additionally, new construction sites produce large, clean recoverable amounts of cardboard. Insufficient curbside container capacity can hinder cardboard recovery. When resources are not available to replace outdated recycling containers to meet the needs of single stream collection, supplemental drop-off collection sites like a convenience center can boost recovery.

Clothing / Textiles

Clothing and textiles includes clothing, footwear, towels, sheets, and pillowcases. The estimated quantity of clothing and textiles generated nationally represents nearly 5 percent of the total municipal waste stream before recovery and disposal. Between

60 to 90 percent of the material comes from residential sources. Clothing and textiles have a national recovery rate of almost 15 percent.

Turnkey collection programs are available from a number of textile recyclers. Curbside, drop-off, and event options are available. Often, they can provide an added source of income for municipalities.

Many textile brokers support these efforts by providing the tools to do one-day events or periodic curbside collections. Some even spot a van for this purpose. Educators can also be enlisted to sponsor programs in which promotional bags are issued for students to deliver textiles to their schools. Studies have shown that these additional efforts do not hurt local non-profit second-hand stores, because the majority of the items collected at the curb are not suitable for resale.

Construction And Demolition Recycling

Figure 4-6 Recoverable Construction/Demolition Materials

Concrete & Brick

- Road Base
- Drainage Media
- Pavement Aggregate

Asphalt

- Aggregate for New Hot Mixed Asphalt
- Road Sub-base

Wood

- Fuel for Waste to Energy
- Mulch
- Engineered Particle Board
- Remilled into Flooring

Drywall

- New Gypsum Wallboard
- Soil Amendments
- Portland Cement Production

Shingles

- Asphalt Binder
- Hot Mix Asphalt

Metal

- Melted and Reintroduced into other Metal Products

Cardboard

- Ground and Used in New Paper Stock

Plastic

- Fuel for Waste to Energy

According to the Construction Materials Recycling Association (CMRA) the United States generates 325 million tons of recoverable construction and demolition (C&D) materials annually. Certain components of C&D waste are processible. In other words, they can be shredded, ground, pulverized or otherwise reduced and screened for a variety of beneficial uses. Most other recoverable materials are recyclable. Sadly, without regulatory requirements, most Mercer County contractors have no incentive to segregate those materials. Others are simply unaware of the potential.

Figure 4-6 shows the types of materials that can be recovered from construction & demolition waste and a short list of applications for the material

Current Technologies And Innovative Alternatives To Demolition

Rather than reducing a building to a pile of rubble, alternatives exist to salvage useful items and valuable building materials. Deconstruction is the term used to describe the systematic removal of materials from structures in order to maximize the reuse and recycling of those resources. Although there may be additional costs associated with deconstruction, such as increased labor hours, under favorable conditions the cost of deconstruction is competitive with demolition, with the added bonus of reducing disposal costs.

Figure 4-7 lists materials that are typically recovered in deconstruction projects.

The objective of deconstruction is to salvage as much of the material intact and in a condition feasible for reuse. An attempt is made to save everything—crown molding, mantels, windows, doors, dimensional lumber, nails, screws, bathtub, and plumbing. Hundreds of case studies from the U.S. Department of Housing and Urban Development, the Building Materials Reuse Association, the Associated General Contractors of America, and many others consistently demonstrate that up to 85% of a structure can be inventoried for future projects or donated to a reuse store.

Figure 4-7 Materials Salvageable from Building Demolition

Appliances	Salvageable
Bricks	
Doors	
Flooring	
Light Fixtures	
Metal Framing	
Pipes	
Shelving	
Cabinets	
Insulation	
Paneling	
Wood beams	
Dimensional lumber	
Ceramic Tile	
Bathroom Fixtures	
Windows	
Nails and Screws	
Hardware	
Mantels	
Molding	
Railings	

Deconstruction is a prime source of materials, which are tax deductible when donated to a nonprofit organization. According to Habitat for Humanity, the tax value of used building material donations can often be substantial and at times large enough to pay for the costs of deconstruction. Habitat for Humanity ReStores are examples of local outlets for useable building and renovation materials that benefits the environment, the building industry, and the community. Proceeds from sales help fund the construction of Habitat houses within the community. Similar outlets such as Construction Junction in Pittsburgh, PA serve as nonprofit operations that sell used or discontinued construction materials at heavily discounted prices.

In Mercer and surrounding counties, there are areas and structures on the National Register of Historic Places. Strict guidelines determine how these homes and buildings must be maintained. Use of materials contemporary to the period or reasonable facsimiles is often required. Architectural antiques are in demand by those wishing to restore these structures to their previous grandeur. Architectural antiques can command top dollar and the buyers need not be limited to the local area. Good sources of period pieces are structures that are being removed to make way for new development. Likewise, those in such an overall state of disrepair, that they are unsafe or not worth saving can provide a wealth of materials.

Businesses that understand the intricacies of professional piece by piece dismantling provide vital materials for the restoration process. These are cases where the sum of the parts is truly greater than the whole. Consequently, many deconstruction companies are also in the business of historic preservation and renovation, which in turn is proving to be a source of jobs and profits.

Incentivizing C&D Recycling

The cost of transportation and processing makes recycling C&D no more economically feasible than landfilling. There are a number of ways, however, that communities can create awareness, increase reuse and recycling, and decrease landfill disposal of C&D

materials. Rather than outright disposal bans, a variety of monetary incentives and positive reinforcement have proven to be successful in triggering an increase in recovery. Following are a few of the methods commonly implemented.

Refundable Deposits For Recycling C&D Debris

In this type of system contractors place a deposit on construction, demolition, and remodeling projects when the project permit is issued. The deposit rate is based on square footage of and the type and quantity of material expected to be generated by the project. The costs of recycling or processing that material is also factored into the equation. Upon demonstration of diversion of a pre-established percentage of the C&D debris, the full deposit or appropriate portion is refunded to the contractor.

Procurement Policies With Preference For Recycling Of C&D Debris

Local governments can implement policies that require contractors to submit a recycling plan for a pre-established percentage of C&D material from construction and demolition of government facilities and projects. A portion of the final payment can be withheld until the contractor demonstrates that the project attained the desired results.

Recognition Programs To Encourage Contractors To Reduce And Recycle

Many jurisdictions have recognition programs for green businesses. The same principle can be applied to local developers, contractors, and remodelers. A monetary reward, media recognition, an award that can be displayed in an office, or decals that can be placed on vehicles and equipment have all been used successfully for this purpose.

LEADING BY EXAMPLE

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a driving force in the trend toward “Sustainable Building.” Recycling C&D

debris is one of the most important aspects of this movement. To reduce the environmental impacts of renovation and new construction. LEED encourages construction sites to recycle. 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 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%.

As more and more projects seek LEED certification, the need for knowledgeable contractors, haulers and processors will increase. Contractors and waste management companies who are ill prepared to comply with the C&D recycling requirements, are at a disadvantage in bidding and acquiring contracts for LEED projects. 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 landfill disposal.

Food Waste

The USEPA estimates that more than 14 percent of the waste generated in the US is food related. The largest percentage of any single material in our daily discards is food waste., It represents approximately 21 percent of the municipal solid waste disposed in landfills or incinerated. Americans are wasting over one third of their purchased vegetables and fruits, according to the United States Department of Agriculture (USDA).

Even more is left behind in fields simply because of appearance, rather than edibility. The same phenomenon occurs in grocery stores where food is discarded long before it can safely be consumed. In restaurants, plated but untouched food is another significant source of waste.

To deal with the post-consumer dilemma, commercial and residential food waste collection programs are growing throughout the United States. Many are implemented in conjunction with bans on food waste disposal.

These programs are reliant on the development of a cost-efficient collection and processing infrastructure. Low tech options like on-farm and community composting sites work fine for small, localized quantities of food. To divert an entire community's food waste, however, requires large scale commercial operations. Much like landfills, composting operations

HERMITAGE
FOOD WASTE TO ENERGY AND
WASTEWATER RECLAMATION FACILITY

2020 GOVERNOR'S AWARD
FOR LOCAL GOVERNMENT EXCELLENCE

The Hermitage Food Waste To Energy Facility and Wastewater Reclamation Facility, the plant can process food waste into methane gas, which is then converted into electricity.

Hermitage's is currently the only municipal wastewater treatment facility in Pennsylvania to maintain such an operation.

The facility receives commercial food waste from as far as California within the U.S., to waste from South American countries including Chile and Bolivia.

LMCRSWD is working with the facility to .explore the feasibility of collecting local commercial and residential food waste . Hopes are that a drop-off program and eventually a regular collection route can be established.

face strict siting and operational criteria. Odor and surface water run-off are two of the greatest concerns. Therefore, acquiring a permit can be challenging.

Because of an increased focus on renewable energy and alternative fuels a growing number of anaerobic digesters are being designed and built for the sole purpose of processing food waste.

Digesters are dependent on a guaranteed volume of waste. For start-up programs, or where food waste diversion is voluntary, an alternative to a stand-alone operation is often co-digestion with other waste materials. Wastewater treatment plants can be likely candidates for anaerobic digesters that could benefit by the inclusion of food waste. On-farm manure digesters can also be designed to allow for excess capacity to manage food waste.



Logistics, proximity, and competing disposal capacity all influence the feasibility of developing a stronger food waste management infrastructure.

Pennsylvania is far from being a leader in food waste recovery. A survey conducted by BioCycle magazine and supplemented by USEPA indicates that there were approximately 25 commercial food waste composting operations in Pennsylvania in 2014. A more recent survey done by the Pennsylvania Recycling Markets Center shows 64 food waste composters in the state. Of these 37 accept food waste from outside sources and 7 of those are exclusively for commercial food waste.

Logistics, proximity, and competing disposal capacity all influence the feasibility of developing a stronger food waste management infrastructure. Consequently,

although interest exists, expanding commercial and residential food waste collection programs will need to be initiated on a small scale for now.

Other food waste diversion activities, however, are actively being pursued with room to grow. Thanks to protection provisions of the Good Samaritan Act, Mercer County grocers, retail stores and restaurants are able to donate unsold but consumable food to local food pantries for distribution. Collecting and delivering the donations require considerable coordination. Lack of enough refrigerated units hampers those collecting food from donors in getting more to those in need. The PADEP now offers grant funding for this type of equipment.

Private Sector Contributions

Any discussion of recycling accomplishments in Mercer County would fall short if the efforts of private sector concerns were not included. It is important to acknowledge that without significant private investments many of Mercer County's local programs would not exist. The private sector is dominant in collection services and processing of recyclable and hard to manage materials. The continued growth and profit of these operations is crucial for Mercer County to meet its recycling and waste diversion goals.

Summary And Conclusions

Recycling opportunities are generally available throughout Mercer County. The combined efforts public and private sector service providers, residents, businesses, and manufacturers are evident. The County falls short of the national averages despite access to the convenience of curbside recycling. Some improvements could be made. Lower than expected participation and recovery still prevails in many municipalities. Future efforts should focus on encouraging compliance in mandated municipalities and fostering interest in the non-mandated areas.

Chapter 4 featured services currently available in Mercer County. It also mentions some avenues for material recovery that could be made available in the future. Recommendations for improving current conditions and introducing new service options along with a suggested timeframe for implementation are outlined in Chapter 5.

Plan Development

The process to develop a plan to manage municipal solid waste requires extensive research and analysis. Serious efforts are taken to understand current conditions and practices. Programs are measured for performance, productivity, and cost effectiveness. Determining inadequacies, redundancies, essential elements, and complementary services that support the overall system is the objective.

While the planning process focuses on historical information, plans themselves are futuristic in nature. Using the historical data to demonstrate trends and indicators, the ultimate goal is to meet the future needs of the community. The final plan presents the end results and findings of the process. Recommendations could include eliminating outdated or failed programs, enhancing existing programs, and launching further investigations into speculative new ventures.

The planning process for this version of the Mercer County Municipal Solid Waste Management Plan reviewed the goals and objectives and subsequent accomplishments of the previous update. It also demonstrated that certain views and assumptions from that Plan may have shifted or are no longer applicable. The same phenomenon could occur when the 2020 Plan Update is reviewed in future years.

Chapter 5 presents a summary of the priority municipal solid waste management issues identified by the Lawrence/Mercer Counties Solid Waste Recycling Department, the consultant, and the Solid Waste Advisory Committee. It includes an action plan to address the issues, which incorporates efforts by the County, municipalities, non-profit organizations, and the private sector. The Mercer County Municipal Solid Waste Management Plan, however, is meant to be a fluid and dynamic policy document. It allows for shifts in the implementation timeline. It anticipates the need for further investigations and studies to determine the feasibility of some of the suggestions before definitive action is taken. It is open to new technologies and opportunities that remain true to the Plan's original goals and objectives.

Predominant Issues and Root Causes

COMMON CIRCUMSTANCES

The lack of ordinances for mandatory waste and recycling collection coupled with a lack of a municipal waste collection contract secured through a competitive bidding process were noted as a primary cause of a variety of issues.

Committee members, staff and consultant shared a combination of research findings, professional observations, and personal experience in presentations and conversations during the SWAC meetings. The lack of universal availability and access to collection services and outlets was noted as a top concern. The need to expand the types of materials targeted for recovery also made the priority list. As in past versions of the Plan, the ongoing battle with illegal dumping continues to plague the County. There was consensus that expansion of remediation efforts was necessary. The importance of convenience to encourage proper handling of materials was deemed important. A myriad of other issues surfaced during the meetings, too.

The lack of ordinances for mandatory waste and recycling collection coupled with a lack of a municipal waste collection contract secured through a competitive bidding process were noted as a primary cause of a variety of issues. These include illegal dumping, contamination of drop-off recycling locations and poor participation in recycling and ultimately lower recovery. Reliance on periodic events rather than permanent collection outlets makes it inconvenient, and more difficult to responsibly manage Bulky Waste, White Goods, HHW, and E-waste.

The Committee acknowledged the obvious dilemma of public expectations for services versus the financial realities of County and municipal budgets. Budgets are expected to

become more burdened by the trickle-down economic effects of the Coronavirus Pandemic.

Figure 5-1 depicts the issues, which were discussed in the SWAC meetings and considered problematic. The suspected contributing factors of these problems are also shown.

Figure 5-1 Municipal Waste and Recycling Issues Reviewed & Evaluated in SWAC Meetings

Prevailing Conditions	Illegal Dumping
	Littering
	Open Burning
	Inconsistent Public Education and Awareness
	Contamination at Recycling at Curbside and Drop-Off Sites
	Poor Participation in Recycling
	Cost and Inconvenience of HHW and E-scrap Collections
	Difficulty Disposing of Bulky Waste, Appliances, Home Remodeling Waste
	Obstacles to Implementing Services for Food Waste Recovery
	Lack of Incentives to Recover construction/Demolition Waste
	Poor Public Awareness and Perceptions
	Inaccurate and Missing Data
Poor Monetary Return on Recycling Commodities	
Contributing Factors	Lax Enforcement and Prosecution
	Lack of and Inconsistent Laws & Ordinances
	Voluntary Waste Collection Service
	Lack of Municipal Collection Contracts
	Inequity of Recycling Services thughout the County
	No CDRA Outlets for Full List of Covered Devices (ewaste)
	Inconsistent Collections for Bulky Waste & Appliances, Home Remodeling Waste
	Cost of Providing Drop-off Service
	Proximity of Recycling Processors & Markets
	Undeveloped Infrastructure for Food Waste Collection
	Lack of Regulatory Directives for Food Waste Collection
	Lack of Permanent Convenience Center
	Inconsistent Reporting and Data Management Policies and Procedures
	Budgetary Constraints
	Political Will
Public Willingness to Pay	

Timeline for Success

The 2011 Mercer County Municipal Solid Waste Management Plan established specific objectives with a list of activities to attain each. An aggressive implementation schedule set a timeline for completion of the items. A similar action plan is set forth for the 2020 Plan Update.

Five distinct goals were established for the 2020 Mercer County Municipal Solid Waste Management Plan Update and Revision. These recommendations were determined by examining the current status and performance of programs and services within the County. The actions suggested to attain the goals are straightforward and practical. Each allows for flexible approaches based on the availability of funding and other resources.

To the credit of the Lawrence-Mercer Counties Solid Waste/Recycling Department, a significant portion of the activities listed in the 2011 Plan were accomplished. A few pertinent items remain unfinished. These have been retained and are incorporated into the new implementation schedule along with new issues identified during the current planning process.

Considering that the Plan covers a ten-year period, the recommended actions are staged to occur over several years. Timelines are suggested but can be modified based on needs and other priorities and unforeseen events. Some suggestions may require further study or consideration to determine feasibility and a reasonable course of action based on local resources.

A Partnership Approach

The private sector has always played an important role in municipal solid waste management and recycling in Mercer County. Although the County was once part of a

joint county recycling operation endeavor, collection, current disposal and processing of municipal waste and recycling is primarily the domain of private sector service providers.

To attain the goals and objectives of the 2020 Mercer County Municipal Solid Waste Management Plan, the SWAC agreed that participation and cooperation of the private sector is essential. Whether it be adding new and different materials for recovery, expanding the availability of curbside recycling to currently unserved areas, or providing the resources to facilitate the recovery of Household Hazardous Waste and E-waste. the private sector is generally poised to pursue new opportunities when it makes good business sense. Many of these opportunities are compatible with the basic recommendations in Mercer County's Plan.

To that end, disposal facilities were invited to demonstrate in their proposals to provide disposal capacity how their current and proposed service offerings, or other resources, would complement and sustain the goals and objectives of the 2020 Mercer County Municipal Solid Waste Management Plan. The services and programs of those facilities, which met the criteria and have entered disposal capacity agreements with the County, have been incorporated into the implementation schedule.

The targeted goals and tasks along with an anticipated timeline for implementation are shown in Table 5-1.

Table 5-1 Implementation Schedule for the 2020 Mercer County Municipal Solid Waste Management Plan

Objective	Timeline	Action Item
<p><i>Ensure universal access to waste and recycling collection and outlets is available throughout the County</i></p>		<p>Explore the feasibility of establishing a permanent center for countywide collection of hard to recycle/bulky items</p>
		<p>Continue to offer the Big Blue Bin program so that residents in areas without convenient access to curbside programs can recycle, with the goal of reducing the number of sites by making curbside collection available.</p>
		<p>Provide technical assistance to local municipalities to improve existing contract specifications and to expand the network of municipalities that contract for waste and recycling collection services</p>
		<p>Explore opportunities to establish a regional resale center for salvaged building materials similar to “Construction Junction.”</p>
<p><i>Enhance enforcement and accountability throughout the municipal waste and recycling programs.</i></p>		<p>Provide technical assistance to local municipalities to improve their waste and recycling ordinances</p>
		<p>Coordinate with local magistrates, Fish and Boat Commission, and Game Commission to share tools and resources.</p>

Facilitate the development of programs and infrastructure for the recovery of select components of the waste stream.

Conduct a study to determine the feasibility of recovering commercial and residential food waste

Conduct a pilot program for drop-off collection of residential food waste

Support the recovery and reuse of C&D Waste

Promote deconstruction opportunities and services

Explore the potential of collecting textiles, handbags, mattresses, books, etc.

Research and pursue grant funding available for these types of projects

Prevent illegal dumping and accelerate the remediation of existing dumping sites.

Support efforts of local nonprofit organizations to continue local clean-ups of existing dump sites.

Expand camera program

Expand tire recycling markets and funding

Develop public outreach and communications strategy that strategically informs all levels of diverse stakeholders.

Using a strategic communication matrix outline the issues, stakeholders, information, methods of communication, and timing of outreach

Develop a curriculum and agenda for a regular and consistent public education program that covers all aspects of waste and recycling management.

Conduct targeted seminars for specific stakeholder groups

Explore the potential to develop an Environmental Council of business leaders who can promote and support the mission and programs of the Department.

Become more proficient at delivering an ongoing positive proactive social media campaign across multiple outlets

Develop strong relationship with reporters and news media. Prepare press releases about activities on a regular basis.

Providing for Future Disposal Capacity

A fundamental purpose of the Mercer County Municipal Solid Waste Management Plan is to project future waste generation and recovery and to assure adequate capacity is available for disposal of the remaining material. In fact, this is the single most important responsibility outlined for counties in the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101). Under the Act, counties must secure capacity assurance for a minimum of 10 years, but longer periods are allowable if a county can demonstrate access to and availability of guaranteed disposal outlets.

Contractual Commitments

A variety of mechanisms can be utilized to satisfy this requirement. Each has procedural and legal implications. The choices differ based on the views, needs and political will of the local jurisdiction. Regional circumstances, market participants and public perception can influence the selection and delivery of disposal options.

Historically, in Mercer County, a formal contractual agreement has been the preferred guarantee of disposal capacity. The same mechanism is used to fulfill the Act 101 requirement for the 2020 Plan. Mercer County executed and entered into disposal capacity agreements with landfills that met the selection criteria outlined in the Request for Proposals. Each landfill signed mutual agreements indicating the ability and willingness to provide back-up services for the other facility.

Chapter 6 reinforces the criteria and mechanisms used to determine how and where Mercer County municipal solid waste will be managed under the 2020 Mercer County Municipal Solid Waste Management Plan. It provides justification for the continued implementation of a modified flow control mechanism to the designated facilities, which entered capacity agreements with the County. In addition, it describes the

evaluation process to determine the best approach to address the County's need for by-pass disposal capacity.

Forecast And Fulfillment Of Capacity Assurances

Waste generation is driven in part by population and other demographic influences, A variety of other factors also must be considered. To calculate the volume of Mercer County municipal solid waste that will be disposed over the next 10 years, information from the Pennsylvania State Data Center and the US Census Bureau served as the sources for demographic figures. Data regarding historic waste generation, recycling and disposal was taken from local sources and facility reports submitted to PADEP. National trends in waste generation, recovery, and disposal reported by the USEPA provided a necessary benchmark. Professionally recognized and well documented assumptions combined with these other factors were used to project Mercer County's future capacity needs. Chapter 3 includes the background data and the chart of calculations.

Flow Control of the Waste Stream

Mercer County is similar to the majority of counties in the Commonwealth where the important decision was made to forego owning and operating a public disposal facility. Rather, the County opted to utilize a limited menu of the many operating municipal waste disposal facilities in the region, which includes only those sites that guaranteed capacity to Mercer County via a contractual commitment .

The decision to implement this modified version of flow control was vetted in the previous iterations of the Mercer County Municipal Solid Waste Management Plan. No changes in conditions or circumstances have occurred since those decisions were made.

The Mercer County Solid Waste and Recycling Ordinance adopted in conjunction with 2020 Mercer County Municipal Solid Waste Management Plan continues the flow control policy originally established through County Ordinance No. 6 1991 and more recently by the Transporters Ordinance adopted in 2011. The current ordinance repeals and replaces any former solid waste related ordinances and provides the same necessary legal mechanism that established the authority of the County and/or its agents to implement and enforce the flow control directive for municipal solid waste set forth in the Plan.

Exempt Activities

Mercer County relies on other facilities to fulfill specific disposal requirements. The ordinance clarifies that facilities used for septage and regulated medical waste are not subject to the flow control requirements. The revised ordinance requires transporters to use disposal or processing facilities with regulatory permit approvals to accept the specific exempt wastes.

Temporary Circumstances And Emergencies

At times, emergencies, operating conditions, excess volume, or other reasons may prevent one of the designated landfills from accepting waste on any given day. To ensure proper disposal, the County allows for back-up facilities to accept waste under such circumstances. Back-up facilities were required to submit proposals and were subject to the same selection criteria as primary facilities. Mercer County's flow control ordinance also applies to these back-up facilities.

Disaster Debris Management

In times of catastrophic events, the volume of disaster debris may exceed the average daily permitted volumes of the designated landfills. Under these circumstances, Mercer County's designated landfills would petition PADEP for temporary waivers from their volume constraints.

Recommendations For Site Designation

A summary of the review of the proposals to provide disposal capacity to Mercer County is included in Appendix C. It documents the selection process and choice to designate ____ facilities where Mercer County municipal solid waste can be disposed during the 10-year planning period. Reviewers adhered to the selection criteria and point system outlined in the original solicitation for capacity.

For the 2020 Mercer County Municipal Solid Waste Management Plan, Table 6-1 lists the facilities designated to receive Mercer County municipal solid waste in accordance with the Solid Waste and Recycling Ordinance adopted in conjunction with the Plan.

Other forms of municipal solid waste, septage, and regulated medical waste, must be transported to a facility permitted to accept the specific waste for processing and/or disposal.

Table 6-1 Mercer County Designated Disposal Facilities 2020-2029

<p>Republic Services</p> <ul style="list-style-type: none"> • Carbon-Limestone Landfill
<p>Vogel Holding</p> <ul style="list-style-type: none"> • Seneca Landfill
<p>Waste Management</p> <ul style="list-style-type: none"> • Evergreen Landfill • LakeView Landfill • Northwest Landfill • Valley Landfill

Execution of the Plan

During the planning process, specific objectives were identified and incorporated into a timeline for implementation during the ten-year period encompassed by the Plan. Legal mechanisms were developed or amended to ensure that responsible solid waste management is practiced in Mercer County. Technically, Act 101 assigns the responsibility for the Plan's content and implementation to the Mercer County Board of Commissioners. The provisions of the Act, however, do provide the County with an option to delegate those duties to another representative or organization.

Chapter 7 identifies the agency responsible for all aspects of the Plan's implementation and enforcement. It outlines the associated responsibilities and the personnel necessary to carry-out the mission.



Delegation of Duties

In 2010, an ordinance and an intergovernmental agreement, created and delegated the Lawrence-Mercer County Recycling/Solid Waste Department. (LMCRSWD) with the power and authority to administer and enforce the Mercer County Municipal Solid Waste Management Plan. The proximity of the counties, the similarity in their recycling drop-off programs, a sound working relationship between the Boards of

Commissioners, along with a skilled staff already existing in Lawrence County all contributed to this decision. The result is a successful initiative which benefits both counties.

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

LMCRSWD monitors the disposal capacity agreements and associated reports submitted by each facility. Public education, enforcement and coordination of County sponsored programs are initiated by LMCRSWD staff. Seeking out, obtaining, and administering grant funding from varied sources is a high priority.

Roles and Responsibilities

A full time Director serves as the primary administrator of LMCRSWD. This individual reports to the Boards of Commissioners. The Director is responsible for the staff and oversees the day-to-day services and operations. The Director prepares financial statements, establishes procurement policies, and monitors the receivables process. Outside contractors are engaged to perform a number of services for the Department. It is the duty of the Director to ensure the performance and cooperation of these vendors. The Director, together with input from the Assistant Director, prepares the annual budget.

The Director must regularly communicate with the Commissioners and a variety of related state and federal departments and agencies. The Director ensures that the guidelines and recommendations set forth in the Plan are implemented according to schedule. The Director serves as the official liaison with the PADEP and maintains communications with the Department's Northwest Regional Office. It is important for

the Director to keep abreast of pending legislative initiatives and PADEP policy changes that could affect the County, the municipalities, and local businesses.

Tracking, monitoring, and forecasting the solid waste and recycling activities within the counties falls under the responsibilities of the Assistant Director. This individual oversees the process of securing from businesses and municipalities the data, which is necessary to file the annual report required by the PADEP and the Act 101, Section 904 Performance Grant application.

Community outreach and communication regarding solid waste and recycling issues is an important function of this organization. Program development and technical assistance is another vital service. For the most part, the Director serves as the face of LMCRSWD on all public outreach and awareness related issues. However, the Assistant Director also plays an important role through attendance at community and civic functions. The Assistant Director interacts directly with civic groups, youth organizations, schools, local municipalities, and individual Mercer County residents. In addition to implementing this proactive outreach campaign, the Assistant Director must handle inquiries and the resolution of complaints from outside sources.

The goals of the 2020 Mercer County Municipal Solid Waste Management Plan emphasize deterring and eliminating illegal dumping. Therefore, it is time to strengthen the enforcement program by hiring an individual dedicated to these duties. An Enforcement Officer would play a major role in the identification and prosecution of violators. This position would complement and carry-out the provisions of the proposed solid waste and recycling ordinance.

PROFESSIONAL DEVELOPMENT

A combined strong management team is an essential component to maintaining organizational effectiveness. It is important for the staff to attend and participate in professional development seminars, webinars, and trade association meetings.

Reading and reviewing industry related articles and publications are also useful. Periodically, training should go beyond industry topics and focus on other issues such as leadership, fiscal responsibility, fundraising and strategic planning.

With greater competition for funding and other sources of revenue on the horizon, a staff knowledgeable in industry trends, new technology, and applications positions the County to offer the best mix of services for Mercer County residents and businesses. It also allows the staff to be prepared with the background data required to write and submit strong grant applications and obtain funding.

Public Private Cooperation

Mercer County has widespread availability of private sector municipal solid waste management services. To a minor extent municipalities may periodically haul leaves, yard debris, or items from seasonal clean-ups. Recycling services are available to some degree throughout the County but are more concentrated in populated areas. Local recycling collection programs are a perfect demonstration of how public/private partnerships work. Although the programs are designed and sponsored by the public sector, private contractors hired by either county or municipal governments perform the physical act of servicing residents at the curb, at drop-off locations, or at special collection events. Almost all recyclables collected in the County are processed by private companies. Occasionally volunteer programs do collect materials, but they are ultimately processed by private companies.

County Services

Currently, Mercer County does not employ workers to engage in the physical collection or processing of municipal waste or recyclable materials. The County uses a competitive procurement process to secure private contractors to service County sponsored programs. Staff and volunteers do provide ancillary support at collection events and for illegal dump site clean-ups.

The County's equipment assets are limited to a series of recycling drop-off containers, and containers that are shared for recycling at community events. All of the County's equipment was purchased, at least in part, with funds made possible by Act 101, Section 902 Equipment and Implementation Grants.

Municipal Services

Most municipalities in Mercer County do not employ public works crews to collect and transport municipal solid waste or recyclables. In the Boroughs of Greenville and Grove City, however, public workers do collect leaves, leaf waste and yard debris. The Boroughs each operate an approved composting site where these materials are processed. Processing equipment for the yard waste programs was purchased in part with 902 Grant funds. The City of Farrell uses public workers to collect electronic waste from residents on an as needed basis. A few other municipalities host drop-off collection services by appointment. All of the e-waste is processed by private sector companies.

Future Considerations

Based on current interest and participation in periodic collection events, the Plan includes recommendations for a study to determine the potential to establish a County owned and operated convenience center. The center would serve as a practical outlet for electronic discards, bulky waste items, appliances, and other recyclables not commonly recovered in curbside programs.

The purpose of developing a convenience center is solely to complement existing services and to reduce illegal dumping. The private sector would still play a role in transporting and processing materials collected at the potential site.

Legal Authority

The 2020 Mercer County Municipal Solid Waste Management Plan establishes goals and objectives and a strategy to attain them. To establish the power and authority for the County and the Lawrence-Mercer Counties Recycling/Solid Waste Department to implement and enforce the Plan certain, legal mechanisms are needed. Ordinances serve to define waste management standards for residents, businesses, and service providers. Contracts and other agreements clarify the commitments and expectations between the County and other entities that provide support services or have agreed to partnerships. These legal documents contain valuable guidelines which can prevent and also resolve conflicts and disputes regarding solid waste issues.

Chapter 9 presents the types of implementing documents associated with the 2020 Plan. A brief description of each item is included along with its purpose. The actual documents are provided in separate sections of the Appendices, with the specific location noted below.

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 Ordinance

In 2011, the County adopted the Solid Waste and Recycling Transporters Ordinance to ensure that those collecting and transporting municipal waste and recyclables in Mercer County report their activities. The Ordinance served the purpose of facilitating the County's annual reporting requirements to PADEP by tracking and monitoring the activities of those engaged in handling and transporting recyclables. The ordinance is located in Appendix D.

Ordinance to Enter into an Intergovernmental Agreement

The Intergovernmental Cooperation Act required the counties to pass an ordinance enabling them to execute the agreement to create the Lawrence Mercer Counties Solid Waste/Recycling Department. The ordinance is located in Appendix D.

Intergovernmental 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.

Impact of the Plan's Recommendations and Policies

The 2020 Mercer County Municipal Solid Waste Management Plan includes goals, objectives and recommendations designed with anticipated resources and future expectations in mind. While past efforts were applauded, there was consensus that policy and program revisions could remedy issues like universal access to collection and outlets for materials, prevent illegal dumping, and increase material recovery. Some of these changes will be initiated by County leadership. Others will be launched at the municipal level. Private sector service providers will continue as the primary resource to expand the solid waste and recycling infrastructure.

Notable Recommendations

A review of illegal dumping activities prompted the Committee to suggest the need for universal waste management standards and stronger enforcement.

The contents of those dump sites along with the expense and resources required for special collection events, and the Big Blue Bin program prompted interest in the development of a centralized drop-off point. The Plan includes a recommendation for a feasibility study for a Convenience Center, which would provide supervised collection of select recyclable, bulky waste items, HHW, and address the need to deal with the consequences of the disposal bans created by the Covered Device Recycling Act.

The study will determine the volume of materials expected to be managed at the Convenience Center, an optimal location, the necessary equipment, and the size and conceptual layout of the facility.

Food waste is one of the largest remaining components of the municipal solid waste stream that could be recovered but is still disposed in significant quantities. During the planning process the SWAC was exposed to a wastewater treatment facility that also accepts commercial food waste for processing into energy. The Plan recommends

a feasibility study. The Committee suggested the need for stronger enforcement including a pilot program, which if successful, will establish how the facility can add residential and commercial food waste collection and processing services systematically, beginning with drop-off collection and expanding to a curbside model with public and private sector service participants.

There are few alternatives for the management of construction and demolition waste in Mercer County except disposal. The Plan supports the expansion of deconstruction over demolition and suggests the development of an outlet for deconstruction materials, perhaps at a Convenience Center.

Other recommendations are continuations or enhancements to existing programs.

Stepwise Approach

An implementation schedule recommends a phased approach to anticipated improvements. The programs and policy changes complement and enhance rather than disrupt the current system. A smooth transition is anticipated for all stakeholders.

Access to Shared Resources

The need to secure disposal capacity is not unique to Mercer County or to Pennsylvania. Local jurisdictions throughout the nation share the same requirements for developing municipal solid waste management plans, which include assurances that adequate outlets are available to manage their disposal needs. There was a time when municipal governments satisfied the responsibility for waste disposal by operating a town dump. In Pennsylvania alone there were thousands of open dumps. These were replaced by a fewer number of local sanitary landfills, which operated with some degree of engineered design and regulatory control .

As municipal waste management rules and regulations became more complex and environmentally responsible, the cost of designing, constructing, and operating a disposal site increased exponentially. Rural counties often lacked a sufficient and sustainable volume of waste needed to justify the considerable investment required to meet the stricter operating regulations and design criteria of current state of the art facilities. Many closed their former operations. Many feared the disposal needs of some counties and municipalities were in jeopardy.

An unanticipated result of the new regulatory criteria, however, was that the logistics of municipal waste management would change significantly. Although private sector investors face the same constraints as their public sector counterparts, they opt for fewer but much larger capacity facilities. While this reduces development costs, the facilities are reliant on the economies of scale to cover the total expenditures. Unless they are designed to serve highly concentrated population areas, the intent of the operation is to draw the necessary volumes of waste from a regional waste shed. In extreme circumstances, where a facility is necessary to address the needs of surrounding rural counties, it is often necessary to attract waste from remote counties and other states to maintain a financially sustainable operation.

Because favorable market conditions are dependent on the cooperation of all participants, it is prudent for Mercer County to protect its need for municipal solid waste capacity, without interfering with the needs of other counties. In keeping with the premise of Act 101, it is also advisable to use the resources of the private sector to the greatest extent possible in the development of recycling programs.

The Regional Network

There are no municipal waste disposal facilities operating within Mercer County. Although this could change, to meet its disposal capacity needs, the County is currently reliant on the availability of facilities in other jurisdictions.

Other Pennsylvania counties experience these same circumstances. Therefore, many forms of waste flow naturally through a network of transporters and facilities with no local, state, or national boundaries. Each facility has entered into long term agreements, which share a secured portion of their capacity with one or more counties or businesses.

As part of the process to develop the Mercer County Municipal Solid Waste Management Plan, a variety of facilities made contractual commitments guaranteeing disposal capacity to the County. These facilities are located in the greater Western Pennsylvania and Ohio area.

Mutual Respect for Commitments

The lack of interference by other counties and states in the normal operation of disposal facilities located within their jurisdictions is vital to the disposal needs of Mercer County. Likewise, Mercer County understands and respects that should any facility be approved and permitted by PADEP to operate in the County, it would be necessary for the operation to honor its immediate and long-term contractual obligations with other parties. Therefore, the County will not interfere with the need for facility operators to design, finance, and construct reasonable expansions to meet

these various capacity commitments, whether it is or it is not included in the Mercer County Municipal Solid Waste Management Plan. The County will not interfere with the normal operational and regulatory process involved with such expansions, nor prevent it from generating the necessary profits to support those projects, provided the facility complies with the provisions of the Mercer County Municipal Solid Waste Management Plans.

Fundamentals of Public Engagement

Effective public participation is functional when it leads to better decisions and a locally appropriate plan. Public participation must also be meaningful by providing participants with opportunities to influence the outcome and a sense of ownership for the ultimate plan. One of the benefits of stakeholder engagement is the ability to compare hard data with public perception and local practices. Another is to assess public awareness of issues, to measure the acceptance of new policies and programs and to gauge the willingness to change. The development of the Mercer County Municipal Solid Waste Management Plan relied on input from a broad spectrum of stakeholders with different perspectives on common issues. Although consensus was not attainable on each topic, the recommendations and implementation plan reflect the general comments and views offered throughout the process.

The Solid Waste Advisory Committee

To ensure that the Mercer County Municipal Solid Waste Management Plan is representative of the needs and concerns of all stakeholders, the Board of County Commissioners appointed a committee to participate in the planning process. The appointees to the Solid Waste Advisory Committee (SWAC) are inclusive of all classes of municipal government within the County. Additionally, members represent the waste and recycling industry, civic/environmental organizations, manufacturers, and the County. The make-up of the Mercer County SWAC is consistent with the membership criteria established by Act 101.

Figure 12-1 lists the SWAC members and their affiliations.

Figure 12-1 Mercer County Solid Waste Advisory Committee Members and Affiliations

County Government

Scott Boyd	Mercer County Commissioner
John Logan	Mercer County Fiscal Department
Megan Gahring	County Recycling Coordinator

Municipal Government

Todd Hittle	Hempfield Township (2nd Class Township)
Garth Falkner	Jefferson Township (2nd Class Township)
Carol Budanka	Shenango Township (2nd Class Township)
Bonnie McCartney	Perry Township (2nd Class Township)
Jeremy Coxe	City of Hermitage (City)
Mike Ceci	City of Farrell (City)
Frank Conley	City of Sharon (City)
Vance Oaks	Grove City Borough (Borough)
Jasson Urey	Greenville Borough (Borough)

Waste, Recycling, Composting Industry

Jerry Bowser	Tri-County Industries
Craig Hahlen	Waste Management
Lance Grimes	Shenango Valley Recycling
Tom Darby	Hermitage Water Pollution Control
Chuck Moose	On-farm composting site

Industrial Sector

Matt Ceremuga	Joy Cone
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Civic and Environmental Organizations

Carmen Reichard	Mercer Regional Planning Commission
Ginger Fenton	Penn State Cooperative Extension
Dot Hillman	Mercer County Builders Association
Monica King	Shenango RiverWatchers
Jay Russell	Mercer County Conservation District
Brenda Marino	Midwestern Intermediate Unit IV
Kim DiCintio	Mercer County Regional COG

Committee Activities

SWAC members participated at various levels. Many attended all of the in-person functions, while others simply review and commented on the Plan's content and recommendations. Informational and project status meetings were convened at the County courthouse. In addition, members were invited to locations throughout Mercer County that demonstrated services, processes, or approaches to municipal solid waste management, and other environmental concerns within Mercer County. Exposure to working operations provided an in-depth look at material management issues and offered a sound foundation for discussion amongst the members.

Figure 12-2 shows the schedule of meetings and the topics discussed at each.

For a more detailed record of the discussions, the minutes for each meeting are provided in Appendix G.

Figure 12-2 SWAC Meeting Schedule and Content

Meeting Schedule

October 10, 2018

Introduction to planning process. Review of past recommendations and initiative Report on current state of recycling.

December 14, 2018

Discussion of recycling markets. Update on the Big Blue Bin program. Relevant issues from PADEP SWAC and regional roundtable. Tour of Tri-County Industries transfer Station

April 16, 2019

Introduction of County Education and Fact Sheets. Review of current local demographics and their impact. Tour of Hermitage Wastewater Treatment and Waste to Energy Facility.

August 6, 2019

Presentation of 2018 Recycling Data. Discussion of special handling materials – HHW, E-Waste and Regulated Medical Waste. Special handling material event data and trends. Tour of Joy Cone Company's new cookie facility.

December 12, 2019

Review of disposal trends and capacity requirements. Department updates – KPB Litter Summit, DEP Food Recovery Grant, Hard to Recycle Locations for 2020.

July 22, 2020

Review of Request for Capacity criteria and process. Review of proposed Solid Waste Ordinance and impact on illegal dumping enforcement provisions. Tour of Conservation District Munnell Run Farm.

September 22, 2020

Update on status of Capacity proposals and review. Final in person comments on draft chapters.

APPENDIX A
SOLICITATION FOR CAPACITY



REQUESTS FOR PROPOSALS FOR MUNICIPAL SOLID WASTE DISPOSAL/ PROCESSING CAPACITY AND SUPPORT OF MATERIAL MANAGEMENT OBJECTIVES

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 through its planning process 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. In addition, the planning process identified certain goals and objectives to further sustainable material management in the County. The Mercer County Board of Commissioners is hereby soliciting proposals for disposal capacity for County generated MSW and support mechanisms for the Material Management goals of the MSW Plan from 2020 to 2029. Text of the advertisement for this RFP can be obtained from the Mercer County website, (<https://www.mcc.co.mercer.pa.us/rfp> . A copy of the RFP can be obtained from project consultant Michele Nestor, President Nestor Resources, Valencia PA 16059. michele@nestorresources.com

SOLICITATION FOR MUNICIPAL SOLID WASTE DISPOSAL SERVICES

The Mercer County Board of Commissioners will receive sealed proposals until 11:00 a.m., prevailing Time on Thursday, May 7, 2020. 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 two (2) original printed copies of the Proposal and one electronic formatted copy on a flash drive to Mercer Controller's Office 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 Controller's Office, 2 Mercer County Courthouse, Mercer, PA 16137. 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.





Issued by the
Lawrence-Mercer Counties Recycling/Solid Waste Department
on behalf of the
Mercer County Board of Commissioners

Request for Proposals

Municipal Solid Waste Disposal And Processing Capacity and
Mechanisms To Support And Complement Materials
Management Planning Objectives

2020-2029

AMENDED APRIL 17

Due date for proposal submissions extended to SEPTEMBER 3, 2020

Lawrence-Mercer Counties Recycling/Solid Waste Department

Jerry Zona, Director

Megan Gahring, Assistant Director

430 Court Street
New Castle, PA

Phone: (724) 658-6925

Email: recycling@co.lawrence.pa.us

Project Consultant**Primary Contact for Proposal Related Questions**

Michele Nestor

Nestor Resources, Inc.

Valencia, PA 16059

Phone: (724) 898-3489

Mobile: (724) 612-7675

Email: michele@nestorresources.com

Introduction

The Mercer County Board of Commissioners is accepting proposals for the disposal and processing of Municipal Waste generated within the County and for mechanisms to support and complement the Materials Management Objectives of the Mercer County Municipal Solid Waste Management Plan. Through this Request for Proposal, the County will select the disposal and processing methods and facilities to ensure disposal and processing capacity in accordance with the provisions of Act 101, the Pennsylvania Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988. Act 101 mandates that each County must have secured disposal and processing capacity for the Municipal Waste generated within its boundary for a period of ten years. Those facilities entering into agreement with the County for secured capacity will be designated in the Municipal Solid Waste Management Plan of Mercer County.

This document, which comprises the request for proposal, includes five sections:

1. Procurement Approach and Purpose
2. Evaluation Criteria
3. History and Background
4. Contract Provisions
5. Required Forms for Submission of Proposal

Sealed Proposals in response to this RFP are due on Thursday, September 3 , 2020, by 11:00 AM. To qualify for consideration, the Proposer must submit two (2) hard copies, each executed in blue ink and labeled “original,” and one (1) “copy” formatted as MS Word or pdf files each on separate electronic media Flash Drives.

The outside of each sealed envelope must be marked “Proposal-Disposal Capacity.”

SUBMIT THE PRINTED MEDIA TO:

**Mercer County
Controller Amundsen
2 Mercer County Courthouse,
Mercer, PA 16137**

The County of Mercer (“County”) intends to review and evaluate all proposals to determine which contractor(s) submitting proposals are deemed to serve the best interests of the County in meeting its needs for disposal and processing capacity in accordance with Act 101 and which support and complement the Materials Management objectives of the Mercer County Municipal Waste Management Plan. The County will consider only those facilities which have submitted qualified proposals. After the evaluation of the proposals is complete and based on the recommendations, which result from it, the County will execute the disposal and processing contract(s) with the selected contractor(s).

A contractor responding to this RFP shall be prepared to enter into a contract with the County to provide up to ten (10) years disposal and processing capacity for Municipal Waste generated within the County, to perform disposal and processing services and implement the proposed services and support for County implemented programs for Materials Management in accordance with the conditions set forth in Section 4 Contract Provisions, of this RFP. The contractor shall operate a fully permitted disposal and processing facility which meets at a minimum the federal guidelines of Title 40--Protection of Environment CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY PART 257--CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES and PART 258--CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS as well as any design or operating criteria exceeding these standards required by the state and local governments in which the facility is located.

Under all alternatives and provisions described herein, the collection and transportation of waste is handled by municipal or private collection firms and is not a consideration in this proposal.

Section 1

Procurement Approach

Purpose of Request for Proposals

The County intends to comply with the specifications set forth in Act 101, the Pennsylvania Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988, by securing sufficient disposal and processing capacity, which is both economically feasible and environmentally sound, for the Municipal Waste generated within the County's borders for a period of ten years.

County Designation of Facilities and Execution of Contracts

If the proposal is accepted by the County, one of the originals will be returned to the Contractor once it is executed by the County. The County anticipates that the proposals will be reviewed, accepted and contracts executed on or about May 1, 2020. The contract term will commence immediately upon execution by the County.

Pennsylvania Right-to-Know Law

If supporting information contained in the proposal is considered confidential, that information should be submitted under separate cover and clearly labeled "CONFIDENTIAL INFORMATION" on the cover along with the applicable law and/or regulation that supports the treatment of such information as confidential. The Proposal is subject to the Pennsylvania Right-to-Know Law ("RTKL") and therefore the County can make no guarantee that any material will remain confidential. The provisions set forth in the proposed Municipal Waste Disposal Service Contract attached hereto shall apply to this Proposal.

Requirements for Submitting Proposals

To be considered as a response qualified for review, proposals must meet the requirements set forth in this Section.

Proposals must be received by the date and time specified in the Introduction. Proposals received after the specified date and time will not be considered as a response qualified for review and will be returned unopened. The County reserves the right to reject any or all proposals, to request additional information or clarifications, 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.

Packages containing the proposals must be sealed and clearly labeled to show the name and address of the Proposer, the statement "Proposal-Disposal Capacity."

Proposals must be submitted in both print and electronic digital formats.

- Two printed and separately bound hard copies must be clearly marked "ORIGINAL" and contain the forms, contract and certifications as indicated and be executed with original signatures in blue ink.
- One (1) Flash Drive with each containing a copy of the proposal formatted as an MS Word or pdf file. Each Flash drive must contain all of the required information, forms, contract and certifications. The electronic file must be saved to clearly identify the facility by name.
- The printed and electronic copies must be sealed and addressed to: *Mercer County Controller Amundsen, 2 Mercer County Courthouse, Mercer, PA 16137*
- *Proposals must be received September 3, 2020 by 11:00 a.m.*

For Contractors proposing multiple facilities

- **Separate Hard Copies Required for Each Proposed Facility** the Contractor must submit two printed and separately bound hard copies clearly marked "ORIGINAL" which contain the forms, contract and certifications as indicated and be executed with original signatures in blue ink.
- **Shared Electronic Media for All Proposed Facilities** One (1) Flash Drive containing a copy of the proposal for each facility formatted as an MS Word or pdf file. Each Flash Drive must contain all of the required information, forms, contract and certifications for each facility. An electronic file must be created for each facility, must be saved to clearly identify the facility by name. However the Flash Drive may contain the files for all of the facilities submitted by the contractor.

Emergency Back-up Disposal and Processing

Contractors are required to identify a back-up facility(ies) in the event the proposed site exceeds its daily volume and/or for emergency closures.

- **Owner/Operated Back-up Facilities.** Intercompany facilities may not be identified simply by name to serve as back-ups for one another. Each facility must also submit a complete response to this RFP along with a signed contract.

- **Third Party Back-up Facilities.** A Contractor may fulfill the requirement for an emergency back-up facility by providing an agreement with a third-party facility that has submitted a proposal package.

**CAREFULLY READ THE DESCRIPTIONS AND INSTRUCTIONS FOR EACH OF THE SECTIONS LISTED.
AVOID SUBMITTING MORE INFORMATION AND DOCUMENTATION THAN THE RFP REQUESTS OR REQUIRES.**

PLEASE Expedite The Submission/Review Process and Save Yourself Time And Expense By Adhering To The Format.

Organization of the Proposal

The proposal must consist of the following information organized into sections.

Each section must be in the order shown below, separated by clearly labeled tabs/dividers:

- Cover Letter
- Statement of Qualifications
- Experience and Qualifications of Managers and Supervisors
- Compliance History
- Certificate of Permit
- Facility Design and Operational Plan
- Permitted Volumes in Tons, Operating Hours and Performance Guarantee
- Current Available Permitted Capacity in Cubic Yards
- Financial Assurances
- Completed and Signed Contract
- Cost of Processing and Disposal
- Reserved Capacity
- Proposed Mechanisms to Support and Complement Materials Management
- Representations and Certifications
- Contractor Information

Cover Letter and Signature Requirements

A cover letter, which is addressed to the County of Mercer must accompany each proposal. The cover letter shall commit the contractor, if selected, to carry out all of the provisions of the proposal. It shall state that all information submitted and represented both in the proposal and in support of the proposal is accurate and factual. The letter shall designate by name and title the key technical and business representatives who, if the contractor is selected, will negotiate with the County.

An officer of the organization submitting the proposal empowered and authorized to sign such documents shall sign the cover letter. The same individual signing the cover letter shall sign the disposal and processing capacity contract and all forms in the proposal requiring signatures. Two printed copies of the proposal document must be clearly marked as the original and contain the original forms, the disposal and processing capacity contract and cover letter. **The original forms, the disposal and processing capacity contract, and the cover letter shall be submitted as printed hard copy and signed in "BLUE" ink.**

A copy shall be submitted as electronic media, (Flash Drive) in MS Word or pdf format with each file saved to include and clearly identify the name of the facility.

Statement of Organization's Qualifications

The organization submitting the proposal shall provide sufficient information to demonstrate and prove experience, management, and resources required to provide consistent, reliable, and legal disposal and processing facilities to Mercer County.

- A list of the **counties** currently contracting with the facility for disposal and processing capacity shall be included.
- A list of the host municipalities with which the facility has secured host agreements shall be included.
- The organization's experience in the successful operation of disposal and processing facilities shall be documented. **This section should be limited to 4 pages of text or printed material.**

Experience of Managers and Supervisors

Experience and qualifications of the management team directly responsible for the day-to-day operation of the facility proposed to accept waste shall be documented.

- This section should include a list of the site's management personnel and for each a detailed description of their industry experience, training, and responsibilities. (GM, Ops., Technical, Financial)

Facility Compliance History

A compliance history shall be provided for the **facility** submitting the proposal, which covers the most recent ten-year period, or if in operation less than ten years, for the length of its operating term. The history must be inclusive of Federal, State and Local Environmental Protection Acts and Regulations including but not limited to those concerning Solid Waste Management, Air Quality, Water Quality, Water Supply, Surface Mining, Oil and Gas Management, Dam Safety and Encroachment, Conservation and Reclamation.

The compliance history must list any permit or license denial, suspensions, or revocations; any notices of violations; any administrative orders, consent agreements or adjudications issued, or civil penalties assessed by Federal State or Local Regulatory Agencies. The dates and resolutions for each item listed must be included. The organization submitting the proposal must describe any summary, misdemeanor, or felony convictions and pleas of guilty and no contest obtained against the organization both within the Commonwealth of Pennsylvania and also outside of its borders. The description shall include the date, location nature, and disposition of each stated action.

Organizations may submit a copy of **PADEP Form HWC, Compliance History, (not Form C-1)** in lieu of a written description of the compliance history. Facilities located in other states that require completion of a similar document may submit it in lieu of a written description provided that document includes all of the information required in this section.

Certificate of Permit

A copy of the approved current operating permit, **with the current pending expiration date clearly shown**, shall be submitted for the organization's facility proposing to accept waste. Copies of approvals for any addendums or revisions approved since its issuance by the State Regulatory Agency with direct oversight for the facilities operation.

Facility Design and Operational Plan

The organization submitting the proposal shall provide a short description of the disposal and processing facility it intends to utilize in response to this RFP. **Do not include the entire narrative from the facility's permit. Pennsylvania Facilities should not include the full Form 14 from their permit application. Please provide only short excerpts to demonstrate each point.**

Responses should be clear and informative without being encyclopedic. **Please submit no more than four pages of narrative** to describe the design, its components, and the operations plan.

All facilities must include in their descriptions:

A paragraph or two describing the general procedural mechanism for each item listed below. **Do not submit** the complete description from the facility's permit.

- ✓ the name and location of the facility (including the names of the municipalities in which it is physically located),
- ✓ a brief outline of its operating plan for the life of the facility including post closure care,
- ✓ a brief description of the daily record keeping procedures and measurement of waste,
- ✓ a brief outline of its waste acceptance and monitoring program, and also
- ✓ its environmental emergency response plan.

Requirements unique to the type of facility: (no more than two–three paragraphs each item)

A **LANDFILL** shall submit a brief description of:

- ✓ its liner system,
- ✓ methane recovery and utilization and
- ✓ method of leachate control, monitoring, and treatment, , (on-site/off-site).

OTHER TYPES of disposal and processing facilities shall include

- ✓ a detailed description of the technology and equipment utilized to process Municipal Waste,
- ✓ the byproducts of the process and
- ✓ the methods of handling the byproducts.

Design drawings are not required and should not be included in the proposal, but the County reserves the right to request such information during the review and/or selection process.

Additional Onsite Features and Services

A **FACILITY** shall submit a brief description of other services and feature that could benefit the County's transporters, residents, or municipalities:

- ✓ leaf waste or yard waste management/composting
- ✓ C&D processing

- ✓ user friendly tipping areas
- ✓ allowable salvaging practices
- ✓ recycling collection points
- ✓ beneficial uses
- ✓ other

Permitted Volumes and Operating Hours and Performance Guarantee

In this section the following information shall be provided:

- ✓ The current permitted average and maximum daily, yearly, and life-of-permit tonnage limits shall be listed for the organization's disposal and processing facility utilized in response to this RFP.
- ✓ The hours that facility is permitted to accept waste shall be listed.
- ✓ an outline of the preferred procedures for accepting an excessive amount of waste resulting from a natural disaster or other emergency in the County at the proposed facility.
- ✓ In addition, a contingency plan for accepting waste outside of the normal operating hours or during emergency or temporary closure of the disposal and processing facility.
- ✓ The method by which uninterrupted disposal and processing service will be provided to Mercer County in the event that an emergency or other uncontrollable circumstance precludes the use of the facility.

BACK UP FACILITIES

Back-up facilities proposed for the purpose of emergency or temporary service must also submit a complete response to this RFP along with a signed contract. If applicable, the Contractor may clearly indicate that its intent is for the facility to serve solely in a back-up capacity.

If not submitting a multi-facility proposal, the Contractor may fulfill the requirement for an emergency back-up facility by providing an agreement with a third-party facility that has submitted a proposal package.

Available Capacity (Airspace or Burner Capacity)

The facility proposing to accept waste must prove and document both its most current annual and also its most current quarterly airspace usage and available capacity in cubic yards based on its existing permitted status.

- ✓ **Pennsylvania landfills should submit Page 1 of the PADEP Annual Operations Report, which requires the facility to calculate the available airspace in cubic yards.**
- ✓ **Resource Recovery Facilities should demonstrate the daily throughput capacity and burner design.**

Should the facility's current available permitted capacity be less than ten years, the organization submitting the proposal shall include narrative detailing provisions for providing disposal and processing capacity beyond the fixed terms of the permit. Options for expanding capacity shall be consistent with the current Federal, State and Local laws and regulations.

Financial Assurances

The organization must submit in the proposal the following proof of sufficient financial responsibility for the operation of the facility:

- ✓ a certificate of pollution liability and public liability insurance **with the County listed as additional insured;** and
- ✓ the closure/post closure bonding requirements /worksheets of the facility with the type of security, dollar amount, terms, conditions, and limits stated.

The following information would be provided later, and only upon request:

Upon request, the organization must also demonstrate sufficient financial resources to carry out the responsibilities as outlined in this RFP and to back up the contractual obligations. Proof of financial resources must be provided upon request either at the time the contractor is selected or at the time that the disposal and processing capacity contract is executed.

Proof of sufficient financial resources will be in the form of complete audited financial statements for the most recent three years of continuing operation. If the organization submitting the proposal is a joint venture, subsidiary, or partnership, the financial information must be supplied for the parent company and the parent company must state its willingness to guarantee such joint venture, subsidiary, or partnership throughout the term of the disposal and processing services contract.

Mechanisms To Support And Complement Materials Management Planning Objectives

In this section the organization will demonstrate its resources available to assist the County in attaining its Materials Management objectives.

Of specific interest to the County is support with equipment, transport and disposal for the illegal dump clean-ups conducted by various non-profit organizations in the County. Another priority is removing Household Hazardous Waste, Electronic Waste and other Hard to Recycle materials from the municipal waste stream. The Plan has a goal of expanding drop-off and curbside recycling through municipal contracted services and ensuring curbside collection is available even in subscription areas. A description of current or desirable programs is included but the County welcomes creative and innovative solutions including those to capture other materials.

In kind services, event sponsorships, and donations are a few examples of acceptable support, however the County welcomes other creative strategies. Proposals that include reasonable user fees, public/private partnerships, or cost sharing will be considered if within the feasibility of County or municipal budgets. For County sponsored events, organizations will receive event branding, name recognition, and high visibility on all related promotional materials. For Contractor provided services and programs the County will promote public awareness.

Currently, a series of County sponsored contracted collection events are conducted during the year for HHW, Ewaste, tires, and other items. The Plan proposes to centralize these collection efforts at a permanent location in lieu of such events. Although the County uses a charge model for most of the items, it still incurs costs to host and promote collection.

Recovery of clean glass for recycling is another important issue identified during the planning process. Since glass is now generally excluded from most single stream curbside and drop-off programs, separate collections are necessary to divert it from disposal. Currently there are no County sponsored glass collection events.

The County implements a drop-off recycling collection program with sites strategically located throughout the County. The program has operated for approximately two decades. The planning process revealed that unmanned drop-off collection serves as an enabler to those avoiding the cost of disposal. Expanding curbside collection and moving away from drop-off service was identified as an important

Contamination is difficult to control in any collection program. Proposals should address education, public awareness and operational methods to reduce contamination in their programs.

Textile recycling represents an untapped opportunity to increase material recovery in Mercer County. Collection events and scheduled curbside programs are growing in popularity in other areas of Pennsylvania. Similar services or events would complement the Materials Management objectives of the County's Plan.

The proposal should describe what role the organization would assume, the resources it would dedicate to directly implement a program(s) or services to address these objectives or how it would otherwise support the County's ability to provide such services. Details regarding how a program would be promoted, public outreach and education, collection methods, number/frequency of events/collections, location(s), projected financials and estimated value to the County. Plans to ensure access in typically underserved areas of the County will be favored.

Comprehensive approaches to support these Materials Management goals and objectives are preferred. Proposals that offer well planned strategies, valuable resources and multiple solutions will score higher than others. Effectiveness of the proposal in increasing clean-up efforts and improving material recovery/recycling performance will result in higher rankings in the review. To ensure countywide services, the County reserves the right to award Contractor proposals that may mirror programs or services suggested in other proposals. Contractor sponsored programs and services are at the sole risk of the Contractor. Exclusivity, participation levels, volumes, and revenue are neither guaranteed nor implied.

Signed Contract

The organization submitting the proposal shall complete and submit the signed Contract guaranteeing disposal and processing capacity. The same person authorized to submit the proposal shall sign the contract **in blue ink**.

Contract Form A-Cost of Processing and Disposal

The organization submitting the proposal shall submit a Form A as provided in the Contract Agreement. The same individual signing the cover letter shall sign the completed form, which must be included with the signed contract with the proposal. The method of price adjustment, if any, over the contract period must be explained and demonstrated with the Form. The tipping fee must include any and all Act 101 or host municipality fees or surcharges, which should also be outlined and described.

Contract Form B- Reserved Capacity

The organization submitting the proposal shall submit a Form B as provided in the Contract Agreement. The same individual signing the cover letter shall sign the completed form, which must

be included with the signed contract with the proposal. The capacity reserved shall be specified in tons, and percentage on an annual basis and by tons on a daily basis. The number of operating days each year the facility is available to accept waste must be specified.

Contract Form C- Mechanisms for Materials Management

The organization submitting the proposal shall submit for each proposed program, service, or other method of support a Form C as provided in the Contract Agreement. The same individual signing the cover letter shall sign the completed form, which must be included with the signed contract with the proposal. The Form C will serve as a cover sheet for a detailed narrative of the proposed program, service, or other method of support provided on no more than 3 additional pages per form. Each proposed mechanism must include a detailed description of the conceptual program, service, or other support. It will state materials accepted in the program, collection methods, communication and outreach methods, applicable fees, if any, features and benefits, and how it will provide countywide service.

Proposals for sponsorships of specific County operated programs or direct monetary contributions for general programming shall specify a specific lump sum or how the dollar amount will be calculated and the frequency it will be distributed.

Additionally, the Contractor shall indicate if the proposal declines to offer any mechanisms.

Additional Required Forms

Representations and Certifications Form

The organization submitting the proposal shall submit the Representations and Certifications Form as provided in this RFP. The same individual signing the cover letter shall sign the completed form, which must be included with the proposal.

Contractor Information Form

The organization submitting the proposal shall submit a Contractor Information Form as provided in this RFP. The same individual signing the cover letter shall sign the completed form, which must be included with the proposal.

Section 2

Evaluation Criteria and Points System

The County will utilize the following criteria in evaluating and ranking proposals submitted in response to this RFP. There is no significance or correlation to the order in which the items are listed however the available point value and thus importance each has in the selection criteria is noted. Items that are basic requirements for permit approval and to retain that permit status have fewer available points than those items where the Contractor has direct control and influence of the variable.

The review panel will include the project consultant, the Director and Assistant Director of the Solid Waste/Recycling Department. The preliminary results of the review will be shared with the SWAC and County Commissioners for added input and consensus. Successful proposals must achieve a minimum of 94 points of a possible 115 points.

Completeness and Adherence to Submission Guidelines- 17 available points

Contractors will be evaluated on the quality, content, and organization of the proposal in keeping with the submission guidelines and instructions included in the Request for Proposals. Submissions that are complete and succinctly address the requested information will rank higher than those that require added investigation and/or include superfluous attachments and overdocumentation.

Financial Stability – 5 available points

Contractors will be evaluated on the basis of their overall financial strength and credit worthiness as well as their public and environmental liability protection as an indication of their ability to establish and maintain a financially sound disposal and processing system. Financial assurances for closer and post closure care are important.

Regulatory Compliance – 8 available points

Contractors will be evaluated on their overall compliance history with attention given toward severity of violations, consistency of violations and most importantly, the demonstrated resolution and disposition of any such incidents.

Operating Permit Status and Capacity - 5 available points

Contractors will be evaluated on 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 as an indication of its

ability to provide adequate disposal and processing service for the needs outlined by the County in this RFP. **Facilities without a currently approved permit should not submit a proposal. If and when a permit is issued, those facilities may petition the County at that time for inclusion in the Plan.**

Technical Design and Operational Plan – 13 available points

Contractors will be evaluated on the effectiveness of the facility's design and overall operation to provide a sound and reliable environmental solution to the County's disposal and processing needs as well as its ability to meet Federal, State and Local regulatory standards for municipal solid waste management. Issues such as leachate collection and treatment, methane recovery and innovative utilization, ash management, ground water monitoring systems, radiation monitoring, waste acceptance plans.

Additional On-site Services – 7 available points

Contractors should include, yard waste composting, and beneficial use programs are considered important.

Solid Waste Management Experience. – 9 available points

Contractors will be evaluated on their demonstrated management experience in the successful operation of the proposed disposal and processing technology or process and their demonstrated successful performance in providing disposal and processing services through other county and municipal contractual.

Minimum and Maximum Waste Volume Expectation - 15 available points

Contractors will be evaluated on their ability 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 along with no minimum guarantees of waste required from the County. Facilities need not commit to 100% of the County's capacity needs. However, the facilities must be capable of providing the capacity which they propose. Confirmed back-up capacity will factor into the evaluation of this section. "Put or Pay" (as defined below) contract requirements will be objectionable to the County as they are viewed as providing disincentives to recycling.

Tipping Fees and Annual Costs - 19 available points

Contractors will be evaluated based on their compliance with providing a maximum cost charged per ton for the disposal and processing service including any and all fees and surcharges resulting from

Act 101, host municipality agreements or other federal or state statutes, and local ordinances and resolutions. The maximum cost per ton may not exceed the facility's published gate rates.

Time and distance factors will be applied to evaluate pricing more fairly.

The total annual cost to the County, if any, to construct, operate or otherwise invest in a proposed processing and disposal facility must be provided in detail and will also be a critical part of the evaluation.

Mechanisms To Support And Complement Materials Management Planning Objectives - 25 available points

Contractors will be evaluated on the quality of the programs, services or other offerings proposed and how they complement the objectives of the Mercer County Municipal Waste Management Plan. Feasibility of implementation and effectiveness in material recovery while serving the greatest portion of the County's population will be considered. Lowest cost to the County, municipalities and users, as well as the overall financial and environmental value of the proposed programs, services or other offerings will be factored into the evaluation.

Based upon these criteria, the contractor(s) will be selected. The County reserves the right to enter into agreements with any or all of the parties that submitted complete responses on the date and time required by the RFP and met the minimum 94-point criteria.

Conditions or constraints outlined in the proposals could affect the number of designated facilities selected for the Plan

Section 3

Mercer County Background Information

Location and General Characteristics

Mercer County is located in Western Pennsylvania and is situated along the eastern border of Ohio near Youngstown. The major population center is in the Shenango Valley, which is home to the cities of Farrell, Sharon, and Hermitage. The junction of Interstate 80 and Interstate 79 is located in the County. Other major highways include State Routes 62, 19 and 18.

Collection and Disposal Network

Numerous municipal contracts exist for waste collection services in Mercer County. However, private subscription is still very prevalent in the outlying rural areas. Services are offered by a limited number of private sector haulers. Numerous contractors and businesses are also known to have Act 90 Waste Transporter Authorization to collect and transport municipal waste. A Countywide recycling collection system is operated by Mercer County. Recycling also is provided curbside in select areas.

Current Processing And Disposal Practices

The Mercer County Municipal Solid Waste Management Plan utilizes a modified form of flow control. In accordance with the provisions of Act 101, the County entered into processing and disposal capacity agreements with a number of qualified processing and disposal facilities. Disposal is limited to those sites designated in the Plan; however, local haulers, businesses, and municipalities may use one or more of the facilities. The current disposal capacity contracts are due to expire beginning in 2020

Proximity and business relationships affect the actual flow of waste more than any ordinance. A large portion of Mercer County's municipal waste is currently disposed at Seneca Landfill located in Butler County. Both LakeView Landfill (Erie County) and Northwest Sanitary Landfill (Butler County) also receives notable quantities. No guarantees, or put or pay provisions, were made by Mercer County for minimum waste volumes to be delivered for processing and disposal as part of any of the existing agreements. It is anticipated that on or around June 1, 2020, new contracts will be executed with qualified facilities, based on the content of this RFP, for a minimum term of ten years.

Projected Landfill Capacity Requirements

This section presents the estimated future disposal capacity required for Mercer County. It is based on current reported disposal quantities with some adjustments made to correct for suspected reporting errors. The projections allow for possible future changes in the rate of MSW generated per capita, and projected changes in population.

Population. The Pennsylvania State Data Center at the Pennsylvania State University has produced State and county population projections for the Commonwealth of Pennsylvania. Presented below are county totals from the 2010 Census and projections for 2010 to 2040. The Center also publishes population estimates following these projections. Table 2 shows the most recent population estimates for Mercer County.

Both the 2014 and 2018 population estimates showed decreases rather than the projected growth shown in Table 1. Interestingly, the estimated losses from 2010 -2014 and 2010-2018 closely resemble the percentages of the projected growth except they are negative rather than positive. It makes one wonder if the projected growth was meant to be a loss originally.

Table 1. Mercer County Population Projections: 2010-2040

County	July 1, 2010 Estimate	July 1, 2020 Projection	July 1, 2030 Projection	July 1, 2040 Projection	Percent Change 2010- 2020	Percent Change 2010- 2030	Percent Change 2010- 2040
Pennsylvania	12,711,308	13,230,170	13,759,594	14,132,588	4.10%	8.20%	11.20%
Mercer	116,541	118,420	121,313	122,884	1.60%	4.10%	5.40%

Table 2. Mercer County Population Estimates: 2010-2018

County	July 1, 2010 Estimate	July 1, 2014 Estimates	July 1, 2018 Estimates	Percent Change 2010- 2014	Percent Change 2014- 2018	Percent Change 2010- 2018
Mercer	116,541	114,884	110,683	-1.42%	-3.66%	-5.03%

Current Reported Disposal of MSW. Facility destination reports for waste reported as originating in Mercer County indicate highly inflated results from what would be expected based on the demographics and shrinking population of the County. When transfer facilities

are part of the overall regional waste transportation system, it is common for waste origins to be misidentified as the location of the transfer station when loads arrive at the landfill. The transfer station located in the County receives waste from numerous counties in Pennsylvania and also from Ohio.

Estimated Future Generation Rate for MSW. To prevent overestimating capacity needs, the County relied on contemporary USEPA waste generation and disposal estimates for MSW and adjusted population estimates from the Pennsylvania State Data Center to calculate its projected disposal quantities. For Sewage Sludge and Construction & Demolition that are not managed through a transfer station a disposal rate was assumed from 2018 reported data and population estimates.

The USEPA reports on national MSW generation and disposal rates. In recent years, the generation rate per capita has been about 0.85 tons/person/year with little variation. The discard rate has also been relatively constant at about 0.52 tons/person/year. Thus, for projection purposes, it was assumed that per capita generation rates will remain unchanged.

Table 3 presents projected disposal capacity requirements for the years 2018 through 2030. The figures are based on a constant per capita generation rate with adjustments due to projected population changes.

Table 3. Projected Landfill Capacity Requirements Mercer County 2018 through 2030

Year	Tons per Year					Total Projected Capacity
	Estimated Population	MSW	Sewage Sludge	Construction & Demolition		
2018	110,683	57,555	1,796	2,825		62,177
2019	109,952	57,175	1,759	2,749		61,683
2020	109,226	56,798	1,748	2,731		61,276
2021	108,505	56,423	1,736	2,713		60,871
2022	107,789	56,050	1,725	2,695		60,470
2023	107,077	55,680	1,713	2,677		60,070
2024	106,370	55,312	1,702	2,659		59,674
2024	105,667	54,947	1,691	2,642		59,279
2026	104,970	54,584	1,680	2,624		58,888
2027	104,277	54,224	1,668	2,607		58,499
2028	103,589	53,866	1,657	2,590		58,113
2029	102,905	53,511	1,646	2,573		57,730
2030	102,225	53,157	1,636	2,556		57,348

Section 4

CAPACITY AGREEMENT

The following Contract/Agreement shall be executed between the County and the Contractor. The contract signed in BLUE ink must be included in the Contractor's two ORIGINAL proposals with reproductions in the electronically formatted copy. The contract shall become effective on the date the agreement is signed by the Mercer County Board of Commissioners

MUNICIPAL WASTE PROCESSING AND DISPOSAL SERVICE CONTRACT

THIS MUNICIPAL WASTE PROCESSING AND DISPOSAL SERVICE CONTRACT (hereinafter referred to as the "Contract") entered by and between THE COUNTY OF MERCER, Mercer, Pennsylvania, hereinafter jointly referred to as the "County" AND

(Name of Facility/Parent Company)

hereinafter referred to as the "Contractor" whose permitted processing and disposal facility Permit No. _____ issued by _____ is located in _____ (Municipality)(ies), _____ County, _____ State.

WITNESSETH:

WHEREAS, the County, acting through the Board of Commissioners has 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 2001 and 2010, requires that all Municipal Waste generated within Mercer County must be disposed only at a Municipal Waste processing and 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, 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 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 Materials Management objectives 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, and pursuant to the parties' intent to be legally bound under the Uniform Written Obligations Act, 33 Pa.C.S. § 6, the undersigned hereby agrees as follows:

I. 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, or Resource Recovery Facility in accordance with its Permit for a Solid Waste Processing and Disposal Facility, which was issued by the Pennsylvania Department of Environmental Protection ("DEP") or the equivalent regulatory agency in the state where the facility is located 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 Facility'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 Processing and Disposal Service Contract, between the County and the Contractor.

Contractor-The Facility and Parent Company identified as such on the first page of this contract or any permitted successors, assigns, or affiliates.

County -The County of Mercer, Pennsylvania, acting by and through the Mercer County Board of 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.

Facility—Land, structures and other appurtenances or improvements where municipal waste processing and disposal is approved and permitted to occur under Federal and state law. A Facility includes a landfill, a resource recovery facility, a waste-to-energy facility, a digester and/or other municipal solid waste processing and disposal technologies operating under the provisions of a permit approved and issued by the Pennsylvania Department of Environmental Protection or the state regulatory agency in which the operation is located.

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 slaughterhouses.

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 identified on the first page of this contract.

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

Materials Management Support – Services , programs, or financial assistance that promote the recovery of specific materials from the municipal solid waste stream to further the goals and objectives of the Mercer County Municipal Solid Waste Management Plan. Materials Management Support includes Contractor operated services and programs as well as financial aid and in-kind support donated to the County by the Contractor

Mercer County- a fifth class county located in the Commonwealth of Pennsylvania

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 Request for Proposals for Municipal Waste Processing and Disposal Services that was submitted by Contractor to the County.

“Put or Pay” - A requirement to guarantee delivery of predetermined quantities of waste to a facility which also requires payment to the facility regardless of whether or not the waste was delivered for processing and disposal.

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 composting 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 processing and disposal facility 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 Processing and Disposal Site

In consideration of Operator's Covenants and this Agreement, the County hereby agrees to include operator's Facility 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 and the contractor shall begin providing Municipal Waste processing and disposal, service for the County under the terms and conditions of this Contract on the date the Contract is duly executed by the Board of County Commissioners.

3. Term of contract

The 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 Permit for the Facility (or the equivalent regulatory agency in state which the facility is located) or (b) Ten (10) years, or (c) terminated in writing by consent of both parties.

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 and 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 any remedy available to the County as provided by law.

6. Penalties and Actual Damages

A. It is hereby understood and mutually agreed by and between the Contractor and the County that the Municipal Waste processing and 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.

1. A Contractor that operates, or whose parent company operates, a transfer station that receives Mercer County municipal waste for transport to one of the designated facilities shall also submit a report from the transfer station in accordance with Section IV.

C. If the Contractor neglects, fails or refuses to provide the Municipal Waste processing and 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 and 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 actual damages for such breach of Contract for each and every calendar day that such service is disrupted or terminated.

D. The amount of actual damages shall be equal to any additional total waste processing and disposal cost (i.e., any processing and disposal cost in excess of the amount that haulers normally would have paid for processing and disposal of the same amount of waste at the Contractors' Facility 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' Facility) if any, that the haulers have incurred for transportation and processing 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 actual 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 actual 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.

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). 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 Contract to guarantee the delivery to Contractor's Facility of any minimum quantities of Municipal Waste or payment for any services provided by Contractor to any hauler.

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. Entire Agreement /Amendments to the Contract

The provisions of this Contract, together with the Agreements and exhibits incorporated by reference, shall constitute the entire Municipal Waste Processing and Disposal Capacity Contract between the County and the Contractor, superseding all prior processing and disposal capacity agreements or contracts, if any,

except as otherwise provided in this Contract. No amendment or modifications of the terms and conditions of the Contract shall be made prior to the date the Contract is duly executed by the Mercer County Board of Commissioners. Once the Contract is duly executed by the Mercer County Board of Commissioners, 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. The County and the Contractor agree that any existing Municipal Waste processing and disposal contracts between them are hereby rendered null and void and superseded by this 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, including, without limitation, the proposal submitted by the Contractor, 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 mail, 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:

For the County:

Director

Lawrence/Mercer Counties Recycling/Solid Waste

Department

430 Court Street

New Castle, PA 16101

For the Contractor:

Notice Address as shown on Form B.

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, process and dispose specified quantities and types of Municipal Waste for disposal originating from sources located in Mercer County, in accordance with all applicable Federal, state and local regulations. In addition, the Contractor agrees to provide and implement the programs, services or other support for Materials Management documented on Form C. 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:

Annual adjustments to the maximum Municipal Waste quantities shown on Part B1 may be permitted if the request for adjustments is made in writing at least sixty (60) days in advance of the anniversary of the effective date of the Contract . Any quantity adjustment request will be mailed to the County by United States Postal Service, Certified Mail. If an authorization is approved, it will be considered an amendment to this Contract and the adjusted quantities will supersede those previously in effect.

3. Maximum Tipping Fees or Rate Schedule

The maximum rate or tipping fee to accept the various types of Municipal Waste shall be consistent with those listed on Form A.

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 those required to be authorized by the Pennsylvania Waste Transportation Safety Act ("Act 90 ") as well as those regularly engaged in the business of waste transportation but are exempted by Act 90. Only Municipal Waste materials delivered to the Contractor's Facility by authorized and such exempt waste haulers shall count towards any maximum waste quantity limits under the Contract. Contractor shall be responsible for obtaining a current list of the authorized waste haulers from the appropriate State agency.

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 Act 90 as well as those regularly engaged in the business of waste collection and transportation in Mercer County during the hours shown on Form B,

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 processing and 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 transporters authorized by Act 90 as well as those regularly engaged in the business of waste collection and transportation in Mercer 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. The Contractor shall notify the County in the event Contractor becomes aware that materials that are being collected in the County and/or municipal recycling programs are being routinely delivered to Contractor for waste processing and disposal. The Contractor shall cooperate with the County in reaching the Commonwealth of Pennsylvania's Recycling goals.

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 servicing the county. The waste haulers authorized by the Pennsylvania Waste Transportation Safety Act 90, as well as those regularly engaged in the business of waste transportation but are exempt from Act 90, shall be responsible for the prompt removal and processing and disposal of any such unacceptable waste and shall bear all costs associated

with the subsequent removal, transportation and processing and disposal of such Hazardous and/or Unacceptable waste.

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, authorized 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 to the County.

D. The Contractor shall not charge a tipping fee to any waste hauler authorized by the Pennsylvania Waste Transportation Safety Act 90, as well as those regularly engaged in the business of waste transportation but are exempt from Act 90, that is greater than the maximum rates established by this Contract for each type of waste originating in Mercer County. 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. If Contractor desires to adjust the maximum rate or tipping fee for processing and disposal of each type of Municipal Waste under the Contract in excess of the amount provided in Form A in the RFP submitted by Contractor to the County, the Contractor may request the consent of the County for such increase by providing the County with at least 60 days advance written notice of the proposed increase. Consent to any proposed increase shall be at the sole discretion of the County. The notice of proposed increase to the County shall be delivered to the County by United States Postal Service, Certified Mail on or before October 1 of the year prior to the proposed effective date of the 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 request consent of 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 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 under this contract, the County at its discretion shall have the right to solicit new Municipal Waste, processing and disposal service proposals and the right to terminate this Contract, if in the judgment of the County, more favorable processing and 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 and disposal facility. All annual rate adjustments as set forth in , demonstrated and included with Form A 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 surcharge for the recycling fund, post-closure trust fund and County or host municipality benefit fee imposed on Pennsylvania Facilities by Act 101 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.

12. State Legislated County Fees or Surcharges

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.

13. Mechanisms to Attain Materials Management Objectives

Within 4 months from the effective date of this contract the Contractor shall submit to the County an operating plan with a detailed outline including a timeline describing how the Contractor will introduce the programs and services for Material Management proposed on Form C. These programs and services shall be fully implemented no later than 12 months from the effective date of this contract. Any monetary support for County programs and services proposed on Form C shall commence January 1, 2021.

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 disposal 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 3 Pa.C.S. Chapter 41 (relating to the Consolidated Weights and Measures Act) and 70 Pa. Code Part I (relating to weighmasters) and applicable regulations thereunder. The operator of the scale shall be a licensed public weighmaster under 3 Pa.C.S. Chapter 41 and 70 Pa. Code Part I. and applicable regulations thereunder;

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.
 - 1. Loads from transfer facilities should be made distinguishable from those directly hauled.

3. Quarterly Operation Reports

The Contractor shall prepare and submit on forms approved 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 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. Loads from transfer facilities should be made distinguishable from those directly hauled; and
- E. A Contractor that operates, or whose parent company operates, a transfer station that receives Mercer County municipal waste for transport to one of the designated facilities shall also submit a report from the transfer station showing:

1. The names of the waste haulers or transporters and self-haulers that delivered Municipal Waste originating from sources in Mercer County.
2. A summary of the total weight 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.
3. The total amount of tons of Mercer County Municipal Waste transported from the transfer station to each disposal facility designated in the Plan to receive waste from Mercer County.

The inbound and outbound tons of Mercer County waste must reconcile.

F. A Contractor that operates Materials Management programs or services proposed on Form C shall include with the report

1. A summary of the total weight of each type of material recovered in each program or service
2. The dates and locations of collection events for each program or service
3. The number of cars at each collection event
4. The number of homes serviced in direct request pick-up programs

4. Annual Operation Report

The Contractor shall prepare and submit on forms approved 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. 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;
- B. A current Certificate of Insurance as evidence of continuing insurance coverage for public liability insurance as required under the Contract;
- C. For Resource Recovery or other 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;
- D. 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
- E. If available to the Contractor, Certificate of good standing- from its bonding company.

F. 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 approved 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 processing and 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 30-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 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 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, national origin or any other protected category.

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 and 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.

IX. Right-to-Know Law

The Pennsylvania Right-to-Know Law, 65 P.S. § 67.101-3104, applies to this Contract.

Unless the Contractor provides the County in writing, with the name and contact information of another person, the County shall notify the Contractor's Project Coordinator using the Contractor information provided by the Contractor in the legal contact information provided in this Contract, if the County needs the Contractor's assistance in any matter arising out of the Right-to-Know LAW ("RTKL"). The Contractor shall notify the County in writing of any change in the name or the contact information within a reasonable time prior to the change.

Upon notification from the County that the County requires the Contractor's assistance in responding to a RTKL request for records in the Contractor's possession, the Contractor shall provide the County within 14 calendar days after receipt of such notification, access to, and copies of, any document or information in the Contractor's possession which arises out of the Contract that the County requests ("Requested Information") and provide such other assistance as the County may request in order to comply with the RTKL. If the Contractor fails to provide the Requested Information within 14 calendar days after receipt of such request, the Contractor shall indemnify and hold the County harmless for any damages, penalties, detriment or harm that the County may incur under the RTKL as a result of the Contractor's failure, including any statutory damages assessed against the County.

The County's determination as to whether the Requested Information is a public record is dispositive of the question as between the parties. The Contractor agrees not to challenge the County's decision to deem the Requested Information as Public Record. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, the Contractor will immediately notify the County, and will provide a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL within seven (7) calendar days of receiving the request. If, upon review of the Contractor's written statement, the County still decides to provide the Requested Information, the Contractor will not challenge or in any way hold the County liable for such a decision.

The County will reimburse the Contractor for any costs associated with complying with this provision only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

The Contractor agrees to abide by any decision to release a record to the public made by the Office of Open Records, or by the Pennsylvania Courts. The Contractor agrees to waive all rights or remedies that may be available to it as a result of the County's disclosure of Requested Information pursuant to the RTKL. The

Contractor’s duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

WITNESS the execution hereof, the parties expressly intending to be legally bound pursuant to the Uniform Written Obligations Act, 33 P.S. §6, Contractor and County have caused this contract to be executed by their respective duly authorized agents, as of the date and year first written.

COUNTY OF MERCER

_____, Chair

_____, Commissioner

_____, Commissioner

DATE _____

ATTEST: _____

Chief Clerk

CONTRACTOR

CONTRACTOR: _____

TITLE: _____

WITNESS; _____

TITLE: _____

Form A – Cost of Processing and Disposal

<p>Name of Facility _____ Maximum Tipping Fees Per Ton For Each Category of Waste</p> <p>The maximum tipping fee shall not exceed the posted gate rate.</p> <p>Include all applicable surcharges, fees, taxes from Legislation, Regulation, or Programs of State, Federal, County or Host Municipalities</p> <p>Show a breakdown of those fees in the following table</p> <p>Indicate any annual escalators that will apply or attach a separate table demonstrating future rates.</p>					
	MSW	Construction Demolition	Sewage Sludge	Other	Other
Base Tipping Fee (without taxes, and other fees)					
List Name of Fee, Tax, Surcharge below.	List Amount for Each Fees, Taxes, Surcharges that will apply to Mercer County MSW				
Total Tipping Fee including all fees and surcharges					

Form B -Reserved Capacity by Waste Type		FACILITY: _____				
Types and Quantities of Municipal Solid Waste			Specify tons per day and tons per year			
Year	MSW Only	C&D	Sludge	Other	Other	Total
2020-2021						
Tons Per Day						
Tons Per Year						
Tons Per Day						
Tons Per Year						
2022-2023						
Tons Per Day						
Tons Per Year						
Tons Per Day						
Tons Per Year						
2024-2025						
Tons Per Day						
Tons Per Year						
2025-2026						
Tons Per Day						
Tons Per Year						
2026-2027						
Tons Per Day						
Tons Per Year						
2027-2028						
Tons Per Day						
Tons Per Year						
2028-2029						
Tons Per Day						
Tons Per Year						

Form B - Part II Total Reserved Capacity

Total Combined Quantities of all Accepted Categories of Municipal Waste

YEAR	TOTAL MERCER MSW TONS PER YEAR <i>(all categories)</i>	PERCENTAGE <i>Reserving Capacity for % of Mercer MSW Annually (all categories)</i>	ANNUAL TONS <i>Reserving Capacity for #Tons Mercer MSW Annually (all categories)</i>	OPERATING DAYS <i>Estimated Annual Working Days</i>	TONS PER DAY <i>Reserving Capacity for #Tons Mercer MSW Daily (all categories)</i>
2020	61,276				
2021	60,871				
2022	60,470				
2023	60,070				
2024	59,674				
2025	59,279				
2026	58,888				
2027	58,499				
2028	58,113				
2029	57,730				

Operating hours from _____ to _____ Monday through Friday and from _____ to _____ on Saturdays,

Notices
 All notices, demands, requests, and other communications under this contract shall be delivered to:
 Contractor: _____
 Address: _____ Attention: _____
 With a copy to: _____

Section 5

REQUIRED PROPOSAL FORMS

The following forms shall be completed, signed by an official authorized to bind the Offeror, and attached to the proposal.

1. Representations and Certifications Form
2. Contractor Information Form

Representations and Certifications

Company _____

Facility _____

Authorized Official _____

An officer of the organization submitting the proposal empowered and authorized to sign such documents makes the following representations and certifications as part of this proposal:

1. Certification of Non-Collusion and Independent Price Determination

I certify that as an officer of _____, I have lawful authority and have thus been empowered to submit and execute the proposal contained herein; that neither have I nor any representative of _____ has either directly or indirectly entered into any agreement, express or implied with any representative or representatives of other companies or individuals submitting such proposals for the object of controlling of price, the limiting of proposals submitted, the parceling out of any part of the resulting contract or subject matter of the proposal or proposals or any profits thereof; and that I nor any representatives of _____ have not nor will not divulge the sealed proposal to any person or persons except those having a partnership or other financial interest with him or her in the proposal or proposals until after the said sealed proposal or proposals are opened.

I further certify that neither I nor any representative of _____, have been a party to collusion among proposers in restraint of the freedom of competition by agreement to make a proposal at a fixed price or to refrain from submitting a proposal or with any state official or employee as to quantity, quality, or price in any discussions between proposers and any County official concerning exchange of money or other things of value for special consideration in the letting of the contract and that neither I nor any representative of _____ have paid, given, donated or agreed to pay give or donate to any official, officer, or employee of Mercer County any money or other thing of value either directly or indirectly.

2. Acceptance Period

I agree to allow 180 days from the date of this proposal for acceptance thereof by the Commissioners of Mercer County.

3. Ambiguity

I recognize and accept that in the case of any ambiguity or lack of clarity in stating fees, prices or other information and conditions in the proposal, the County shall have the right to construe such prices or information and conditions in a manner most advantageous to the County or to reject the proposal.

4. Contingent Fee Representation

I certify that _____ has not employed or retained any company or person other than a full time bona fide employee working solely for _____ to solicit or secure this contract nor has it paid or agreed to pay any company or person other than a full time bona fide employee working solely for _____ any fee commission, percentage or brokerage fee contingent upon or resulting from the award of this contract. I agree to furnish any information relating to both conditions as requested by Mercer County.

5. Equal Employment Opportunity

I assure that neither the employees, applicants for employment, nor those of any labor organization, subcontractor or employment agency in either referring or furnishing employee applicants are discriminated against by _____.

Executed under penalty of perjury this _____ day of 2020,

at _____

By _____ (name)

_____ (title)

SEAL _____ (company)

Date: _____

On _____, 2020, before me, the undersigned, a Notary Public in and for _____, personally appeared _____, known to me to be the _____ of Company that executed the within instrument on behalf of the Proposer therein named, and acknowledged to me that such Proposer executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal in the County of _____, this _____ day of _____ 2020.

Notary _____

My Commission expires _____ Notary Public

Contractor Information

Company _____

Address _____

Phone _____ Fax _____

Owner/President _____

Type of organization (corporation, joint venture, partnership, individual)

For joint ventures, indicate role and ownership share of each participant. Providing information for each. List any and all subcontractors.

Proposed Processing and Disposal Facility

Permit #/ State /Date Issued/Expiration

Physical Location

(County/Municipalities)_ _____

Have you or any officer of the company or facility ever failed to complete any contract awarded in your own name or that of the company or facility?

If yes, explain who, where and why_____

Have you or any officer of the company or facility ever failed to complete any contract awarded in your own name or that of any other company or facility?

If yes, explain who, where and why_____

Are you or any officer of the company or facility engaged in any contracts for services similar to those contained in the proposal herein?

If yes, explain who, where and when _____

Have you or any officer of the company or facility your partners or joint ventures been party to a lawsuit issued within the past three years that might impact your ability to perform the obligations of this contract?

If yes, explain who, where and why _____

Have you submitted a complete and accurate compliance history outlining any and all judicial actions, convictions, consent orders or agreements, violations, and resolutions for any environmental, or public health and safety laws and regulations?

Explain or comment on any desired actions _____

Executed under penalty of perjury this _ _____ *day of 2020*

at _____

By _____ *(name)*

_____ *(title)*

SEAL _____ *(company)*

Date: _____

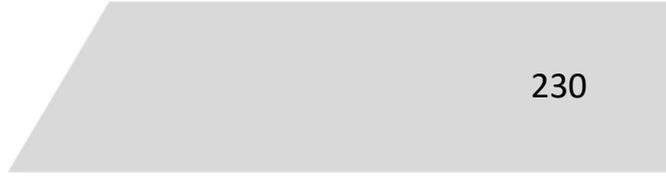
On _____, 2020, before me, the undersigned, a Notary Public in and for _____, personally appeared _____, known to me to be the _____ of Company that executed the within instrument on behalf of the Proposer therein named, and acknowledged to me that such Proposer executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal in the County of _____, this _____ day of _____ 2020

My Commission expires _____



APPENDIX C
EVALUATION OF PROPOSALS



THE MERCER LAWRENCE-MERCER COUNTIES
RECYCLING/SOLID WASTE DEPARTMENT
ON BEHALF OF MERCER COUNTY

Recommendations For Designation Of Disposal and Processing Facilities



Nestor Resources, Inc.

MERCER
COUNTY
MUNICIPAL
SOLID WASTE
MANAGEMENT
PLAN
2021-2030

DISPOSAL
CAPACITY
PROCUREMENT

ADMINISTRATIVE
REVIEW
AND TECHNICAL
EVALUATION OF
PROPOSALS
SUBMITTED ON
SEPTEMBER 3,
2020

Responsibility for Guaranteeing Disposal Capacity

Based on the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), the fundamental purpose of the Mercer County Municipal Solid Waste Management Plan is to project future waste generation and recovery and to secure adequate capacity for the disposal of the remaining material. Capacity guarantees are to provide for a 10-year span. A variety of mechanisms can be utilized that satisfy this requirement. Each has procedural and legal implications that can be benefits or detractors depending upon local circumstances. Historically, Mercer County directed the flow of municipal waste generated within its borders to a select menu of disposal facilities, which guaranteed disposal capacity to the County. Mercer County has utilized a formal procurement process including a contractual agreement as the preferred guarantee of capacity. The same mechanism was chosen to fulfill the capacity assurance requirement of Act 101 for the 2020 Plan Update.

Projecting Disposal Capacity Needs

Waste generation is driven in part by population and other demographic influences. For Mercer County, the sources of relevant demographic information included the U.S. Census Bureau and the Penn State Data Center. For data related to waste generation, disposal and recycling, facility reports submitted to PADEP and records maintained by the County and municipalities were reviewed. National trends in waste generation, recovery, and disposal were also considered. Other information is drawn from professionally recognized and well documented assumptions. Based on these combined factors, the capacity required by the County for the next ten years was calculated.

During the planning process trends in Mercer County's current disposal practices were identified. The utilization of regional transfer stations and their potential for misreporting the origin of waste at destination disposal facilities was identified. The impact of that practice on accurately accounting for Mercer County's municipal waste was reviewed. The consumption of disposal capacity by other counties, states, and industrial generators at the facilities previously designated in the 2021 Plan was evaluated. The degree of which recycling efforts reduced the need for disposal capacity was also factored into the projections. No indication of pending capacity deficits were uncovered in the exercise. However, because current agreements are set to expire within the next year, it was necessary for the County to secure new guarantees.

Capacity Procurement Process

A Request for Proposals for Disposal Capacity was issued by the Lawrence-Mercer Counties Recycling/Solid Waste Department. The PADEP, who was notified of the County's intent to solicit for capacity assurances, posted the official solicitation notice in Pennsylvania Bulletin. In addition, the solicitation appeared in the digital online national trade publication, Waste Advantage.

To reach the greatest number of potentially interested parties, in addition to public notification, the County circulated the Request for Proposals through industry trade organizations and to facilities within the region permitted to dispose and/or process municipal solid waste. These combined efforts assured that facilities located both within and out of the state would be informed of the County's request.

Selection Criteria

Proposal submission guidelines specified the format and content required for administrative completeness and technical merit review. Facilities were required to adhere to these instructions. The selection process was non-biased. All facilities and disposal processes were given equal consideration and opportunity. The potential need to make inquiries regarding the content of the proposals, ask for supplemental documentation, or request further clarifications were built into the technical review process. Categorized criteria and established requirements used in the review and selection process are described below. The criteria was accompanied by a point system which was explained in the Request for Proposals. Facilities were required to meet a minimum 94-point threshold to enter capacity agreements with the County.

Completeness and Adherence to Submission Guidelines- 17 available points

Contractors will be evaluated on the quality, content, and organization of the proposal in keeping with the submission guidelines and instructions included in the Request for Proposals. Submissions that are complete and succinctly address the requested information will rank higher than those that require added investigation and/or include superfluous attachments and overdocumentation.

Permit Status and Remaining Capacity- 5 available points

Facilities were required to demonstrate the existence of a current operating permit issued by the PADEP or the equivalent state regulatory agency for non-Pennsylvania facilities. The projected life of the facility and its ability to provide available capacity for all or some portion of the County's needs during the period of the Plan was a key indicator of the site's ability to meet the service needs of the County.

Regulatory Compliance – 8 available points

Regulatory compliance is a measure of potential liabilities. A review of the compliance history of the facility was included in the assessment. The compliance history for each company and facility was reviewed and condensed as a tabulation of violations, consent orders, penalties, etc.

Financial Strength and Risk Assessment- 5 available points

Documentation of the credit worthiness and financial stability of the operator, along with the levels of public and environmental liability protection were required. Each was considered an important indicator of the potential level of risk to the County and the facility's ability to maintain and provide a financially sound disposal system.

Industry Qualifications and Experience – 9 available points

The experience of personnel located at the facility and who were directly responsible for management and operations was reviewed. The depth of waste industry experience was considered as a demonstration of the contractor's ability to provide reliable disposal service. Documented performance in related contractual scenarios was also considered in the evaluation.

Technical Design and Operational Methods– 13 available points

Additional On-site Services – 7 available points

The ability to meet Federal, State, and Local standards for the operation of a municipal solid waste disposal facility was required. The technical design of the proposed facility and disposal process were evaluated based on the use of proven and accepted technology, demonstrated and approved

alternatives, and best engineering practices. The effectiveness of design components such as liner composition, leachate treatment, methane gas recovery, combustor units, boiler design was considered. The quality of operational plans for waste acceptance, emergency management, and contingencies for pollution prevention and control, safety, operational efficiency and energy production were important as were add on services such as yard waste composting, and beneficial use of waste materials.

Mechanisms To Support And Complement Materials Management Planning

Objectives - 25 available points

Contractors were evaluated on the quality of the programs, services or other offerings proposed and how they complement the objectives of the Mercer County Municipal Waste Management Plan. Goals considered were unrestricted universal access to services, expansion of services to previously underserved areas of the County, recovery of new materials not previously collected, effectiveness of material recovery, and education to preserve the quality of materials. Support of illegal dumping prevention and remediation, comprehensive nature of the proposals in addressing multiple material management needs, and the quality and detail of the plans to implement the proposed were other equally important objectives considered. The overall financial and environmental value of the proposed programs, services or other offerings were factored into the evaluation when such information was provided upon request .

Although proposals were invited for new or alternative disposal technologies, none was received in this solicitation process. In addition, no proposal included supposition of County partnerships or investments in the construction and operation of facilities. Based on these factors, no further cost/benefit comparison, life cycle analysis, or evaluation was deemed necessary.

Minimum and Maximum Allowable Disposal Requirements- 15 available points

The evaluation included 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 during the ten-year period of the Plan. The criteria made clear that "Put or Pay" disposal guarantees for predetermined quantities of Mercer County waste were considered disincentives to recycling and therefore objectionable to the County.

Maximum Gate Rates and Potential Cost to County - 19 available points

Competitive pricing was not part the sole determining criteria to be included in the Plan. However, because disposal is restricted to the facilities designated in the Plan, it was necessary to offer transporters, municipalities, individuals, and businesses full disclosure of the potential cost of each available disposal option. Therefore, facilities were required to submit a pricing matrix that established ceilings for the maximum fees, which would be charged for the contracted disposal services. Facilities were allowed to submit separate disposal rates for the different categories of municipal waste for which capacity was reserved. All fees and surcharges resulting from Act 101, host municipality or county agreements or other federal, state, and local statutes were to be identified and quantified.

No conditions were imposed on the disposal rate other than the facility-defined cap. The use of one or more of the designated facilities remains a matter of choice. The maximum rates do not preclude the ability of parties to negotiate lower fees based on business relationships and other factors.

Proposal Review and Evaluation

Respondents to the Request for Proposals included: Republic Services, Waste Management, and Vogel Holding. Combined, proposals for a total of six landfills offered daily, annual, or contingency capacity assurances to the County. These were examined and reviewed to determine compliance with the submission criteria and attainment of sufficient points. The facilities that meet both criteria will be officially designated after the final approval of the Plan.

During the review and evaluation process, as minor mistakes were noted, requests were made to eliminate deficiencies. Answers and clarifications were provided and incorporated as received. . The results of the proposal evaluation are presented in nine sections following these narratives. Each section represents a segment of the legal, technical, operational, and financial selection criteria. Tables show the proposed facilities with their responses and demonstrated information condensed for presentation purposes.

SECTION 1 COMPLETENESS AND ADHERENCE TO SUBMISSION GUIDELINES

Facility	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Owner	Republic Services (Browning Ferris)	Vogel Holding	Waste Management	Waste Management	Waste Management	Waste Management
Site Location	8100 S Stateline Rd Lowellville, OH 44436	421 Hartman Rd, Evans City, PA 16033	1310 Luciusboro Rd. Blairsville, PA 15717	851 Robison Road East Erie, PA 16509	1436 West Sunbury Rd, West Sunbury, PA 16061	
Technical Contact	Brent Bowker	Elizabeth Bertha	Ryan Czarnota	Craig Hahlen	Craig Hahlen	Tom Poullet
Operational Contact	Brent Bowker	David Smith	Tim Fello	Craig Hahlen	Craig Hahlen	Tom Poullet
Proposal Organized in Required Order/Format	NO	YES	YES	YES	YES	YES
Signatures/Certifications	YES	YES	YES	YES	YES	YES
Includes All Required Components	NOT CURRENTLY	YES	NOT CURRENTLY	NOT CURRENTLY	NOT CURRENTLY	NOT CURRENTLY
Missing Information	No listing of agreements	none	Pollution & Comprehensive Liability Insurance (self-insured?)	Comprehensive Liability Insurance (self-insured?) -- Resumes for all management personnel	Resumes for all management personnel--- Capacity remaining in cyds	Comprehensive Liability Insurance (self-insured?) Resumes for all management personnel
Reviewer Comments	Failed to follow prescribed formatting making it difficult to locate required content. Doesn't break down environmental fees.	none	Doesn't provide base tipping fee/ calculates price increase using total fee	Doesn't provide base tipping fee/ calculates price increase using total fee	Doesn't provide base tipping fee/ calculates price increase using total fee. Life of facility less than ten years	Doesn't provide base tipping fee/ calculates price increase using total fee
AVAILABLE POINTS 17	13	17	15	14	15	14

SECTION 2 PERMIT STATUS AND REMAINING CAPACITY

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Current Certificate of Permit and Expiration Date	CID28728 Mahoning County Health District	PADEP 100403 EXP 1/8/2030	PADEP 100434 EXP 7/26/2026	PADEP 100329 EXP 3/16/2030	PADEP 100585 EXP 3/23/2026	PADEP 100280 EXP 4/5/2026
Permitted Volumes, Hours, Guarantees	11,000 TPD 3.1 MILLION TPY HOURS = M-F 12:00am - 4:00pm SAT - 4:00am-NOON	4,600 TPD 1,196,000 TPY HOURS = M-F 8:00am -3:00pm SAT - 8:00am-11:00am	1,000 TPD 312,000 TPY HOURS = M-F 8:00am-4:00PM	4,600 TPD 1,196,000 TPY HOURS = M-F 7:00am -3:00pm	2500 TPD 650,000 TPY HOURS = M-F 7:00am -3:00pm	3500 TPD 910,000 TPY HOURS = M-F 6:00am - 3:00pm
Available Permitted Capacity in Cubic yards	46,544,259 CY 11/23/19	2,498,094CY 6/2020	7,425,293 CY 6/20/2019	15,770171 CY 6/2020	Missing	7,892,983 CY 6/20/2019
AVAILABLE POINTS	5	5	5	5	4	5

SECTION 3 REGULATORY COMPLIANCE

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Compliance history for Specific Facility PADEP Form HWC, Compliance History	YES	YES	YES	YES	YES	YES
Types and number of violations, consent orders, convictions		22 notices pf violations 3 Consent Assessments /Penalties\$520,000	1 notice of violation	4 notices of violation... 3 Consent Assessments/Penalties totaling \$13,000	8 notices of violation - 2 Consent Assessments/Penalties totaling \$25,000	1 notice of violation
Resolution		RESOLVED	RESOLVED	RESOLVED	RESOLVED	RESOLVED
AVAILABLE POINTS 8	8	8	8	8	8	8

SECTION 4 FINANCIAL STRENGTH AND RISK ASSESSMENT

A Certificate of Pollution Liability and Public Liability Insurance
Closure/post closure Bonding Requirements and the type of Security, Terms, Conditions, and Dollar Amount,

Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
YES	YES	NO	NO	YES	NO
\$38.9 MILLION	\$14 MILLION	\$6.2 MILLION	\$12.6 MILLION	\$5.6 MILLION	\$13.9 MILLION
5	5	4	4	5	4

AVAILABLE POINTS -5

SECTION 5 Industry Qualifications and Experience

Demonstrated Experience in the Successful Operation of Disposal and Processing Facilities
Host Counties/Municipalities Identified
Managerial Staff Experience e and Qualifications

Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
YES	YES	YES	YES	YES	YES
Mahoning County Poland Township	Butler County Jackson Township Lancaster Township	Indiana County Center Township Brush Valley Township	Erie County Summit Township	Butler County Clay Township	Westmoreland County Penn Township
YES	YES	PARTIAL	PARTIAL	PARTIAL	PARTIAL
9	9	7	7	7	7

AVAILABLE POINTS 9

SECTION 6 Technical Design and Operational Methods

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Name and Location of the Facility (including host municipalities)	YES	YES	YES	YES	YES	YES
Operating Plan for the Life of the Facility & Post Closure Care	PARTIAL	YES	YES	YES	YES	YES
Daily Recordkeeping Procedures and Measurement of Waste,	MISSING	YES	YES	YES	YES	YES
Waste Acceptance and Monitoring Program	MISSING	Form R criteria for compatible wastes Computerized scale Radiation monitoring. Surveillance cameras. Spotters.	Form R criteria for compatible wastes Computerized scale Radiation monitoring	Form R criteria for compatible wastes Computerized scale Radiation monitoring. Surveillance cameras. Spotters.	Form R criteria for compatible wastes Computerized scale Radiation monitoring.	Form R criteria for compatible wastes Computerized scale Radiation monitoring
Environmental Emergency Response Plan.	MISSING	YES PADEP waivers & back-up facilities	YES PADEP waivers & back-up facilities	YES PADEP waivers & back-up facilities	YES PADEP waivers & back-up facilities	YES PADEP waivers & back-up facilities
Description of Liner System,	Clay and single HDPE	Dual composite & geomembrane liner	Dual composite & geomembrane liner	Dual composite & geomembrane liner	Dual composite liner	Dual composite & geomembrane liner
Methane Recovery and Utilization	Collected and converted to electricity. Also flares off excess	Collected and converted to electricity and LNG for vehicles	Collected and flared	Collected and converted to electricity. Also flares off excess	Collected and flared	Collected, cleaned and distributed through natural gas pipeline
Leachate Control, Monitoring, and Treatment (on-site/off-site).	Pre-treatment and Off-Site Management	On-site treatment facility	On-site treatment facility	Off-site treatment facility	On-site treatment facility	On-site treatment facility
Add-On Services on Site		Transfer Station, Yard Waste Composting, Tire Processing, Solidification, E-Waste Drop-off, Recycling Drop-off				
AVAILABLE POINTS 13 + AVAILABLE POINTS 7	13	20	12	13	12	13

SECTION 7 Proposed Mechanisms to Support Plan Goals

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Illegal Dump Clean-Ups						
<i>Disposal</i>	100 tpy @ \$89.41	Free minimum 1 ton disposal to nonprofit events including but not limited to registered via KPB Great American Clean-Up on pre-determined dates	Free disposal to events registered via KPB Great American Clean-Up on pre-determined dates	Free disposal to events registered via KPB Great American Clean-Up on pre-determined dates	Free disposal to events registered via KPB Great American Clean-Up on pre-determined dates	Free disposal to events registered via KPB Great American Clean-Up on pre-determined dates
<i>Transportation</i>	NA		Discount for one pull to municipalities that have contracts with WM	Discount for one pull to municipalities that have contracts with WM	Discount for one pull to municipalities that have contracts with WM	Discount for one pull to municipalities that have contracts with WM
Special Handling						
<i>HHW</i>			Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.
<i>Curbside Drop-off</i>	NA	NA	NA	NA	NA	NA
<i>Event</i>	NA	NA	NA	NA	NA	NA
<i>Universal Access</i>	YES	NO	NO	NO	NO	NO
<i>Fees</i>		Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality

SECTION 7 Proposed Mechanisms to Support Plan Goals

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
<i>Ewaste</i>			Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.	Only offered through integrated municipal contracts or stand-alone municipal contract if municipality pays the bill.
<i>Curbside Drop-off</i>	YES FOR A FEE	NA	NA	NA	NA	NA
<i>Event</i>	NA	NA	NA	NA	NA	NA
<i>Universal Access</i>	YES	NO	NO	NO	NO	NO
<i>Fees</i>	\$10-\$120 per unit	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality
<i>Hard to Recycle</i>						
<i>Curbside</i>				NA	NA	NA
<i>Drop-off</i>	YES TIRES FOR A FEE			NA	NA	NA
<i>Event</i>				NA	NA	NA
<i>Universal Access</i>		YES		NA	NA	NA
<i>Fees</i>		\$5-65\$		NA	NA	NA

SECTION 7 Proposed Mechanisms to Support Plan Goals

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Recycling			Only offered through integrated municipal contracts. Limited materials.	Only offered through integrated municipal contracts. Limited materials.	Only offered through integrated municipal contracts. Limited materials.	Only offered through integrated municipal contracts. Limited materials.
<i>Curbside</i>		YES Contract and subscription				
<i>Drop-off</i>		YES at Seneca Landfill	NA	NA	NA	NA
<i>Event</i>		NA	NA	NA	NA	NA
<i>Universal Access</i>		YES	NO	NO	NO	NO
<i>Fees</i>		Per unit fees paid by consumer. Subscription and contract. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality	Per unit fees paid by consumer. Vary per municipality
Education Program		YES schools, civic organizations	To WM customers	To WM customers	To WM customers	To WM customers
New Material Recovery Comprehensive Program	NO	NO	NO	NO	NO	NO
Service Expansion	NO	NO	PARTIAL	NO	NO	NO
Compatible with Plan Goals	YES	YES	YES	YES	YES	YES
AVAILABLE POINTS 25		20	20	15	15	15

SECTION 8 Minimum and Maximum Allowable Disposal Requirements

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
Maximum Annual Volume in Tons	67,404	15,217.80	13,000	61,276	61,276	59,929
%of County Waste Will Accept	110%	25%	21%	100%	100% for 7 years	97%
MSW Tons Daily	235 (combined)	36.5	50 (combined)	235.67(combined)	235.67(combined)	229 (combined)
C&D Tons Daily	does not differentiate	4.9	does not differentiate	does not differentiate	does not differentiate	does not differentiate
Sludge Tons Daily	does not differentiate	4.9	not to exceed 10% of actual MSW received	does not differentiate	does not differentiate	does not differentiate
Other Tons Daily	NA	2.4				
Back-Up Contingency Plan		YES TRANSFER STATION TO OTHER SITES IN PLAN	YES OTHER WM LANDFILLS IN PLAN	YES OTHER WM LANDFILLS IN PLAN	YES OTHER WM LANDFILLS IN PLAN	YES OTHER WM LANDFILLS IN PLAN
AVAILABLE POINTS	15	15	15	15	14	15

	Carbon Limestone Landfill	Seneca Landfill	Evergreen Landfill	LakeView Landfill	Northwest Sanitary Landfill	Valley Landfill
MSW Base Tipping Fee	\$63.41	101.7	87.94	115.83	97.98	115.8
MSW Add-On Fees/Taxes/Surcharges	\$26.00	8.3	8.54	8.33	7.78	7.87
Total MSW Maximum Cost	\$89.41	110	96.48	124.16	105.56	123.67
C&D Base Tipping Fee	\$63.21	101.7	87.94	115.83	97.98	115.8
C&D Add-On Fees/Taxes/Surcharges	\$19.60	8.3	8.54	8.33	7.78	7.87
Total C&D Maximum Cost	\$82.81	110	96.48	124.16	105.56	123.67
SEWAGE SLUDGE Base Tipping Fee	??	101.7	87.94	115.83	97.98	115.8
SEWAGE SLUDGE Add-On Fees/Taxes/Surcharges	??	8.3	8.54	8.33	7.78	7.87
Total SEWAGE SLUDGE Maximum Cost		110	96.48	124.16	105.56	123.67
AVAILABLE POINTS 19	19	19	19	19	19	19
TOTAL POINTS	107	118	100	100	99	100

SECTION 9 Maximum Gate Rates and Potential Cost to County

Recommendations for Disposal Facility Designation

The review and evaluation of the proposals determined that all of the facilities meet the established selection criteria. Some of the facilities are operating with permits that will expire before 2025. A few have capacity that could be greatly depleted during the term of the contract but have room for expansion and design modifications. In these instances, actions to modify or renew existing permits are expected to result in approvals. All qualify to become designated disposal facilities in the Mercer County Municipal Solid Waste Management Plan. In summary, the Mercer County will execute and enter into disposal capacity agreements with the facilities shown here. The table is arranged in alphabetical order by the owner/operator with each corresponding facility listed below

Republic Services

- Carbon-Limestone Landfill

Vogel Holding

- Seneca Landfill

Waste Management

- Evergreen Landfill
- LakeView Landfill
- Northwest Landfill
- Valley Landfill

Transporters Ordinance

TRANSPORTERS ORDINANCE

COUNTY SOLID WASTE AND RECYCLING TRANSPORTERS ORDINANCE

ORDINANCE NO. 2011-02
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

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 8- 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 9 -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.

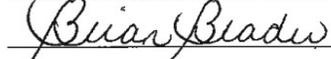
SECTION 10 -CONFLICT

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 11- EFFECTIVE DATE

This Ordinance shall take effect on June 30 2011 ORDAINED AND ENACTED into an Ordinance this 30th day of June 2011.

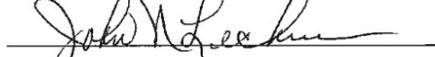
County of Mercer Board of Commissioners



Brian Beader, Chairman

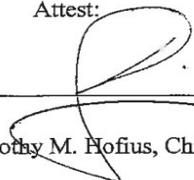


Kenneth R. Ammann, Commissioner



John N. Lechner, Commissioner

Attest:


 Timothy M. Hofius, Chief Clerk

Ordinance to Create Intergovernmental Agreement

ORDINANCE 2010-01

AN ORDINANCE OF THE COUNTY OF MERCER AUTHORIZING AND DIRECTING ITS PROPER OFFICIALS TO ENTER INTO AN INTER-GOVERNMENTAL AGREEMENT WITH THE COUNTY OF LAWRENCE TO ADMINISTER MERCER COUNTY'S RECYCLING PROGRAM

BE IT ORDAINED AND ENACTED, and it is hereby ordained and enacted by the authority of same, that the Mercer County Board of Commissioners be authorized to enter into an inter-governmental agreement with the County of Lawrence providing as follows:

1. CONDITIONS OF AGREEMENT: The agreement shall provide that the County of Lawrence, through its Recycling and Solid Waste Department shall provide all administrative and operational services for the operation of Mercer County's recycling program. Mercer County will be billed, on a quarterly basis, for Lawrence County staff time spent on Mercer County operations.

2. TERM OF THE AGREEMENT: The initial term of the Agreement shall be for two years, and then will continue on an annual calendar year basis until terminated by either party. Either party may terminate at any time and for any reason upon 90 day notice to the other.

3. PURPOSE OF THE AGREEMENT: The agreement will hopefully introduce economies of scale to each county's recycling efforts. Mercer County has delegated daily operational responsibilities for recycling activities to Lawrence County.

4. FINANCING: Funding of operational activities will be from each county's general fund to the extent that there are activities within that county, and from grant funds that may be obtained from PaDEP.

5. IMPLEMENTATION: No new organizational structure will be created to implement the activities. All activities will be undertaken by the Lawrence County Recycling and Solid Waste Department.

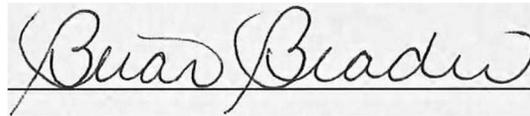
6. PROPERTY: Property owned by either County will remain its property. Property purchased with grant funds for joint use will be owned equally by both counties, and property purchased for use by just one county shall be paid for by that county and remain its property.

8. SEVERABILITY: The provisions of this Ordinance shall be severable, and, if any of the provisions hereof shall be held unconstitutional, void, or otherwise unenforceable, such shall not affect the validity of any of the remaining provisions of said Ordinance.

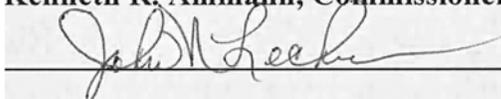
9. REPEALER: All ordinances or parts of ordinances conflicting with any of the provisions of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

10 EFFECTIVE DATE: This Ordinance shall become effective immediately after final passage.

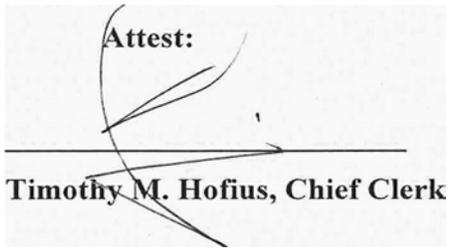
ORDAINED AND ENACTED finally into law by the County of Mercer, this 13th day of May, 2010



Kenneth R. Ammann, Commissioner



Attest:



Timothy M. Hofius, Chief Clerk

APPENDIX E
INTER COUNTY AGREEMENT &
DELEGATION

AGREEMENT

THIS AGREEMENT is made this ____1st__ day of _____ July _____, 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.

AMENDMENTS

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.

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:
By: James Gagliano
James Gagliano, County Administrator

County of Lawrence
By: Steve Craig
Steve Craig, Chairman

By: _____
Richard DeBlasio

By: Daniel Vogler
Daniel Vogler

By: Timothy M. Hofius
Timothy M. Hofius, Chief Clerk

By: Brian Beader
Brian Beader, Chairman

By: Kenneth R. Ammann
Kenneth R. Ammann, Vice-Chairman

By: John Lechner
John Lechner, Secretary

APPENDIX F
RESOLUTION TO ADOPT THE
PLAN

RESOLUTION 2021-230

WHEREAS, the Solid Waste Management Act, Act of July 7, 1980, P.L. 380, No. 97, as amended (Act 97) established a comprehensive planning and regulatory framework for the storage, collection, transportation, processing, and disposal of solid waste, including municipal waste; and

WHEREAS, the Municipal Waste Planning, Recycling and Waste Reduction Act, Act of July 28, 1988, P.L. 528, No. 101 (Act 101) gave the County primary responsibility for planning for municipal waste management within its boundaries and for ensuring sufficient disposal capacity for all municipal waste generated within its boundaries; and

WHEREAS, Section 303(d) of Act 101 authorizes counties to enter into an agreement with another person, or organization, pursuant to which that person undertakes to fulfill some or all of the County's responsibilities under Act 101 for municipal waste planning and implementation of the approved County Plan; and

WHEREAS, the Lawrence-Mercer Counties Solid Waste Recycling Department was established for the purpose of planning for the effective, efficient, reliable, and environmentally safe storage, collection, transportation, processing, and disposal of solid waste; and

WHEREAS, the County Board of Commissioners designated the Department as the agency to prepare the revision to its prior Plan; and

WHEREAS, pursuant to the request of the County Board of Commissioners, the Department has prepared (as a revision to the prior Plan) the Mercer County Municipal Solid Waste Management Plan of 2020 (the 2020 Plan); and

WHEREAS, the County Board of Commissioners believes that the 2020 Plan is appropriate and necessary to protect the health and welfare of the residents of the County; and

WHEREAS, the County Board of Commissioners believes that effecting and carrying forth the 2020 Plan will enable the County and each municipality to continue to realize the benefits of an effective, efficient, reliable and environmentally safe system for the storage, transportation, processing and disposal of solid waste.

Now therefore be it resolved by the Mercer County Board of Commissioners that the 2020 Plan is hereby adopted and that all plans or parts of plans inconsistent therewith are repealed.

ADOPTED this 17th day of June 2021

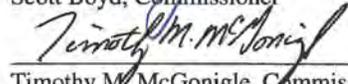
Attest


Chief Clerk

MERCER COUNTY BOARD OF COMMISSIONERS


Matthew B. McConnell, Chairman


Scott Boyd, Commissioner


Timothy M. McGonigle, Commissioner

APPENDIX G
ADVISORY COMMITTEE MEETING
MINUTES

Mercer County SWAC Meeting October 10, 2018 at 10:00 AM – 12:00 PM

Mercer County Courthouse

Present:

Monica King, Shenango RiverWatchers
Dot Hillman, Mercer County Builders Association
Ginger Fenton, Penn State Extension
Gary King, Perry Township
Jasson Urey, Borough of Greenville
Matt Ceremuga, Joy Cone Company
Jeremy Coxe, City of Hermitage
Jay Russell, Mercer County Conservation District
Kim DiCintio, Mercer County Regional Council of Governments
John Logan, Mercer County Fiscal
Michele Nestor, Nestor Resources, Consultant
Vance Oaks, Grove City Borough
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Jerry Bowser, Tri-County Industries
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Presentation: Overview of MSW Planning, Michele Nestor
- Presentation: Overview of Mercer County MSW Plans - Past, Present and Future, Megan Gahring
- Presentation: Recycling Trends, Jerry Zona

Introductions:

Megan Gahring opened the meeting and thanked everyone for attending. All those present made introductions.

MSW Plan Overview:

Michele Nestor presented an overview of the Municipal Solid Waste (MSW) planning process. Roles and responsibilities of the SWAC, Project Consultant, and County were discussed. Future topics for SWAC meetings were presented.

Megan Gahring then presented an overview of Mercer County's current MSW Plan and the recommendations included. Discussion of accomplishments and efforts still needed.

Current State of Recycling:

Jerry Zona presented information regarding China's National Sword initiative and impacts to our local recycling programs. There are significant changes to recycling markets impacting the cost, transportation, materials, and processing of recyclables. Status of the Big Blue Bin (BBB) program was discussed and its contract expiration in 12/18. Costs of the program have increased significantly, and drastic changes are expected.

Michele discussed Crawford County's current transition from the BBB program and offering Town Hall meetings to communities for open discussion. Many communities are considering contracting recycling services as a result.

Goals and Interests Roundtable:

Jerry Bowser verified that recycling markets are down. TC Recycling made a 3.5-million-dollar investment in their recycling center. The center is suffering from contamination from plastic bags, etc. Manual labor is required to remove plastic bags and contamination, and results in the shutdown of equipment. Jerry would like to see all yard waste collected in paper bags instead of plastic bags. There are concerns with the bidding process in Mercer County. Mandatory participation needs to be a requirement for contracting to assure that service costs can be realistically estimated. An ordinance requiring all households to participate is needed, or else there are problems with being the exclusive contractor in a municipality but not everyone is subscribing. TCI encourages the mandatory offering of recycling service with waste service ... and bundling of cost. Jerry noted most customers want to recycle.

Vance Oaks stated Grove City Borough's concern is cost of the recycling program. Being a mandated community, they are required to provide the service to residents. The Borough has an aging population, and the cost of service is increasing. Outside of borough boundaries, the service is not required and it's discouraging to see many choose not to recycle. The Grove City school district needs some assistance with their recycling program. The Borough is willing to host a future SWAC meeting.

Kim DiCintio discussed recycling in mandated versus non-mandated communities. Having a county-wide recycling program and ordinance would resolve some of the participation issues. The COG is willing to host a meeting. Currently, 32 municipalities participate in the COG.

Ginger Fenton lives in Sandy Lake Borough and stated that creating awareness and public education for opportunities to recycle in the Borough are needed. The Penn State Cooperative Extension Office is willing to host a meeting.

Gary King stated that Perry Township hosts a BBB site. Abuse of the site is prevalent and public education is needed. Some schools utilize the BBB site in the Township. The township has concerns if the site is removed.

Jeremy Coxe has been involved in the planning process for many years as a County Coordinator, Authority member, and now with the City of Hermitage. The City is mandated and has the collection of waste and recycling for past 9 - 10 years. Hermitage is one of the first communities in the county to mandate collection. Public feedback was prevalent for first several months, as much of the city is rural in nature and there were some very outspoken residents. Currently, the program is very successful. A base fee for each household includes curbside trash, yard waste, and recycling service. Tags are available for bulky items. The cost is about \$50 every three months. The contract expires next summer of 2019. Current issues include phone calls to get rid of items. The City would like to have available a laundry list of options. The current "free" recycling of electronics seems to be in jeopardy and there are concerns with keeping the cost of service down. Education on actual services receiving for a very reasonable cost. Exceptions included in their contract exist for low-income households and business owners. Website, social media and newsletters are used for education and outreach. One way to increase recycling rates is to limit trash to the cart/tote size. The City doesn't have a lot of illegal dumping issues. Most often residents are recycling more than they are throwing away.

Michele Nestor encouraged the base fee as a way to decrease costs for existing customers of subscription recycling service. Costs for those not having any service will increase, however, this ensures that all households must participate, and it levels the cost for everyone in the community.

Monica King stated Shenango RiverWatchers receives many calls in office about what to do with hard to get rid of items. They offer public awareness of recycling opportunities and programs available.

Dot Hillman discussed promoting recycling efforts within the household. Consumers trends are to buy and discard. Promoting ways to educate the consumer on waste minimization and excessive consumption is needed. Also, promoting the reuse of household items and donation of useful items as other opportunities to minimize waste.

Jasson Urey discussed the success of Greenville Borough transitioning to mandatory participation. There are concerns with how to educate the public and spread awareness on Recycling Right, despite educational material being available. The Borough implemented curbside Household Hazardous Waste (HHW) collection in 2012 and found the service to be extremely convenient and beneficial to residents. How does the Borough incentivize recycling in mandated communities? Education to residents on the value of service and reasonable cost is needed.

Jeremy Coxe stated trash collection is a service like any other utility in the household and should not be an option residents.

Michele Nestor encouraged public education on the value of the service in today's society. Disputing the myth that recycling is free, and they are making money on my recyclables is critical.

Michele Nestor discussed that in the next 10 years, how we track and record materials in tonnage and rates will transition to a focus on calculating the reduction in greenhouse gas emissions. Packaging trends are focusing more on light-weighting versus the recycled content in the packaging material.

Matt Ceremuga promoted educating homeowners, making it convenient, and disseminating information to households on recycling. Recycling efforts at Joy Cone include plastic waste now being bailed in-house with new equipment. Cone batter waste goes into making animal feed. The company removes and recycles paper jackets off the cones.

John Logan stated the number of small appliances and HHW needing disposed of is impressive. Collecting appliances at the annual recycling event is great opportunity to recycle these items. The life expectancy of these appliances has been greatly reduced over the years. The availability of matching funds for grant programs is a growing concern for the County. There are concerns from site sponsors that maintain the areas of BBB's being removed as a result of price increased to the program. How do we address the handling of yard waste and encouraging composting ... both household, on-farm composting, and larger scale composting?

Jay Russell offered cooperation on education and outreach efforts and disseminating information between the R/SW Department and the Mercer County Conservation District.. Composting and organic matter being removed from waste stream is an interest of the Conservation District. The District supports the development of composting sites on agricultural areas and is able to assist with permitting and site development. The District has concerns with illegal dumping on county-owned properties and along roadways. Uniform

accessibility to recycling service, especially in rural areas, is a concern. Jay offered to the Conservation District and Munnell Run Farm to host future meetings.

Michele discussed waste minimization as a part of the planning process. A growing trend is food waste and removal of this material from the waste stream. Other than having curbside organics collection, the region may consider smaller scale efforts to redistribute food waste. Such as collection from restaurants and distribution to those in need, small scale composting sties, and targeting commercial entities for the collection of food waste.

Next Meeting Date:

The next meeting date will be in December of 2018. Location to be determined. Jerry Zona mentioned the possibility of the Hermitage Waste Water Treatment Plan hosting a tour.

Mercer County SWAC Meeting December 14, 2018 at 10:00 AM – 12:30 PM

Tri-County Industries Transfer Station in Grove City

Present:

Scott Boyd, Mercer County Commissioner
Ginger Fenton, Penn State Extension
Gary King, Perry Township
Jasson Urey, Borough of Greenville
Jeremy Coxe, City of Hermitage
Jay Russell, Mercer County Conservation District
John Logan, Mercer County Fiscal
Michele Nestor, Nestor Resources, Consultant
Vance Oaks, Grove City Borough
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Jerry Bowser, Tri-County Industries
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Meeting Agenda
- Summary of Recycling Roundtable Discussions, Megan Gahring
- Review of Recycling Roundtable and DEP Act 101 Workgroup, Michele Nestor

Introductions:

Megan Gahring opened the meeting and thanked everyone for attending. All those present made introductions.

Update on the BBB Program:

Megan Gahring and Jerry Zona discussed the upcoming changes to the County's drop-off recycling program. The contract for the program expires December 31. County officials conducted a request for proposals earlier this year and received one bid from Tri-County Industries at approximately \$365 per month per container or \$4,380 per year per container. The counties' current cost is \$2,400 per year per container.

The County was anticipating increased costs for the Big Blue Bin program and had been brainstorming ideas for worst-case scenarios. Dropping the metal, glass and plastic from the program was determined to be the most logical approach to the challenge. Zona said, this

course of action will result in no increase to the budget and by focusing strictly on papers the counties will not have to pick and choose sites to close.

Eliminating glass, metal and plastic from the program also removes the most problematic materials from the program. Gahring said a view into many of the containers will reveal plastic bags, Styrofoam, clamshell food containers, light bulbs, and a many other trash items that don't belong.

There has been a national trend to eliminate glass from recycling programs over the past several years. Glass has largely been replaced by plastic so there are limited glass recycling options. Additionally, broken glass contaminates the other recycling streams and is expensive to manage. For plastics, there are trends to collect primarily #1 and #2 plastic bottles.

All of the recycling site sponsor are notified of the changes, press releases were issued in local media, and signs are posted on all of the recycling bins. During January 2019, TCI will begin transitioning the sites to cardboard and paper only bins.

Updates from Western PA Recycling Roundtable:

A collaborative meeting with Industry, County Recycling Coordinators, Regulatory, and Local Government representatives was held on December 6th in Franklin, Venango County.

A Roundtable discussion of local impacts as a result of the recycling markets were held. Throughout the region, the phasing out and dropping of glass materials from recycling programs is a common occurrence.

There was agreement by all those present that a consistent message for What Can be Recycled is needed to reduce contamination rates for recycling. In general, the following should not be put in your recycling bin:

- No Junk Mail
- No Cartons
- No Plastic Bags
- No #3-#7 Plastics
- No Glass

If a hauler wants to make changes to materials included in your municipal contract, be sure to check your local ordinance for consistency. For example, your ordinance states "hauler must collect glass." DEP may hold municipalities accountable for the items stated in the ordinance to be eligible for 904 grant funding. If materials in your ordinance need amended, a Resolution can be used.

There was also agreement among those present that the Cost of Recycling needs communicated to consumers. Most customers don't understand the cost involved with providing recycling service ... the collection, transportation, and processing involved before the material has value and can be marketed.

Material is not recycled until it is made into another product. Look at recycling as feedstock for manufacturers, instead of an environmental contribution. Quality feedstock has value.

Michele reported the impact of removing glass from single stream materials, based on 2017 tonnage, is about 623 tons. Estimated glass removed from commingled stream is about 310 tons. Approximate loss of Performance Grant funding (904 monies) is about \$5,594.

Updates from PA DEP Act 101 Workgroup:

Michele reported on discussions to Act 101 proposed by the Committee at the DEP workgroup session on December 12th. A final report is due to the DEP Secretary in January. Some Mercer County municipalities could be impacted by changes to density and population requirements for mandated recycling if proposed changes are enacted to Act 101.

Tour of TCI Transfer Station:

Jerry Bowser led a tour of the TCI transfer station for those members that wished to see the operations at their Grove City location.

Mercer County SWAC Meeting April 16, 2019 at 10:00 AM – 12:30 PM

Hermitage Food Waste to Energy Facility

Present:

Ginger Fenton, Penn State Extension
Tom Darby, Hermitage Food Waste to Energy Facility
Jasson Urey, Borough of Greenville
Lyle Huffman, Borough of Greenville
Monica King, Shenango River Watchers
John Logan, Mercer County Fiscal
Michele Nestor, Nestor Resources, Consultant
Vance Oaks, Grove City Borough
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Jerry Bowser, Tri-County Industries
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Meeting Agenda
- December 2018 Meeting Minutes
- Special Drop-Off for Select Materials Fact Sheet
- Recycling and Waste Management Options for Municipalities Fact Sheet
- Developing a Municipal Curbside Recycling Program Fact Sheet

Introductions:

Megan Gahring opened the meeting and thanked everyone for attending, and thanked Tom Darby for hosting our meeting. All those present made introductions.

R/SW Fact Sheets and Updates:

Megan discussed the development of the Fact Sheets that were distributed. As per the current MSW plan, one of the recommendations is for municipal outreach on recycling and waste management programs. Over the winter, the RSW addressed this need and drafted two educational documents for municipal officials on options for developing municipal programs. Jerry discussed the Fact Sheets in detail.

Megan also mentioned that the courthouse drop-off recycling station is now rotating throughout Lawrence and Mercer counties for monthly collection events. The flyer details all of the dates, locations, and items accepted for the program. To date, the events have been extremely successful.

The RSW submitted a 902-grant application to DEP for curbside recycling carts to support the transitioning of the BBB sites to curbside recycling programs.

A burning ordinance inventory was also conducted over the winter to assess how many municipalities in Mercer County have an ordinance that addresses the burning of recyclables.

Mercer County Demographics:

Michele discussed the status of recycling markets. Many investors are interested in Pennsylvania for constructing new facilities for paper and plastic processing.

Courts have determined and ruled that Act 101 does not provide administrative fees for counties. In other words, counties are not permitted to include mandatory administrative fees in their contracts for securing landfill capacity, as per MSW plans. However, counties may request in-kind services, dollars, sponsorships, donations, etc. in agreements. The criteria for acceptance must be included in the RFP's for disposal (compliance, quality of offerings from landfills, etc.).

Michele stated that Mercer County has the option to structure an RFP like that. Clearfield County spent a lot of money in court fees, but their case opened the door to create new opportunities for funding county programs. County funding is always needed, and this may present an option in the new plan if the Commissioners wish to do so.

A proposal by the Governor is looking to take 13 million from Recycling Fund to help pay DEP salaries.

Michele presented a series of slides discussing the residential demographic profile for Mercer County.

The average change in population throughout all of PA is up by 8%. Mercer County, however, has lost 3% of its population. Historically in Mercer County, the decline in population is a common trend. The demise of the steel industry around 1980 created a significant decline in people living and working in Mercer. Poverty rates increased at that time, youth moved away, and the county hasn't completely recovered from this.

A map of population change was presented for each municipality within MC. Growth in urban areas is slowly coming to a halt and leveling off. Growth, however, seems to continue around the Grove City area.

Michele explained population is the baseline factor for waste generation. Age brackets for population are from 18 to 64 years old. Generally, there are not a lot of births. The age range including the 25–30-year-olds are working and generating an income. It's during these ages when communities experience a robust economy. In Mercer County, this age bracket is lacking. The mean age in MC is 34. People are staying in their homes; there's not a lot of new construction and people aren't moving into the community. Waste generation rates are low as there aren't as many items being purchased and spending in these communities is at a minimum .

Housing plays a big factor in waste collection. Single family homes lend themselves to curbside collection. Contracts aren't necessarily utilized. MC has mostly single-family homes versus townhomes and condominiums. The best demographic indicators for curbside collection are housing and population density. The population prime for curbside collection is 200 people per square mile.

Vance questioned how owner-occupied homes versus rental properties affect collection programs. Whenever possible, it's suggested the property owners, landlords and absentee owners be billed. If tenants of rental units are billed, they are less likely to pay. Rates can be charged by an annual or quarterly rate. Details for payment and collection are administered in the ordinance

Michele reported the subscription rate in Crawford County was surveyed last year after the county got rid of their drop-off recycling sites. All of the haulers were contacted and asked for housing counts for service. Results showed that townships had about 30% subscription rate. A campaign was started to talk to municipal officials about curbside programs and mandatory recycling. Drop-offs can enable people to avoid paying for the services.

Greenville Borough discussed how they created a landlord committee to address lack of users paying for services. The borough accounted for a \$40,000 deficit because of non-payments. The borough requires landlords of rental properties to incorporate language and fees in their leases agreements with tenants. Some type of limited collection for evictions and special circumstances is needed. Evictions also create code enforcement violations and problems. Commercial entities not wanting to pay also need targeted, as well as continued outreach to magistrates about enforcement with evictions and illegal dumping. KPB encourages contact with magistrates.

Michele noted, that under Act 101, counties are required to know how much solid waste is generated, how much landfill capacity is available and under contract, and that there are haulers with sufficient capacity to transport the waste.

Enforcement for mandated municipalities is difficult when surrounding municipalities aren't required to recycle and mandated residents are using drop-off recycling facilities to avoid paying for curbside service.

Jerry discussed the importance of education and outreach programs to schools and other audiences. Haulers are experiencing difficulty with their drop-off facilities receiving a lot of contamination at their bins. Even when working with die hard recyclers and environmentalists, most of the public believes they are doing it right.

Tour of the Hermitage Food Waste to Energy Facility:

Tom Darby provided a tour of the food waste to energy facility.

Mercer County SWAC Meeting August 6, 2019 at 9:30 AM – 12:00 PM

Joy Cone Cookie Facility

Present:

Scott Boyd, County Commissioner
Matt McConnell, County Commissioner
Timothy McGonigle, County Commissioner
Ginger Fenton, Penn State Extension
Nicki Biles, Mercer County Fiscal
Monica King, Shenango RiverWatchers
Kim DiCintio, Mercer County Regional Council of Governments
Jeremy Coxe, City of Hermitage
Matt Ceremuga, Joy Cone Company
Michele Nestor, Nestor Resources, Consultant
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Randy Vogel, Vogel Disposal
Jerry Bowser, Tri-County Industries
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Meeting Agenda
- April 2019 Meeting Minutes
- 2018 Municipal Recycling Performance Chart
- Recycling Right Fact Sheet
- Plastic Bags & Film Plastics Fact Sheet
- Mercer County Landfills & Transfer Stations Fact Sheet
- Regulated Medical Waste Presentation
- 2019 Hard to Recycle Item Event Flier

Introductions:

Megan Gahring of the Lawrence-Mercer Recycling/Solid Waste Department opened the meeting and thanked everyone for attending. All those present made introductions.

R/SW Updates:

Megan reported the 2018 recycling tonnage for Mercer County as reported by annual reports received by the Department. The data is collected and entered into the RETRAC database

accessible by PA DEP. Total residential recycling tonnage was 19,100 tons and commercial tonnage was 11,158 tons. Compared to population and the total amount of waste generated in Mercer County, the diversion rate for recycling calculated is 32%. This recycling rate includes all single stream, HHW, electronics, and organics recycled by residents and businesses in the 2018 calendar year.

Municipal recycling performance data for Mercer County is compiled annually by the Department to evaluate residential curbside recycling rates for several municipalities. Single stream recycling rates for the mandated municipalities along with two others are evaluated in the spreadsheet.

Fact Sheets:

The Department continues developing Fact Sheets on varying recycling and solid waste topics. Over the winter, three more documents were developed. Recycling Right is an overview of acceptable and unacceptable materials for recycling, along with the problems of contamination. Plastic Bags and Film offers information on where bags and film can be taken for recycling, and the problems with bags at recycling centers. The Landfills and Transfer Station Fact Sheet discusses options for hauling and disposing trash and recycling collection centers at these facilities.

Regulated Medical Waste:

Michele discussed society's growing sources of medical waste which include infectious and chemotherapeutic waste from home health care, outpatient & urgent care centers, the opioid addiction, recreational drug use, mail order pharmacies, and physician samples. Injectable drugs are projected to grow to a \$625 billion dollar market by 2022. Industry waste and recycling haulers are continually exposed to the extreme safety and health hazard threat presented by sharps/needles disposed of improperly.

Education on the options for the proper disposal of used sharps is needed. The Federal Drug Enforcement Agency (DEA) offers collection days each April and October for the drop-off of unwanted over-the-counter drugs and prescriptions. The Department also publishes a Fact Sheet on Medications, their proper disposal, and take back locations throughout Mercer County. Discussions also included education and outreach to funeral homes.

HHW & Electronics:

Jerry Zona discussed Special Collection event trends from 2011-2018. Materials collected include tires, appliances, and electronics. In 2016, the event began accepting HHW. Participation rates for Mercer County have steadily increased since 2011 and steadied in

2018. The same is true for the weight of materials collected. In 2017, additional advertising in the region resulted in a record number of participants. To accommodate the increasing amount of traffic, several changes were made in 2018 to expedite the unloading process and wait times.

2019 Hard to Recycle Event:

Megan announced the Hard to Recycle event in Mercer County will be held on September 21, 2019 from 10AM - 1PM at the Jefferson Township Fairgrounds. Fliers are now available and are posted on the Mercer County Government webpage. News ads will be placed in the Record Argus, Sharon Herald, Farm and Dairy and Weekly Bargain Bulletin throughout the month of September.

Tour of the Joy Cone's Cookie Plant:

Matt Ceremuga led the committee members on a tour of the facility's cookie and wafer production lines.

Mercer County SWAC Meeting December 12, 2019 at 10:00 AM – 11:30 AM

Mercer County Courthouse

Present:

Scott Boyd, County Commissioner
Nicki Biles, Mercer County Fiscal
Jeremy Coxe, City of Hermitage
Michele Nestor, Nestor Resources, Consultant
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Jerry Bowser, Tri-County Industries
Gary King, Perry Township
Vance Oaks, Grove City Borough
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department

The following handouts were distributed:

- Meeting Agenda
- April 2019 Meeting Minutes
- H2R Flyer for 2020 (in progress)
- Mercer County Waste Disposal Trends - Slides

Introductions:

Megan Gahring of the Lawrence-Mercer Recycling/Solid Waste Department opened the meeting and thanked everyone for attending. All those present made introductions.

R/SW Updates:

Megan discussed the Keep PA Beautiful Litter Summit in Harrisburg on November 14th. The last time a litter study was conducted for PA was in 2009. Visible litter counts were conducted at 180 sampling points. The quantity of litter is relatively the same as 10 years ago however the results showed that the types of litter have changed. Cigarette butts still remain the highest percentage of material found, with plastic and film now the second most found. In 2009, paper items were the second most commonly found litter material. A survey of public attitudes toward litter was also conducted by random phone calls and interviews. Updates from PA DEP, PA DCNR, and PA DOT were also presented by Secretaries of the agencies.

Megan reported that DEP is offering a new grant opportunity for Food Recovery Infrastructure. Non-profit organizations that provide food to the public and partner with retailers or wholesalers of foodstuffs are eligible to apply for equipment such as: refrigerators, stoves, box trucks, dollies, etc. Applications are due April 24, 2020 and pre-application meeting is required with the County Coordinator and DEP.

Megan is scheduling the Hard-to-Recycle monthly events for 2020 and is looking for additional hosts to sponsor the events. The flyer was passed around offering members the chance to sign up for a monthly event.

Megan reported on the Build Reuse annual conference at the Phipps Conservatory in Pittsburgh. Numerous speakers from around the world discussed their efforts and experiences in creating a circular economy with the disassembly, reform, and reuse of building materials. The concepts will reduce the amount of construction and demolition waste entering landfills. DON Services in New Castle is implementing some of the efforts with the revitalization and new construction of home in the lower east side community. A representative from the City of Sharon also attended the conference.

Jerry Z. discussed the ongoing series of Fact Sheets for the Department's education campaign on recycling and waste. An additional 10 Fact Sheets were developed, printed and will be advertised in local newspapers. Minimal disposal options exist for compressed cylinders and propane tanks. Michele mentioned a Penn State project that is researching disposal options for compressed cylinders.

Jerry Z. also discussed the results of the annual Special Collection events this year. 325 cars went through Jefferson Township Fairgrounds with 21,000 pounds of electronics and almost 7,000 pounds of HHW. The majority of the participants were from the Greenville area.

Jerry Z announced that Lawrence County Commissioners hired part-time enforcement officer over the summer. John Kulnis is responsible for the camera surveillance program, obtaining an ORI for the Department, and issuing citations. He is also available to work with municipalities on illegal dumping.

Mercer County plans to update their ordinance during the MSW planning process to mimic the updates made to Lawrence County's Solid Waste Management Ordinance. The Mercer County ordinance is currently a transporter ordinance which doesn't allow for comprehensive waste management and recycling regulations.

Tri-County CleanWays is having their annual meeting and volunteer appreciation dinner this evening at Sonis. A presentation by the New Castle School District's Drastic Plastic project will be included in the program.

Michele discussed new electronic waste discussions being held with legislators in the state. An e-waste recycling coalition of manufacturers such as Sony, Vizio, Apple, and Dell) are proposing the creation of a clearinghouse or nonprofit for the collection and distribution of fees. Retail outlets may not have a choice of their recycler. The nonprofit coalition would have equal stakeholder participation and not just be comprised of OEM's. Potential fees would be included in the cost for new electronic items purchased. Legislation may be proposed in January 2020.

Mercer County Disposal Rates and Trends:

Michele presented visual graphs and statistical data that examined trends in the generation and disposal of municipal solid waste (MSW) over the past 10 years for Mercer County. MSW is about 90% of all the waste reported. Under PA law, MSW doesn't include sewage, C & D waste, infectious waste, and ash. Also, waste disposed out of state is not included. Carbon Limestone landfill waste is not reported, as it is located in Ohio. The industrial climate and decline has changed over the year and impacts residual waste trends. Looking within the past 10 years, MSW in Mercer County peaked during 2012 and 2013.

The main driver of MSW is population. Economics has more of an impact on the C & D waste stream. Mercer County has experienced a significant population decline, yet the quantity of MSW has remained relatively the same. This discrepancy has been consistent over the years.

EPA estimates 60,000 tons of MSW are disposed of annually in Mercer County based on the current population. The reported averages by landfills are much higher and in the 100,000 tons range. The EPA averages 3 pounds of MSW are generated per person per day. However, in Mercer County 6 pounds or more per person per day are reported.

Seneca landfill in Butler County accepts the majority of waste generated in Mercer County. Waste Management owns both the Northwest landfill in Butler County and Lakeview landfill in Erie County. The Lakeview landfill accepts more waste from Mercer County than the Northwest landfill.

Transfer stations also report waste like the landfills. Some of the discrepancies in reporting of MSW for Mercer County might be a result of duplicate reporting. The transfer station located near Grove City sends their waste to Seneca Landfill in Butler County.

As far as recycling trends, 8,661 tons of Act 101 recycling materials were reported in ReTrac for 2018 calendar year. A 34% recycling rate is the national average, however that average rate has dropped to the 20's percentile as a result of the China National Sword Initiative.

Jerry Z. discussed the Municipal Recycling Performance rates for the 2017 calendar year. MRFs report that 20% of their single stream recycling material entering the facility is glass.

Michele reported that curbside textile recycling is a new initiative in urban areas.

Jeremy discussed the results of the City's glass recycling event in November with PRC. He also expressed interest in establishing an ongoing program with the county for the collection and recycling of glass.

Michele discussed the timeline for the remainder of the MSW planning process. In January 2020, the County will release an RFP for landfill disposal capacity. The RFP may include donations or sponsorships for HHW events for the landfill however, fees are not recommended. Responses will be due the end of January. The next SWAC meeting is slated for February.

Meeting adjourned at 11:30 AM.

Mercer County SWAC Meeting July 22, 2020 at 9 AM – 11 AM

Mercer County Conservation District and Munnell Run Farm

Present:

Scott Boyd, County Commissioner
John Logan, Mercer County Fiscal
Jeremy Coxe, City of Hermitage
Michele Nestor, Nestor Resources, Consultant
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Jay Russell, Mercer County Conservation District
John Kulnis, Lawrence County Compliance Officer
Vance Oaks, Grove City Borough
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department
Dot Hillman, Mercer County Builders Association
Jerry Bowser, Tri-County Industries

The following handouts were distributed:

- Meeting Agenda
- December 12, 2019 Meeting Minutes
- DRAFT Mercer County MSW Ordinance
- R/SW Fact Sheets: Bulky Waste, Hiring a Hauler, Recycling Myths, Yard Waste, and Document Destruction.

Introductions:

Megan Gahring of the Lawrence-Mercer Recycling/Solid Waste Department opened the meeting and thanked everyone for attending. All those present made introductions. John Kulnis introduced himself as the part-time compliance officer for Lawrence County. He updated the committee on the activities he has been tasked with since being hired in July 2019. The Department received their ORI (Originating Identifier) number that all allows the Department to directly file citations for illegal dumping, rather than going through the Sheriff's Dept., local police, or state police officers. The BBB camera surveillance program is being enhanced with new equipment and signage. The Lawrence County SWM Ordinance is currently being updated with these provisions for enforcement and will be introduced to the Commissioners for a public notice comment period.

R/SW Updates:

Megan provided an update of activities since the last SWAC meeting in December 2019. Included was the extension of the landfill agreement RFP deadline to September 3rd. This additional time was requested by landfills as a result of COVID.

The monthly H2R events have resumed. The July event was hosted at the Ellwood City public works garage. August will be held at Grove City, September in Volant, October in Hempfield Township, and November & December at the R/SW Office in New Castle.

A Construction & Reuse Forum is planned for September 16, 2020 in New Castle. The four-hour event is designed to bring together community stakeholders and form partnerships for building deconstruction and reuse economies. More details of the event to follow. The committee will receive an advertising brochure for the event once finalized.

Mercer County Ordinance Revision:

The last SW ordinance update for Mercer County was done in 1992. The current Solid Waste Transporter ordinance is now being modified during this planning process to address the comprehensive management of trash and recycling, with enhancements to rural communities. The Department convened sampled ordinances from across the state for suggested language. The current modifications include provisions for better enforcement of illegal dumping in the county.

After a short review, Michele mentioned that the definitions might need updated for consistency with PA DEP. Those definitions included municipal waste versus medical and residual waste. Standard flow control language used in the ordinance. Also, the ordinance provides language for waste haulers/transporters to provide curbside recycling service to customers that request it. This supports the offering of rural recycling in non-mandated municipalities. Michele recommended with include modified language to address fees and cost relating to rural curbside recycling offerings.

Annual recycling reports are by haulers are required. Mandated municipal recycling is required, as consistent with DEP Act 101. The RSW policy is to refer mandated recycling violations directly to the municipality. However this inclusion also allows the County to support the municipality in their compliance. For example, the County can send a NOV or warning letter to the offender, notifying them that they are in violation of the County Ordinance. Multi-family housing units are a common offender in mandated municipalities.

Jerry Bowser asked for clarification on the definition of "general haulers". General haulers were clarified as those haulers not being on a regular route. Vance inquired about prohibited

activities for bulky waste that would be complaint driven, which could potentially open the door for a Mercer County compliance officer to be available to address municipal complaints. Jerry Zona commented “Yes” and noted that the Department goal has always been compliance over conviction. The RSW is not actively searching for situations where bulky items are being accumulated by a household but is rather responding to complaints and inquiries. John Kulnis is currently assisting Scott Township with a similar complaint near a Dollar General on Route 108 in Lawrence County.

Mercer County Landfill RFP:

Michele discussed expanding offerings with the RFP process for landfill agreements to address the prohibition of charging administrative fees by PA DEP. The RFP includes evaluation criteria for the donation of services, equipment, sponsorships that support programs implemented by the Department. For example, program offerings supporting the recycling of glass, textiles, or even frequency of collection. Also suggested were making HHW collection for residents more accessible on an ongoing basis. One goal of the Department is to make waste and recycling collection a universal occurrence, meaning you have access to these services independent of which municipality you reside. These goals of the Department were highlighted in the RFP for awareness. The ultimate goal of the landfill agreements is to have the public sector provide services to support the county in achieving their goals. The value of the cost of the service has to be reasonable to obtain criteria points in the evaluation of the RFP. Michele is currently developing the evaluation criteria to substantiate the acceptance landfill agreements and public process. Megan, Jerry, and Michele will evaluate the proposals received, assign points to the services offered, and make a recommendation to SWAC. Standard criteria is used for the completion of forms. Only full and complete proposals are accepted, with the necessary permits. The County does reserve the right to request additional information for incomplete proposals. Sample evaluation criteria includes regulatory compliance, qualifications, compliance history, financial stability, bonding worksheets, operating permit status, available disposal capacity, and environmental and liability insurance. Landfill technical designs and operational plans would address innovate technology, methane recovery, and provide for a backup facility. Landfills will also be evaluated based on other services offered like recycling, acceptance of yard waste, residential tip at the facilities, and/or C & D recycling.,

To evaluate what percent of Mercer County waste they willing to accept, a two-level matrix is used. The matrix asks how much tonnage you are willing take in one year (tonnage on a daily basis) and how will accommodate extra waste during catastrophic events (adopting an emergency plan). For the past 15 years, so much landfill capacity has been available in the northeastern US, partially due to the light-weighting of packaging materials and single stream

recycling. Lately however, landfill capacities are diminishing in the Northeast because surrounding states have been sending their waste to PA landfills.

The RFP's Materials Management Planning section requests mechanisms and support from landfills that compliment county objectives such as: consistency with MSW plan, expansion of materials and collection frequencies, and equipment and collection costs for illegal dumping and litter cleanups.

County-wide services and those that support a greater portion of Mercer County's population will be evaluated. To meet objectives, the County is willing to accept donations if services are not provided. Education is another objective, most recently on how to reduce the contamination of curbside recycling materials. Evaluation will also include locations, curbside versus drop-off collection, on-going or one-time services, and financial worth of service or offering. Michele is confident that this RFP meets the latest court rulings for landfill agreements, including the fair open and competitive process requirements.

New Fact Sheets:

Jerry Z presented the new R/SW fact sheets that were developed. Most of the education stemmed from inquiries and phone calls the department receives in the office. Jerry also presented a chart and comparison of trash and recycling programs for mandated municipalities.

Jeremy reported on a Pennsylvania Resources Council glass recycling event held in Hermitage during July. The weeklong event collected close to 4 tons of glass. The collection containers was 80% full to capacity. The City is considering hosting another event in late fall, 2020. A county program to share in the cost and opportunity for glass collection is desired.

The meeting adjourned at 10:20 AM.

A walking tour of Munnell Run Farm was conducted by Jay Russell, the Mercer County Conservation District Manager.

Mercer County SWAC Meeting September 22, 2020 at 10 AM – 12 PM

Mercer County Courthouse

Present:

John Logan, Mercer County Fiscal
Michele Nestor, Nestor Resources, Consultant
Jerry Zona, Lawrence-Mercer Counties Recycling/Solid Waste Department
Vance Oaks, Grove City Borough
Megan Gahring, Lawrence-Mercer Counties Recycling/Solid Waste Department
Dot Hillman, Mercer County Builders Association
Jerry Bowser, Tri-County Industries

The following handouts were distributed:

- Meeting Agenda
- July 22, 2020 Meeting Minutes

R/SW Updates:

Megan started the meeting providing an update on recent events by the Department. A Construction and Reuse Forum was held on September 16, 2020. The virtual event included a diverse audience of about 40 people, including industry experts, government officials, contractors, arts foundation, historical societies, and trade schools. Speakers included Mike Gable from Construction Junction in Pittsburgh, Joe Connell an experienced consultant from Maine, and local community speakers from New Castle and Sharon. The event's purpose was to gauge interest in the region for a network of professionals to learn more about, and move forward with, the deconstruction and reuse of building materials. Looking at buildings as material banks is one way to encompass the environmental, economic, and social benefits to recycling and reusing building materials to avoid disposal at the landfill. As an outcome, the Department intends to explore Construction and Demolition (C & D) waste, recycling outlets and market development for the region, as one way to move forward with supporting the landfill diversion of building materials.

The annual Mercer County Special Collection Event was held on Saturday, September 19, 2020 at the Jefferson Township Fairgrounds. Over 150 cars went through the event collecting appliances, tires, electronics and HHW. New this year, was the requirement for registration with the contractor for an appointment time to drop off your materials. This allowed for a calm, spaced out, sequencing of cars coming through the event, without traffic

concerns, and a greatly reduced waiting time for participants. We plan to continue with this format and scheduling of appointments going forward with future events. Results are not in yet for the weight of material received. Debbie Fisher with Mercer County IPP provided 14 volunteers for the day. Without support of community service volunteers, the event could not be made possible.

Vance Oaks reported on the Grove City Borough electronics recycling event that took place on Saturday, September 12, 2020. A new contractor was utilized this year for the event. Noble Environmental, a Pittsburgh based company, took in about 130 cars, by appointment only, and approximately 17,000 pounds of electronics and HHW were collected. Vance reported the event went very smoothly and they were pleased with the new contractor.

MSW Plan Update & Comments:

Megan provided a current update on the MSW planning process. On September 3, 2020, landfill Request for Proposals (RFP's) were due to the Courthouse and opened during the Commissioners public meeting at 1 PM. A total of 6 proposals were received. Waste Management submitted proposals for four landfills: Valley, Northwest, Evergreen, and Lakeview. Seneca landfill submitted one, as well as Republic Services for the Carbon Limestone landfill in Ohio. We will evaluate the proposals for completeness, and plan to meet to review the Materials Management offerings received. Generally speaking, the RFP's from landfills offered differing quantities of in-kind disposal for illegal dumping materials.

Megan announced that comments are still being accepted for the draft Chapters of the Plan Update. SWAC has received all of the Chapter to date for review.

We are still on track to wrap up the MSW planning process by the end of the year. Once the landfill agreements are reviewed and recommended, the Commissioners will pass a resolution to accept and execute the agreements. Executed landfill agreements are included in the Plan.

The draft plan will be distributed to all of the Mercer County municipalities. The draft plan will include the updated Mercer County Ordinance once approved by the Solicitor and Commissioners. A Legal Notice for the Ordinance will then be published in the local news media for a 30-day comment period. DEP review and approval of the plan is the final step in the process.

Michele reviewed Chapter 11 of the Plan that discusses the Noninterference of Local Facilities. The intent of this Chapter is to remind the public that any future landfills that receive permits from the State, after the Plan is approved, have the right to petition for inclusion. With no other comments, the meeting adjourned

