

2016



ARMSTRONG COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN

PREPARED BY

THE ARMSTRONG COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT



Nestor Resources, Inc.

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ARMSTRONG COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN REVISED 2016

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Introduction

From a purely practical perspective, local governments tend to assume some degree of responsibility for managing the municipal waste generated within their jurisdictions. In the past, solid waste management plans developed at the municipal level contained theory that was rarely practiced. Progressive waste management practices and steps to protect the environment were often dismissed as impractical.

Historically, garbage collection was prevalent in urban areas, but rural residents had fewer options. A common solution to municipal waste management was often the town dump. In

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fact, in the Commonwealth of Pennsylvania, nearly 1100 open dumps still existed during the 1970's. These sites were primitive by today's standards. They attracted vermin, emitted odors, and often smoldered or burned out of control. Still, they did not cause immediate alarm, primarily, because they provided a cheap and mostly free disposal outlet.

During the last decades of the twentieth century, a phenomenon occurred that would soon change our views and municipal waste management practices. Our purchasing power increased due to the availability of affordable but less durable merchandise. Processed and prepackaged food, often in individual portions replaced home cooked meals. This newfound freedom to consume was outpaced only by our ability to discard without concern.

Beginning in 1960 and continuing at a steadily escalating pace for 30 years, Americans generated municipal waste at a rate greater than had ever been seen. It exceeded the pace of

population growth. It quickly became apparent that the town dumps were ill equipped to deal with the ever-increasing waste stream. It also was finally acknowledged that they posed environmental harm.

In response, the United States Environmental Protection Agency was formed followed by new environmental regulations at the federal level. This created a wave of activity and trickle down legislation that reached all the way to the core of the problem. Pennsylvania reacted by instituting significant changes in municipal solid waste management statutes that became the most stringent standards for landfill design and operation in the nation. As municipal open dumps began to disappear, the need to project and prepare for local needs along with mechanisms to ease this transition was seen as crucial.

The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) dictated that municipal waste plans have more tangible results than in the past. Act 101, for the first time, shifted the authority for Municipal Waste Management to the County. This transfer of authority away from the municipalities was intended to give the County the ability to implement the recommendations developed in the planning process. The primary responsibility delegated to a county by Act 101 was to secure sufficient disposal capacity for its waste. Although a number of counties chose to develop and build publically owned and operated landfills and/or waste to energy complexes, contractual agreements with landfills or other processing facilities were used by the majority of counties to attain this goal.

Although Act 101 did shift disposal issues to the counties, the municipalities retained primary responsibility for municipal waste storage, collection, and transportation. Included with those duties were mandates for select municipalities, based on defined population criteria, to require recycling by residential, institutional, and commercial sources. The counties have no direct responsibility to provide recycling programs or services. Nevertheless, counties are required to report on these activities, coordinate efforts, and demonstrate in their municipal solid waste management plans to what extent the collectively combined municipalities will feasibly attain the state's recycling initiative.

HISTORY OF ARMSTRONG COUNTY'S MUNICIPAL WASTE MANAGEMENT PLANNING

In 1990, Armstrong County, in accordance with the provisions of Act 101, presented to the municipalities for ratification a ten-year plan for the management of Armstrong County Municipal Solid Waste. The final Plan was approved by the Pennsylvania Department of Environmental Protection (PADEP) and subsequently was adopted by the Board of County

Commissioners. Updates and revisions were developed and approved in 1993 and in 2005. This project represents the fourth iteration of the original Plan.

SUPPORTING STUDIES

Other studies and technical assistance projects have been conducted outside of the previous planning processes. These efforts primarily examined the recycling programs implemented on behalf of Armstrong County by the Progressive Workshop, a nonprofit adult occupational training and rehabilitation agency. Most recently, a comprehensive study evaluated the Armstrong County Recycling Center and the drop-off recycling program from an operational and economic perspective. The purpose was to determine the best approach to ensure long-term sustainability of the many services provided by the County and the Progressive Workshop. The changes and recommendations resulting from that report have been incorporated into the current Plan. The effects on recycling performance and program finances are also included.

BENEFITS OF ARMSTRONG COUNTY MUNICIPAL SOLID WASTE PLANNING

Armstrong County benefitted from the original Plan's recommendations. The County secured disposal capacity to ensure its citizens fair and equitable disposal costs. The use of professionally operated state of the art landfills decreased the risk of future environmental liabilities. The County's support of voluntary recycling opportunities helped to conserve valuable natural resources. Adoption of ordinances and prosecution of violators to prevent illegal dumping helps to ensure the quality of life and protect the public health and safety in local communities.

IMPACT OF LOCAL RECYCLING EFFORTS

From the onset, recycling has been an important component in the Armstrong County Municipal Solid Waste Management Plan. Resources are limited in county and local governments. Programs must be judged on the return for the dollars invested. In the absence of other good metrics, that return can be measured purely in financial terms. Like other commodities, recyclable materials have varying degrees of direct monetary value based on market conditions at any given time. Unlike many agricultural and mining commodities, recycling is not subsidized on a large scale through tax credits or other incentives. For this reason, recycling is often judged unfairly with expectations for material sales to cover the full costs of operation.

Armstrong County has always recognized that there are other advantages derived which are not immediate and direct to the recycler. The impact of these benefits are often overlooked and ignored. One only has to look at the Progressive Workshop to see how recycling provides added quality of life and greater independence to a valuable fraction of the community.

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

The Armstrong County Recycling Center demonstrates how recycling can increase the quality of life to a valuable fraction of the community.

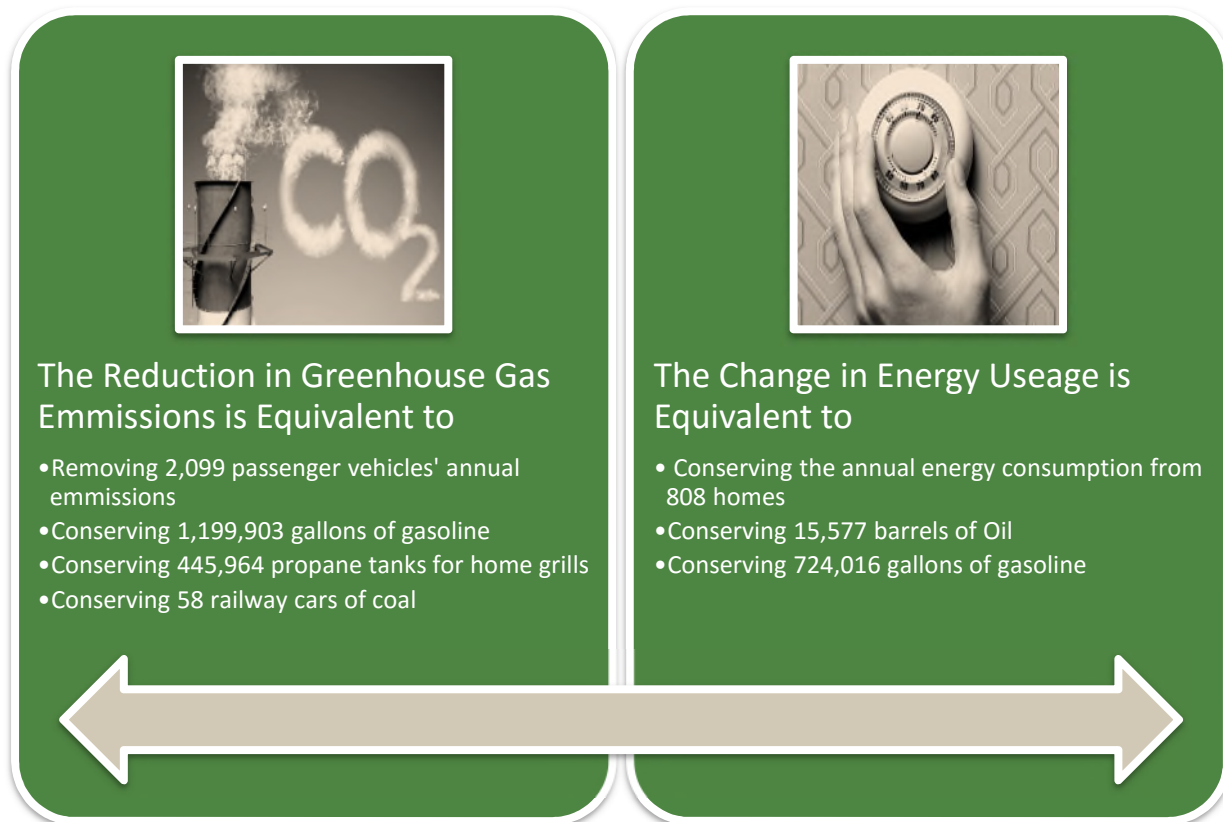
include source reduction, recycling, combustion, composting, and landfilling.

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 O-1 shows the environmental benefits of recycling in Armstrong 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 Armstrong County. GHG savings for Armstrong County were calculated by comparing the emissions associated with landfilling versus recycling specific

materials found in local programs during 2011. These include: glass, cardboard, aluminum and bi-metal cans, plastic containers, newspapers, office papers, and tires.

Figure 0-1 Environmental Benefits of Armstrong County's Recycling



MOVING FORWARD

The planning process is designed to examine existing facts, statistics, and circumstances that indicate strengths and weaknesses in municipal solid waste management policies and programs. The findings help planners identify future needs with the ultimate objective of providing adequate resources and mechanisms to accommodate for them. The Armstrong County Municipal Solid Waste Management Plan documents the progression of research and discovery that led to the decisions and recommendations, which will be implemented during the ten-year period of the Plan.

The activities for initiating a newly developed plan and for revising or updating an existing one are very similar. What typically differs is one establishes a baseline and the other benchmarks actual performance against previously established projections and expectations. Another contrast is the availability of information. New initiatives may have to dig deeper for the decision-making data while existing plans have the advantage of mining information from tracking and monitoring mechanisms created specifically for this purpose during development.

Following are brief descriptions of the process used during this update of the Armstrong County Municipal Solid Waste Management Plan.

WASTE CHARACTERIZATION

One of the first steps in planning for municipal solid waste management is to identify and understand the sources, types, and quantities of generated waste. Since waste generation is typically measured in terms, which relate to population and other socio-economic factors, examining local demographic trends is important. National and regional studies and trends are used to analyze the local reported data and to establish benchmarks.

The update compares actual reported data and previous projections. It examines local changes in waste quantities, population, and other contributing factors. The analysis factors in widely accepted trends in waste composition and other industry influences.

AVAILABLE SERVICES AND UTILIZATION

Examining municipal solid waste collection programs for residential, commercial, institutional, and government entities can reveal where adequate access to services exists as well as where there are service gaps and inadequacies. Identifying service providers for collection, processing, and disposal along with tracking the utilization of

those services by local citizens is a good step in revealing where poor waste management habits may exist. It is also valuable to explore services that could be made available based on new technologies or new operations.

The update looks at industry consolidation and its impact on currently available services. It also examines the reported utilization of disposal facilities compared to the capacity previously reserved.

POTENTIAL FOR RECOVERY AND DIVERSION

An intense review of reported recycling and waste diversion activities serves as a foundation to determine future projected recovery of materials. It also establishes the potential for future business development opportunities. Creating a baseline allows for the development of performance objectives and metrics.

The update reviews changes made in recycling and collection programs resulting from studies conducted since the adoption of the Plan. It looks at the impact of current market conditions on existing programs and suggests reductions or additions to service offerings.

IMPLEMENTATION STRATEGY

The final component brings the planning process's findings and recommendations together in an action plan. The action plan clearly defines the resources, tools, and timeframe necessary to achieve the goals of a municipal waste management plan.

The update organizes all of these elements and arranges them in a structure called the implementation plan. It serves as the final documentation of the process and as a guide for future requirements.

The updated Plan reaffirms existing initiatives and establishes new goals and objectives based on the core needs of the County. It also delineates the responsibility to fund such services at the individual, municipal, and county level. Lastly, it provides legal mechanisms to implement and enforce the recommended changes.

The structure of the Plan revision is shown in Figure.0-2

Figure 0-2 Plan Contents and Organization

Chapter 1	DESCRIPTION OF THE WASTE
•general demographic data •current waste stream characteristics •reported and estimated waste quantities •material types and sources	
Chapter 2	DESCRIPTION OF FACILITIES
•collection and disposal practices •disposal facilities utilized •local municipal collection programs	
Chapter 3	FUTURE CAPACITY
•disposal capacity projections •external influence on available capacity •determination to solicit for capacity •data on local municipal collection programs	
Chapter 4	DESCRIPTION OF RECYCLING
•benchmarks for population, waste generation and reduction •comparison of local efforts to national trends •outline of strengths and weaknesses and recommendations for future recovery •economic and environmental benefits of waste reduction and recycling	
Chapter 5	SELECTION AND JUSTIFICATION
•justifications for the strategies used to implement a comprehensive waste management system •modifications to existing programs as well as those newly proposed •potential business and economic development opportunities •implementation schedule	

Chapter 6

LOCATION OF FACILITIES

- names, locations, and types of facilities designated to receive Armstrong County’s waste over the next 10 years

Chapter 7

IMPLEMENTING ENTITY

- organizational structure
- basic resources needed by the Department

Chapter 8

PUBLIC FUNCTION

- county and municipal owned and operated facilities, equipment
- future public facilities

Chapter 9

IMPLEMENTING DOCUMENTS

- ordinances
- contracts and agreements
- rules and regulations

Chapter 10

ORDERLY EXTENSION

- extension and expiration of existing agreements

Chapter 11

NON INTERFERENCE

- cooperation with existing disposal sites

Chapter 12

PUBLIC PARTICIPATION

- advisory committee meetings
- public comments

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Chapter 1

Generation and Composition

UNDERSTANDING MUNICIPAL WASTE IN ARMSTRONG COUNTY

Nationally, the United States Environmental Protection Agency (USEPA) tracks and monitors municipal solid waste. The Agency's extensive database documents trends in municipal waste generation over more than fifty years. It is regularly updated. In- depth information is available on the types and quantities of specific materials in the overall waste stream.

The USEPA also studies and records the amount of waste that is discarded and identifies whether it is recovered for other uses or returned as feedstock into the manufacturing process, which originally produced it. Information is available on the materials that are ultimately converted to energy, or landfilled. Pennsylvania maintains similar but less detailed records.

This background data is useful in planning for municipal solid waste management. Although USEPA's documented statistics are used to predict generic outcomes for the nation as a whole, they are equally useful in assessing local needs. The best results are achieved when the assumptions and benchmarks derived from the national study are applied in conjunction with characteristics of the local community.

Heritage, culture, and education can influence how people opt to manage their waste. Population, housing, economic conditions and the overall geography are variables that determine the types, and quantities of waste produced, locally. These issues have an impact on the cost and effectiveness of waste management services, as well.

This chapter examines the physical and socio-economic characteristics of Armstrong County. It offers a snapshot of the people, businesses, and institutions that generate municipal solid waste. History, cultural views, and traditions are discussed within the context that they affect waste management and overall environmental views and practices. In essence, Chapter 1 provides the foundation upon which meaningful analysis and subsequent recommendations made during the planning process are based.

AN OVERVIEW OF THE COUNTY

Location has always been key to Armstrong County's socio-economic development. Situated in Western Pennsylvania, Armstrong County is located approximately 40 miles from the City of Pittsburgh. It is also conveniently located within an hour's drive from the Ohio state line. Two major roadways provide access to the County. State Route 422 flows east to west. It connects with Interstate 79 in Pennsylvania. State Route 422 is also a primary route to the Ohio border. State Route 28 connects the County to Interstate 80 to the north. As the major thoroughfare into the City of Pittsburgh, State Route 28 fosters the growth of commercial and industrial opportunities in Armstrong County. It is an easy commute for residents employed in the city but who prefer a more rural lifestyle.

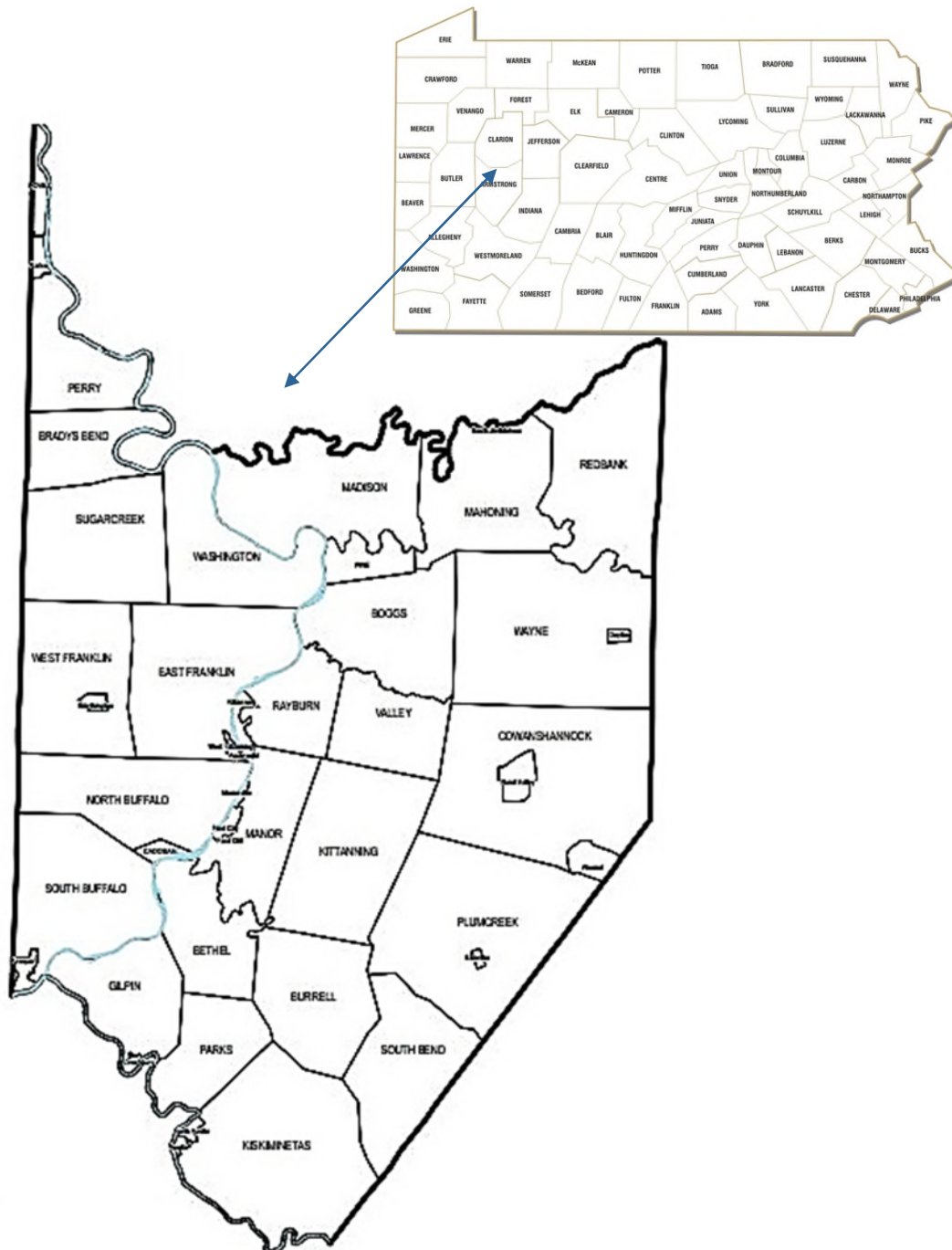
Armstrong County is bordered by five counties. These include Jefferson and Indiana to the east and southeast respectively; Clarion to the north; Butler and Westmoreland to the west and southwest respectively.

GOVERNMENT

Pennsylvania uses population to categorize counties into eight classifications. Armstrong County is ranked as a 6th class county. Twenty-four counties with populations from 45,000 to 89,999 people fall within this category. A board of commissioners consists of the three highest elected officials in Armstrong County government. Departments and agencies are assigned with specific areas of responsibilities. Local government is made up of forty-five municipalities' with one city, sixteen boroughs, and twenty-eight townships.

Figure 1-1 shows the location of Armstrong County in relationship to Pennsylvania overall. Municipal boundaries are outlined.

Figure 1-1 Map of Armstrong County in Relationship to Pennsylvania



GENERAL DEMOGRAPHICS

In planning, it is important to establish a baseline year to assure that data and statistics from national, regional, and local sources reflect certain common assumptions. The most recent data available at the national level for waste generation, composition, and disposition is from 2012. Likewise, demographic data from the state is available through 2012. For consistency, it is reasonable to use 2012 as the baseline year for the Armstrong County Municipal Solid Waste Management Plan, with occasional references to more current statistics or comparisons if necessary.

POPULATION

The US Census Bureau reported the July 1, 2010 population for Armstrong County was 68,894 people. That is a 4.83 percent decrease from the 2000 US Census when the population was recorded as 72,392 people. The Pennsylvania State Data Center located in Harrisburg, PA, works in conjunction with the US Census Bureau to gather and compile state, county, and municipal demographic data within the Commonwealth. The Center also issues estimates and projections on population, housing, and related issues.

County Population Projections for Pennsylvania, 2010-2040, published by the Pennsylvania State Data Center projects a continual decline in Armstrong County's population. An estimated decline of 5.6 percent is forecasted for the years 2010 to 2030. The decline is already evident. The Data Center estimates Armstrong County's 2012 population at 68,409

Population is a key driver of waste generation. Location, accessibility, and housing density also factor into the provision and costs of integrated waste management services. Such issues must be considered when assessing the needs of Armstrong County

Table 1-1 lists the municipalities in Armstrong County along with the 2012-estimated population of each. The table also illustrates how the population is distributed into urban or rural sectors within the municipalities. Overall, 67 percent of the County's population resides in rural areas with significantly lower population density.

Table 1-2 shows the occupied housing units in Armstrong County. It demonstrates the differences in land mass and population density throughout the County.

Figure 1-2 provides a graphic demonstration of the population density by each Armstrong County municipality.

Table 1-1 Armstrong County Population with Rural and Urban Designations

Area	Total 2012 Population Estimate	Urban Population	Rural Population	Percent Urban	Percent Rural
Armstrong County	68,409	22,233	46,176	32.50	67.5
Apollo Borough	1,623	1,623	0	100.00	
Applewold Borough	305	305	0	100.00	
Atwood Borough	106	0	106		100
Bethel Township	1,187	0	1,187		100
Boggs Township	933	0	933		100
Bradys Bend Township	761	0	761		100
Burrell Township	700	0	700		100
Cadogan Township	338	287	51	84.90	15.1
Cowanshannock Township	2,883	0	2,883		100
Dayton Borough	545	0	545		100
East Franklin Township	4,050	1,628	2,422	40.20	59.8
Elderton Borough	356	0	356		100
Ford City Borough	2,950	2,950	0	100.00	
Ford Cliff Borough	373	373	0	100.00	
Freeport Borough	1,791	1,791	0	100.00	
Gilpin Township	2,485	249	2,237	10.00	90
Hovey Township	97	0	97		100
Kiskiminetas Township	4,752	328	4,424	6.90	93.1
Kittanning Borough	3,980	3,980	0	100.00	
Kittanning Township	2,264	0	2,264		100
Leechburg Borough	2,118	2,118	0	100.00	
Madison Township	812	0	812		100
Mahoning Township	1,408	0	1,408		100

Source Pennsylvania State Data Center and US Census Bureau

Area	Total 2012 Population Estimate	Urban Population	Rural Population	Percent Urban	Percent Rural
<i>Manor Township</i>	4,237	2,169	2,068	51.20	48.8
<i>Manorville Borough</i>	403	403	0	100.00	
<i>North Apollo Borough</i>	1,281	1,281	0	100.00	
<i>North Buffalo Township</i>	2,998	246	2,752	8.20	91.8
<i>Parker City</i>	838	0	838		100
<i>Parks Township</i>	2,715	785	1,930	28.90	71.1
<i>Perry Township</i>	350	0	350		100
<i>Pine Township</i>	406	0	406		100
<i>Plumcreek Township</i>	2,352	0	2,352		100
<i>Rayburn Township</i>	1,882	422	1,460	22.40	77.6
<i>Redbank Township</i>	1,052	0	1,052		100
<i>Rural Valley Borough</i>	873	0	873		100
<i>South Bend Township</i>	1,167	0	1,167		100
<i>South Bethlehem Borough</i>	474	0	474		100
<i>South Buffalo Township</i>	2,635	58	2,577	2.20	97.8
<i>Sugarcreek Township</i>	1,527	0	1,527		100
<i>Valley Township</i>	657	0	657		100
<i>Washington Township</i>	931	0	931		100
<i>Wayne Township</i>	1,184	0	1,184		100
<i>West Franklin Township</i>	1,836	0	1,836		100
<i>West Kittanning Borough</i>	1,163	1,163	0	100.00	
<i>Worthington Borough</i>	631	0	631		100

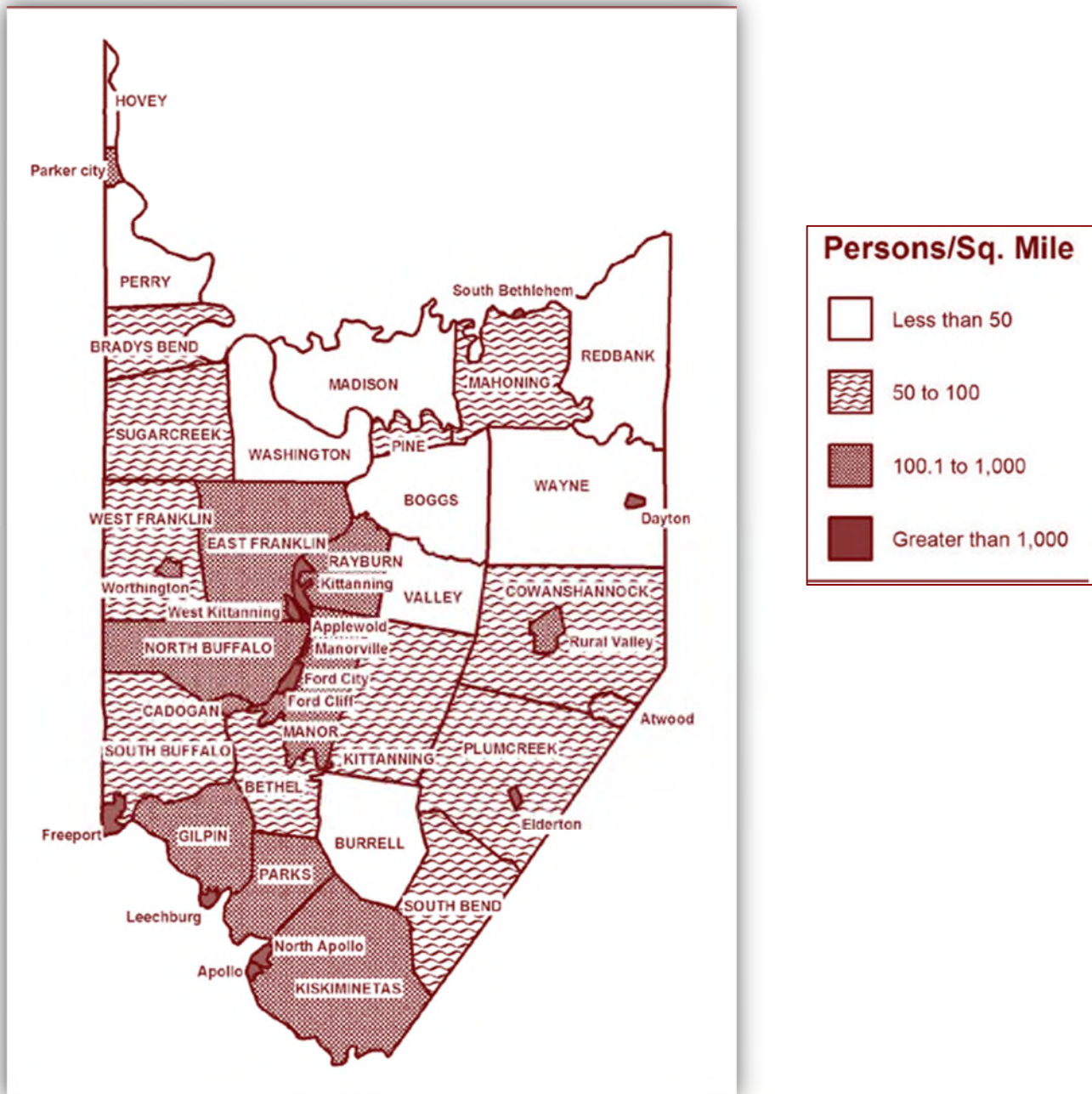
Source Pennsylvania State Data Center and US Census Bureau

Table 1-2 Population Density and Housing Units by Municipality			
Area	Occupied Housing Units	Square miles of Land	Persons Per Square Mile
Armstrong County	28724	653.2	104.7
Apollo Borough	675	0.31	5,235.50
Applewold Borough	162	0.05	6,100.00
Atwood Borough	53	2.09	50.7
Bethel Township	472	15.27	77.7
Boggs Township	288	24.58	38
Bradys Bend Township	313	12.61	60.3
Burrell Township	222	21.46	32.6
Cadogan Township	167	0.99	341.4
Cowanshannock Township	1144	45.66	63.1
Dayton Borough	189	0.38	1,434.20
East Franklin Township	1746	30.88	131.2
Elderton Borough	163	0.32	1,112.50
Ford City Borough	1356	0.64	4,609.40
Ford Cliff Borough	169	0.08	4,662.50
Freeport Borough	788	1.27	1,410.20
Gilpin Township	1021	16.45	151.1
Hovey Township	36	2.15	45.1
Kiskiminetas Township	2090	40.67	116.8
Source Pennsylvania State Data Center and US Census Bureau			

Area	Occupied Housing Units	Square miles of Land	Persons Per Square Mile
Kittanning Borough	1799	1	3,980.00
Kittanning Township	888	30.71	73.7
Leechburg Borough	996	0.44	4,813.60
Madison Township	348	30.03	27
Mahoning Township	561	24.78	56.8
Manor Township	1799	16.58	255.5
Manorville Borough	177	0.1	4,030.00
North Apollo Borough	555	0.54	2,372.20
North Buffalo Township	1271	24.71	121.3
Parker City	406	0.96	872.9
Parks Township	1154	14.04	193.4
Perry Township	116	15.02	23.3
Pine Township	181	4.34	93.5
Plumcreek Township	890	42.38	55.5
Rayburn Township	752	11.85	158.8
Redbank Township	447	32.3	32.6
Rural Valley Borough	411	2.11	413.7
South Bend Township	434	22.53	51.8
South Bethlehem Borough	243	0.15	3,160.00
South Buffalo Township	989	26.96	97.7
Sugarcreek Township	532	26.67	57.3
Valley Township	263	14.74	44.6
Washington Township	401	22.45	41.5
Wayne Township	422	44.72	26.5
West Franklin Township	726	26.08	70.4
West Kittanning Borough	613	0.43	2,704.70
Worthington Borough	296	0.69	914.5

Source Pennsylvania State Data Center and US Census Bureau

Figure 1-2 Population Density



Source Pennsylvania State Data Center

THE IMPORTANCE OF RIVERS AND WATERWAYS

The Allegheny River flows from north to south through the heart of the County. Feeding into the Allegheny is the Clarion River to the north and the Kiskiminetas River, which forms Armstrong's southwestern border with Westmoreland County. The river corridors are flanked with communities that are linked organically by the rivers and bridged synthetically by the industries that become their livelihoods by pulling from their natural resources.

COMMUNITIES WITH A COMMON THREAD

To the far north is Parker City where the Clarion River joins the Allegheny River bordered by Hovey, Perry, Bradys Bend, Sugarcreek, Washington, Madison, Pine, and Boggs Townships.

Midway through Armstrong County are a cluster of Boroughs that include Kittanning, the county seat, Applewold, West Kittanning, Ford City, Ford Cliff, and Manorville, and the Townships of East Franklin, Rayburn, North Manor, Buffalo, Bethel, Cadogan, and South Buffalo.

Lower Armstrong County is popularly known as the Alle-Kiski Valley. Here the Kiskiminetas River flows beside the Boroughs of Apollo, North Apollo, and

Leechburg and the Townships of Parks and Kiskiminetas. Near the town of Schenley in Gilpin Township, the Kiskiminetas joins the Allegheny and passes the Borough of Freeport as it flows toward the City of Pittsburgh and the Ohio River.

A portion of the municipalities does not border the rivers but is tied to them by the streams, creeks, tributaries, lakes and manmade waterways that form the surrounding watershed. These include Dayton, Worthington, Atwood, Rural Valley, South Bethlehem, and Elderton

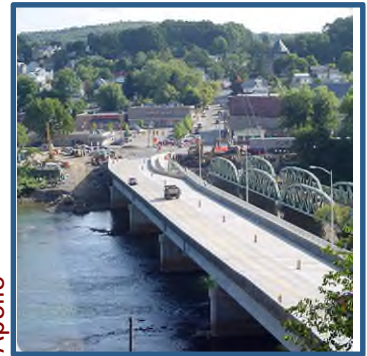
Allegheny River North at
Bradys Bend



Allegheny River South at
Freeport



Kiskiminetas River at
Apollo



Boroughs, along with the Townships of Mahoning, Redbank, Wayne, Valley, Plumcreek, South Bend, Kittanning, Burrell, Cowanshannock, and West Franklin,

The rivers allowed Armstrong County to capitalize on the vast array of natural resources in the region. Towns flourished from the ability to extract coal, oil, natural gas, salt, clay, sand, and a pristine spring water ideal for making whiskey. Local iron, steel, brick, and plate glass manufacturing and a distillery thrived. The promise of prosperity attracted a willing immigrant workforce and the County grew exponentially.

A series of locks and dams constructed during the 1920's and 1930's make the Allegheny River navigable for nearly its entire length that flows through Armstrong County. Commercial transport of raw materials and finished products are dependent on the lock and dam system to this day. In addition to navigation, water intake from the rivers supported industrial operations and provides drinking water for some communities.

Much like the rivers, the Armstrong County Municipal Solid Waste Management Plan addresses an issue common to every municipality. The Plan supports the extraction of valuable resources from the waste stream to serve as manufacturing feedstock and create jobs. Finally, it creates the bridge to help municipalities steer residents toward local solid waste management practices designed to prevent pollution of the land, air, and waterways.

ESTABLISHING AND MAINTAINING ROOTS

The laborers who built Armstrong County are from diverse ethnic, religious, and cultural backgrounds, but they share a strong dependable work ethic. Their descendants were rewarded with upward mobility, higher education, and better living conditions. Strong family units, community pride and lifetime camaraderie have slowed the migration, which could have occurred during serious economic downturns.

According to the Penn State Data Center, 91 percent of the 2012 population were native to Armstrong County. Likewise, nearly 92 percent had consistently remained in the same residence over a five-year time span. For those who did move, 6 percent relocated within Armstrong County and less than 3 percent moved to another county or state.

The absence of new home construction is an indicator that demand is low. The average residential structure was built in 1955. Only 5 percent of all homes were constructed since

the beginning of the 21st century. The declining population signifies that while emigration from the County is negligible, domestic immigration is slow as well.

For all of these reasons, change comes slowly to Armstrong County communities. A well-orchestrated plan with a multi faceted media approach for introducing new waste management and recycling programs is necessary to avoid mass resistance. An advantage of the same situation could be to use the attachment and loyalty to local neighborhoods to motivate improvements.

REVITALIZING AND REPURPOSING

Tragically, both the Allegheny and the Kiskiminetas were victims of the very industrialization they supported. Mine acid, petroleum, raw sewage, and industrial discharges polluted the waterways for decades. The Kiskiminetas was a virtually lifeless river. Today, tighter regulatory controls for the management of industrial waste and sewage have improved the water quality of the rivers. Conservation and watershed groups have successfully remediated areas of mine acid drainage. These efforts are focusing new attention on the rivers as tools from growth and development.

As a flood control mechanism for downstream communities, Mahoning Creek Lake Dam and Crooked Creek Lake Dam provide flood protection for the lower Allegheny River Valley and the upper Ohio River. These structures provide an indirect form of waste reduction. Flooding is the cause of extensive destruction and devastation to homes and property. Since their



Tighter regulatory controls for industrial waste and sewage along with remediation of acid mine drainage have improved the water quality of the rivers.



Effective flood control mechanisms have reduced the frequency of disasters and in turn the amount of debris disposal.



Litter prevention and marine debris management are essential where recreational boating is prevalent

completion in the 1940's, both the Mahoning and Crooked Creek projects have prevented flood damages estimated to be in excess of \$1.2 billion. This type of disaster debris is difficult to manage because it is wet and often contaminated with other pollutants such as chemicals and raw sewage. Removal and disposal of flood debris is costly for homeowners and municipalities. At one time seasonal flooding along the Allegheny River was an expectation rather than an exception. As part of a system of dams constructed by the Army Corps of Engineers, the facilities fulfill an important need.

Mahoning Creek Lake Park and Crooked Creek Lake Park have purpose beyond flood control. Both are year round outdoor activity destinations for local and regional visitors. Thousands of campers, picnickers, boaters, hunters, and anglers frequent the parks each year. Navigable by small leisure craft, canoes and kayaks the Allegheny and the Kiskiminetas Rivers attract boating and fishing enthusiasts. Public and private docks provide access along the shoreline. Small service oriented businesses prosper by catering to the water borne tourists. Western Pennsylvania's rural counties initiated a marketing campaign several years ago to promote the region's recreational events and activities. The rivers and the park are vital resources in this emerging tourist economy and provide value-added benefits to Armstrong County.

With tourism and increased use, another form of pollution can follow. To protect these assets, litter prevention and marine debris management are essential. Public education and awareness campaigns can deter illegal dumping and increase recycling. Where recreational boating is prevalent and in high traffic tourist areas, ensuring docks and outdoor recreational venues have sufficient waste and recycling receptacles with adequate capacity is another wise preventive measure. Armstrong County should consider working with the Tourist Bureau and local watershed groups to develop these tools.

CURRENT ECONOMIC CONDITIONS

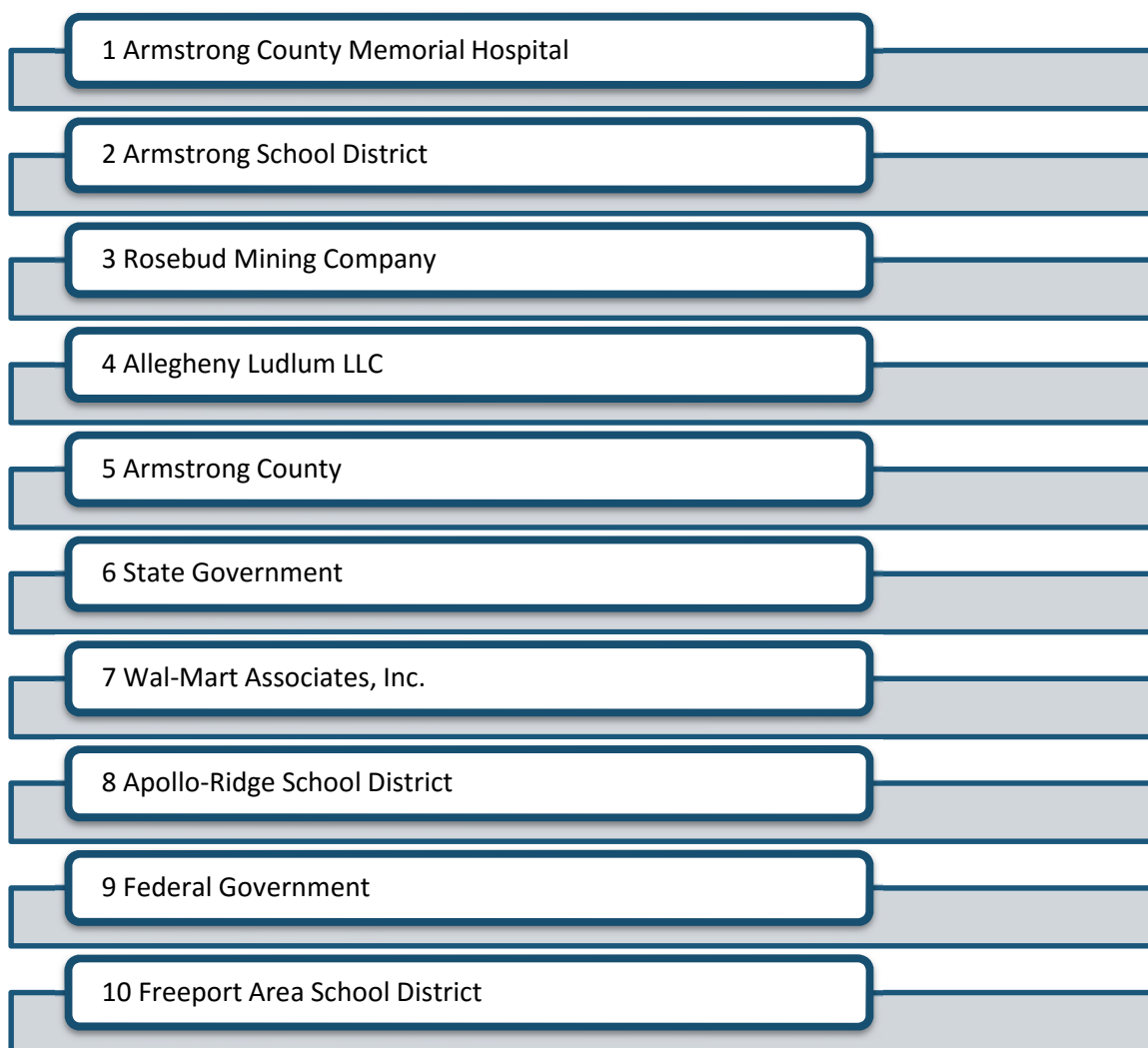
In addition to population, housing and other general demographics, Penn State Data Center provides statistical data and business patterns including the types and number of establishments, the number of employees in each category, and the associated payroll. The results for each county are updated and published on a regular basis.

The *2014 Armstrong County Data Book* features statistical information reported up through 2012. Current global economic conditions have presented challenges for the County's once strong industrial base. It is easy to see from the data, little remains of the industrial giants

that once employed the bulk of Armstrong County’s population. Of the top ten employers in Armstrong County, Armstrong Memorial Hospital ranks first, but collectively school districts and government (federal, state, and local) dominate the list. Allegheny Ludlum is the only manufacturer, and Rosebud Mining is the sole mining interest.

Figure 1-3 lists the top ten employers in Armstrong County.

Figure 1-3 Armstrong County’s Top Ten Employers for 2012



The top employers in Armstrong County do not necessarily pay the highest wages, at least in the private sector. Utility workers receive the highest average salaries but represent one of the smallest employment sectors. The second highest average wages are paid by local school districts followed closely by the mining industry. Coal mining jobs specifically pay significantly more than all others in that industry. Wages for government offices that employ a significant portion of the workforce were not disclosed.

Mineral extraction, including coal mining and oil and gas concerns rank second, however, coal-mining jobs in this category pay significantly more than others in this category. The long-term prospects for miners are less than promising. The majority of the coal seams have been mined-out. Recent regulatory initiatives to reduce air emissions from coal-fired power plants could have a negative effect on that industry. Few other employer categories offer wages at the same level as mining. So losing these jobs would have a negative impact on the economy. Drilling and exploration in the Marcellus Shale Gas Formation has stimulated economic growth but how many permanent jobs it will sustain is still uncertain.

Manufacturers continue to employ a significant portion of the workforce and pay some of the higher average wages. Unlike during the peak of manufacturing production when larger conglomerates were more representative of local industry, smaller but numerous specialty plants are prevalent now. These facilities are more apt to be in the finishing end of the iron and steel industry rather than raw production. A smattering of other types of manufacturing also exists.



Collectively, school districts rank as one of the top employers in the County

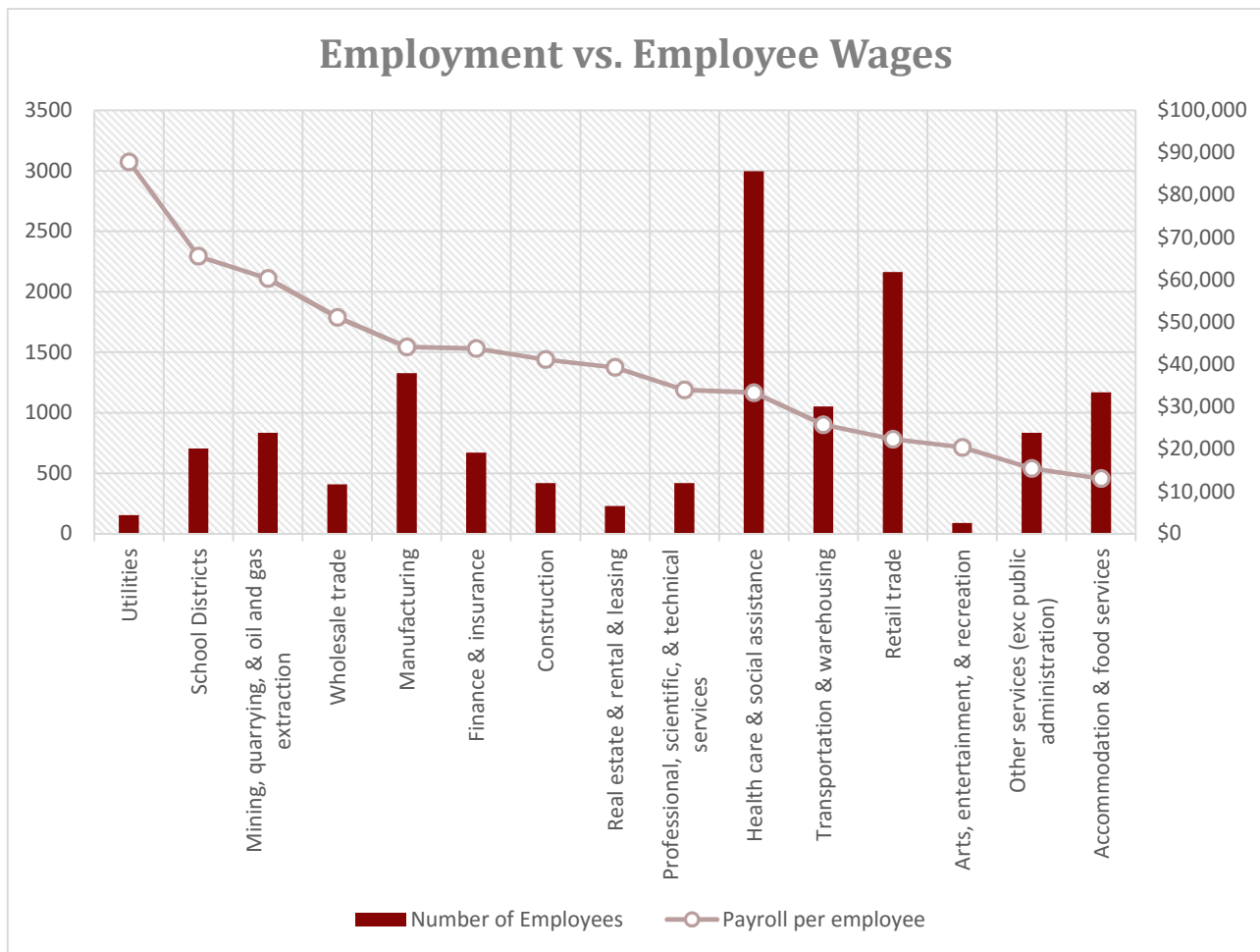


Miners earn better wages than most other private sector workers in the County

Similar to public sector and jobs in school districts, compensation information for agricultural employment was not disclosed. The Penn State Data Center does include some financial information that indicates agriculture is still important to Armstrong County. There are 793 farms in Armstrong County. Based on total cash receipts, including livestock, crops, and government subsidies, Armstrong County ranks 30th in Pennsylvania farming.

Figure 1-4 illustrates the categories of employment, the number of employees, and wages paid. It shows that higher paying employment opportunities are fewer than those with lower wages.

Figure 1-4 Employment and Wages



Another way to understand local economic conditions is to look at personal income. It directly affects the purchasing power and quality of life for local residents. “Willingness to pay” is a determining factor in implementing waste management and recycling programs. Programs designed with cost sensitivity to household incomes are likelier to gain public acceptance and to succeed.

The median household income in Armstrong County is \$44,478, which is lower than the statewide median of \$52,267. Approximately 11 percent of the population is living below the poverty level. There is great disparity between the communities as well. In South Buffalo Township, the average family’s income is roughly \$65,679, well above the state and local median. In contrast, the average income for Ford City Borough families is \$29,938, significantly less than both Pennsylvania and Armstrong County. Considering these differences is useful in determining the appropriate types of waste and recycling services for various areas of the County.



“WILLINGNESS TO PAY” IS A
DETERMINING FACTOR IN
IMPLEMENTING WASTE MANAGEMENT
AND RECYCLING PROGRAMS.
PROGRAMS DESIGNED WITH COST
SENSITIVITY TO HOUSEHOLD INCOMES
ARE LIKELIER TO GAIN PUBLIC
ACCEPTANCE AND TO SUCCEED.

UNDERSTANDING MUNICIPAL SOLID WASTE SIMILARITIES AND VARIABLES

Most of us are more familiar with municipal solid waste than we realize. Each day we engage in activities that generate municipal solid waste. We produce it where we live, where we work, where we shop, in our schools, in our medical facilities and in a host of other community activities. The USEPA reports for 2012, the baseline for data utilized in the Plan, that each person in the United States generated an average of 4.38 pounds of municipal solid waste per day.

Essentially, things that 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. Income, education, geography, weather, and other demographics influence the types and amounts of items purchased and ultimately discarded. Often a physical sort of the

local waste stream is conducted to provide precise data. However, for general planning purposes, the time and cost to initiate that process is not justifiable. Instead, reliable information from national sources can be utilized to conduct a reasonable analysis of local conditions.



Nationally, there are fewer differences in our purchases and discards since the popularity of Big Box retailers and online shopping has grown.

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. The advancements in product distribution affect the make-up of our discards as well. Unfortunately, rural areas can be ill-equipped to collect, process and market the types and volumes of resulting material. Understanding the content of the waste stream ensures that local services are designed to manage materials appropriately.

NATIONAL OUTLOOK ON MUNICIPAL SOLID WASTE

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 issue a series of publications on behalf of USEPA. The project and publications are commonly referred to as “The Franklin Study.”

It focuses on municipal solid waste generated by residential and commercial sources. 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. Until recently, the USEPA reports were published as *“Characterization of Municipal Solid Waste in the United States.”* The iteration that coincides with the baseline year for data utilized in analyses during the planning process is titled *“Generation, Recycling, and Disposal in the United States: Facts and Figures for 2012.”*

USEPA’s ongoing study continues to serve as the definitive survey on the characterization and composition of the national waste stream. It is used as a reference and base of comparison throughout the analyses in the Plan. The series has been challenged, and refuted. However, critics consistently fail to take into account how the parameters and criteria used to define and categorize municipal solid waste differ from state to state as well as from the federal interpretation. The next section discusses the where similarities and differences may exist in Pennsylvania’s laws and regulations.

REGULATORY INFLUENCES

As commonplace as municipal waste can be, it is equally confusing on several levels. An extensive set of federal, state and local laws and requirements create the regulatory framework for the broad spectrum of solid waste management. Inconsistencies exist in the scope of materials and categories considered solid waste from state to state and by the federal government. It can be problematic to interpret and compare data accurately unless the differences are identified upfront. To complicate things further, who and where municipal solid waste is generated can equally affect how it is defined and categorized.

DISTINGUISHING MUNICIPAL WASTE BY ITS SOURCE

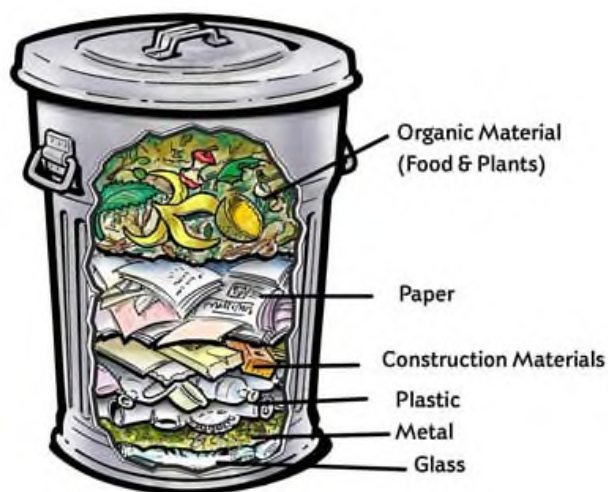
Defining a waste by who generates it or by where it was generated, rather than by its chemical or physical characteristics or environmental impact is often a more practical way for regulatory agencies to monitor and enforce proper waste management practices. Therefore, in both industries and households often there are items commonly found, which for each source are regulated differently and are required to use different disposal methods. Even within the municipal solid waste stream, different sources of generators are defined. These

include the broad categories of residential and commercial, with the commercial sector broken down into more specific types of businesses and operations. While the overall contents of the waste stream remains the same, the proportion of the materials differs in depending on which source generated it. The ability to identify the specific sources of the municipal waste generated is of major importance in the planning process. By knowing not only the overall quantities of a material, but also the amounts generated from various sources, enables jurisdictions to target education and recovery programs where they will get the best return on their efforts.

The categories and sources of municipal solid waste generators found in Armstrong County are discussed later in this chapter.

DISSECTING THE WASTE STREAM

There are a number of categorized sub sets 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, we generally mean glass bottles and jars.

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

A description of the USEPA product categories is shown in Table 1-3.

Figure 1-5 provides a detailed breakdown of the composition of municipal solid waste in 2012 according to the USEPA. The chart represents the total waste generated prior to recovery of materials for recycling and prior to disposal.

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.

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.

TABLE 1-3 USEPA CATEGORIES OF PRODUCTS AND NON-PRODUCTS IN MUNICIPAL SOLID WASTE

PAPER AND PAPERBOARD

Collectively, the many products made of paper and paperboard materials comprise the largest component of MSW. The paper and paperboard materials category includes products such as office papers, newspapers, corrugated boxes, milk cartons, tissue paper, and paper plates and cups.

GLASS

Glass is found in MSW primarily in the form of containers, but also in durable goods like furniture, appliances, and consumer electronics. In the container category, glass is found in beer and soft drink bottles, wine and liquor bottles, and bottles and jars for food, cosmetics, and other products.

METALS

Ferrous By weight, ferrous metals (iron and steel) are the largest category of metals in MSW. The largest quantities of ferrous metals in MSW are found in durable goods such as appliances, furniture, and tires. Containers and packaging are the other source of ferrous metals in MSW.

Aluminum The largest source of aluminum in MSW is aluminum cans and other packaging. Other sources of aluminum are found in durable and nondurable goods.

Other Nonferrous Other nonferrous metals (e.g., lead, copper, zinc) are found in durable products such as appliances, consumer electronics, etc. Lead in lead-acid batteries is the most prevalent nonferrous metal (other than aluminum) in MSW.

PLASTICS

Plastics are a rapidly growing segment of MSW. While plastics are found in all major MSW categories, the containers and packaging category (bags, sacks, and wraps, other packaging, PET bottles, jars and HDPE natural bottles, and other containers) has the most plastic tonnage.

RUBBER AND LEATHER

The predominant source of rubber in MSW is rubber tires from automobiles and trucks. Other sources of rubber and leather include clothing and footwear and other miscellaneous durable and nondurable products. These other sources are quite diverse, including such items as gaskets on appliances, furniture, and hot water bottles, for example.

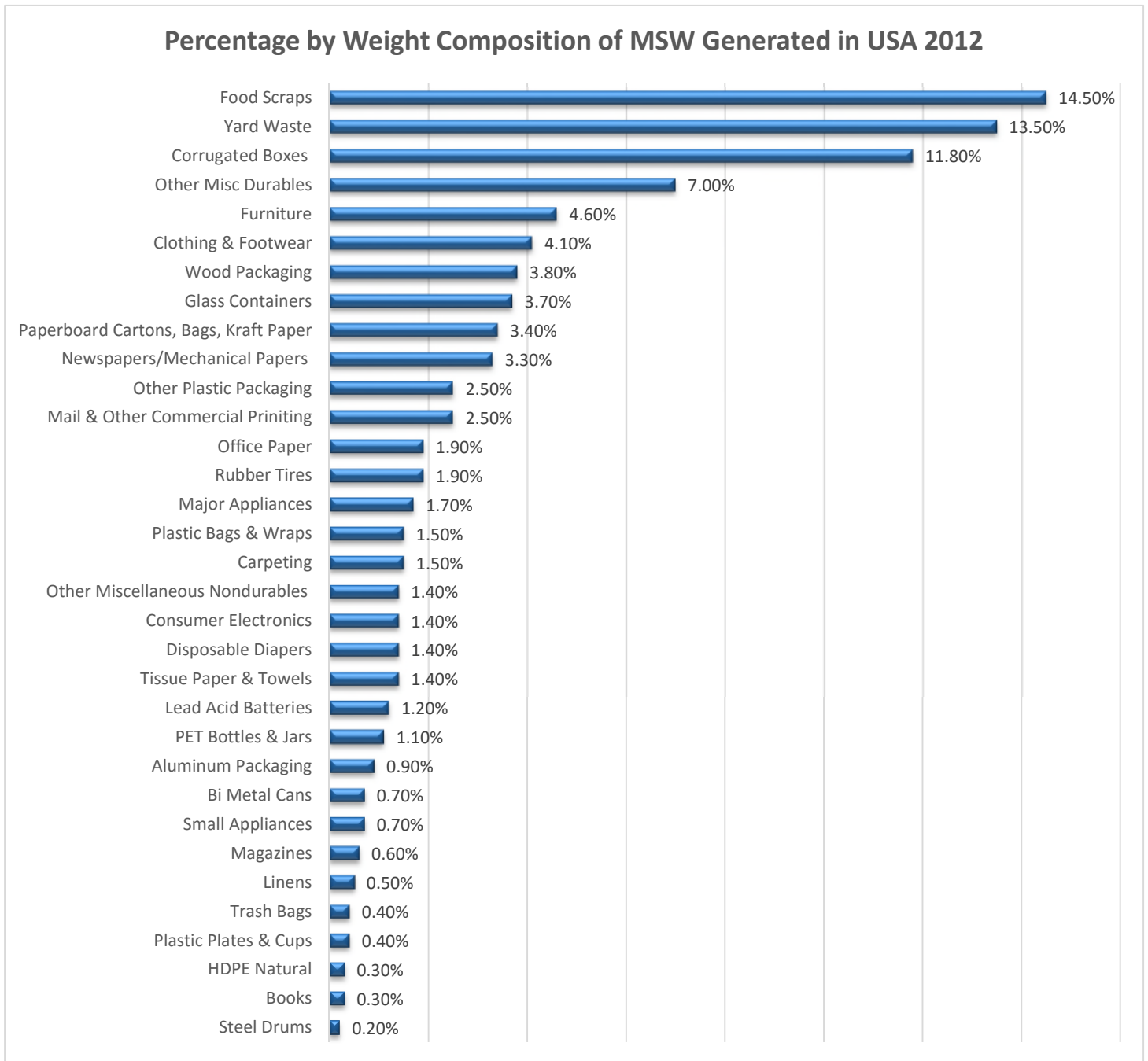
TEXTILES

Textiles in MSW are found mainly in discarded clothing, although other sources were identified to be furniture, carpets, tires, footwear, and other nondurable goods such as sheets and towels.

WOOD

The sources of wood in MSW include furniture, other durable goods (e.g., cabinets for electronic equipment), wood packaging (crates, pallets), and some other miscellaneous products.

Figure 1-5 USEPA Composition of Municipal Waste Generated in 2012



A DOWNTURN IN WASTE GENERATION

USEPA documents in its studies over the past 50 years the quantities, composition, and recovery of municipal solid waste vary considerably. Because of these changes, the rationale used to assess and project waste management needs at the enactment of the Municipal Waste Planning, Recycling and Waste Reduction Act in 1988 (Act 101) is not necessarily applicable in 2012. This section offers a brief discussion of the evolution of municipal waste based on nationally documented changes. These findings form the current assumptions used throughout the planning process to assess the validity or anomalies of local data and programs.

From 1960 to 1990 the amount of municipal solid waste generated on a per capita basis exceeded the population growth rate. The total amount of municipal solid waste generated in the United States has approximately tripled over this 50-year period. Part of the increase is directly related to the growth of the population during that same period. However, individual consumer patterns were also a contributing factor. In contrast, over the past 7 years, the quantity of material generated and discarded has been relatively constant.



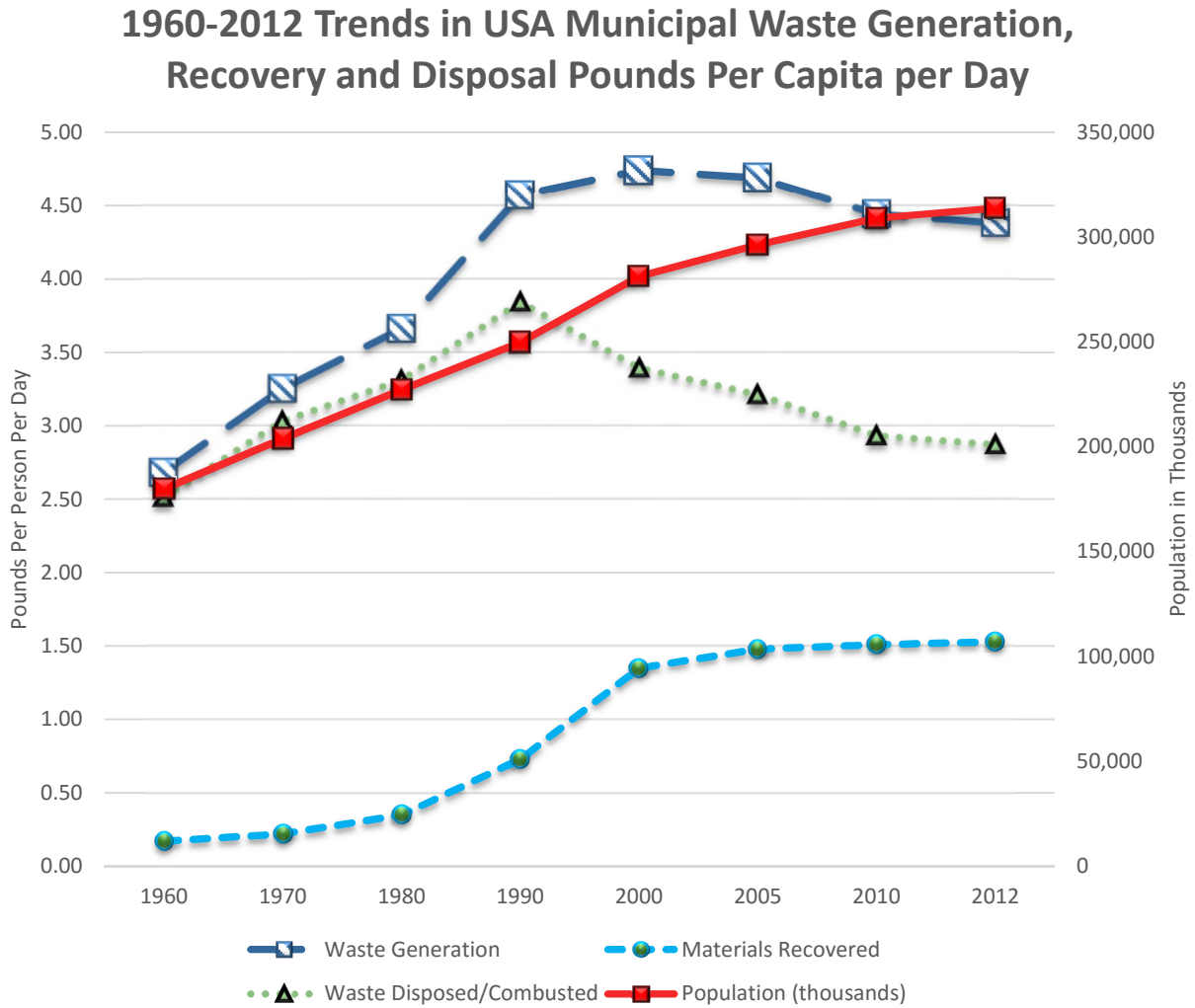
In areas like Armstrong County where the population is in decline, a decreased per capita generation rate can make a notable difference in service availability and costs.

DIRECT IMPACT OF INDIVIDUAL HABITS

In 1960, each person in the United States generated approximately 2.68 pounds of municipal solid waste per day. From 1960 to 1990, the per capita rate grew at an accelerated pace to 4.57 pounds per person per day. That pattern appears to be stabilized and in fact on a downward trend. Since 1990, the per capita rate has slowed, peaking briefly in 2000 at 4.72 pounds per person per day. The 2012 rate is 4.40 pounds per person per day, which is lower than the 1990 rate.

Figure 1-6 illustrates the changes in waste generation, recovery, and disposal since 1960. It compares the per capita rates to population growth during the same time period.

Figure 1-6 Trends in Municipal Waste Generation, Recovery, and Disposal



In areas like Armstrong County where the population is in decline, a decreased per capita generation rate can make a notable difference in service availability and costs. If service providers do not perceive the number of homes serviced per route and the quantity of material collected to be productive and profitable rates increase or routes are abandoned. This is particularly true in rural areas where subscribing to waste collection services is voluntary. Availability of convenient and affordable service is a key factor in deterring illegal dumping. The Armstrong County Municipal Solid Waste Plan offers suggestions to ensure availability of waste management services throughout the County.

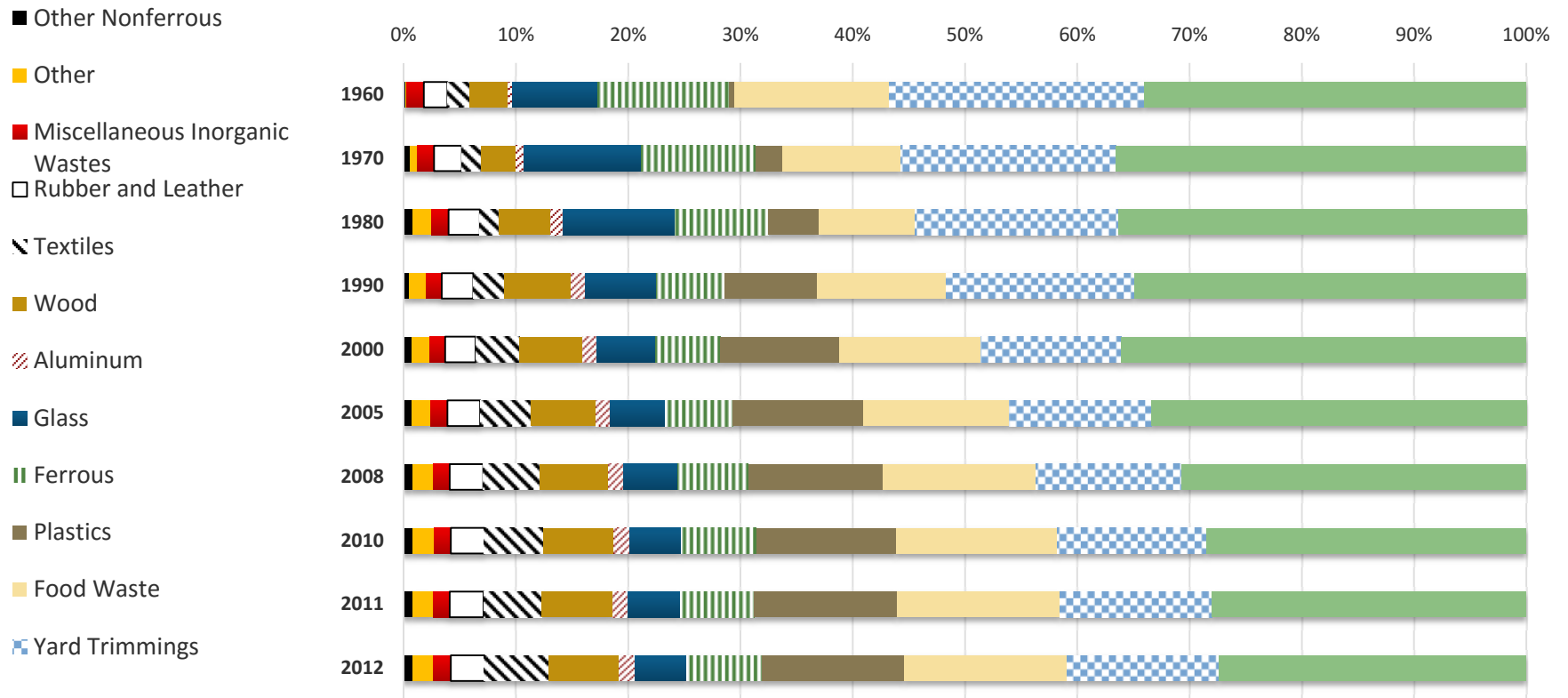
THE EVOLVING WASTE STREAM

Clearly, the quantity of municipal solid waste generated per person changed since 1960. A more dramatic and ongoing change is represented in the make-up of the overall waste stream. Although the basic categories of materials remain, significant changes are noticeable in the proportion of each material represented in the total waste stream. For example, in 1960 paper represented about 34 percent of the municipal solid waste stream. Paper is 27.4 percent in 2012 and the decline is expected to continue as magazines, books and newspapers are replaced by digital media. Plastics were negligible in 1960 at less than 1% of the total municipal solid waste stream generated, but by 2012, plastics increased to nearly 13 percent. A notable shift occurred in packaging material. Plastic packaging grew from less than 1 percent in 1960 to 5.5 percent in 2012, while glass packaging decreased from 7 percent in 1960 to 3.7 percent in 2012.

Figure 1-7 shows how the composition of municipal solid waste generated fluctuated over the years. The decline of paper products and glass and the proportional increase in plastics and food waste is clearly noticeable.

Figure 1-7 Municipal Waste Generated 1960-2012 Composition Changes

Municipal Waste Generated 1960-2012 Composition Changes by Percentage of Total Weight



SUCCESSFUL WASTE DIVERSION

Municipal solid waste generation nearly tripled by weight over the past 50 years, however the quantity that USEPA labels “discarded” also commonly referred to as “disposed.” only doubled. This is attributable to the success of programs designed to divert waste from disposal to recycling and composting.

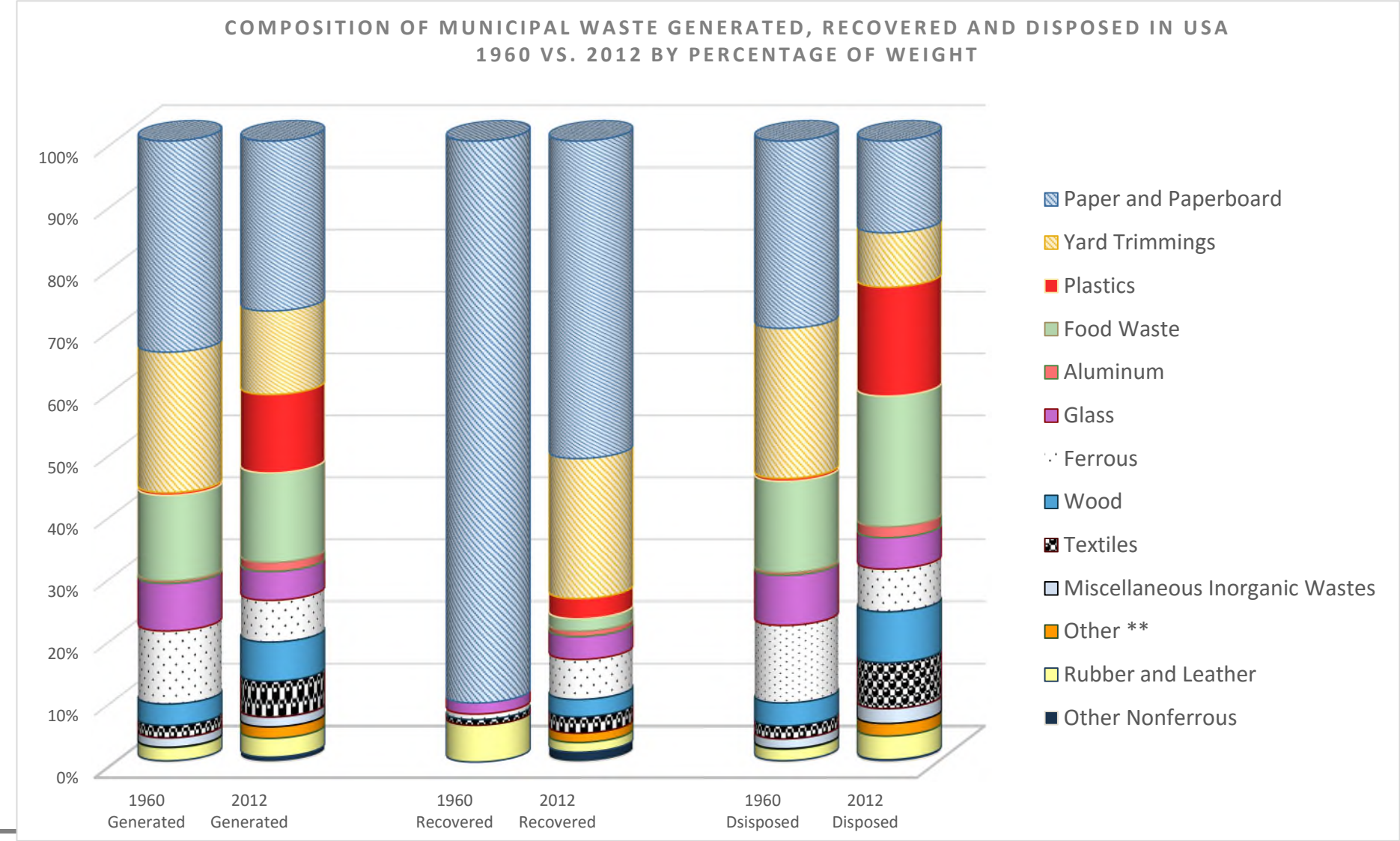
The proportion recovered through recycling and composting programs grew from less than 7 percent of total municipal solid waste generated in 1960 to more than 34 percent in 2012, with 66 percent of the waste stream disposed. The growth was rapid from 1980 through 2000, a direct result of state level initiated regulatory changes. Pennsylvania’s Act 101 is an example of the type of legislation adopted by a number of states that included mandates and incentives to increase recycling. The pace of recovery plateaued after 2000 and the trend has been rather constant for the past fifteen years.

A trend toward individual use items increased the volume of packaging required for shipping and marketing, which was the key factor in the evolving makeup of the municipal waste stream. The change presented a greater need and opportunity to recover materials. Because only recyclable materials are removed, there is a proportional change in the composition of materials recovered compared to the composition of the waste generated. Likewise, once material recovery occurs, the composition of the municipal solid waste disposed differs from both the waste generated and the materials recovered.

As an example, paper (including paperboard) is currently the largest material category as a percentage by weight of the municipal solid waste generated. However, by the effective removal of paper for recycling, the quantity of paper disposed has been declining since about 1990. Recently, plastic and organics, consisting of food scraps and yard trimmings, surpassed paper as the principal components of what remains in municipal solid waste disposed.

Figure 1-8 shows a side-by-side comparison of national waste generation, recovery and disposal composition for 1960 and for 2012. The success of aggressive paper and corrugated cardboard recovery programs is clear. Higher proportionate amounts of organics and plastics remain. In spite of the growth in collection programs for both materials, they are being generated at an accelerated rate. With proposed disposal bans for organics, as well as changes in packaging for food and beverage containers, the composition of waste disposed continues to shift into the near future.

Figure 1- 8 Composition of Municipal Waste Generated, Recovered, Disposed 1960 vs.2012



MUNICIPAL SOLID WASTE TRENDS IN ARMSTRONG COUNTY

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.

To examine the current conditions in Armstrong County, understanding what is common or normal in the majority of communities across the nation, provides a sufficient benchmark for evaluating local data. Comparing the USEPA information to Armstrong's reported data provides insight into prevailing trends and developing conditions that could affect future solid waste management capacity needs and the development of treatment and processing methodologies.

DETERMINING LOCAL GENERATION, RECOVERY AND DISPOSAL RATES

Population is used to calculate the generation, disposal and recovery rates on a per capita basis. It is also used to estimate generation, recovery, and disposal when a per capita rate is assumed. In 2010, the population of the United States was 314.1 million persons. That year the Franklin Study estimated that 250.9 million tons of municipal solid waste as defined by the USEPA was generated in the United States. Of the municipal solid waste generated in 2012, the nation discarded 135.1 million tons. An estimated 86.6 million tons were recovered, establishing for 2012 a national recovery rate of 34.5%. This approximates Pennsylvania's current recycling goal of 35%. Therefore the national data is a reasonable standard to use as a measure of Armstrong County's reported disposal activities and its performance in attaining the state's recycling goals.

According to the results of the U.S. Census, Armstrong County 2012 estimated population was 68,409. In 2012, Pennsylvania landfills reported the disposal of 31,848 tons of municipal solid waste from Armstrong County. Another 1,342 tons were recovered according to the County's reports. This excludes a portion of the tonnage reported from a local scrap yard, which includes materials from sources other than municipal waste generators and/or

from sources outside of the County. Based on the reported data, the estimated amount of municipal waste generated in Armstrong County in 2012 was 33,191 tons.

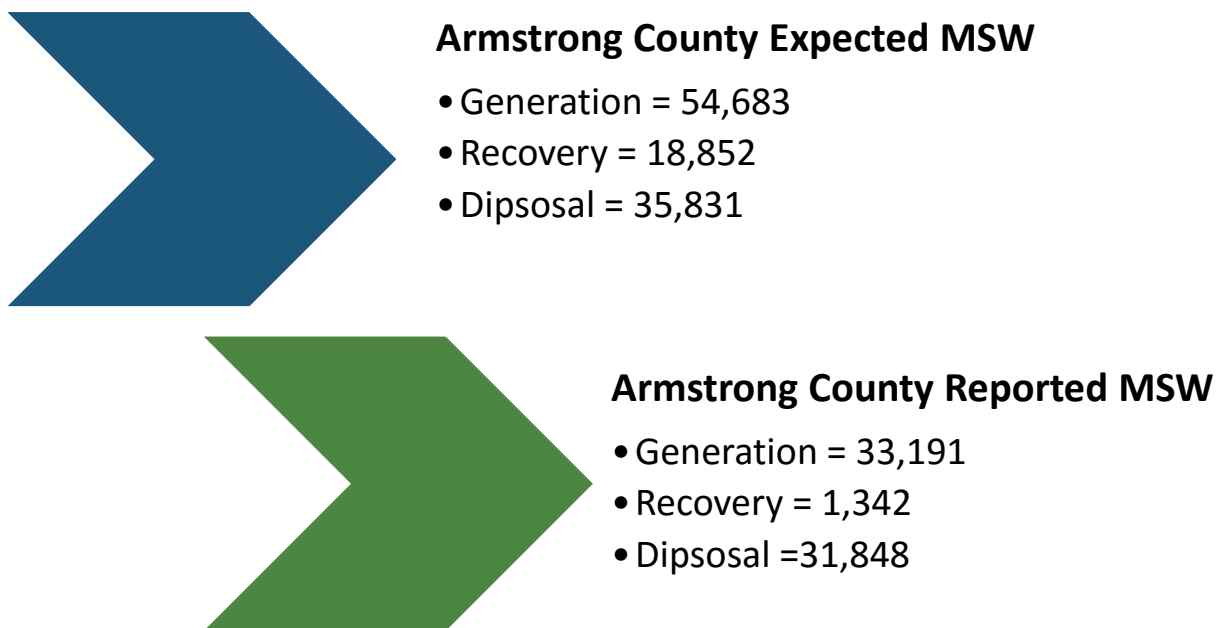
Figure 1-9 compares the 2012 national per capita municipal waste generation, disposal and recovery rates to those calculated from Armstrong County’s reported disposal and recovery tonnages for 2010. Using the reported data, Armstrong County’s per capita generation rate is significantly lower than expected if Armstrong County performed the same as the national norms. The disposal rate however is relatively close to the expected results. The largest discrepancy from the expected results appears in the reported recovery.

Figure 1-9 Expected vs. Reported Per Capita Generation, Recovery and Disposal 2012



Figure 1-10 shows the 2012 estimated waste generation, recovery and disposal for Armstrong County compared to the reported data for the same year. The estimates were calculated using the national waste generation criteria, the estimated 2012 population of 68,409 persons, and assumes the same national level of performance in recovery programs. It illustrates more clearly the degree of differences between the County's reported data and typical results for similar areas,

Figure 1-10 Expected vs. Reported Tons Generation, Disposal, and Recovery for 2012



ACCOUNTING FOR THE VARIANCES

A number of scenarios could explain the differences between Armstrong County's reported results and those that would be expected if the county performed the same as the national norm. The first possibility is that the national data represents averages. So there will always be jurisdictions which exceed and those with less than average performance. The County's disposal data is close enough to the average to be in that realm of possibility.

Armstrong's discrepancy from the norm for waste generation is rather large to be simply a statistical shift on the performance curve. Considering that most of the waste expected to be disposed can be accounted for in landfill reports, attention is drawn to the low recovery of materials. Typically, when lower than expected recycling performance is reported the disposal data is inflated in seemingly direct correlation. When reported disposal appears to be low it is often the result of an aggressive recovery program and the difference is reflected in those figures.

It might be tempting to argue that tonnage from the local scrap yard was discounted and might explain the wide spread of nearly 20,000 tons. However, excluded were not the bottles, cans, papers and plastics that are factored into the national data, but scrap ferrous metal in quantities greater than the County's entire population would be expected to generate for all combined materials in the waste stream.

Looking to other avenues, three possibilities seem likely. All probably occur with one contributing more to the deficit than the others do.

Gathering accurate data on recycling activities is a universal challenge. Although the County receives accurate reports from the Progressive Workshop, the Recycling Center and drop-off program capture a small fraction of the material available for recovery in the County. Commercial offices, retailers, grocery stores, warehouses, and even manufacturers generate and recycle significant quantities of cardboard and paper. Many of these establishments and their recycling service providers fail or refuse to report their activities.



There is strong indication that Armstrong County's municipal waste generation rate is closer to the norm than reported.

Unfortunately, the same evidence suggests that some portion of the County's municipal waste may be managed improperly.

Armstrong County residents generate the greater portion of the overall municipal waste stream.

To promote pollution prevention, and to protect public health and safety, policies and enforcement mechanisms to deal with municipal waste generated by residents are essential in Armstrong County.

Underreporting by commercial establishments plagues most counties. This could account for the greater portion of the suspected missing material.

Related to the failure to report but somewhat different is misreporting. Commercial waste and recycling collection services do not operate in a vacuum. Many of Armstrong County's business districts and communities border or are in close proximity to the borders of other counties. Collection routes are designed for productivity not political boundaries. It is possible that some of the waste and the material recovered for recycling in Armstrong County is collected and misreported as originating in another county.

There is strong indication that Armstrong County's municipal waste generation rate is closer to the norm than reported. Although Armstrong County's disposal data appears close to the expected performance, in reality with such a low recovery number, the disposal rate should be much higher. The two previous scenarios explain how recovery may perform better than the reported data suggests. A third suspected cause does not support the assumption that weaknesses in the reporting system account for the missing quantities of material. Unfortunately, it leads to the conclusion that some portion of the County's municipal waste may be managed improperly.

Waste collection is voluntary throughout most of Armstrong County. Waste that is collected by a commercial service provider or self-hauled to a landfill is included in the facility reports. Based on the amount of contamination at the Progressive Workshop's drop-off sites, it is evident that many individuals avoid the cost of disposal or have no other convenient outlet for their waste. Signs of illegal dumping and open burning exist as well. It is logical to suspect that these methods are used to manage at least some portion of the missing quantities of municipal solid waste.

SOURCES OF MUNICIPAL WASTE IN ARMSTRONG COUNTY

Municipal solid waste is generated in residences, commercial establishments, government buildings, institutions, and at community. These generators are divided into two categories: residential and commercial. Regardless of the generator, the waste stream is characteristically similar. The proportionate amounts of certain materials produced in homes

may differ from commercial establishments. Due to the nature of each commercial generator, their waste may differ slightly from one another.

There are select groups of generators whose municipal waste falls into special categories. The waste may have unique characteristics and/or require special handling. The special needs and conditions for all types and sources of municipal solid waste are addressed in the Plan.



RESIDENTIAL MUNICIPAL WASTE GENERATORS

Municipal solid waste is generated in the greatest quantities in private homes. Depending on the needs and circumstances of families and individuals, “Home” may take on a variety of characteristics. Residential sources include single-family detached homes as well as townhouses, condominiums, apartments, mobile home parks, etc.



In Armstrong County
67 percent of the
population lives in
rural areas where the
ratio of residential
waste is higher than
from commercial
sources

According to the USEPA in an average community, at least 54 percent of the municipal waste is generated by residents. In rural communities, residential properties tend to exceed commercial real estate. It is reasonable to expect the proportion of rural residential waste to be even higher than in urban areas.

A statewide study conducted in 2005 for PADEP reported that the ratio of municipal solid waste from residential sources was 64 percent. However, in Pennsylvania’s rural areas, the study found that residents generated as much as 72 percent of the municipal solid waste. In Armstrong County 67 percent of the population lives in areas considered rural. It is likely that residents in the County’s rural settings generate a higher proportion of municipal solid waste than commercial establishments. Because each Armstrong County community has slightly different ratio of urban and rural areas, the percentage of residential and commercial waste will shift slightly from town to town.

The sum of the County’s reported disposal and recovery quantities result in a municipal solid waste generation rate that is significantly lower than anticipated when compared to the national norm. Based on the portion of the overall municipal waste stream that they represent it is crucial for residents to exercise proper waste management practices. To have the greatest impact on pollution prevention, and to protect public health and safety, policies and enforcement mechanisms to deal with municipal waste generated by residents are essential in Armstrong County.

HOUSING CHARACTERISTICS

Approximately 76 percent of the residential housing units in Armstrong County are single family detached homes. Similar to single family detached units but categorized separately because of other structural differences, mobile homes represent over 11 percent and single family attached homes, commonly called “row houses,” account for another 4 percent. The other 13 percent of of Armstrong County units include various types of multi-family dwellings that have from 3 to more than 50 units per structure.



Housing characteristics are useful in determining the appropriate municipal solid waste and recycling collection service for a community. The types and number of structures can influence affordability of the program as well.

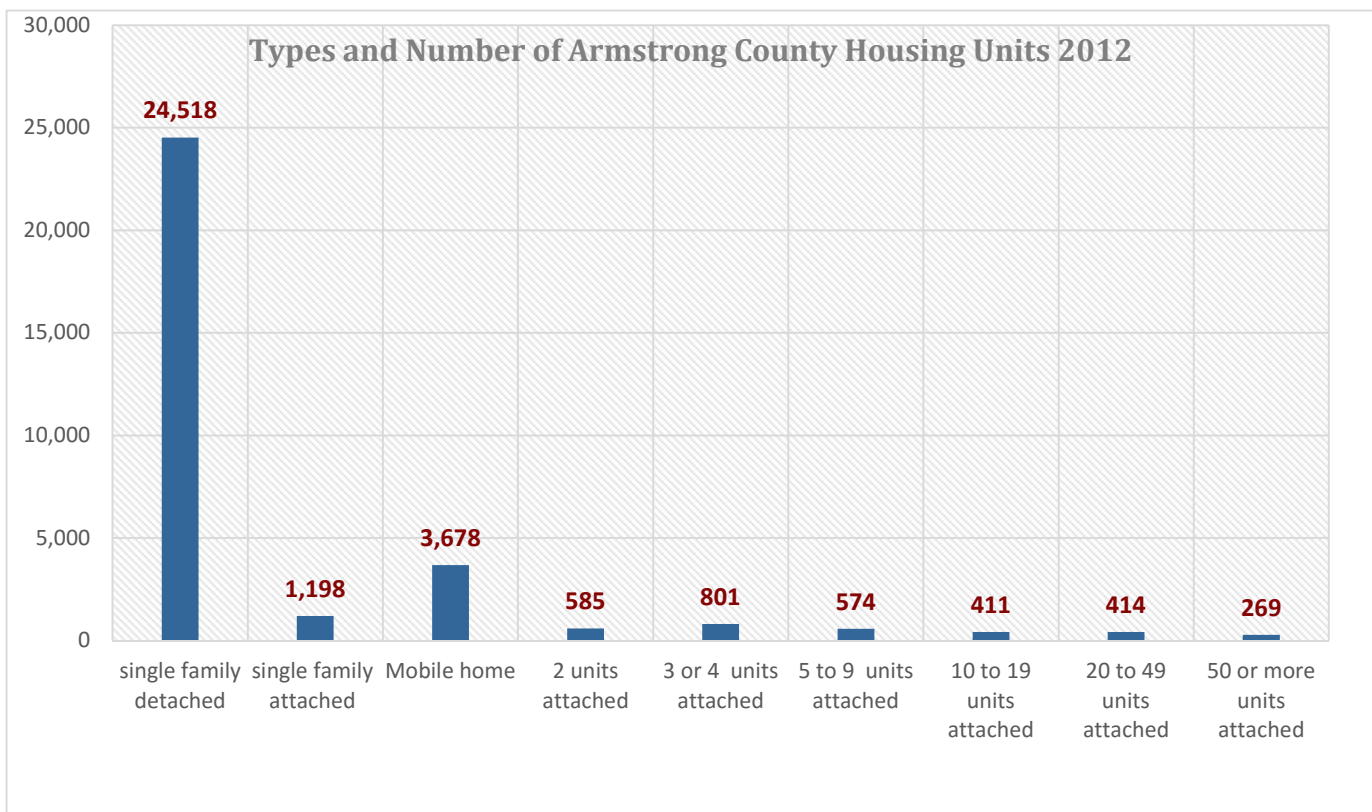
From a service and cost perspective, single-family detached housing units are advantageous because collection commonly is provided at the curb. Where single family housing units are densely clustered in one community, or when a greater number of units are guaranteed to participate from joint municipal 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 those services on their own. Several Armstrong County communities contract with a single service provider through a competitive bidding process.

A popular form of waste collection service in Armstrong County is private subscription, where residents arrange for services with the hauler of their choice, In the municipalities where private subscription is offered, local ordinances may or may not require resident participation. Even in those that mandate participation, enforcement is negligible.

Chapter 2 provides a closer look at the available municipal solid waste infrastructure, reported collection and disposal activity for all types of municipal waste and a variety of undesirable waste management practices.

Various types of residential housing units exist in Armstrong County. These are shown in Figure 1-11

Figure 1-11 Categories of Armstrong County Housing Units 2012



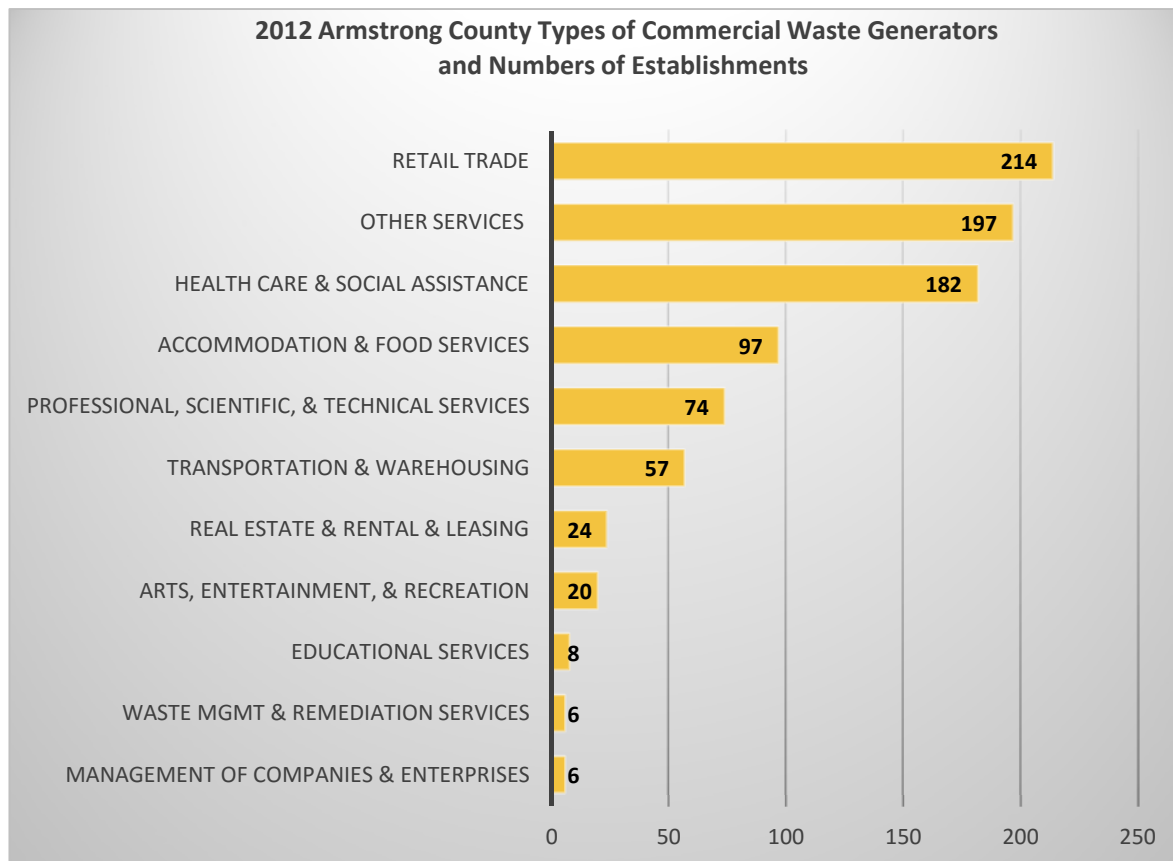
Source US Census Bureau

COMMERCIAL MUNICIPAL WASTE GENERATORS

Generators of commercial municipal waste are more varied than residential generators. Identifying the number and nature of commercial establishments is helpful in planning for municipal waste management and the potential for material recovery. The commercial waste stream remains similar to residential municipal waste. The nature of the operation, the volume of sales, and the number of employees ultimately affect the total volume and composition of the municipal waste produced by each generator. Although waste generated by these employers differs from that produced in industrial settings, if managed improperly environmental consequences can occur.

Figure 1-12 shows the types and numbers of commercial municipal waste that existed in 2012.

Figure 1-12 Commercial Municipal Waste Generators



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

BUSINESS ESTABLISHMENTS

The Pennsylvania Data Center reports that 885 commercial business establishments were located in Armstrong County in 2010. This figure includes retailers, wholesalers and a wide variety of service industries. Banks, office complexes, restaurants, hotels, hair salons, plumbers, and other similar operations fall within this category. All are considered commercial generators of municipal waste. Each are sources of materials that lend themselves to recovery and thus where successful commercial recycling programs could be developed.

OTHER BUSINESSES 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.

GOVERNMENT FACILITIES

The functions of the federal, state, and local government are conducted in offices and facilities throughout Armstrong County. Agencies and organizations representing social services, economic development, the military, environmental, and agricultural 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.

EDUCATIONAL INSTITUTIONS

In 2102, 4 major public school districts were operating in Armstrong County with 23 separate facilities. The number of facilities has since decreased. They provide educational opportunities for students ranging from kindergarten through twelfth grade. Several private parochial schools service these same age groups. Approximately 16 private elementary and/or secondary schools are located throughout the County. Other learning centers also exist. There is a branch campus of a state university and a community college, as well as technical and vocational schools.

RESIDENTIAL CARE FACILITIES

Sometimes referred to as institutional facilities, skilled nursing, personal care, and assisted living facilities are included as commercial municipal waste generators. While these facilities produce municipal waste commonly found in most residences, they also generate materials that require special handling. Due to the nature of their operations, a portion of the municipal waste generated in these facilities falls into a special category of regulated medical waste, previously known as infectious chemotherapeutic waste. These special handling wastes are discussed in the next section.

COMMUNITY EVENTS

It is common for communities to come together to socialize and celebrate. These occasions may occur in conjunction with holidays of national importance. Sometimes the events are focused on the activities of local sports teams. Community organizations often organize festivals and carnivals to raise funds for their charitable works. Others stem from long standing traditions honoring local culture and history. These activities all result in the generation of municipal waste. Because of the way it is collected, municipal waste from community events is typically categorized as commercial. Predicting the volume of waste that will be generated at any given event is virtually impossible. 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 where animals are included.

Armstrong County hosts several fairs, festivals, and other events during the year. Most notable of these is the Dayton Fair and Fort Armstrong Folk Festival. This large volume of people taxes the capabilities of local services and significantly increases the amount of waste and recyclable materials generated.

Events may have similar features, but in reality, each is unique in character. For years, the standard assumptions for projecting event waste came from a reliable source of aggregated field data compiled as a technical bulletin by



the National Solid Waste Management Association (now the National Waste and Recycling Association). The bulletin listed the amount of waste generated by tourists under a variety of conditions. For daylong event, depending upon the types of refreshments and activities available at each event, an average of 3 lbs. of waste per attendee per day could be expected. It is assumed that this includes waste generated by the vendors, as well. Since 1985, changes in the manner in which beverages are dispensed and fast foods are prepared and packaged have had an effect on the event waste stream. Therefore, the accuracy of the 1985 data is probably unreliable today.

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 that current statistics predict the average rate of event waste generation to be closer to 0.66 pounds per attendee. Much of the waste is organic and a considerable portion of the materials generated can be recycled or composted.

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. Because Armstrong County is a destination for leisure travelers, including day-trippers and boaters there is an increasing demand to provide for the management of waste and recyclables generated “on-the-go.”

UNIQUE TYPES OF MUNICIPAL SOLID WASTE

Municipal solid waste is inclusive of a wide array of materials generated by a broad scope of sources. Select operations generate municipal solid waste which requires special handling and processing methods. These wastes include sewage sludge, and regulated medical waste. Certain activities can produce municipal waste with a distinctly different composition than typical residential or commercial sources. An example is waste resulting from construction and demolition.

Although an important part of municipal solid waste management, none of these waste streams are factored into the residential or commercial analyses in the Plan. The data and issues surrounding each are discussed separately. The USEPA and many other states do not factor one or more of these particular types of materials into the overall quantities of municipal waste. In Pennsylvania, however, they fall within the regulatory framework of municipal solid waste. Therefore, in the planning process counties must address how each is managed.

Construction and demolition (C&D) waste is a perfect example of a waste stream that is defined and regulated as a sub-set category of municipal waste in Pennsylvania, but viewed differently by USEPA and in other states. Because it is generated under specific circumstances, has unique components, and is collected and managed differently than regular residential or commercial municipal waste, it warrants individual attention.

SOLID WASTE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES

Construction and demolition (C&D) waste is managed and accounted for differently from state to state. In recognition of this problem, the USEPA recently suggested that more universal tracking and measurement standards for C&D waste should be established. Public comments were solicited to assess the level of support for this proposal and are currently under review.

Construction and demolition waste is defined and regulated as municipal waste in Pennsylvania. In many other states, it is considered a separate and distinct category of waste, unrelated to municipal waste management. 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, and/or demolition and any or all of a number of related activities.

Planning and forecasting for C&D waste is more challenging than for municipal waste in general. The variables are numerous. While municipal waste as a whole is relatively consistent, C&D waste can fluctuate wildly from month to month and year to year. In places like Pennsylvania, and definitely Armstrong County, projects are subject to seasonal weather conditions. Swings in the economy can stimulate or deter new development and construction. For all of these reasons, it becomes easier to understand the difficulties in projecting C&D quantities for the long term.

Construction and demolition activities can differ dramatically depending on the specific project or job site. Work may include construction, renovation, and/or demolition and any or all of a number of related activities. The mix and physical characteristics of materials in the waste stream can vary in residential, commercial, or industrial settings, and even on a load-by-load basis. Demolition projects tend to generate asphalt, concrete, earth, sand, trees, steel, brick, lumber, roofing materials, flooring, plaster, dry wall, and other similar materials. Typically, demolition loads contain larger quantities of these materials since

essentially entire structures are being discarded. During new construction projects discards tend to include trimmings from dry wall, framing, carpet remnants, etc. Packaging materials such as cardboard boxes, Styrofoam, nylon or plastic strapping, pallets, etc. are among the other materials, which are often bound for disposal from new construction activities.

Efficient builders have very little trimming waste, as they measure and purchase accordingly. Additionally, demolition contractors who implement deconstruction techniques can reduce the overall quantities of waste generated. Deconstruction is essentially reverse construction in which a building is dismantled piece by piece for the purpose of salvaging valuable materials for reuse. Any number of items can be recovered, including but not limited to windows, doors, molding, mantels, blocks, flooring, etc. These items often have resale value particularly to renovators of older or historical structures. At times it is simply a matter of practicality and resourcefulness of the contractor who can reuse the materials in other projects. Some materials can be recycled such as wood, drywall, and carpeting, among others.

In 2003, USEPA reported that C&D related waste was generated at the rate of 3.2 pounds per person per day. Of the C&D waste generated USEPA estimated that approximately 48 percent was reused or recycled and 52 percent was disposed, a disposal rate of 1.66 pounds per person per day, compared to disposal rate for USEPA's municipal solid waste of 2.87 pounds per person per day

ARMSTRONG COUNTY CONSTRUCTION AND DEMOLITION WASTE TRENDS

Using USEPA's rate of disposal Armstrong County would dispose of 20,724 tons of C&D waste per year. Pennsylvania disposal facilities in 2012 reported 3,882 tons of C&D waste, which originated in Armstrong County. According to the Pennsylvania Department of Environmental Protection, 17.5 percent of the material disposed in Pennsylvania landfills can be categorized as C&D waste. Using Pennsylvania's regulatory definition of municipal solid waste, this represents approximately 10percent of all Armstrong County waste disposed in Pennsylvania facilities. USEPA's estimates are significantly more than the reported 3,881 tons. Despite the deviations from DEP estimates of C&D waste disposed in landfills and the assumed generation rate from the studies, Armstrong County's results are probably normal for the locale. Several explanations are plausible.

C&D material, which does not reach a Pennsylvania landfill, is not necessarily improperly managed or disposed. Much of the brick and concrete and other masonry materials are

utilized as clean fill, similar to the manner in which state highway projects manage this material. Contractors also reuse doors, windows, hardware, etc. in other project applications.

Armstrong County's proximity to the Ohio border could also skew the reported data. Ohio landfills offer significantly lower disposal rates for C&D waste than Pennsylvania landfills do. Although Ohio landfills might record the state of origin for C&D waste, there is no obligation to track and monitor the material by county.

Determining an accurate C&D waste generation rate is difficult. There are reasons to improve the tracking and monitoring of these materials. One is to ensure that all material is handled properly. According to data collected by Keep Pennsylvania Beautiful from illegal dump surveys and cleanups, C&D waste is the most dominant and frequently found material at these sites. A reporting requirement as a condition of building and demolition permits is an easy way to obtain this information. It serves as a form of deterrent against illegal dumping. Another mechanism is to register all types of waste and recycling transporters. Consideration of these potential solutions was part of the revision planning process. Further discussion on this issue is provided in Chapter 5.

SPECIAL HANDLING MUNICIPAL WASTE STREAMS

The physical nature and/or chemical composition of certain types of municipal solid waste require them to be managed in a different fashion. Moisture content, consistency, or weight of the material may require specialized containers for storage and transportation. Certain components may necessitate greater handling precautions to protect risks to those that are collecting, transporting, and disposing of the waste. Therefore, these categories of municipal solid waste are controlled and regulated differently.

SEPTAGE AND SEWAGE SLUDGE

The water and human waste that exits our homes, offices, and businesses through drains and pipelines is known as sewage or septage depending upon how it is collected for treatment. Although it is primarily rural, Armstrong County does have an expansive network of sewer lines and public wastewater treatment plants (WWTP). As is common, the existing facilities service the most densely populated municipalities of the County. The remaining communities have requirements for the installation of on-lot septic systems. Septic systems must be periodically pumped and the septage is either land applied or transported for

treatment at a WWTP. Multi-family dwellings, such as trailer parks and residential care facilities, as well as industrial operations may operate private pre-treatment systems, with the sewage being transported for final treatment,

Raw sewage is eventually treated at WWTP's and dewatered sufficiently to become sewage sludge, which is typically disposed in landfills. In 2012, 1810 tons of Armstrong County sewage sludge were disposed according to Pennsylvania landfill reports. No reporting of septage or biosolids is required. Therefore, the quantities are unknown. However, the companies that transport septage within Armstrong County are regulated and monitored by PADEP. Thus, it is assumed that these materials are managed adequately. The septage transporters along with the landfills that manage Armstrong County sewage sludge are addressed in Chapter 2.

Nineteen wastewater treatment plants (WWTP) service the needs of Armstrong County communities. Table 1-5 lists the wastewater treatment plants in Armstrong County and the municipalities, which are serviced by each.

Table 1-5 Armstrong County Wastewater Treatment Plants

Wastewater Treatment Facility	Service Area
Brady's Bend Township Water and Sewer	Bradys Bend Township
Cadogan Township Sewage Treatment Plant	Cadogan Township
Dayton Borough Sewage Treatment Plant	Dayton Borough Wayne Township
Eastern Armstrong County Municipal Authority	Elderton Borough Plumcreek Township
Ford City Municipal Sewage Disposal Authority	Ford City Borough
Freeport Borough Sewage Treatment Plant	Freeport Borough
Gilpin Township Municipal Authority	Gilpin Township
Kiski Valley Water Pollution Control Authority	Apollo Borough Kiskiminetas Township Leechburg Borough North Apollo Borough
Kittanning Borough Municipal Authority	Kittanning Borough Manor Township Rayburn Township
Mahoning Township Municipal Authority	Mahoning Township
Manor Township Joint Municipal Authority	Ford Cliff Borough Manor Township Manorville Borough
Parker Area Authority	Parker City
Parks Township Municipal Authority	Parks Township
Rayburn Township Municipal Authority	Rayburn Township
Redbank Valley Municipal Authority	South Bethlehem Borough
Shannock Valley General Services Authority	Cowanshannock Township Rural Valley Borough
South Buffalo Township Municipal Authority	South Buffalo Township
West Hills Area Water Pollution Control Authority	Applewold Borough East Franklin Township North Buffalo Township West Kittanning Borough
Worthington-West Franklin Joint Municipal Authority	West Franklin Township Worthington Borough

REGULATED MEDICAL WASTE

The days of inpatient medical care and long hospital stays have vanished. Slowly, health care providers have prompted medical practitioners to evolve away from centralized facilities. To increase efficiencies and reduce costs, complex procedures are now more commonly performed in the offices of physicians, dentists, and varying outpatient medical care facilities. This decentralization has resulted in a shift in where and how regulated medical waste is generated and managed.

Hospitals remain the primary source of regulated medical waste, previously known as Infectious and Chemotherapeutic Waste (ICW) in Pennsylvania. However, these remote medical facilities generate sufficient quantities to also require specialized medical waste management services. The material is typically transported to regional processing and disposal facilities.



The PADEP regulates and licenses medical waste transporters. A requirement of the licensed transporters is to submit annual reports of their activities. However, the data is not easily accessed or readily sorted by county. Transporters, treatment facilities, and medical practices are not required to report to the County the amount of regulated medical waste generated or processed. Since both medical facilities, transporters of regulated medical waste and the processors of the material are highly regulated by state and federal laws, it is safe to assume that regulated medical waste is well managed in Armstrong County.

SUMMARY

Many components of municipal solid waste provide opportunities to capture and conserve natural resources. Because municipal solid waste, results from the ordinary and recurring cycle of our daily activities, it presents a unique challenge. How it is generated, who generates it, and the quantities generated are factors to consider. The information presented in Chapter 1 serves as a foundation for decisions and recommendations made during the planning process.

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Chapter 2

Municipal Solid Waste Infrastructure

EVALUATION AND HISTORIC UTILIZATION OF THE SYSTEM

The core of a municipal solid waste management plan is the assurance of an adequate collection, transportation, and disposition network designed to handle the various waste streams. A successful plan establishes fair standards. It conveys clear expectations for sound waste management practices to be implemented by residents, businesses, and service providers alike.

Meaningful and accountable municipal solid waste management strategies assume an inevitable responsibility to protect the natural resources and prevent environmental pollution. An underlying foundation is a county's inherent obligation as the guardian of the public health and safety. Key in attaining these goals are policies that make it easier to do the right thing and enforcement mechanisms with penalties commensurate to the level of offense.

Chapter 2 focuses on actual waste collection and disposal patterns in relationship to the broad infrastructure of transporters, facilities, and other services available to meet the needs of Armstrong County. It discusses how the system was utilized in comparison to projections and recommendations made in the 2004 Plan revision. The narratives explore factors that influence behaviors and point to issues that require added attention and/or remedies.

Finally, Chapter 2 identifies the effect of all of these issues on the ability of the County to secure future disposal capacity to meet its needs in accordance with the provisions of the Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988 (Act 101).

LOCAL PATTERNS AND PRACTICES

Regardless of the municipality in which they are located, commercial businesses in Armstrong County can contract directly with the service provider of their choice. This includes the option to self-haul waste generated on-site. As in most areas of the Commonwealth, local municipalities do not exercise any control or limitations over this choice through an exclusive franchise or by other means.

Residential waste collection, in select Armstrong County municipalities, is provided as a municipal service. Public employees and vehicles service the waste collection routes in the Boroughs of Kittanning and Ford City.



Communities who use the bidding and contracting process prefer it because with greater routing efficiencies the cost tends to be lower.

Private firms are contracted to collect waste in the Boroughs of Freeport, Leechburg, Apollo, North Apollo, and Worthington. A competitive bidding process is implemented to determine the exclusive service provider in each municipality. Communities who use the bidding and contract process prefer it because the

cost tends to be lower.

Where a single hauler collects from all housing units, routing efficiencies are greater than where multiple haulers operate. Communities who secure service through the bidding and contract process can often obtain higher levels of service, such as curbside recycling and/or yard waste collection, for little or no added cost. Curbside recycling collection is available in Kittanning and Leechburg.

Critics fear over time, competitively bid municipal contracts can erode away competition. However, mergers and acquisitions occur naturally in the waste industry with or without contractual scenarios. In turn, opportunities for entrepreneurs follow and new companies are created.

In the vast majority of Armstrong County municipalities the service provider, the level of service offerings and the cost differs from town to town - in some instances from house to house. In lieu of municipal contracts, residents make arrangements directly with the service provider of their choice. This practice is known as subscription service. Residents either

purchase bags or tags identifiable to the contractor, or pay flat fees, which are billed directly by the hauler.



Proponents of subscription service claim that it maintains a higher level of competition and thus, over time, keeps prices affordable. Detractors claim that lower route density causes competitors to withdraw from subscription areas and eventually subjects customers to a controlled marketplace. Strong evidence suggests that in subscription systems small rate increases occur frequently but go unnoticed. Overtime the incremental increases result in significantly higher rates than in areas where competitive bidding occurs more often.

Fewer residents subscribe to waste collection services where enforcement measures are lax and fear of prosecution for illegal dumping is minimal.

CONTRIBUTING CIRCUMSTANCES AND OUTCOMES

Many municipalities adopted a model ordinance that required local residents to have waste collection service. It was drafted during the development of the original Armstrong County Municipal Solid Waste Plan in 1990. Enforcement has been lax to nonexistent. Consequently, subscribing to waste collection is considered voluntary and many residents have no service provider. Complicating this issue is the reluctance of hauling companies to service areas where low route density, geography, unmaintained private roads and other features affect productivity. Occasionally, a personal choice to use environmentally friendly alternatives such as backyard composting, recycling, or waste minimization reduces or eliminates one's need for waste collection. However, most often, the absence of collection is triggered by other factors, which leads to undesirable disposal practices.

Personal economic circumstances greatly influence if a person voluntarily subscribes to a commercial waste collection service. Even those with high environmental principles can decide to discontinue collection service when faced with limited funds. Where lax

enforcement measures and fear of prosecution for illegal dumping is minimal, the likelihood that residents will not subscribe to waste collection services is greatest

Although unwillingness to pay is a significant reason for people to dump illegally, often a more compelling issue is simply the lack of reasonable and convenient disposal outlets. Some residents may self-haul their own waste to disposal facilities, but that option is limiting with no transfer stations or landfills located in Armstrong County. In communities where curbside collection of waste and recyclables is not mandatory, the incidents of illegal disposal activity increase. The abuse is even more noticeable when such services are unavailable at all. This is also true where normal household waste is collected, but bulk waste and white goods are not.

ILLEGAL DUMPING ACTIVITIES

The health risks associated with illegal dumping are significant. Rodents, insects, and other vermin are attracted to dump sites. Dumpsites with scrap tires provide an ideal breeding ground for mosquitoes that spread West Nile Virus and encephalitis. Illegal dumping can affect proper drainage of runoff, making areas more susceptible to flooding. In rural areas, burning, or spontaneous combustion of dumpsites can cause forest fires and severe erosion. Additionally, runoff from dump sites containing chemicals may contaminate wells and surface water used as sources of drinking water. Nevertheless, illegal dumping persists throughout Pennsylvania. Armstrong County is no exception.

Implementation of the Armstrong County Municipal Waste Management Plan has notably decreased the visible signs of open dumping in the County. A greater overall public awareness prevails for the importance of proper storage, collection, and disposal practices. Still, active illegal dumpsites exist.

Keep Pennsylvania Beautiful (formerly Pa CleanWays) recently completed a study, which surveyed every Pennsylvania county for the evidence of illegal dumping. The locations of dumpsites were recorded using a GIS system and the types and quantities of materials were logged in a database. Armstrong County was surveyed in 2009.

Surveyors identified 176 illegal dumping sites dispersed across 26 of the 45 municipalities in Armstrong County. Of these, 71 percent had recent dumping activity. Rural municipalities represented the primary setting for illegal dumping, accounting for 99 percent of the locations. This is consistent with the findings of other studies, surveys, and reports, which have consistently concluded illegal dumping tends to be more prevalent in rural areas.

For safety and other legal issues regarding trespassing on private lands Keep Pennsylvania Beautiful was restricted to a superficial survey with sites mainly seen from the roadside. Therefore, the report cautions that this is a small representation of the extent of illegal dumping in Armstrong County.

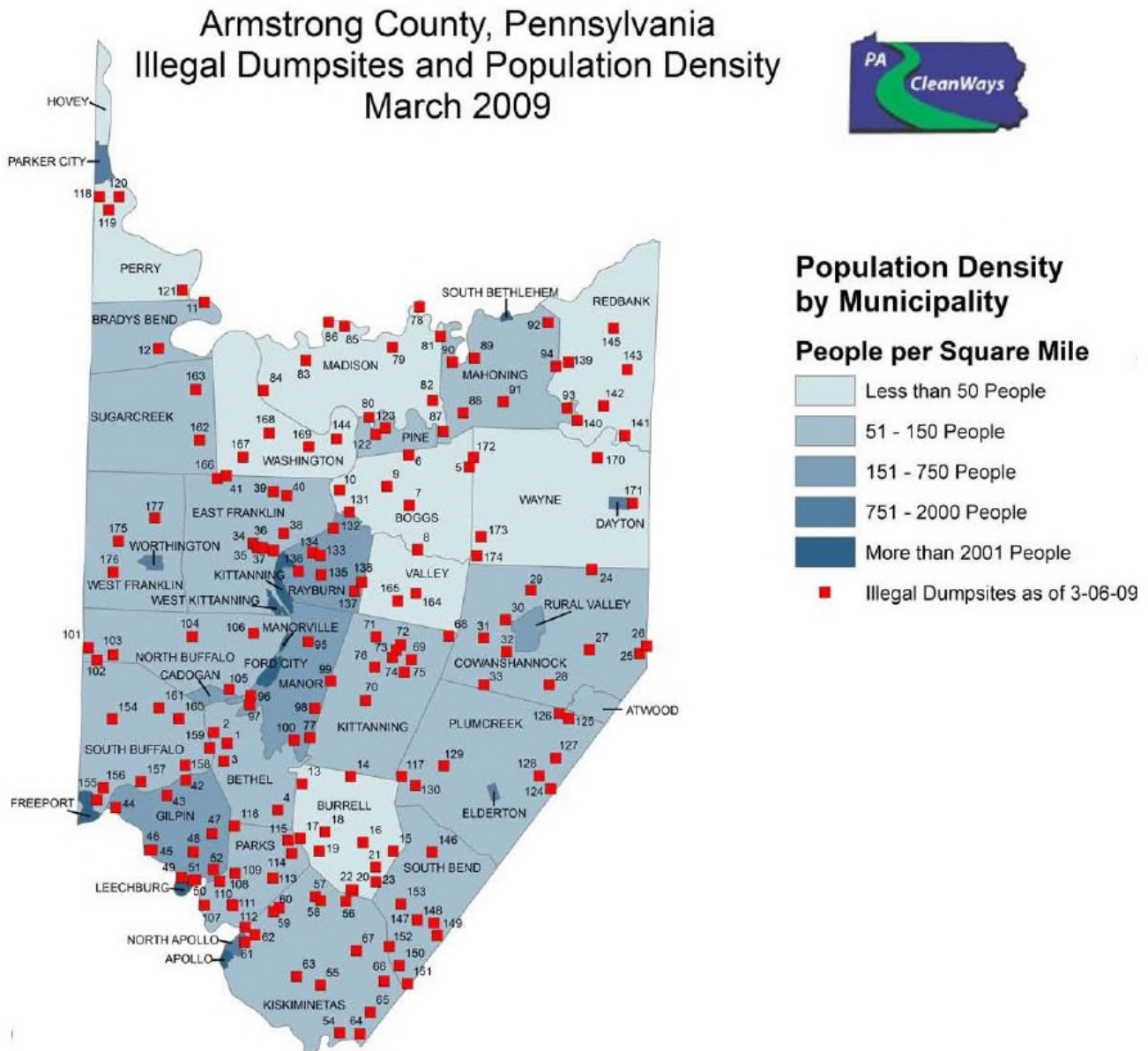
Warning of penalties for illegal dumping violations were posted at 11 sites, yet 8 of the sites had ongoing active dumping. This is a common phenomenon. The fear of discovery and prosecution for an illegal dumper diminishes in direct proportion to the perceived level of enforcement. In posted areas, the assumption is made that the accumulation of garbage is an indicator that previous dumpers escaped detection and punishment. Consequently, the mere existence of dumpsites breeds more dumping.

The surveyors used a set of standard assumptions based on the types and numbers or volumes of materials visible on the surface to assess the resources needed for future remediation. Frequently documented items included tires, furniture, and appliances. Based on observations and the common assumptions Keep Pennsylvania Beautiful estimated from 1 -40 tons of material were disposed at each site totaling 585 tons for all locations.

Waste was seen in close proximity to waterways at 56 sites and at nearly half of those waste was directly in the waterway or body of water. Preventing pollution caused from illegal dumping is important to the local water supply and Armstrong County's tourist economy. The County's rivers and waterways are popular with fishing and boating enthusiasts. Recreational use continues to increase. Ways to arrest the growth of illegal dumping before it becomes unmanageable were considered during the planning process.

Figure 2-1 shows the location of the illegal dumpsites identified by Keep Pennsylvania Beautiful and illustrates how population density plays a role.

Figure 2-1 Illegal Dumping Sites in Armstrong County Recorded in 2009



MISUSE OF THE RECYCLING DROP-OFF SITES

Not addressed and therefore unmentioned in the Keep Pennsylvania Beautiful survey are the blatant occurrences of illegal dumping at the recycling drop-off sites located throughout the Commonwealth. Contamination routinely happens in any recycling program due to misunderstanding or best intentions of participants. However, a common problem for county and municipal programs is the use of unmanned drop-off sites as disposal outlets. Offenders are typically those who avoid paying for waste collection, but are just barely environmentally conscientious enough to prevent them from disposing on other's properties. Because the midnight dumpers associate the recycling containers with waste collection, they feel free to shift the cost and responsibility for managing the material to the program, minus the guilt associated with hillside or waterway dumping.

The Progressive Workshop faces this dilemma. Over time, the volume of contamination from intentional dumping has increased sufficiently enough to cause the closure of some sites. Disposing of these unwanted materials is costly and detracts from the ability of the Recycling Center and the Progressive Workshop to provide other desired services.

THEFT OF SERVICE

Sadly, those who fail to pay for proper removal of their waste may create extra costs for honest citizens. Often, responsible individuals and businesses that do pay for collection and proper disposal are victimized by this behavior. When unauthorized users place material in another's waste receptacle for disposal, it is considered theft of service. Not only do the offenders avoid payment, their waste can result in price increases for the paying customer due to the need for more frequent service or larger containers.

CONFRONTING THE PROBLEM

Groups like Keep Pennsylvania Beautiful periodically organize local volunteers to remediate illegal dumping areas. Because volunteer clean-ups draw positive public attention, often overlooked is the reality that local municipalities bear the ongoing cost for cleaning up illegal dumpsites. Public works or road crews are often dispatched at significant taxpayer's expense to remove and dispose of abandoned waste. Keep Pennsylvania Beautiful has catalogued the costs of its own clean-up efforts. In addition, it has surveyed counties and municipalities to determine the average cost per ton for such efforts. Based on their findings, the cost of collection/transportation and disposal along with the value of the labor and materials is

approximately \$1,000 per ton. For municipalities that does not include the value of other projects that should be addressed by public works crews that must deal with this problem.

Armstrong County in conjunction with the Progressive Workshop sponsors periodic collection events for tires, electronics, and household hazardous waste. Most of these programs are provided free or at minimal cost to residents and local municipalities. Of all of the methods to deter illegal dumping these events are the most proactive and effective means to arrest the problem currently implemented in the County. Ensuring that all residents participated in an organized mandatory waste collection program would be the better solution.

LITTER CONTROL

Environmental behavior based studies seem to agree that littering has no age, gender, education, or financial boundaries. Although, studies indicate that women or people in care giving roles may litter less than others may, overall all ages and genders are guilty of littering. Even the most sincere and devoted conservationist has, at a minimum, been tempted to

litter, and likely has at some point. Based on those findings, it seems that efforts to reduce littering would be futile. However, certain conditions

- have been shown to reduce the amounts of items and the number of times that people litter.



Litter prevention has long-standing support in Pennsylvania. What is now known as the Pennsylvania Resources Council coined the phrase "Don't Be A Litterbug" nearly sixty years ago. and introduced its mascot, which is now one of the most familiar national icons. The Pennsylvania Resources Council has tools and collateral material available to local schools and communities to launch educational promotions. The

image of the Litterbug has evolved over time, but the original message has never changed. Both continue as an effective campaign in creating public awareness. Yet the consequences of littering still plague every county in the Commonwealth.

Littering can result from limited availability of waste and recycling receptacles in public places. Certain products tend to increase the prevalence of litter. These include one-use plastic and paper bags; single serve beverage containers, takeout food containers, and cigarettes. Targeted distribution of convenient disposal and recycling containers as well as bans or deposits on some of the offending products could help alleviate the issue.

Several times per day, smokers are confronted with the decision of how to handle the disposal of cigarette butts. According to studies conducted by Keep America Beautiful, cigarette butts alone account for trillions of pieces of litter each year. Since the introduction of smoke free office buildings, restaurants and other public areas, smokers and discarded cigarette butts gather in greater quantities around the entrances/exits to buildings.

Similarly, litter can accumulate at high transition points where people are leaving one activity or environment and entering another. For instance, people tend to litter when they are leaving or getting into their vehicles, entering a store, getting on or off public transportation, etc. Littering in these areas can result from limited availability of waste and recycling receptacles in public places. Grant funding is periodically available for purchasing public venue containers. The Armstrong County Recycling Coordinator is available to support local municipalities in their efforts to initiate anti-litter campaigns.

OPEN BURNING

No other undesirable waste management practice is defended by individuals at all levels of the socio-economic spectrum more than open burning. Tolerance for open burning is practically ingrained as a tradition in Rural Pennsylvania. Little thought is given to striking a match and igniting the family's household trash or a pile of brush and leaves. Where camps and campgrounds are prevalent, it is hard for some to distinguish the line between campfires and burning trash. People burn waste for a variety of reasons. The study, *Open Burning in Rural Northeastern Wisconsin: An Analysis of Potential Air Pollution* examined the motivations and behaviors associated with the burning of waste. Convenience, habit, and the avoided cost of trash collection ranked high on the list. This makes burning bans commonly contentious issues. These same reasons prompt illegal dumping.

The public in general has little to no awareness of the dangers of open burning. Smoke from any fire can affect the health of a community. The smoke from backyard burning is released close to the ground where people can easily breathe it. Smoke can trigger asthma attacks. People with heart and lung conditions are vulnerable, as are those with other chronic health

problems. The increasing volume of plastics and other synthetics in the waste stream release dangerous carcinogenic emissions when combusted. In fact, the toxic emissions released from open burning of trash exceed those for large scale commercial municipal waste incinerators where proper containment and filters are installed. An often-overlooked consequence of backyard burning should be of particular concern in Armstrong County. Unattended burn barrels and pits can cause accidental fires, which could easily ignite a forest. The loss of property and life along with valuable natural resources poses an immediate as well as a long-term risk to the public health and welfare.

Open burning, remains a common occurrence in Armstrong County. The adoption and enforcement of burning ordinances is a step to control burning by local citizens. Some communities kick off the implementation of the ordinance with buy-back programs for the barrels. Just as with illegal dumping, mandating and enforcing waste collection could effectively eliminate the practice.

MUNICIPAL SOLID WASTE COLLECTION AND TRANSPORTATION SYSTEM

In Armstrong County a comprehensive network of waste transporters serve varied needs. Although some municipal operations exist, without question, private sector service providers are dominant. Both Kittanning and Ford City use municipal employees and equipment to collect residential household waste. Municipalities may haul waste periodically from clean-ups or seasonal collections of yard waste. Private sector services are more varied and complex.

Traditional curbside collection and commercial dumpster service and roll-off containers for large volumes are readily available to residents and businesses throughout the County. Some transporters also provide dump trucks and /or trailers for construction demolition and remediation projects. Specialty services are also available for materials that are difficult or potentially dangerous to handle.

STATEWIDE TRANSPORTER REGULATION AND AUTHORIZATION

Transporters of municipal and residual waste are regulated in Pennsylvania by the Waste Transportation Safety Act (Act 90). 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) are required to obtain Waste Transporter Authorization. Act 90 applies to those transporting municipal or residual waste to

processing or disposal facilities in Pennsylvania. The law has a broad scope. It covers not only those that are typically engaged in the business of waste collection, but also others, who may haul construction and demolition debris, roofing material, landscape wastes, and significant quantities of materials from their own manufacturing operations. Therefore, many remodelers, developers, roofing contractors, landscapers and manufacturers, must also comply.

Exceptions

The Act does allow for a limited amount of exceptions for transporters and some for specific types of facilities

Exempt from the requirement to obtain Act 90 Authorization are:

- Transporters that collect waste in Pennsylvania but utilize an out of state disposal facility
- Transport vehicles with a registered gross vehicle weight less than 17,000 lbs.,
- Transport trailers with a registered gross vehicle weight less than 10,000 lbs.

Certain processing and/or disposal facilities may accept material from transporters without the Act 90 Authorization. These include:

- Facilities where municipal or residual waste is being land applied through agricultural utilization or land reclamation.
- Facilities that operate under a permit-by-rule.
- Facilities that are not required to obtain a permit under §271.101 (relating to permit requirement).
- Cement kilns burning waste tires as fuel.
- Facilities that process electronic waste and components by sorting, disassembling or mechanical processing for beneficial use.
- Composting facilities.
- Facilities that process municipal or residual waste for beneficial use under an individual or general permit.

Table 2-2 lists the transporters of municipal waste with Pennsylvania Act 90 Authorization located within or regularly servicing Armstrong County .

Table 2- 2 Municipal and Residual Waste Transporters		
Company	Municipality	Authorization ID
Dayton Borough	Dayton	WH15944
K.L. McIntire	Dayton	WH13507
American Safety & Health - Con	Ford City	WH16685
CE Davis Contracting, LLC	Ford City	WH14563
Ford City Borough	Ford City	WH3181
Mark E. Lunz	Ford City	WH3773
Schrec's Trucking, LLC	Ford City	WH12982
CWM Environmental, Inc.	Kittanning	WH7721
First Class Energy, LLC	Kittanning	WH12704
Frontier Energy Services LP	Kittanning	WH13241
Hagofsky Hauling	Kittanning	WH1306
Kittanning Borough	Kittanning	WH2841
R & J Roll-Off Services	Kittanning	WH0944
T & L Excavating & Hauling	Worthington	WH12140
The Bauer Company, Inc.	Worthington	WH12741
Toy Pipeline Contractors, Inc.	Worthington	WH12302
Atkinson	Worthington	WH0595 (EXPIRED)
Transporters Located in Other Counties		
Advanced Disposal	Brockway	WH0397
Tri-County Industries, Inc.	Grove City	WH0618
Republic Services	Huntington Township	
C. Shirey Sanitation	Rimersburg	WH0595
Waste Management Butler Hauling	West Sunbury	WH1436

ARMSTRONG COUNTY'S TRANSPORTER REQUIREMENTS

Armstrong County Ordinance No. 92-2 of 1992 (County Licensing Ordinance) established a licensing system for transporters of municipal solid waste who collect and transport waste from and through Armstrong County. Based on the Pennsylvania's regulatory oversight of regulated medical waste (at the time known as infectious chemotherapeutic waste), an exemption to the licensing requirement was issued to those transporting that type of waste. The ordinance was amended in 2005 to include those who collect and transport recyclable materials.

The County Licensing Ordinance was adopted not only to institute minimum standards for vehicles and collection equipment, but primarily to enforce the municipal solid waste flow control provisions of the Armstrong County Municipal Solid Waste Management Plan. Measures to fulfill the Act 101 reporting requirements were incorporated as well. To alleviate transporter confusion and reluctance, the amendment established clear-cut expectations for reporting, including penalties for failure to comply.

The flow control mechanism supports the contractual agreements with disposal facilities guaranteeing disposal capacity for the County's municipal solid waste. Licensed haulers were directed to use one or more of the landfills that executed agreements with Armstrong County.

Shortly after the County Licensing Ordinance was amended in 2005, the Pennsylvania Supreme Court ruled that the provisions of the Waste Safety Transportation Program superseded all licensing programs established by local county and municipal ordinances. Therefore, much of Ordinance No. 92-2 of 1992 is considered invalid. Although a severability clause allows those portions of the Ordinance not affected by the court ruling to stand, the licensing language is so pervasive that it would be difficult to enforce the remaining requirements.

Reporting is an important requirement of Act 101. To comply with the provisions of Act 101, many counties replace the previous licensing programs with a registration process, which accepts the Waste Transporter Authorization in lieu of a separate county license but requires others that do not have the Act 90 Authorization to meet similar standards established by the county. Whether to repeal, amend, and/or adopt a new ordinance are options available to Armstrong County.

REQUIREMENTS FOR TRANSPORTERS OF SPECIAL HANDLING WASTE

Certain portions of the municipal solid waste stream generated within Armstrong County, have unique properties and characteristics that make them more complicated to manage. These wastes are not typically hauled directly to landfills. 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.

The Waste Safety Transportation Program does not regulate transporters of special handling wastes, such as septage and regulated medical waste. These transporters are operate under separate requirements and conditions.

REGULATED MEDICAL WASTE TRANSPORTERS

The PADEP has regulatory authority for regulated medical waste (formerly called infectious chemotherapeutic waste) Aside from stipulating standards for storage and handling of regulated medical waste the regulations establish licensing requirements for transporters. The license calls for transporters to report the origin and ultimate destination of the regulated medical waste. Because processing facilities for medical waste are far less numerous than municipal waste landfills, most transporters operate within a wide service area, if not the entire state. There are no regulated medical waste transporters based within the County,

Table 2-3 shows the licensed regulated medical waste transporters located in the closest proximity to Armstrong County.

Company	Address
Genesis Environmental Ltd	380 Locust Street McKeesport, PA 15132
Stericycle, Inc.	100 35th Street Pittsburgh, PA 15201
Veolia Environmental Services	6330 Route 219 Brockway, PA 15824

SEPTAGE TRANSPORTERS

In Pennsylvania, transporters of residential septage must register with the PADEP. Haulers register with PADEP based on the location of their business, not on their service area. It is common for transporters to cross county lines to provide such services. Transporters are required to maintain logs with specific data for each load of septage collected and transported. There are no reporting requirements for septage transporters, however, the information must be made available upon request to PADEP inspectors. In addition to PADEP registration, many counties also require septage transporters to register and report on the activities conducted within the county's jurisdiction. The Armstrong County, Ordinance 92-2 Amended, requires septage haulers to register and report their activities.

Table 2-4 lists the known septage transporters operating in Armstrong County.

A & A SEPTIC SERVICES	162 Beagle Club Road, Cowansville, Pa 16218
J & D SEPTIC SERVICE, INC.	Craig 219 South Main, Elderton, Pa 15736
A AFFORDABLE SANITATION	107 School St, Hyde Park, Pa 15641
J & D'S SEPTIC SERVICE	219 S Main, Elderton, Pa 15736
VOGEL DISPOSAL SERVICE INC	Brickyard Road, Mars, Pa 16046
ROYAL FLUSH, INC.	Route 56, Spring Church, Pa 15686
A PODOBNIK SANITATION	Locust Street, New Kensington, Pa 15068
VETS SANITATION	610 Saxonburg Road, Butler, Pa 16002
AMOS REED SEPTIC TANK CLEANING	250 Park Rd, Apollo, Pa 15613

ARMSTRONG COUNTY MUNICIPAL WASTE DISPOSAL TRENDS

Planning in general is not an exact science. Regardless of the topic or issue, plans are meant to be a snapshot in time. Plans assess a number of related conditions in the same timeframe to establish benchmarks, understand trends, and recommend solutions to meet future needs. Successful plans are dynamic rather than static and are designed with the flexibility to be altered as circumstances change.

This project represents the third revision/update since the adoption of the Armstrong County Municipal Solid Waste Management Plan in 1990. The municipal solid waste landscape has evolved over that time. Service providers, technologies, views, and regulatory goals may have eliminated options in some areas but created new opportunities in others. As discussed previously, even the composition of the waste stream differs.

Chapter 2 contains the reported data gathered from a number of respected sources. disposal facilities since 2003. By comparing this past performance to the expectations made during the previous planning process the County can accommodate for a variety of changes and adjust former assumptions. Doing so helps the County make realistic predictions and informed decisions moving forward.

POPULATION AND DISPOSAL PREDICTIONS AND OUTCOMES

Population is a main driver of waste generation and disposal. Fluctuations in the population directly affect the amount of waste that must be managed through disposal, energy recovery, or recycling. Complications caused by overestimating or underestimating can affect system performance, return on infrastructure investments, and protection of the environment. Planners use a variety of accepted techniques to determine the rate at which the population will grow or decline in a geographic area. Why and how one method is used over another is often dependent on local circumstances, personal preferences, and other factors.

Establishing a waste generation, disposal, or recovery rate is another valuable component in determining future disposal and recycling needs. Typically, the historic reported data is considered to see evidence of trends that could lead to upwards or downward shifts in waste generation or a significant alteration of the waste composition.

The population growth rate and the waste generation, disposal, and recovery rates can fluctuate, but not always in direct harmony with one another. A review of population and

waste disposal projections made for Armstrong County during the previous planning process reveals some disparities between the expected and actual results. Uncovering the cause of those differences is an important part of the current project. To do that requires an understanding of the original assumptions.

Table 2-5 shows two sources used to project Armstrong County's population growth in from 2003 through 2013. One is a more aggressive approach used by Armstrong County Department of Planning and Development (ACP&D) based on local data available from the Southwest Regional Planning Commission. The second represents more conservative estimates made by the Pennsylvania State Data Center. Actual population and estimates, also provided by the Pennsylvania State Data Center in conjunction with the US Census Bureau are shown for comparison. The table offers a similar comparison for anticipated waste disposal calculated by using the assumed population and the established disposal rate and trends at the time.

The economic outlook in 2003 started out slow, but as U.S. troops advanced into Iraq, for the first time since 2001, the mood in the country shifted from anxious to hopeful. The Gross domestic product grew at an accelerated rate in the third quarter. Tax cuts were followed by a pace of consumer spending not seen since 1997. Mortgage rates dropped to a 30 year low. Under those circumstances, from the perspective of those responsible for economic development, the key indicators seemed to signal future growth.

The ACP&D projections shown in Table 2-5 were calculated with the optimism of that time. The estimates from the Penn State Data Center were part of a much farther-reaching set of projections covering many decades. Made prior to the events of 2003 the forecasters were not influenced by those circumstances and worked under the assumption that the population would face continuing decline.

Unfortunately, the job market post 2003 did not keep pace with consumer spending. As history has documented the bubble burst and in 2008, the economy slowed to a halt. Therefore, the long-range Penn State data were closer to the actual population based on census data and interim estimates.

Interestingly, the corresponding disposal projections using the Penn State population estimates and disposal trends veered off course at the point when the nation faced a difficult economy. Manufacturing jobs plummeted, consumer spending decreased and in turn, people disposed of fewer items. Also faced with tighter budgets, corporations like Walmart

looked for ways to cut costs. Less and lighter weight packaging, the largest combined segment of the municipal waste stream, was the answer. The result nationwide was a 20-30% decrease in landfill tons disposed. A reasonable assumption is that the difference shown in Table 2-5 between Armstrong County's estimates and the reported waste disposal simply follows the national trends. While this explains the local projected versus reported variances, it does not address the wide gap in Armstrong County's reported disposal data compared to the expected disposal tonnage based on the national averages.

Table 2-5 Armstrong County Projected Disposal versus Actual Reported Disposal						
	Projected Population ACP&D	Projected Population Penn State Data Center	Estimated Actual Population Penn State Data Center	Projected MSW disposed using ACP&D	Projected MSW disposed using Penn State Data Center	Actual MSW disposed
2003	72,392	72,090	71,174	44,521	44,335	45,716
2004	73,373	71,987	70,784	45,492	44,633	44,852
2005	73,703	71,884	69,822	46,061	44,925	42,409
2006	74,035	71,713	69,106	46,568	45,107	41,552
2007	74,368	71,542	68,804	47,136	45,345	40,748
2008	74,703	71,371	68,449	47,704	45,576	36,693
2009	75,039	71,199	67,851	47,657	45,218	37,183
2010	75,716	71,028	68,833	48,440	45,441	36,107
2011	76,057	70,857	68,644	49,008	45,657	36,014
2012	76,399	70,686	68,367	49,507	45,805	36,663
2013	76,743	70,514	68,107	50,073	46,008	34,131
Landfill tons disposed represent all PA categories of municipal solid waste including MSW, C&D, Sewage Sludge, and Ash						

Historically, Armstrong has always generated, disposed, and recycled less than might be expected if the County performed the same as the national trends. A myriad of demographic indicators could be used to explain the differences. When considered individually each may appear insignificant, but when combined issues like household incomes, aging population, lifestyle, housing, etc. can add up. Armstrong County was sooner and hit harder by the loss of manufacturing than some areas of the nation. With unemployment or a shift to service oriented jobs comes a loss of purchasing power, which in turn results in less waste.

Factors such as missing or inaccurate reporting also are suspected to contribute to the differences. Other counties in Western Pennsylvania face similar issues. The problem is magnified when municipal solid waste is collected by local haulers and delivered to a transfer station. There wastes originating from various sources are loaded and compacted into larger vehicles to transport to a remote disposal facility. Upon arrival at the disposal site, rather than identifying each source of the waste in the mixed load, it is common for transfer drivers to state the location of the transfer station as the source. The practice skews the reported disposal data for both the originating county but also for the county in which the transfer station operates. Some amount of Armstrong County municipal solid waste is handled through a transfer station located in Clarion County and transported to Greentree landfill in Elk County. Both facilities are owned and operated by Advanced Disposal. The transfer station opened in approximately 2006. Since that time, Clarion County's reported disposal figures, particularly those reported by Greentree Landfill, have increased in spite of a population decline. It is probably safe to assume a portion of the waste originated in Armstrong County.

A failure to handle waste properly could also result in lower than anticipated reported quantities.

CONTRACTUAL DISPOSAL CAPACITY FACILITIES FROM THE 2004 PLAN

Ensuring that residents and businesses have outlets able to manage the volume and weight of municipal waste generated is the primary responsibility assigned to counties by Act 101. To meet that requirement the County solicited for capacity and entered into agreements with a number of landfills. The County did not guarantee any prearranged volume of tons to be delivered to each of the facilities. However, by ordinance it did limit haulers to the use of only these facilities for the disposal of all categories of municipal waste that they collect and transport. The agreements covered a period of ten years. The contracts that were executed during the last Plan update in 2005 are set to expire during this planning process.

Table 2-6 lists the landfills, which entered into disposal capacity agreements with Armstrong County after the development of the 2005 Plan update.

Table 2-6 Armstrong County Designated Disposal Capacity Facilities 2005-2015

OWNER/OPERATOR	Facility Name County/State
ADVANCED DISPOSAL	Greentree Landfill (Elk County, PA)
REPUBLIC SERVICES	County Landfill Closed (Clarion County, PA)
	Greenridge Reclamation Landfill (Westmoreland County, PA)
VOGEL HOLDING	Seneca Landfill (Butler County, PA)
WASTE MANAGEMENT	Evergreen Landfill (Indiana County)
	Laurel Highlands Landfill (Cambria County, PA)
	Monroeville Landfill (Allegheny County)
	Northwest Landfill (Butler County)
	Valley Landfill (Westmoreland County)

ARMSTRONG COUNTY'S REPORTED DISPOSAL ACTIVITY

Disposal and processing facilities in Pennsylvania are required to submit annual reports to PADEP. The reports list the types, quantities and origin of the waste by state and for Pennsylvania, the county. From 2003 through 2013 numerous landfills reported some type of municipal and/or residual waste, which was generated in Armstrong County. Except for some small random loads, municipal solid waste followed the flow control pattern established in the County Licensing Ordinance and was delivered to those landfills with Armstrong County disposal capacity agreements. Residual waste was reported by a wider selection of landfills.

DISPOSAL DESTINATIONS

Figure 2-2 shows the locations of the landfills in Pennsylvania that accept waste from Armstrong County.

Distance is a factor in the overall cost of waste management. The map includes a circle that represents a radius of 100 miles from, Kittanning, roughly the middle of the County. It also shows a jagged line that represents a one-hour drive time from Kittanning. The map helps to illustrate why certain facilities receive significantly more waste from Armstrong County than many others do receive.

Figure 2-3 provides a graphic representation of which facilities manage the majority of Armstrong County's municipal waste.

The largest consistent recipients are the various landfills owned and operated by Waste Management. Each of these sites is in one of Armstrong's bordering counties. These include Evergreen in Indiana County, Valley in Westmoreland County, Northwest Sanitary in Butler County, and Monroeville in Allegheny County. The only other operation, which receives notable quantities of municipal solid waste from Armstrong County, is Seneca Landfill. Owned and operated by Vogel Holding, Seneca Landfill is also located in Butler County. The remaining landfills have reported fluctuating but mainly small amounts of the County's waste.

Table 2-7 shows the amounts of municipal and residual waste each landfill reported from 2003 through 2013. With the loss of major manufacturing, Armstrong County generates and disposes of less residual waste than it does municipal waste. Cuttings from exploration and drilling in the Marcellus Gas Formation have increased residual waste disposal, but that trend is expected to be short lived.

Figure 2-2 Landfills Reporting Disposal of Armstrong County Waste 2003-2013

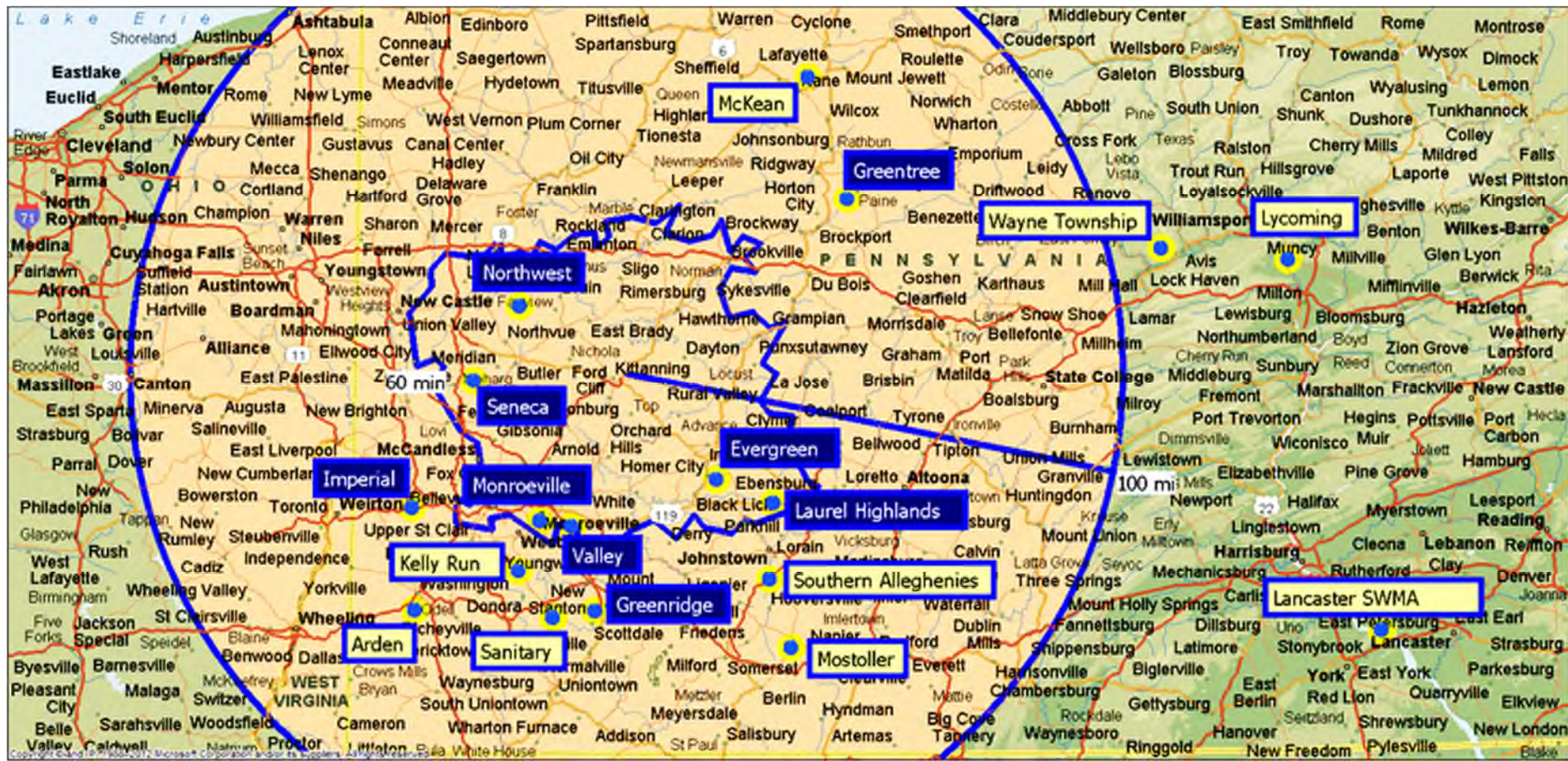


Figure 2-3 Facilities Reporting the Greatest Quantities of Armstrong County Municipal Solid Waste 2003-2013

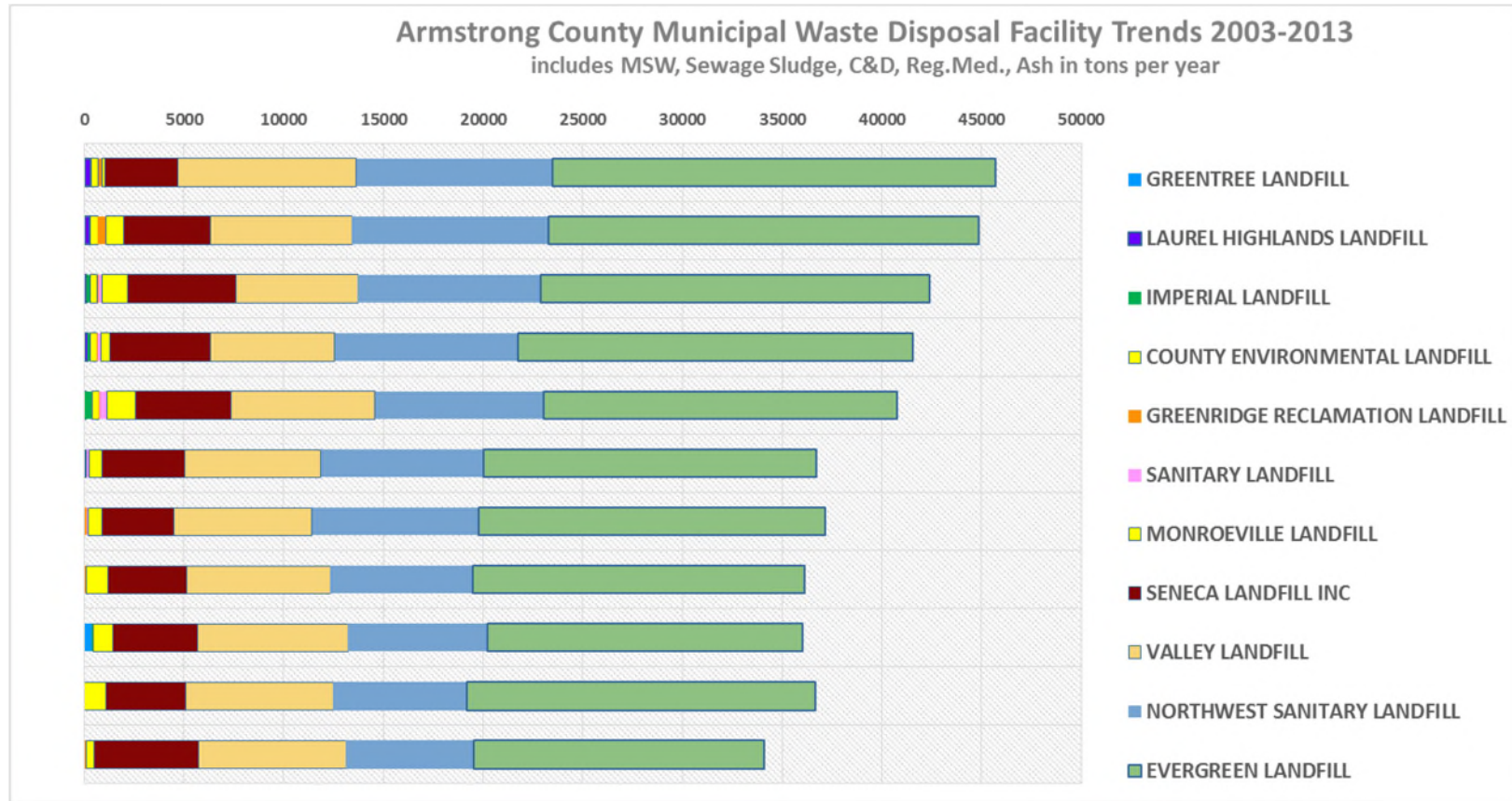


Table 2-7 Armstrong County Municipal and Residual Waste Disposal Destinations 2003-2013

	2003			2004			2005		
	TOTAL	MSW	RSW	TOTAL	MSW	RSW	TOTAL	MSW	RSW
SOUTHERN ALLEGHENIES LANDFILL	0.0	0.0	0.0	20.3	0.0	20.3	0.0	0.0	0.0
ARDEN LANDFILL INC.	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0
SANITARY LANDFILL	27.7	13.1	14.6	27.3	27.3	0.0	156.4	156.4	0.0
VALLEY LANDFILL	14,959.0	8,940.9	6,018.1	20,437.0	7,088.7	13,348.3	20,445.4	6,113.5	14,331.9
GREENRIDGE RECLAMATION LANDFILL	171.1	171.1	0.0	932.6	392.3	540.3	73.3	73.3	0.0
MCKEAN COUNTY LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SENECA LANDFILL INC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EVERGREEN LANDFILL	23,643.3	22,222.9	1,420.4	22,173.5	21,564.8	608.7	20,058.6	19,526.1	532.5
NORTHWEST SANITARY LANDFILL	10,248.8	9,841.5	407.3	10,440.9	9,871.2	569.7	12,549.2	9,173.7	3,375.5
MONROEVILLE LANDFILL	158.5	147.7	10.8	863.5	863.5	0.0	1,305.8	1,305.8	0.0
IMPERIAL LANDFILL	138.2	29.8	108.4	67.3	51.5	15.8	219.9	177.5	42.4
KELLY RUN SANITATION INC LANDFILL	2.7	2.7	0.0	2.8	2.8	0.0	0.2	0.2	0.0
CLINTON COUNTY SWA WAYNE TOWNSHIP LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING COUNTY LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COUNTY ENVIRONMENTAL LANDFILL	1,545.1	366.1	1,179.0	370.9	370.9	0.0	335.1	335.1	0.0
GREENTREE LANDFILL	8.1	8.1	0.0	18.2	17.5	0.7	9.4	9.4	0.0
LAUREL HIGHLANDS LANDFILL	427.1	294.1	133.0	240.1	240.1	0.0	134.9	134.9	0.0
MOSTOLLER LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LANCASTER COUNTY SWMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	51,329.6	42,038	9,291.6	55,595.4	40,491.6	15,103.8	55,288.2	37,005.9	18,282.3

	2006			2007			2008		
	TOTAL	MSW	RSW	TOTAL	MSW	RSW	TOTAL	MSW	RSW
SOUTHERN ALLEGHENIES LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARDEN LANDFILL INC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SANITARY LANDFILL	186.2	186.2	0.0	386.7	386.7	0.0	101.8	101.8	0.0
VALLEY LANDFILL	10,246.5	6,228.7	4,017.8	7,281.8	7,206.7	75.1	6,829.1	6,827.3	1.8
GREENRIDGE RECLAMATION LANDFILL	2,462.9	47.8	2,415.1	36.4	36.4	0.0	7,886.7	4.3	7,882.4
MCKEAN COUNTY LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SENECA LANDFILL INC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EVERGREEN LANDFILL	20,753.1	19,792.3	960.8	19,023.6	17,730.7	1,292.9	17,818.8	16,688.1	1,130.7
NORTHWEST SANITARY LANDFILL	9,921.9	9,201.7	720.2	8,729.4	8,434.2	295.2	8,443.5	8,152.0	291.5
MONROEVILLE LANDFILL	423.9	419.8	4.1	1,428.9	1,419.3	9.6	680.6	669.3	11.3
IMPERIAL LANDFILL	152.2	115.4	36.8	657.9	361.9	296.0	37.3	35.3	2.0
KELLY RUN SANITATION INC LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CLINTON COUNTY SWA WAYNE TOWNSHIP LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING COUNTY LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	2.6
COUNTY ENVIRONMENTAL LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	68.9	68.9	0.0
GREENTREE LANDFILL	28.5	28.5	0.0	26.1	22.8	3.3	21.6	20.8	0.8
LAUREL HIGHLANDS LANDFILL	160.8	160.8	0.0	11.8	11.8	0.0	0.0	0.0	0.0
MOSTOLLER LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LANCASTER COUNTY SWMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	44,336	36,181.2	8,154.8	37,582.6	35,610.5	1,972.1	41,890.9	32,567.8	9,323.1

	2009			2010			2011		
	TOTAL	MSW	RSW	TOTAL	MSW	RSW	TOTAL	MSW	RSW
SOUTHERN ALLEGHENIES LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARDEN LANDFILL INC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SANITARY LANDFILL	61.7	61.7	0.0	36.7	23.6	13.1	36.5	26.1	10.4
VALLEY LANDFILL	6,920.4	6,914.2	6.2	7,435.1	7,177.9	257.2	7,561.4	7,561.4	0.0
GREENRIDGE RECLAMATION LANDFILL	195.2	82.7	112.5	185.1	65.4	119.7	426.9	23.1	403.8
MCKEAN COUNTY LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SENECA LANDFILL INC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EVERGREEN LANDFILL	18,669.0	17,414.4	1,254.6	17,571.4	16,641.2	930.2	22,005.2	15,812.1	6,193.1
NORTHWEST SANITARY LANDFILL	9,382.1	8,346.2	1,035.9	10,125.1	7,125.5	2,999.6	10,034.9	6,977.5	3,057.4
MONROEVILLE LANDFILL	730.6	710.1	20.5	1,175.9	1,087.2	88.7	2,347.2	958.0	1,389.2
IMPERIAL LANDFILL	24.0	23.8	0.2	6.4	0.8	5.6	196.2	39.5	156.7
KELLY RUN SANITATION INC LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CLINTON COUNTY SWA WAYNE TOWNSHIP LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING COUNTY LANDFILL	4.7	0.6	4.1	1,597.6	2.8	1,594.8	0.0	0.0	0.0
COUNTY ENVIRONMENTAL LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GREENTREE LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	6,375.5	368.5	6,007.0
LAUREL HIGHLANDS LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOSTOLLER LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LANCASTER COUNTY SWMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	35,987.7	33,553.7	2,434	38,133.3	32,124.4	6,008.9	48,983.8	31,766.2	17,217.6

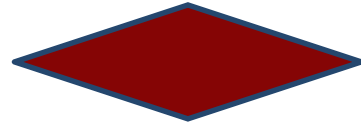
	2012			2013		
	TOTAL	MSW	RSW	TOTAL	MSW	RSW
SOUTHERN ALLEGHENIES LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0
ARDEN LANDFILL INC.	0.0	0.0	0.0	0.0	0.0	0.0
SANITARY LANDFILL	0.0	0.0	0.0	28.6	28.6	0.0
VALLEY LANDFILL	7,381.6	7,372.0	9.6	7,406.3	7,406.3	0.0
GREENRIDGE RECLAMATION LANDFILL	3,448.5	9.9	3,438.6	220.3	44.1	176.2
MCKEAN COUNTY LANDFILL	0.0	0.0	0.0	118.7	0.0	118.7
SENECA LANDFILL INC	4,624.6	4,023.6	601.0	5,761.6	5,212.0	549.6
EVERGREEN LANDFILL	35,030.7	17,471.1	17,559.6	19,999.2	14,594.9	5,404.3
NORTHWEST SANITARY LANDFILL	8,968.1	6,712.2	2,255.9	6,949.4	6,388.9	560.5
MONROEVILLE LANDFILL	2,909.1	1,064.4	1,844.7	835.8	415.3	420.5
IMPERIAL LANDFILL	3.4	0.0	3.4	14.1	9.4	4.7
KELLY RUN SANITATION INC LANDFILL	0.0	0.0	3.4	0.0	0.0	0.0
CLINTON COUNTY SWA WAYNE TOWNSHIP LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING COUNTY LANDFILL	0.0	0.0	0.0	14.2	14.2	0.0
COUNTY ENVIRONMENTAL LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0
GREENTREE LANDFILL	1,240.7	10.4	1,230.3	5,138.2	17.5	5,120.7
LAUREL HIGHLANDS LANDFILL	0.0	0.0	0.0	0.0	0.0	0.0
MOSTOLLER LANDFILL	0.0	0.0	0.0	2,080.6	0.0	2,080.6
LANCASTER COUNTY SWMA	0.0	0.0	0.0	0.0	0.0	0.0
	63,606.7	36,663.6	26,946.5	48,567	34,131.2	14,435.8

CATASTROPHIC EVENTS AND WASTE MANAGEMENT IN THE WAKE OF DISASTER

Even with the recent changes in generation, disposal, and composition, municipal solid waste remains stable and relatively predictable for short term planning. An exception is the rapid influx of material generated during natural disasters and other catastrophic events. Armstrong County is fortunate to be part of the intricate flood control infrastructure managed by the Army Corps of Engineers. Nevertheless, with its rivers and waterways, the County is still vulnerable to the affects of flooding, as well as other disasters.

The devastation and destruction resulting from floods, tornados, ice storms, fires and other natural or manmade catastrophes can be instantaneous and uncontrollable. Emergency responders are often hindered by the bulk of debris blocking roadways, damming up waterways, and covering outlets. Removal must be immediate and efficient to provide access to the disaster victims. Vital components of the infrastructure are often dependent on the existence and implementation of an organized debris management plan. Essentially, restoration of the community cannot be accomplished until the clean-up occurs.

Public works crews are often tasked with clean-ups after moderate storms. Communities will also engage contractors to load, chip, and shred the downed branches and trees. The debris that results from a major disaster is not only an issue because of the quantities, but because it consists of difficult to move and manage materials. Damaged structures must be demolished and removed. Cars, trucks, boats and trailers must be winched and towed. Refrigerators and other major appliances must be carted away. Rotting food, decaying vegetation and



animal carcasses must be removed quickly to prevent vermin infestation. Wet mattresses, upholstered furniture, draperies and carpeting present an opportunity for damaging mold to spread. Workers must continually check for hazardous chemicals, gas leaks, and substances like asbestos.

PLANNING FOR DISASTER DEBRIS MANAGEMENT

Regardless of the type of event or the extent of destruction, Armstrong County must be poised to provide outlets for materials either at the designated disposal sites or at other appropriate contingency facilities. The County's disposal capacity agreements require these sites to demonstrate how they could handle excess disaster waste from Armstrong County, including the provision of a back-up facility.

Disaster debris management is not reserved for disposal only solutions. Contemporary wisdom suggests that much of the debris can be recovered and diverted from disposal. Although the County arranges for disposal outlets, the County could help reduce some of the costs by also identifying and/or promoting the development of outlets for the recovery/recycling of materials from these events.

The devastation and chaos in the aftermath of a catastrophic storm event or other natural disaster is not the opportune time to make decisions on the management of disaster debris.



FEMA advises planners to create lists of recyclable materials as part of their post-disaster debris management plans.

The type of disaster can potentially dictate the types and amounts of debris, but every scenario remains unique. A debris management plan cannot be one size fits all.

Pre-planning for such emergencies is important from a financial as well as public health and safety perspective. It is essential for community members, emergency response crews and local, state and federal recovery agencies to have an understanding of what might be encountered in a variety of situations, and to have policies and practices in place far in advance of the need for

The Armstrong County Department of Planning and Development should engage County and

local emergency management agencies to integrate a countywide disaster debris management plan into their overall hazardous mitigation plans. Working together with the municipalities and other County agencies, will ensure that the plan will be recognized in advance of such situations and that can be implemented readily throughout the County.

ECONOMIC VALUE OF DEBRIS MANAGEMENT PLANNING FOR MUNICIPALITIES

The initial burden of providing for and paying for disaster debris removal typically falls on local municipalities and private property owners. While disaster relief is often available from state and federal agencies, failure to follow proper protocol can reduce the amount of reimbursement due to a community. Therefore, the best plans are cooperative and collaborative efforts between municipalities, service providers, and emergency management agencies.

Part of these plans should include the separation and recovery of materials that can be recycled, as well those more suited for energy recovery than land disposal. Having an organized plan for recovering disaster debris for recycling can ensure that local governments qualify for funding to cover these costs. FEMA advises planners to create lists of recyclable materials as part of their post-disaster debris management plans. The agency emphasizes focusing on end-user markets for recycled disaster debris, including identifying recyclable product buyers and even securing sales of recyclable materials prior to a disaster striking.

ASSESSMENT OF AND RECOMMENDATIONS FOR THE DISPOSAL SYSTEM

The Solid Waste Advisory Committee examined historical data and physical evidence of municipal waste programs and activities in Armstrong County. They also shared their personal insight as stakeholders in the system. The Committee's consensus was that Armstrong County has experienced great improvements in municipal solid waste management since the adoption of the first Plan in 1990. Members of the Committee acknowledged the evidence of some illegal dumping, but they were in general agreement that the problem has greatly reduced from the past.

The Committee agreed that an adequate network for collection, transportation, and disposal is available throughout the County. Landfills remain the primary method of disposal due to availability and affordability. Although supportive of alternative waste management methods, the Committee considered the development of large scale composting or waste-to-energy facilities financially risky based on the currently competitive nature of landfill tipping fees.

During the discussions, members expressed concern for the actions of citizens who were unable or unwilling to pay for service. Key indicators such as random incidents of illegal dumping, ongoing contamination issues at recycling drop-off sites, and the prevalence of burn barrels were mentioned as confirmation of the problem. While in agreement, that mandatory waste collection could resolve these issues, the Committee was not compelled to recommend a countywide ordinance with the requirement, but favored better enforcement of existing local ordinances.

The Committee acknowledged the current County Licensing Ordinance conflicted with the state's authority to regulate haulers under the Waste Transportation Safety Act, Act 90. Revisions to the ordinance were suggested.

Several areas for improvement were identified in this review of current waste management trends. The decisions and justifications for the County's future policies and programs are presented in Chapter 5 and the details of any resulting legal changes are discussed in 9.

Chapter 3

Disposal Capacity Projections

DETERMINATION OF FUTURE NEEDS

The birth of the waste industry as we know it today was prompted by a number of circumstances and events during the last third of the 20th century. The results of decades of poor industrial waste management surfaced. Poorly regulated disposal sites required such extensive remediation that in some instances entire towns were permanently evacuated. Medical waste and raw sewage washed ashore closing public beaches along the Great Lakes and the Atlantic Coastline.

Equally abysmal was municipal solid waste management. Communities relied on open dumps that attracted vermin, smelled, polluted surface water and groundwater. To provide for continued use of the sites from year to year, the dumps were often ignited and burned down to ashes, sometimes smoldering for extended periods. Vast numbers of dumps existed across the country. Pennsylvania recognized and loosely regulated similar small dumpsites in the Commonwealth. Some were privately owned, but the bulk of them were municipal operations.

Tighter controls introduced in federal and state landfill regulations escalated the costs of permitting, engineering design, and construction. Bonding was required for closure and post closure care. Small private and municipal facilities, once the primary disposal outlets, financially struggled to comply. Thousands of landfills closed. Some sold to larger conglomerates intent on internalizing the disposal of waste, which could be collected by their own hauling divisions. Clearly, the marketplace had shifted

As municipal waste generation escalated at a pace never seen before, it became evident that local governments were not adequately prepared to address the issue. Prognosticators

claimed the nation would soon have no place to dispose of this growing waste stream. The environmental and regulatory community soon panicked in belief that the recent regulations had actually helped to facilitate corporate monopolization of the remaining landfill capacity.

Pennsylvania is illustrative of what occurred to fuel such concern as well as why it may have been exaggerated. In the 1980's Pennsylvania had 1100 landfills. By 1990, there were only 71 landfills and today there are 45 operating landfills in Pennsylvania. At face value, those figures point to a pending critical shortage in capacity and were used to promote that perception. In reality, although fewer in number, mega landfills were able to accommodate significantly larger volumes of waste than the small dumps could. In Pennsylvania, between 1995 and 2000, after losing 1055 landfills within 20 years, the disposal capacity actually doubled.

Perhaps a more important realization, disposal became not necessarily a local function. With the elimination of town dumps, communities were no longer self reliant, but dependent on facilities owned and operated by others. Securing long-term disposal capacity became of utmost importance. Where former sites expanded under the new standards or where new disposal facilities were developed, municipalities faced another issue. They feared becoming the destination for unlimited quantities of waste from unknown sources. Although local waste had always been buried in the town's "backyard," resistance and resentment grew for "out of state" or "out of county" waste.

This sense of crisis influenced a flurry of legislative and regulatory activity nationwide. Regulatory agencies focused on a need for disposal capacity commitments as much to slow the growth of landfill development through a demonstration of needs, as to protect the local interests.

The prediction that the nation would run out of landfill space never fully materialized. Nevertheless, the solid waste policies adopted then have far-reaching implications, even today. This couldn't be truer than in Pennsylvania, which enacted one of its most important pieces of legislation focused on municipal solid waste management issues, the Municipal Waste Planning, Recycling, and Waste Reduction Act (Act 101 of 1988). Not only does Act 101 address disposal capacity, but it also establishes the rights of local municipalities, and provides funding for a number of programs. A radical move at the time, Act 101 included residential and commercial recycling mandates on municipalities to divert waste and decrease disposal capacity demands.

Since the last Plan Update in 2004, there is a clear downward trend in tons of municipal waste received for most if not all of the landfills designated for disposal of Armstrong County waste. In many cases, the loss of tonnage was notable. Although the decline appears to have stabilized, there are no indications landfills will ever recoup the lost volume of waste. A logical conclusion is that the County should experience no lack of current or future disposal capacity at the landfills with which it has current disposal agreements. The waste industry however, continually reacts and adjusts to economic circumstances and opportunities. It is wise to explore these other influencing factors before making such a determination.

Chapter 3 reviews the data and analysis used to determine Armstrong County's generation and disposal requirements for the next decade, 2016 thru 2025. It considers current County disposal trends. The rate at which capacity is being consumed by other sources is explored to determine the impact on Armstrong County's needs. Alternative methods of disposal and processing are considered. Finally, the decision and justification to solicit for added capacity is discussed.

CAPACITY CONSUMPTION VERSUS COMMITMENTS

Disposal operations represent profit centers for the owners and in many cases, the shareholders. At a minimum, facilities know the targeted quantities needed to meet daily operating expenses. However, to realize a profit, facilities must continually seek out new reliable sources of waste to exceed that goal. In the absence of inbound waste, profits decrease.

Because all counties in Pennsylvania must demonstrate the availability of sufficient disposal capacity, those that do not own and operate facilities must secure it from outside sources. Contractual commitments are the common method.

Most capacity agreements are one sided. By setting aside a portion of the daily disposal capacity for a county, a facility technically may have to exclude other waste. Conversely, counties will not guarantee any minimum volumes of waste to be delivered for disposal. With no assurance that this daily reserve will be attained, some risk for lost revenue exists.

A variety of market factors may affect an operator's decision to ensure the availability of capacity on demand. Other sources of waste may be delivered on a consistently regular basis or in greater quantities. Other types of waste may have characteristics or properties, which command a higher price per ton. Local politics or agreements may be restrictive. Actual operating practices may enhance or detract from available capacity.

COMPETING FACTORS

A number of issues could reduce the amount of capacity projected to be available for Armstrong County during the implementation period of the Plan, 2016 thru 2025.

OUT OF STATE WASTE

Accepting waste from sources outside of Pennsylvania was a primary goal in the original business plans of a number of landfills that service Armstrong County. Easy access to landfills in Western Pennsylvania is made possible by the network of Interstate Highways. Those, which run east and west, provide direct access to large waste exporting states like New York and New Jersey. Courts have consistently ruled against any state's legislation aimed at controlling the flow of waste from outside sources based on the Dormant Commerce Clause in the U.S. Constitution.

In recent years, less and less out-of-state waste is disposed in Pennsylvania. The decline in out-of-state waste can be attributed to a number of issues including: a change to rail as a mode of transportation by many exporting states; the cumulative negative impact of state fees on the affordability of airspace in our region; and current less favorable economic conditions.

Waste diversion initiatives will continue to reduce the amount of waste exported from the northeastern states. Expansion of the recycling infrastructure and new technologies capture greater amounts of material. The development of composting facilities and digesters in close proximity to the sources of generation coupled with bans on the disposal of organic waste will have the most significant impact.

Even if it is at a lesser rate, out-of-state waste will still occupy airspace in Pennsylvania landfills. Based on current conditions, it is unlikely that it will ever represent a majority ratio of the tons disposed.

INFLUENCE OF RESIDUAL WASTE

Pennsylvania regulates waste residues from industrial and manufacturing processes apart from municipal solid waste. This "residual waste" is accepted for disposal by the landfills designated to manage Armstrong County's municipal waste. Pennsylvania's industries have historically generated more residual waste annually than the reported annual amount of municipal waste originating in homes and businesses. Only a portion of the residual waste

generated is disposed in municipal waste landfills. Many types of residual waste stream have beneficial uses. Others can be reused by the generator or another industry in lieu of virgin materials in the manufacturing process. Select industries have captive disposal facilities used solely for waste produced in their own operations. Western Pennsylvania's industrial base has decreased significantly. The remaining operations perform different functions. The vast quantities of iron, steel, and glass production waste have been eliminated. Smaller more efficient operations employ fewer people and generate less waste. That does not mean residual waste is no longer a competing factor for disposal capacity. A new and growing source of residual waste emerged since 2010. For Pennsylvania landfills that have experienced a downturn in municipal waste disposal, the exploration and drilling activity in the Marcellus Shale Gas Formation has developed into a lucrative market.

Drilling and exploration in the Marcellus Shale Gas Formation provided Pennsylvania landfills with a new source of waste and revenue.



It is difficult to predict accurately the impact on any given landfill. The amount of waste generated at each drill site differs somewhat and is dependent on the depth and horizontal distance of the drilling activity. Drilling activity is influenced by the price of the oil and natural gas. Acceptance of this material does accelerate consumption of the excess disposal capacity currently thought to exist. Drilling activity in Armstrong County is minor at this point. However, local landfills also accept drill cuttings from sites in neighboring

counties. The Marcellus Shale Gas Formation will have an impact across the Commonwealth for a number of years. If drilling exploration is productive, greater demands on disposal capacity could occur. The unpredictable nature of drilling activities and the resulting waste provides more reasons to secure disposal capacity for Armstrong County.

DESIGN AND OPERATIONAL ISSUES

Landfills are not created equally. Site conditions, management, company policies, and the regulatory climate can all determine whether a facility optimizes the capacity that could be made available at a location. Sites with similar acreage, elevations, and permitted daily volumes may have differing capacity remaining in each facility. A number of operational practices such as compaction ratios; density of material received; poor use of daily cover material; and unforeseen construction difficulties can decrease the space available for disposal.

Timing is another factor. Although currently operating with active permits, some landfills with current disposal capacity agreements may require additional approvals or modifications to proceed with expansions of their permitted areas. Regulatory changes and constraints, permitting moratoriums, prevailing public policy and attitudes can hamper or halt permit modifications and renewals. If approvals cannot be obtained in a timely manner, or worse, not at all, then capacity thought available to Armstrong County could decrease.

CORPORATE AND FINANCIAL INFLUENCES

A disposal facility is primarily a business. Sales activity, corporate directives, and administrative issues can affect the consumption of disposal capacity. Increases in permitted volumes due to windfall contracts, catastrophic events, economic conditions, or company policies can accelerate the rate at which capacity is used. Mergers and acquisitions within the waste industry occur on a regular basis. Integrated companies that own hauling operations prefer to internalize disposal at their own facilities. It is common to see waste redirected to newly acquired facilities or to a facility operated by the new owner of a hauling operation. Such shifts can alter the normal consumption of capacity.

PREMATURE CLOSURES

One issue that previously has never been a concern in Western Pennsylvania, but which now must not be overlooked is premature closure of facilities. Landfills with disposal revenue reliant primarily on large volumes of out of state or residual waste may not be able to supplement those losses sufficiently with the smaller quantities of municipal solid waste generated locally. When the return on investment is negative, landfills close.

With the glut of disposal capacity in the region in 2016 and the continuing decline in waste disposal this is a very real possibility. Fewer operating landfills may be in operation before

expiration of the 10-year implementation period of the Armstrong County Municipal Solid Waste Management Plan from 2016 through 2025. This could have a detrimental impact on the availability of disposal capacity in the area. It could also affect disposal costs.

REDUCING DISPOSAL CAPACITY NEEDS

National studies showed rapid growth in municipal solid waste generation and disposal between 1960 and 1990. That growth peaked and since the early 2000's the nation experienced a decline in the per capita waste generation and disposal rates. The downward shift continues but it has slowed enough for the rate to stabilize. A combination of circumstances influenced the reversal of that unprecedented growth.

Business and industry finally made the connection between waste minimization and profitability. Products are now produced with lighter materials, fewer non-functional parts and less packaging. All reduce shipping and handling costs and create less waste. The demise of printed publications increases daily as more advertising shifts to digital sources. Email, texting and other forms of digital messaging continue to erode the use of traditional printed postal services . Recycling programs remove more post-consumer waste from the landfill than ever before. These conditions are not expected to change moving forward.

PROJECTING ANNUAL CAPACITY REQUIREMENTS

In order to determine the future disposal capacity needs of Armstrong County, it is important to review and understand trends in current local reported activities. Because waste is typically measured on a per capita basis, it is vital to know if growth or decline is anticipated in local population. This section describes the sources of data used to calculate Armstrong County's capacity needs. It also illustrates the disposal requirements for the next 20 years.

CURRENT AND PROJECTED POPULATION

The Pennsylvania State Data Center at the Pennsylvania State University has produced state and county population projections for the Commonwealth of Pennsylvania. Table 3-1 shows Pennsylvania and Armstrong County totals from the 2010 Census and projections for 2010 to 2040.

Table 3-1 Population Projections

	July 1, 2010	July 1, 2020	July 1, 2030	July 1, 2040	% Change	% Change	% Change
	Census	Projection	Projection	Projection	2010- 2020	2010- 2030	2010- 2040
Pennsylvania	12,711,308	13,230,170	13,759,594	14,132,588	4.1%	8.2%	11.2%
Armstrong County	68,864	66,750	64,982	62,474	-3.1%	-5.6%	-9.3%

FUTURE RATE OF MUNICIPAL WASTE DISPOSAL

The USEPA tracks and monitors national municipal solid waste generation and disposal rates. Data is available from 1960 to the present. It should be noted that Armstrong County's reported municipal solid waste disposal rate, was only 0.45 tons/person/year, slightly below the national discard rate of 0.525 tons/person/year for the same material.

As discussed previously, sewage sludge, construction & demolition waste, and medical waste are not factored in to USEPA's national municipal solid waste statistics. Those materials accounted for another 0.04 tons/person/year for Armstrong County.

Misreporting probably contributes to the lower than average disposal rate. In addition, the close proximity to Ohio with low disposal rates and no reporting requirements also contribute to the lower than average expected results.

Prior to disposal, various quantities of materials are recovered for recycling in Armstrong. These materials are already excluded from the disposal figures. No significant changes to recycling activities in the County are foreseen and the disposal rate is assumed to remain consistent with its current level.

Table 3-2 presents projected disposal capacity requirements for the years 2015 through 2025. The figures are based on a constant per capita generation rate with adjustments due to projected population changes. For Armstrong County, the quantity is based on the 2012-estimated population of 68,409.

Table 3-2. Armstrong County Projected Landfill Capacity Requirements in Tons

	Population	MSW	Sewage Sludge	Regulated Medical Waste	Construction/ Demolition	Total
2015	67,803	30,986	1,034	31	1,837	33,888
2016	67,593	30,890	1,031	31	1,832	33,783
2017	67,383	30,794	1,028	31	1,826	33,678
2018	67,175	30,699	1,024	31	1,820	33,574
2019	66,966	30,604	1,021	31	1,815	33,470
2020	66,750	30,505	1,018	31	1,809	33,362
2021	66,573	30,424	1,015	30	1,804	33,273
2022	66,397	30,343	1,012	30	1,799	33,185
2023	66,221	30,263	1,010	30	1,794	33,097
2024	66,045	30,183	1,007	30	1,790	33,010
2025	65,870	30,103	1,004	30	1,785	32,922

REQUESTING PROPOSALS FOR FUTURE DISPOSAL OR PROCESSING CAPACITY

The discussions and analyses of conditions, led the County to advertise and accept proposal's from facilities for additional disposal capacity. The PADEP was notified of the County's determination and a formal request was advertised nationally in the industry trade journal, Waste 360.

A copy of the public notification is shown in Appendix C. The Request for Proposals is included as part of Appendix D. A review of the proposals and the landfills, which committed disposal capacity to Armstrong County, are included in Appendix E. A mechanism to designate additional landfills in the future is provided in Appendix F.

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Chapter 4

Partnerships in Support of Rural Recycling

CHALLENGES AND ACHIEVEMENTS

More foresight and planning is required to develop a rural recycling infrastructure than in more urban areas. Because material volumes and distance are major cost factors, rural recycling programs are hampered by insufficient revenue to compensate for the higher cost of processing and handling the commodities. Rural areas are subject to a smaller tax base to support a General Fund already overwhelmed by the demands of a host of other social services. With monies already scarce, subsidies for recycling programs do not take top priority. Where an undeveloped infrastructure prevails along with poor enforcement of illegal dumping and open burning the challenges are magnified.

Armstrong County faces all of these issues. Yet, for the last three decades, the County has supported the growth of a recycling program that has survived through economic upheavals and fluctuating market conditions. To complement the County's efforts municipal programs have operated with varying degrees of longevity. Additionally, private sector participants have investments in collection and processing operations. Some have used recycled feedstock in their manufacturing processes.

Chapter 4 discusses the details of the collective recycling activities in Armstrong County programs. It offers background information on the laws and regulations that influence where and how recycling opportunities originated and spread throughout the Commonwealth. The evaluation of local programs considers performance capabilities and constraints. Lastly, Chapter 4 speculates on events and conditions that could jeopardize or place added demands on the current recycling system.

REGULATORY OBLIGATIONS FOR RECYCLING

The Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988) was a milestone piece of legislation for Pennsylvania. It established the first regulatory requirements for residential and commercial recycling in the Commonwealth. To accomplish its goals and objectives, the law delegated specific duties to counties and municipalities. In doing so, Act 101 also included provisions to protect the interests of private sector scrap and recycling operations.

COUNTY RESPONSIBILITIES

For counties, the emphasis of responsibility provided by Act 101 is ensuring that proper waste management policies and practices are developed and implemented. In addition, counties must provide for sufficient disposal capacity for the municipal solid waste generated. 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 do have administrative assignments for reporting recycling activities. Another role is the development of a municipal solid waste management plan, which requires a demonstration of how the county will attain the state's recycling goal or justify why it cannot.

ACT 101 MANDATES FOR MUNICIPAL PROGRAMS

Unlike counties, Act 101 places squarely the responsibility to implement recycling programs on those municipalities with the highest populations and/or population densities. Unique mandates 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. For these municipalities Act 101 establishes requirements for certain services and standards for collection frequency. Under the Act, mandated communities must also have mechanisms to ensure that commercial, institutional, and government establishments recycle and manage leaf waste accordingly. In addition to the original requirements of Act 101, mandated communities are subject to amendments to the law which resulted from the enactment of Act 140 of 2006. Act 140 introduced a requirement for an ordinance which mandated waste collection, and for the municipality to support a program that enforces against illegal dumping activities.

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.

Based on the most recent data from the US Census Bureau, there are no Act 101 mandated municipalities in Armstrong County. Consequently, all recycling county and municipal efforts in Armstrong County are voluntary and occur because of the desire and dedication of local residents, organizations, and elected officials.

PROGRESS AND ACCOMPLISHMENTS

Armstrong County takes an active if not a direct role in the growth of recycling opportunities for residents and local businesses. To ensure program sustainability, Department stays informed and prepared to apply for grant funding to purchase equipment, develop educational tools and programs and to reimburse the local costs of collecting special materials. The success and improvements in the recycling and waste management program can be credited to the County's attention to operational needs and concerns. The Department of Planning and Development proactively seeks technical assistance to resolve impediments to recycling.

As part of its agreement with Armstrong County to operate a recycling program, the Progressive Workshop modifies and adjusts its practices to control costs and improve the efficiency of its operation. Providing an ongoing and long term countywide collection system in a rural environment is a noteworthy accomplishment. Credit goes to the Progressive Workshop for expanding the program's customer base and securing the best return for the recycling commodities.

It would be easy to rest on past accomplishments. Successful programs remain so by recognizing there is always room for growth and improvement. The planning process is designed to reveal those strengths and weaknesses. It should be used to determine the relevance of past policies and practices. By measuring the progress made toward each goal, it helps to determine and prioritize an effective approach for improvements moving forward.

A good step is an assessment of the recycling program is to review previous recommendations in the context of the time when they were considered. During the development of the 2004 Revised Plan, the Solid Waste Advisory Committee offered a list of

recommended actions to renew interest, increase participation, and open new opportunities for material recovery.

Figure 4-1 highlights some of those recommendations and comments on any progress made toward each goal since 2004.

Figure 4-1 2004 Solid Waste Advisory Committee Recommendations

2004 Recommendations	
• Progress 2005-2015	
Develop and enforce a uniform reporting system	•A licensing program with reporting requirments that included recycling transporters was enacted. Will be amended again in the 2016 Plan.
Determine feasibility of residential curbside recycling	•No known programs have been added
Evaluate feasibility of permanent drop-off sites for residential and commercial recycling	•Trailers replaced Circuit Rider Program. Expansion of commercial sites continues
Support communities developing PAYT programs	•No known expansion of PAYT collection programs.
Seek opportunities for school recycling and composting programs	•Local schools recognized in National Recycle Bowl Competition
Explore potential for regional yard waste management facilities	•No advancements. Need to foster interest from municipalities.
Coordinate grant sponsored Household Hazardous Waste and Electronic Recycling Events	•A permanent electronic waste recovery collection program and periodic HHW events are currenbtly offered.
Create opportunities for market development and materials exchange	•The Progressive Workshopo partners with a firm sensitive to its needs and capabilities

THE CENTER OF ARMSTRONG COUNTY'S RECYCLING SYSTEM

The Armstrong County Recycling Center is located just outside of Kittanning. Under the supervision of the Progressive Workshop, the Center operates in an old dairy barn retrofitted to accommodate the functions of material sorting and processing. The majority of the operation is housed in the barn. A storage building for baled materials awaiting shipment to market is situated adjacent to the barn. Materials collected and received at the Recycling Center are processed by employees and vocational rehabilitation clients of the Progressive Workshop.



The vision to retrofit an old dairy barn for the purpose of implementing a recycling program put existing resources to good use.



The building itself, however, has not been without constraints and challenges.

The vision to retrofit an old dairy barn for the purpose of implementing a recycling program put existing resources to good use. The building itself, however, is not without constraints and challenges. The basic amenities expected for optimal performance in a recycling facility are absent. These include wide open floor space free of obstacles; convenient loading and unloading areas; and a work environment free of distractions. Reliant on randomly available grant funding, equipment purchases have been sporadic and not always in optimal sequential order of installation. Consequently, placement within the building was based more on convenience at the time of delivery rather than ongoing functionality.

The Center supports a cause other than providing recycling opportunities to the residents and businesses of Armstrong County. It employs a primary labor force consisting of adults with physical and/or mental challenges. The operation created jobs and training opportunities to facilitate a move to mainstream employment for many of these individuals.

Much like the structure, it is important to understand that this added element brings with it another platform of limitations. The common efficiencies and productivity expected in similar recycling operations are replaced here by very labor intensive and time consuming methods designed around the capabilities of the workforce. Costlier supervisory staff are needed to perform mechanically oriented functions. With growth, the Progressive Workshop recognized weaknesses in material handling, process ergonomics, material quality and storage. The first of a series of small stepwise changes already were initiated. The return on each capital outlay is projected to be enough to help sustain the purpose of the operation.

BUILDING RECYCLING OPPORTUNITIES

According to *Recycling Programs: Attitudes, Costs, and Designs*, a study conducted by the Virginia Rural Economic Analysis Program (REAP), an extremely successful rural recycling program typically recovers approximately 9 percent of the residential waste stream. By including items such as glass, metal containers and newspapers communities can expect to attain that level of recovery. A higher rate of diversion can be achieved simply by adding corrugated containers and/or by including other commercial waste streams. The benefits of these actions do not come without complications. Evidence of these issues surfaced in the operation of the Armstrong County Recycling Center and the drop-off collection program.

The slow but steady growth of the Center took a sudden and dramatic upturn in the volume of material processed since the 2004 Plan Revision. This was the direct result of the 2006 expansion of permanent recycling collection drop-off sites. Previously, the program offered a Circuit Rider program that made scheduled stops at the designated sites for limited time periods during each month. A good portion of the material was delivered to the Center by local residents.

With the purchase of new trailers, the drop-off sites, became accessible to the public 24 hours per day and 7 days per week. Most recently, the Circuit Rider program was discontinued in its entirety. The added efficiency of the trailers in reducing labor costs and their ability to supplement collection on the days between the previous circuit stops offered convincing results. The quantities and volume of material collected at the drop-off sites grew.

Figure 4-2 shows the locations of the current drop-off sites.

Figure 4-3 shows the materials currently collected at the Center and at the drop-off sites.

Figure 4-2 Armstrong County Recycling Drop-off Collection Sites

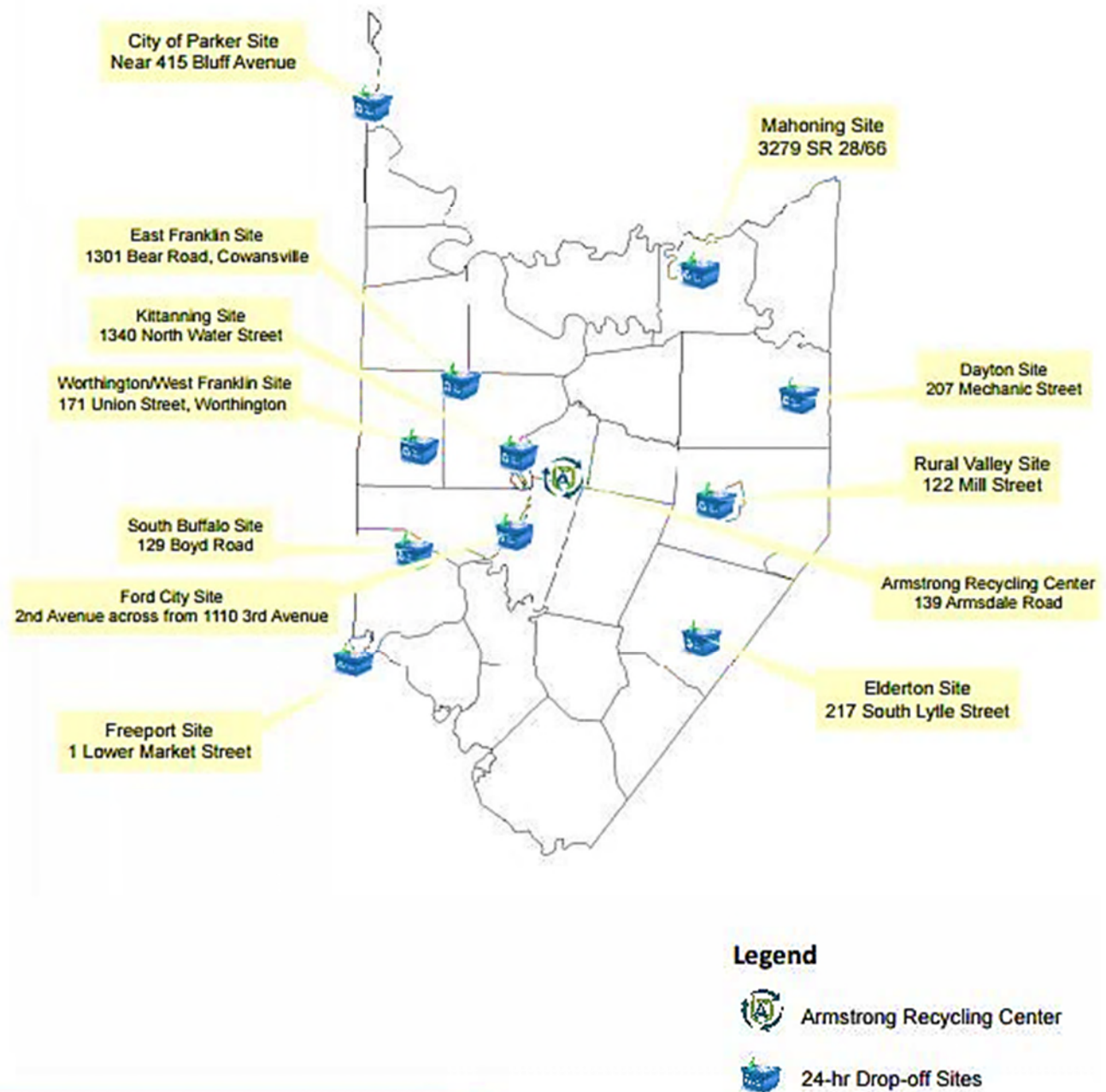


Figure 4-3 Materials Collected at the Armstrong County Recycling Center



Ironically, the efficiencies of the trailers, which reduced costs on one hand, also created the potential for escalating costs in another. Greater quantities of material to be transported and processed placed demands on the overall operation. Increases in the volume of material even more than weight have created a cumulative effect of collection, receiving, processing and storage issues. This is significant operationally because the cost of recycling has a lot to do with the volume of material transported, sorted, baled, and stored. However, the revenue generated is based solely on weight.

In 2010 the quantity of material recycled had increased by 178% based on weight over a twelve year span. On the basis of volume, the increase is more dramatic. Based on loose volume as received in 2010, the quantity of material recycled had increased by 224%. After processing and baling, the quantity increased by 182% as compared to 1996 values.

The composition of the overall recyclable material accepted for collection had a direct impact. Light weight materials such as plastic do not compact well. Worse from that perspective is unflattened corrugated cardboard. Both plastics and corrugated cardboard can occupy a large portion of a container without adding much weight. To manage the material requires a greater number of containers on-site or more frequently scheduled service. Because nearly 2/3 of the material processed at the center is collected off-site a mistake in managing these materials can have a progressively negative effect.

Figure 4-4 shows changes in the proportion of materials collected

Figure 4-5 illustrates variations in the overall amount of each material processed at the Center since 2008.

Figure 4-4 Trends in Composition of Materials from Drop-Off Collection Sites

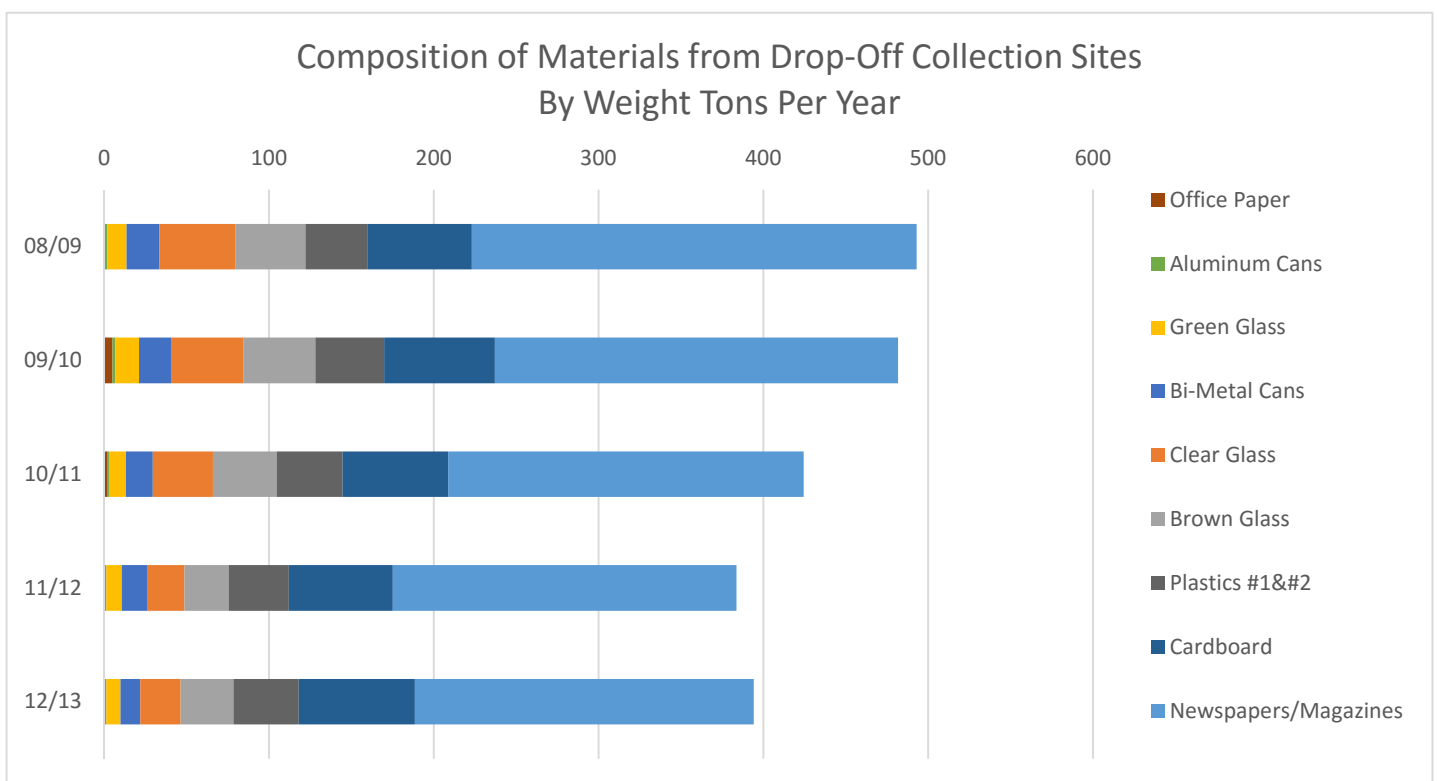
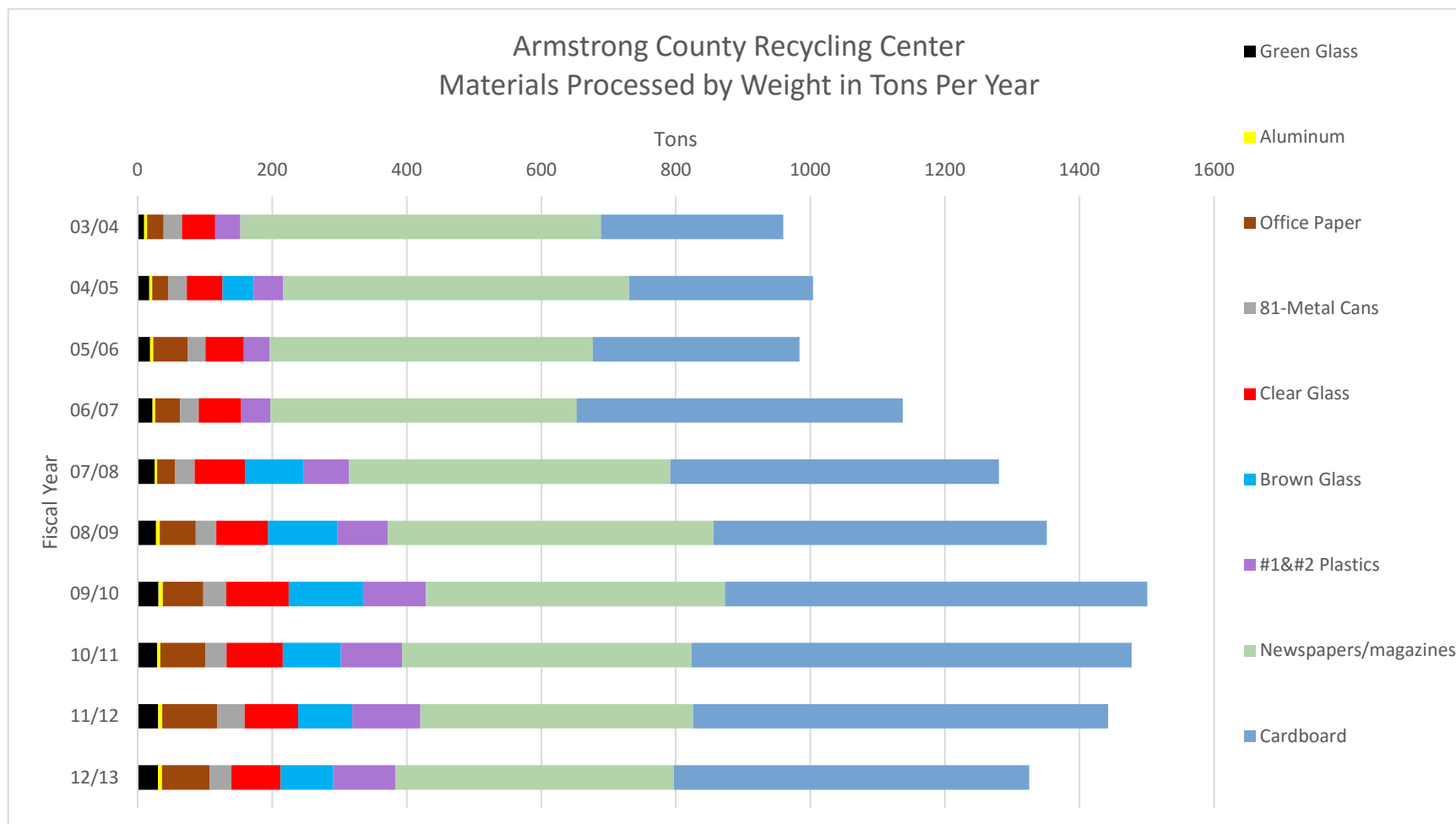


Figure 4-5 Trends in Composition of Materials Processed Armstrong County Recycling



A study on the collection and processing practices was conducted in 2010. The report recommended a number of changes to the program in terms of the materials processed and the methods of processing. Specific improvements were suggested and many have been implemented already by the Progressive Workshop.

Figure 4-6 describes the report's findings.

Figure 4-6 Findings of the Armstrong County Recycling Center Operations St

**Improvements
Considered for
the Operation
of the
Armstrong
County
Recycling
Center**

Make all of the trailer sites consistent in the types and mix of materials accepted. Simplify and improve the labeling of each trailer.

Reduce the quantity of cardboard processed and replace it with increased quantities of office paper, newspaper or other materials.

By considering the increased processing costs and storage requirements, assess the true value of sorting and segregating plastic rather than baling both types together.

Attempt to grow the customers and volumes of material for document destruction as another revenue stream for the service and increased commodity sales of office paper.

Determine if there is true merit to segregating glass by color. Also, reduce the quantity of brown glass collected and processed by controlling abuse of the drop-off collection sites by bars and restaurants.

Substitute or consider alternative materials. Candidate materials include textiles, carpeting, mattresses, major and small appliances, and consumer electronics.

SPECIAL COLLECTION PROGRAMS

Armstrong County recognizes that there are a number of materials other than bottles, cans, and papers that can be recycled. Many others require special handling because of size or chemical characteristics. To accommodate the needs of Armstrong County residents to dispose or discard these items the County in partnership with other organizations provides permanent outlets or periodically hosts collection events.

HARD TO RECYCLE COLLECTION EVENTS

Perhaps the most practical of all of the special programs sponsored by the County and the Progressive Workshop are the “hard to recycle” collection events. At least once per year, they host an event at a convenient location where residents are able to take materials such as, white goods, lead acid batteries, tires and scrap metal for collection. Metals batteries and appliances are sent to local scrap yards to be recycled. Tires are sent to special processors where they may be reclaimed for fuel or recycled into mulch, asphalt or other items.

WASTE OIL

The Armstrong County Recycling Center accepts used oil on an ongoing basis. Since the Center utilizes a furnace, which burns used oil for heat, at least one of the materials provides a direct benefit to the operation of the program.

HOUSEHOLD HAZARDOUS WASTE

Paints, pesticides, fertilizers, cleaning products and other chemicals are commonly found in municipal solid waste. These products share the characteristics of hazardous wastes generated by business and industry. Therefore, although they are exempt from the regulatory requirements when combined by homeowners in their residential trash, removing them from landfills helps to prevent accidental discharge into the groundwater and is beneficial to the environment.

The Armstrong County Department of Planning and Development was one of the original participants on the Southwestern PA Household Hazardous Waste Task Force organized by the Pennsylvania Resources Council (PRC). In conjunction with PRC the County and the Progressive Workshop have sponsored a number of local Household Hazardous Waste (HHW) collection events. The most recent event collected 19,560 pounds of household

chemicals from an estimated 241 households that participated that day. The County's participation on the Task Force provides local residents with the opportunity to take items to other regional HHW collection events sponsored by PRC as well.

ELECTRONIC WASTE

With enactment of the Covered Device Recycling Act in 2010 (CDRA), certain electronic devices are banned from disposal in Pennsylvania. These include, desktop, laptop, and tablet computers, monitors, peripheral devices, and televisions. The manufacturers of these devices are now required to provide for recycling of their products without charge to consumers. Companies must demonstrate that the amount of devices, which were recycled each year on their behalf, are the equivalent to the retail market share of their products sold in the Commonwealth. Implementation of the law has proven to be problematic. The established quotas fall short of the items actually returned each year for recycling. As a result, arguments have ensued over who is responsible for the cost of handling the excess material. Complicating matters, at the time the disposal ban was introduced the commodities markets for materials salvaged from electronic devices took a dramatic downturn. During the planning process, efforts were initiated to amend or repeal CDRA, but had not been finalized when the Plan was completed.

The Progressive Workshop operates an ongoing electronic waste collection program in Armstrong County. Electronics are collected from residents and businesses at the Workshop's North Water Street location in Kittanning Borough. A limited amount of items is accepted in the program. Fees apply for some items and services.

UNWANTED PHARMACEUTICALS

A recently new program for Armstrong County is the collection of outdated and unwanted pharmaceutical sponsored in conjunction with the Armstrong Indiana Clarion Drug and Alcohol Commission, the Pennsylvania State Police, and the Parks Township Police Department. Similar one day events have been scheduled throughout the Commonwealth. Their focus is to capture prescription drugs that when disposed improperly could have a negative impact on the environment. Another targeted goal was the removal of controlled substances that lead to crime and improper use. Studies show that improperly used prescription drugs are a frequent cause of drug overdoses and deaths in teenagers.

Figure 4=7 shows all of the special materials accepted and the points of collection.

Figure 4-7 Items Accepted and Locations for Special Materials Collections in Armstrong County



MUNICIPAL PROGRAMS

Only two municipalities in Armstrong County offer curbside collection for recyclables. These are the Boroughs of Kittanning and Leechburg. Neither meet the population of 5,000 or population density criteria of 300 people per square mile for the recycling mandate under the provisions of Act 101 to apply. Leechburg has a local ordinance which does require residents to separate materials for recycling. The curbside program collects clear, brown and green glass bottles and jars, aluminum and bi-metal cans, and plastic bottles and jugs.

LEECHBURG BOROUGH RECYCLING CENTER

In this small community volunteers have demonstrated that political will and civic pride can overcome what other towns perceive as obstacles in the development of environmental programs. A drop-off recycling program has operated successfully here for a number of years. The Center supplements the curbside program by collecting these additional materials: cardboard, newspapers, junk mail, shredded paper, and magazines.

Founded by the Leechburg Rotary Club in partnership with Boy Scout Troop 551, the program far exceeded the expectations of its origins as a once per month of aluminum can drive. Today the Borough of Leechburg boasts a mid sized processing facility, which receives material not Leechburg and the surrounding communities. The Leechburg Center has been successful in attracting material from commercial establishments enabling it to grow the material processed for recycling to over 300 tons per year. The facility acquired the equipment necessary to operate through funding made available through Act 101 Section 902 and 904 grants provided by the PADEP.

COMMERCIAL RECYCLING

In rural areas, residents and small businesses are the primary generators of waste. Therefore, the quantity is less and the composition tends to differ from that of urban waste streams where warehouses, large retail and office complexes exist. However, state expectations do not always compensate for these factors and consequently rural communities are often expected to meet recycling and reduction goals equal to those of their urban counterparts. Armstrong County is confronted with this situation.

The Center receives corrugated cardboard in greater quantities than other materials from commercial establishments. Glass, and primarily brown glass from bars, is also seen in

notable quantities. Plastic containers also play a role. Most of these materials have contributed to advancements toward reaching the state's recycling goals. There are costs associated with processing the material.

There are several large commercial and institutional establishments that recycle regularly. Many of the chain stores recycle through arrangements made by corporate headquarters and a private vendor. Getting the remainder of the commercial businesses to recycle continues to be a challenge.

The Progressive Workshop collects material from local business locations for a very modest fee. The majority of businesses lack a willingness to pay for pick-up service. Commercial establishments are also encouraged to deliver their materials directly to the Center.

Currently, the drop-off collection program represents the greatest quantities of material in the County's program. It also represents one of the highest expenses. Controlling operational costs is a priority for a non-profit organization like the Progressive Workshop. Identifying potential opportunities for savings is an important part of the planning process.

In general, the drop-off collection program was designed to service residential needs. Unfortunately, inappropriate use of the drop-off sites by commercial businesses is an ongoing problem. An indicator that commercial sources may be abusing the drop-off collection program shows when comparing the make-up of material delivered to the Center to the material collected elsewhere.

The commercial sources of material may vary in total quantities of material, however, the proportion of each type of material looks relatively the same whether delivered to the Center or picked up by the Progressive Workshop employees. Interestingly, when comparing the residential material delivered to the Center to the material collected at the drop-off sites, two major differences are notable. The amount of cardboard that residents deliver to the Center is negligible. However, it represents a much higher percentage of the material collected at the drop-off sites. A similar scenario exists for brown glass.

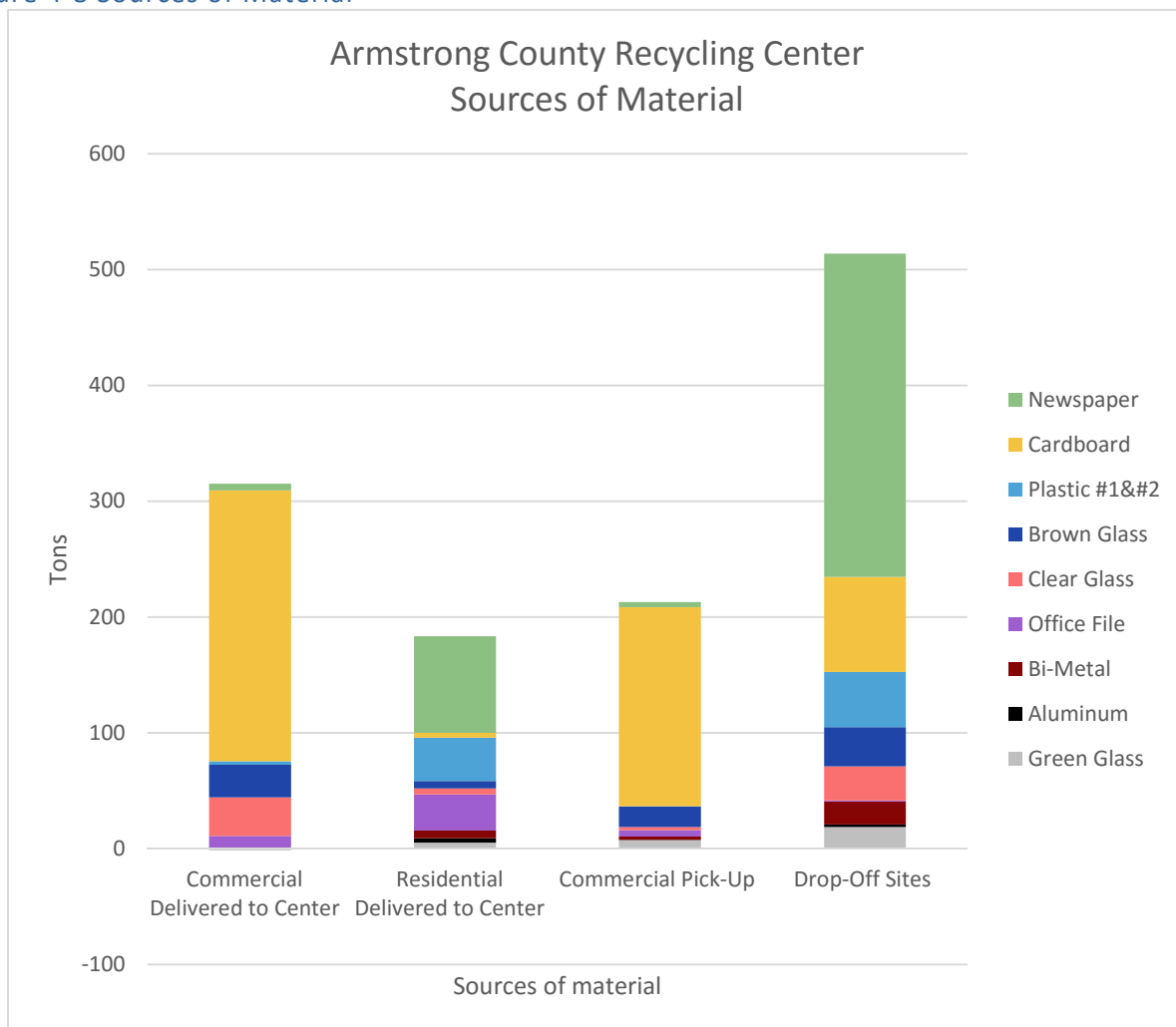
Brown glass costs the Center more to process and transport than its market value. Local bars and restaurants leave cases of empty bottles at the drop-off sites. To remove these items, the Center often has to dispatch another vehicle, another increased cost.

The quantities of cardboard collected at the sites are overwhelming the capacity of the trailers to such a degree that cardboard is being phased out of the drop-off program.

Rejecting material may seem counter to the goals, but to ensure program longevity the financial impact of each service must be considered. Getting more commercial establishments to pay for collection or at a minimum deliver their materials to the Center would make the drop-off program more efficient.

Figure 4- 8 shows different ways the Center receives material and the differences in the make-up of each source.

Figure 4-8 Sources of Material



PRIVATE SECTOR PARTICIPANTS IN RECYCLING

Recycling could not happen in Armstrong County without the support of the private sector. Long before the adoption of Act 101, scrap dealers were the only outlet for recyclable materials. These entrepreneurs continue to play an important role in Armstrong County's recycling efforts. The County's Hard to Recycle Day is reliant on their cooperation. Although the Armstrong County Recycling Center and the Leechburg Borough Recycling Center receive and process material generated by residents and local businesses, the private sector actively collects material through contractual agreements with commercial operations. Similar to the problem experienced by the Progressive Workshop, private collectors find that business owners are reluctant to pay for their services.

IMPACT OF COMBINED LOCAL RECYCLING EFFORTS

Armstrong County may have fewer recycling and waste diversion opportunities than urban and suburban areas. In spite of that, cooperation between the County, municipalities, non-profit agencies and the private sector ensure that a wide portion of the County is provided with some type of collection program during the year. Data reported from those activities documents the types and amounts of materials collected.

Although many other types of materials were reported, the focus of the Armstrong County Municipal Waste Management Plan is to evaluate the County's performance in recycling materials designated in Act 101. Other items have been excluded from the discussions.

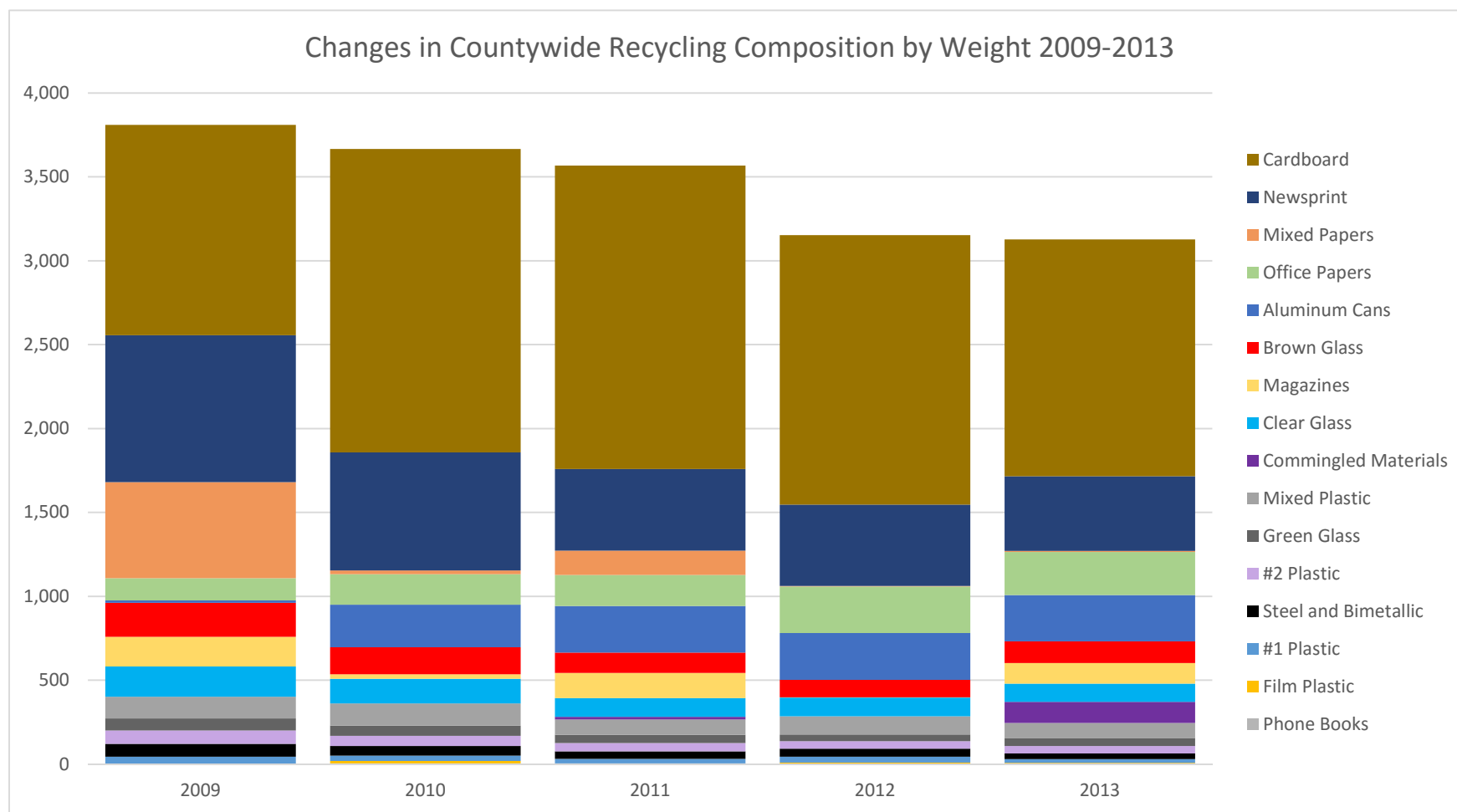
Table 4-2 shows the recycling activity for Act 101 materials reported from all sources in Armstrong County, including but not limited to the Armstrong County Recycling Center. Therefore, the data presented here will be greater than the information shown solely for the Center. The downward trend in total materials recycled resembles what is seen nationwide. Newspapers are getting smaller and in some cases disappearing as a form of information media all together. Plastic packaging weighs less. For many products the contents are now in concentrated form making the plastic package itself a smaller size.

Figure 4-9 illustrates how the mixture of materials in the recycling stream have proportionately shifted over time. The significance of recovering paper and paperboard products, as well as plastics is easier to see in the chart.

Table 4-2 Historic Countywide Trends in Recycling Act 101 Materials by Weight in Tons Per Year

YEAR	#1 Plastic	#2 Plastic	Mixed Plastic	Film Plastic	Aluminum Cans	Steel and Bimetallic Cans	Clear Glass	Brown Glass	Green Glass	Cardboard	Newsprint	Office Papers	Magazines	Mixed Papers	Phone Books	Commingled Materials	TOTAL
2009	40	81	129		15	77	181	202	71	1,254	876	133	177	572	3		3,809
2010	32	60	132	14	253	58	147	161	61	1,808	705	183	28	21	4		3,666
2011	28	49	91		279	44	113	120	49	1,809	486	184	150	146	4	16	3,567
2012	36	44	108	6	279	48	112	103	41	1,607	484	278	2	3	2		3,153
2013	23	44	90	6	275	33	108	130	48	1,411	445	257	123	6	1	126	3,127

Figure 4- 9 Countywide Recycling Material Composition Trends 2009-2013



RECYCLING EFFORTS BEYOND ACT 101

Aside from the materials collected in county and municipal programs, commercial and industrial conservation efforts show in the amounts of materials recovered from these sources each year. Table 4-3 lists the materials, particularly metals, reported from local scrap dealers over the past five years.

YEAR	Aluminum Scrap	Batteries: Lead Acid	Brass	Catalytic Converters, Radiators	Copper	Ferrous Metals	Lead	Rubber Tires	Stainless Steel	TOTAL
2009	517	0	63	0	175	39,000	14	52	154	39,975
2010	437	0	55	0	260	47,300	8	31	1,196	49,288
2011	502	0	87	0	313	51,221	7	29	454	52,613
2012	80	171		21	264	47,782	9	37	537	48,902
2013	494	153	103	0	212	36,562	0	21	445	37,991

SUMMARY

The accomplishments demonstrated in Armstrong County as a result of its overall recycling and waste diversion programs are no small feat. Clearly, the services and programs provided are a benefit to the County. Continual monitoring of program performance and productivity will be necessary to avoid cost overruns and wasteful spending. Finally, the County must build upon its current system by creating new opportunities for the recovery of different types and added volumes of materials. Recommendations for improvement are presented in Chapter 5 with a course of action to implement these ideas.

Chapter 5

Future Outlook for Waste and Recycling

NEW OBJECTIVES FOR ARMSTRONG COUNTY

A major problem with government plans is they fall prey to complacency. This is true for topics like transit, land use, sewage, housing, etc. Municipal solid waste management plans are equally guilty. Great amounts of stakeholder effort go into the planning process. Their findings result in carefully crafted recommendations. Within the first year or so after adoption of the plans, there is hope that suggested programs will be implemented. By year three, the likelihood of program implementation diminishes if they have not yet been initiated. As time passes, things tend to revert to the status quo. The cause can be shortsighted and rigid plans. Plans where available funds and resources fall short of supporting the overly ambitious goals and objectives also face this dilemma. Finding a balance is crucial if plans are to be successful.

This chapter outlines the most important issues identified during the planning process. It provides practical solutions based on the availability and constraints of local resources. Practical guidelines and actions to attain the desired objectives are included. If sufficient evidence was lacking for conclusive decisions, these are targeted for future research and consideration.

The Armstrong County Municipal Solid Waste Management Plan is intended to be a flexible and dynamic tool that offers a suggested path for the County and the Armstrong County Recycling Center to follow during the next decade. Conditions and circumstances will change and unforeseeable events may occur. The Plan encourages the County to validate its course periodically to ensure that its direction remains relevant. The implementation timeline allows for future studies to explore new projects, and evaluate the need to add or eliminate programs and/or services.

ACKNOWLEDGING ACCOMPLISHMENTS

Individuals representing a cross section of the community were appointed by the Armstrong County Board of Commissioners to provide personal perspectives on a variety of related issues. Together they formed the Solid Waste Advisory Committee. Their diverse backgrounds acted as a natural gauge and filtering system of public opinion and acceptance. The Committee pointed out the strengths and weaknesses of the current municipal solid waste management system. In addition, they offered insight to conditions that could influence future needs and services.

Overwhelmingly, the Solid Waste Advisory Committee approved and supported the services offered by the Progressive Workshop on behalf of Armstrong County. The value and benefits of using the Progressive Workshop to operate of the Armstrong County Recycling Center and the recycling collection services were recognized for improving the quality of life of not only the clients, but for all residents in the community.

The Committee was respectful of private sector investments in the municipal solid waste and recycling infrastructure in Armstrong County. Underutilization of these services by local residents and businesses was a concern. With proper rules and enforcement at the municipal level the committee agreed that the private sector could play a greater role in attaining the County's solid waste management goals. Committee members expressed frustration with the ongoing challenges to accomplish this objective.

MODERATE ADJUSTMENTS TO RECYCLING COLLECTION AND PROCESSING

Throughout the Plan, the County's overall accomplishments are well documented. The efforts of all stakeholders are acknowledged. Issues remain that offer opportunities for improvements. Recommended changes and revisions take financial constraints and market conditions into consideration. Program quality and sustainability took priority over quantity of services. That does not mean that the Committee ruled out adding services as part of the future goals. Instead, the recommendations lean toward cautious consideration and fact finding as well as exploring pilot projects to determine compatibility with the Progressive Workshop's workforce.

RIGHTSIZING THE OPERATION

Much effort has been directed at improving the working conditions at the Armstrong County Recycling Center. Focus should continue on making the operation safe, efficient and ergonomically correct. Attention should be given to material flow and handling. More material is not always indicative of greater revenues or profits. Current materials targeted for collection and processing should be evaluated on more than revenue generation, but on the overall physical impact to the collection program and processing facility.

PRODUCTIVE LINES OF BUSINESS

The Center made recent progress expanding new or previously dormant lines of business. This is a positive step forward and should be continued. Person to person visits, and multimedia promotional materials should be incorporated into the campaign.

COMMERCIAL CARDBOARD AND OFFICE PAPER RECOVERY

Since the introduction of the Armstrong County Recycling Center, a steady increase in the amount of materials traditionally generated and recovered by commercial sources has increased.

Cardboard and mixed office papers are found in greater volumes in commercial settings than they are in residential. To improve its cash flow and profitability, the Center should make a concerted effort to solicit more paper-based materials from commercial establishments. Fiber provides a solid payback when it is delivered directly to the Center with no added cost for collection. Use of the drop-off trailer system should be discouraged and fees for collection should realistically be commensurate with operating costs.

DOCUMENT DESTRUCTION

Document destruction services provide a dual service to the community. Promoting the use of this service for a fee to Armstrong County's local governments, school districts and other large institutions should be considered. The offices of medical and legal practitioners as well as insurance agencies are good sources of office paper and users of document destruction services. Promoting file purging and hosting document destruction days during tax season has been a successful way to grow this business for other facilities.

ELECTRONIC WASTE

Although not officially part of the services offered at the Armstrong County Recycling Center, the Progressive Workshop does accept from Armstrong County residents discarded electronic equipment for recycling. Challenges in the Covered Device Recycling Act coupled with a downturn in the commodities market made this effort more challenging than anticipated. Improvements in Pennsylvania's ewaste law are anticipated. However, the legislative process is slow and much needed changes may not take effect for a few years from the time of the writing of this Plan. Charging user fees for services and remaining selective in the types of electronic equipment accepted was a safe course of action and should be continued for the near future.

FUTURE BUSINESS OPPORTUNITIES TO EXPLORE

A good way to protect the operation from the impact of fluctuating recycling commodities market, is to diversify the services offered and materials accepted. Alternative materials have proven to be better sources of revenue than recycling bottles and cans. Some of these materials work best when collected as part of a regional cooperative effort of similar organizations. The collective volume from a joint effort makes the source more attractive to end user or processor. It can also increase the per pound or ton payout to the collector.

Following are some materials gaining traction in recycling programs.

POOLING RESOURCES

The Progressive Workshop has developed expertise in marketing recyclable commodities and in negotiating rates for special handling materials. Often, individual rural recycling organizations collect small volumes of materials. Therefore, they are not in a position to negotiate optimal market terms for their commodities. Small haulers are no exceptions.

Cooperative marketing allows rural regions to offer larger volumes to potential end-markets. This strategy helps them to achieve higher market value, to obtain better transportation rates and to increase the types of materials accepted by the manufacturer.

By joining members in a Market Cooperative, at a minimum, the Center could act as a broker to secure end-user markets. It could also maintain all recycling records and arrange for cost-effective transportation to end-users. Market Cooperatives members often share costs for public education, consulting, and equipment purchases. Membership fees, technical

assistance consulting charges and revenue from the sale of recyclables are all used to fund cooperatives. The Progressive Workshop should meet with representatives from local operations explore the feasibility in developing a Market Cooperative.

TEXTILE RECYCLING

Residential sources account for more than 60% of the total waste clothing, sheets, towels, and similar textiles generated. These textiles constituted 4.6% of the total municipal waste generated in 2012. Clothing and footwear were recovered nationally, at a rate of 14.4%. Towels sheets and other household linens and textiles were recovered nationally at a rate of 17.8%, however they make-up only 0.05% of the waste generated. Based on population it is estimated that 2,583 tons of waste clothing and textiles were generated in Armstrong County in 2012. If recycled at the national recycling rate, about 372 tons would be recovered. The 2012 annual recycling report did not show any recorded activity for clothing and textiles.



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.

It is suspected that clothing and textiles are being recycled within Armstrong County, but are not being captured in the reporting system. Groups like Kiducation, and others place drop-off bins in retail parking lots to collect discarded clothing. In addition to clothing, other groups also seek out bedding, linens, draperies, fabric

samples and remnants, etc. Goodwill and the Salvation Army have permanent outlets. Only a portion of the donations received at their retail stores are suitable for resale. Much of this unsalable material once went directly to the landfill. However, now these stained, torn, and otherwise undesirable items of clothing are turned into industrial rags or fibers for other products.

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

These temporary textile drives would not consume much needed long term storage space for other recycling commodities processed at the Armstrong County Recycling Center. Because the material would be turned over rapidly to the textile broker, issues such as mold, mildew and vermin would not be of concern.

Textiles in the recent past were generating more than \$100 per ton in revenue. With that level of return, it would be worthwhile for the Progressive Workshop to research textile brokers to find a reliable partner. Once found, the Workshop could consider promoting periodic textile recycling campaigns at local schools and churches and hosting textile recycling collections at the Armstrong County Recycling Center.

CARPET RECYCLING

Americans get rid of some five billion pounds of carpet each year or about 1.5% of the municipal waste stream. A market exists for clean recovered carpeting. Carpet manufacturers are eager to receive their product back at the end of its use so they can turn the fiber into another carpet and carpet padding. Carpeting also can be recycled into automobile parts and composite lumber. Carpeting is recovered at the rate of 7.5% nationally, not particularly impressive. The rest is landfilled or incinerated. Because carpet manufacturers seem to be clustered in the south, the hurdle for carpet recycling programs in the northeast is in getting discarded carpeting from here to there in volumes that generate the levels of return worth operating a program. The economics can be very challenging.

This carpet recovery rate is expected to increase as the Carpet America Recovery Effort (CARE), the industry's recovery program, expands. CARE members include independent carpet recyclers, carpet manufacturers, dealers, retailers and suppliers and non-governmental organizations.

There are a number of levels of services associated with carpet recycling. Some organizations offer the physical removal of the carpeting. Others may collect and transport the

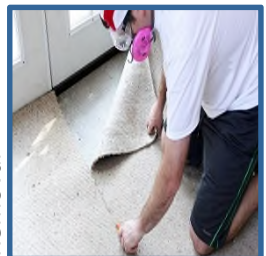
Collection/Transport



Consolidating



Removal



discarded carpets. Some are the receivers who consolidate the carpeting for transport to an end user. A few do all of these.

The best bet for the Progressive Workshop to enter the carpet recycling arena would be through their relationship with Unique Source. This marketing and sales agency promotes and secures business opportunities for organizations who provide services performed by adults with disabilities. If Unique Source could coordinate a Western Pennsylvania network of carpet recovery operations, the logistics and costs may be workable.

MATTRESS RECYCLING



The Progressive Workshop should monitor the industry practices and investigate the current activity in this field to see if mattress recycling could become part of the Recycling Center's operation.

Approximately 15-20 million mattresses and box-springs are disposed of each year in the U.S. with each piece occupying approximately 40 cubic feet or more of landfill space. Since they are bulky and hard to move, disposal is difficult. They often become an illegal dumping problem found on curbs, vacant lots, and roadsides. Over 80% of each mattress (by weight) can be recycled into other useful products.

In the past, “recycling” a mattress was often mistakenly viewed as putting a new cover on an old mattress. However, this is not truly what the industry considers mattress recycling. Much more is involved. Dismantlers recover much of the different components that make up a mattress and box spring and have recycling markets for 80 – 90 percent of the original product. The actual “recycling” part happens when the wood, metal, foam, fabric etc. are recovered, boxed or baled and sold to recycling markets. These markets may continue to process materials or create new products from the raw materials recovered from the mattresses and box springs.

Dismantling mattresses is likely within the capabilities of the Progressive Workshop's clients. Goodwill Industries has a number of mattress recycling operations. Health and safety factors, including the need for bed bug prevention and mitigation may make mattress recycling appear objectionable. However, mattress recycling is a growing industry and best management practices are advancing to deal with these issues. Good sources of used mattresses are health care, educational, government and

hospitality institutions. The Progressive Workshop should monitor the practices and investigate the current activity in this field to see if mattress recycling could become part of the Recycling Center's operation

LEADING BY EXAMPLE

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

The Armstrong County Board of Commissioners supports an ongoing process that expects employees to conduct future business in ways that continually improve the County's environmental performance. They recognize the value of local recycling programs as a potential tool in future economic development and job creation. Municipal officials should share the same expectations within their own jurisdictions. Recycling at municipal buildings and facilities is a way to demonstrate environmental stewardship. It conveys that the municipality expects no less from its residents

Incorporating the elements of source reduction, reuse, recycling, and environmentally friendly product procurement activities into daily operations does not happen overnight. It begins by examining day-to-day practices and asking why specific processes are performed. It also reveals behaviors and physical obstacles that deter recycling and waste minimization in specific departments and facilities. It includes identifying which products are purchased and how they are actually utilized. These elements can be achieved systematically over the course of several years.

Recycling should commonly be implemented by each County, state, and municipal agency and facility. The Armstrong County Recycling Coordinator should conduct waste audits of government facilities to identify the types and volume of materials currently collected and to determine if a greater quantity of materials could be cost effectively added to the program. Participation levels will also be evaluated.

The County Recycling Coordinator can be available to help local officials establish the service requirements of each location. A system of tracking and monitoring the performance at each location should be introduced to assist in the development of appropriate education and enforcement mechanisms to be shared throughout the County. Suggestions will be solicited from participating offices to improve the overall program.

BUY RECYCLED

To further support the importance of recycling, the County should institute a recycled content preferable procurement policy.

To achieve the procurement goal the County Recycling Coordinator should work with the County Fiscal Officer and purchasing agents to develop a recycled content procurement policy that includes the standard statement “Recycled content is preferred” in all bid specifications as an incentive to bidders to find and use price competitive recycled content material.

UNIVERSAL ACCESS TO WASTE AND RECYCLING COLLECTION

Throughout Armstrong County, municipal governments may or may not have established solid waste ordinances that outline minimum requirements for the storage, handling, and collection of municipal solid waste. Fewer have arranged for the collection of waste and recyclables from their residents in a competitive bidding process. Both Act 101 and the Pennsylvania Municipal Code provide broad authority to municipalities for those purposes.

It was noted during the planning process that a number of residents in Armstrong County do not use the services of a waste hauler. The lack of willingness to pay is a major obstacle. For some the availability of service is non-existent or in remote areas, where participants are fewer, cost prohibitive. The consequences of these circumstances are noticeable in the drop-off recycling collection program, which is plagued by contamination from household trash. Political will is needed to correct the situation.

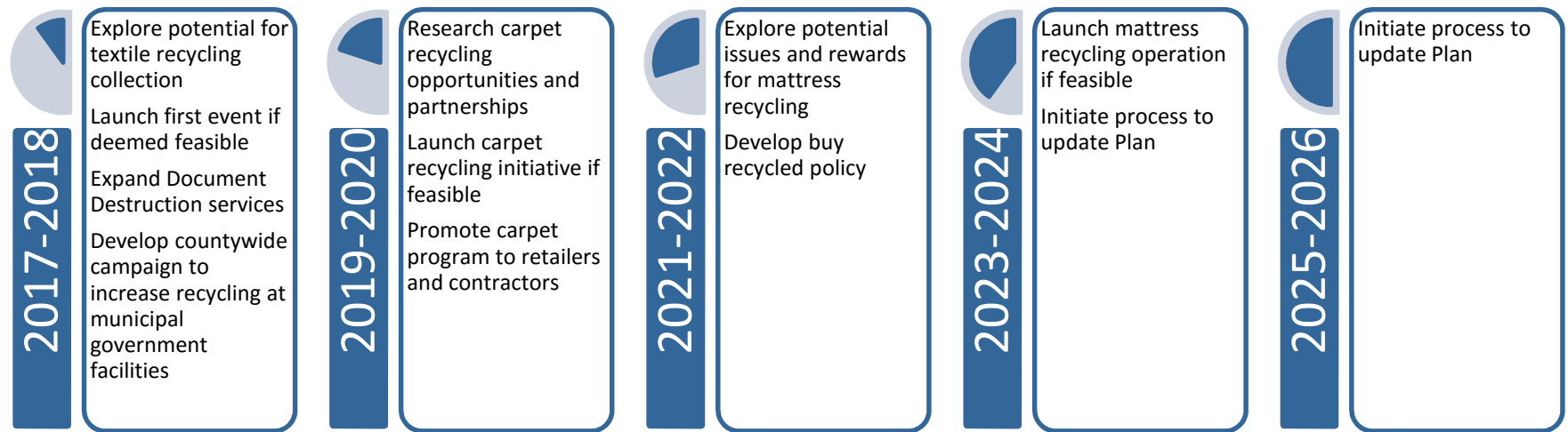
Residential waste and recycling curbside collection services are beyond the normal jurisdiction of the County. However, that does not preclude the County from providing support to municipalities desiring to expand their services, switch to a Pay As You Throw (PAYT) rate structure, or issue a first request for competitive bids for collection service. The County should consider organized forums to foster peer to peer exchanges with municipal

officials. These meetings could be used to expose municipal officials to new concepts, regulatory initiatives, and best practices.

SETTING PRIORITIES AND A SCHEDULE FOR IMPLEMENTATION

The Plan Revisions suggest a variety of actions, which the County could take, to improve upon its existing solid waste management program. In order to maximize those efforts, the County must determine where it will attain the greatest benefit and results. Therefore, a suggested prioritized timeline for implementing the recommendations and revisions is shown in Figure 5-1.

Figure 5-1 Armstrong County Municipal Solid Waste Plan Implementation Schedule



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Chapter 6

Facilities for Future Waste Management

GUARANTEED DISPOSAL OUTLETS

The need for counties to secure sufficient disposal capacity to directly manage the volumes of municipal waste generated within their jurisdictions is a perpetual concern. It outweighs all other responsibilities delegated to counties by the Municipal Waste Planning, Recycling, and Waste Reduction Act (Act 101 of 1988). Capacity assurances are a primary component of Armstrong County's Municipal Solid Waste Management Plan. The process to acquire these agreements was designed to provide equal opportunities to Pennsylvania disposal and processing facilities as well as those located beyond the borders of the Commonwealth. In addition, the selection criteria was established to prevent discrimination against or provide favoritism to any facility or organization.

This chapter describes the process used by Armstrong County to procure disposal and processing capacity. It outlines the criteria used to evaluate the proposals submitted from disposal and processing facilities. It lists the qualifications of each facility and identifies those designated to contract with Armstrong County for future capacity. Lastly, it discusses the factors impacting waste flow control and the County's decision regarding this policy.

VIEWS ON FLOW CONTROL

Armstrong County has traditionally utilized some form of waste flow control as part of its overall municipal solid waste management scheme. During previous planning exercises over the years, the feasibility of dedicating all of the County's waste to a single facility has been debated. Whether owned or operated by the private or public sector, that idea has been consistently rejected. An open menu plan, which allowed for multiple disposal options, was found to be more favorable. Some constraints were still imposed on haulers collecting Armstrong County municipal waste, even in an open menu plan. The "menu" was restricted

to those sites, which met the selection criteria and entered into disposal agreements with Armstrong County.

Although government controls of any kind are rarely welcomed by businesses, tolerance for the menu system continues in Armstrong County because it has yet to conflict with the natural choices made by local transporters. Flow control to a sole facility, exclusive of all others, dictates the destination and the cost of disposal. In contrast, with numerous disposal options normal market conditions could prevail in Armstrong County. Factors such as price, proximity, convenience, access, and site conditions all influenced the flow of waste. In the open menu plan, haulers could opt to use some of the facilities for economic reasons and others for convenience. In addition, vertical integration of collection and disposal operations, creation of new ventures, and expansion of business relationships could develop.

Waste management is an industry in constant change. Mergers and acquisitions are common for hauling operations and disposal facilities. Just as some companies disappear, other small independent operations enter the market. The desire of companies with an investment in both collection and disposal operations to direct waste to their own facilities is understandable. Equally within reason, is for an independent transporter to seek out the disposal option that provides the best competitive advantage. Therefore, at any given time a noticeable, but explainable shift in waste flow can occur. In the menu system, as companies grow, there is freedom to redistribute and redirect routes to new disposal sites.

Armstrong County continues to favor a modified waste flow control scheme. The reasons to maintain the system seem equally justifiable in 2011, as in 1990. An ordinance and reporting process will be utilized to ensure compliance. Disposal options will be limited, to those qualified facilities that have accepted the terms and conditions of the disposal capacity agreement. An adequate array of disposal destinations is within reach by direct and long haul transport. To accommodate future needs, provisions and mechanisms were devised to add more facilities when appropriate during implementation of the Plan.

FACILITY SELECTION PROCESS

Act 101 not only assigns to Counties the responsibility of securing sufficient disposal assurance. More importantly, it requires that the method of obtaining those guarantees must be conducted in a fair, open, and competitive manner. This section describes the process implemented in Armstrong County to procure contractual commitments for disposal for the next ten years.

PUBLIC NOTIFICATION AND SOLICITATION

To seek and acquire disposal capacity for the period 2015-2024, the Armstrong County Department of Planning and Development, on behalf of the Board of County Commissioners, issued a Request for Proposals. To ensure that all interested parties would be aware of the opportunity to provide capacity to the County, a public notification was posted in the *Pennsylvania Bulletin*. Additionally, a display advertisement was published in *Waste 360* a widely circulated trade publication in the waste industry. The actual solicitation is provided in Appendix C. Both in-state and out-of-state disposal or processing facilities, interested in making capacity available to the County were invited to submit offers. The actual Request for Proposals outlining the specifications, contract terms and conditions is provided in Appendix D.

REVIEW AND EVALUATION OF THE PROPOSALS

Armstrong County took all possible steps to ensure fair and open market conditions would continue to prevail as they have since the development of the original Plan. The extent of advertising and outreach covered national, regional, and local interests. It is reasonable to conclude that all interested parties submitted proposals.

Seven organizations submitted proposals for thirteen landfills and one resource recovery facility, which they own and/or operate. Although publicized nationally, only one out-of state facility responded to the request. Proposals were expected to meet specific submission guidelines, which were used to assess administrative completeness. Additionally, detailed criteria for the technical merit review were described. The technical review of the proposals is provided in Appendix E.

DESIGNATED FACILITIES

The facilities that were ultimately selected and allowed to accept Armstrong County municipal solid waste for disposal are shown in Figure 6-1.

Figure 6-1 Facilities Designated for Armstrong County Waste 2015-2024

Advanced Disposal Services	Mostoller Landfill Greentree Landfill
Casella Waste Management	McKean County Landfill Hyland Landfill* *Back-up Facility Only
Republic Services	Greenridge Reclamation Landfill Imperial Landfill
Vogel Holding	Seneca Landfill
Waste Management	Evergreen Landfill Laurel Highlands Landfill Monroeville Landfill Northwest Landfill Valley Landfill
Clinton County Solid Waste Authority	Wayne Township Landfill
York County Solid Waste & Refuse Authority	York County Resource Recovery Center

DESIGNATING ADDITIONAL FACILITIES

The basic concept of a Plan is to provide for known and anticipated needs while remaining flexible enough to allow and adjust for unpredictable changes and events. Armstrong County currently has secured sufficient disposal capacity. However, it is not beyond reason to consider a future need to utilize a disposal or processing facility that is not presently included in the Plan. New opportunities and/or technologies could result in the development of facilities that did not exist during Plan development. The dynamics of consolidation and acquisition cause shifts in disposal facility utilization. The waste industry attracts a breed of entrepreneurs who are known to periodically enter and exit the business. This influences the number and identities of local market participants. It is prudent to consider that landfills, transfer stations, and hauling companies currently identified in the revised Plan may cease to exist either by reaching capacity or from unforeseen market conditions.

The Armstrong County Department of Planning and Development will manage the process of incorporating any additional disposal/processing facilities into the Plan. A simple and direct process will expedite the processing and determination of approval for facility inclusion requests. Adding one or more facility (ies) to a plan is not considered a substantial Plan revision. Therefore, it does not require review and ratification by each of the municipalities. This allows the County to respond to requests quickly and with lower costs than with a full-scale revision.

To maintain the same fair, open and competitive process used to select the initial disposal sites, all facilities must meet the same criteria as those responding to the initial Request for Proposals for Disposal Capacity. Without exception, these include the technical qualifications, compliance history, managerial experience, and permitted status. A copy of the Request for Proposals is shown in Appendix D. It includes the contractual agreement, for the facility to review and execute.

Haulers, transfer stations, disposal facilities, and municipalities may initiate the petitioning process. Requests must be submitted on official forms made available by the Armstrong County Department of Planning and Development. The Processing/Disposal Facility Petition for Designation in the Armstrong County Municipal Solid Waste Management Plan can be found in Appendix F. Once the petitioner submits the form, the County will notify the PADEP that a Plan revision may be forthcoming.

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

Chapter 7

Implementation and Administration

OVERSIGHT AND ENFORCEMENT OF PROGRAMS AND POLICIES

As the highest-ranking elected officials in county government, the Armstrong County Board of Commissioners has a responsibility to implement the policies and programs in the Armstrong County Municipal Solid Waste Management Plan. Considerable effort and focus is required to attain the goals and objectives. The Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988) also assigns a multitude of duties to counties. These include items such as regulatory compliance, reporting, and grant administration. A provision of Act 101 allows another individual, agency, department, or similar entity to assume these responsibilities on the Board of Commissioners behalf. Legislators included in Act 101 funding mechanisms to support in each county a staff position assigned to these activities.

Chapter 7 identifies how the responsibilities for implementing the Armstrong County Municipal Waste Management Plan are assigned. It explains how specific programs are carried out by non-government agencies. Staff and other resources necessary to fulfill the Plan's recommendations are discussed as well.

DEPARTMENT OF PLANNING AND DEVELOPMENT

The Armstrong County Department of Planning and Development is the agent of the County assigned to develop and implement the Municipal Solid Waste Management Plan. In this role, the Department assumes all duties, responsibilities, and powers provided to the County in Act 101.

The Department of Planning and Development includes an Executive Director, an Assistant Director and 4 full time staff who coordinate various planning, community development,

and housing programs. The Department has the primary responsibility for oversight and enforcement of solid waste management and recycling related issues in Armstrong County.

RECYCLING COORDINATOR

One of the Department of Planning and Development's full time staff members is assigned the duties of Recycling Coordinator. This individual is responsible for implementing the guidelines and recommendations set forth in the Plan according to schedule.

REGULATORY AND LEGISLATIVE AWARENESS

The Recycling Coordinator is the County's main point of contact with the Pennsylvania Department of Environmental Protection, Bureau of Waste Management. Developing a good working relationship and open communications with the Department's Southwest Regional Recycling Coordinator is important.

Ultimately responsible for regulatory compliance, the Recycling Coordinator must stay informed on pending legislative initiatives and DEP policy changes that could affect the County and the municipalities. The Recycling Coordinator is expected to communicate in a timely fashion to the Department Director and the Board of Commissioners news of regulatory changes that could affect the County's programs.

Data management is also the obligation of the Recycling Coordinator. Tracking, monitoring, the solid waste and recycling activities within Armstrong County is necessary for the Coordinator to fulfill the Act 101 reporting requirements.

COMMUNITY OUTREACH AND MARKETING

As the official representative of Armstrong County on all solid waste and recycling related issues, the Recycling Coordinator strives to address all questions, and resolve complaints. A high priority is fostering good working relationships with municipal officials, the public, and the private sector. The Recycling Coordinator promotes recycling programs through a variety of outreach efforts and participation in community and civic functions and in the media.

PROGRAM DEVELOPMENT AND COORDINATION

The Recycling Coordinator serves as the County's liaison with the Progressive Workshop, which is the agency responsible for operating the Armstrong County Recycling Center. The

Progressive Workshop also hosts special collection events in conjunction with the County. In addition to administering the contract with the Progressive Workshop, the Recycling Coordinator evaluates the performance of the recycling program, and facilitates requests for PADEP grants to support the operation.

Public education and community outreach programs, planning and feasibility studies, as well technical assistance to local municipalities are generally initiated and supervised by the Recycling Coordinator.

PROFESSIONAL DEVELOPMENT

Attending and participating in professional development seminars, webinars, and trade association meetings is a benefit not only to the Recycling Coordinator but to the County, as well. Reading and reviewing industry related articles and publications is also useful. With greater competition for funding and other sources of revenue on the horizon, a Recycling Coordinator knowledgeable in industry trends, new technology, and applications positions Armstrong County to offer the best mix of services to its residents and businesses.

Periodically, training should go beyond industry topics and focus on leadership, fiscal responsibility, fundraising and strategic planning. It also allows the staff to be prepared with the background data required to write and submit strong grant applications and obtain funding.

FINANCIAL SUPPORT FOR THE RECYCLING PROGRAM

Operating funds for the Armstrong County Recycling Center and the drop-off recycling collection program are primarily the responsibility of the Progressive Workshop. Outside funding comes from a variety of Act 101 Section 900 grants. Act 101 includes a mechanism to support counties and municipalities for their recycling efforts. The Section 902 Equipment and Implementation Grants are competitive and applicants are eligible to submit requests every other grant round, which typically occur once per year. If awarded, the grants provide for 90% of the costs of equipment and program development expenses requested with a current cap of \$250,000. The Section 904 Performance Grant provides a monetary reward per ton of material recycled. Local governments must submit documentation to verify the tons reported.

Consulting and legal fees for planning and feasibility studies are reimbursable up to 80% under the Section 901 Planning Grants. The County has benefitted from the Recycling

Technical Assistance program sponsored by the PADEP in conjunction with the Pennsylvania State Association of Township Supervisors (PSATS) and

At times, the County has supplemented the available grant funding to support special collection events and other programs. County tax dollars also support half of the Recycling Coordinator's salary and expenses and the remainder is funded by Section 903 Grants.

SUMMARY

Successful Plan implementation is reliant on the continued involvement of all stakeholders. The Armstrong County Department of Planning and Development monitors and responds to the individual and collective needs and positions of the municipalities regarding solid waste and recycling issues. Programs and services are designed to complement and support local efforts. In addition, the Department has a strong working relationship with the private sector. By collaborating with these groups and service providers, the Armstrong County Department of Planning and Development continues to encourage the growth of comprehensive waste management services in all municipalities.

Chapter 8

County and Municipal Operations

SERVICES, FACILITIES AND EQUIPMENT

When the legislature drafted Act 101, they incorporated language into the law that the clearly called for using the services of the private sector to the greatest extent possible. The law also established the Recycling Fund to finance the purchase of recycling collection and processing equipment for local governments where private services were not available. A healthy balance of public and private sector municipal solid waste management services are available in Armstrong County. Although waste collection and disposal is primarily a function of private businesses, there is a small degree of participation by municipal concerns. Recycling on the other hand is a demonstration of how public/private partnerships work. Collection programs are orchestrated by the public sector. The physical act of servicing residents at the curb, at drop-off locations, or at special collection events is performed by private contractors hired by either county or municipal governments. Processing of recyclables and yard waste is also a shared arena.

This chapter summarizes the operational role of local government in municipal solid waste management. It describes the functions and assets of both County and municipal entities. Future plans are also discussed.

ARMSTRONG COUNTY FACILITIES AND OPERATIONS

The County owns the Armstrong County Recycling Center which is operated through an agreement with the Progressive Workshop. The County also owns equipment used to operate the recycling program. The equipment was acquired primarily with funds provided through Act 101, Section 902 grants. This collection equipment includes containers/trailers for the permanent drop-off locations, vehicles to collect the trailers and material from commercial

accounts. In addition, processing equipment such as balers, densifiers, and related items used at the Center are also owned by the County.

MUNICIPAL SERVICES

Ford City is the only Armstrong County municipality that utilizes public works crews to collect and transport municipal solid waste. In some communities, municipal public workers collect leaves, leaf waste and yard debris. These materials are delivered to local compost sites where the material essentially remains in static piles.

Of all the municipalities, only Leechburg Borough operates a recycling center. The facility is staffed by the municipality's residents who voluntarily donate their time. The equipment and building were purchased with a combination of Act 101, Section 902 grants and local funds.

FUTURE PROGRAMS AND FUNCTIONS

Developing and investing in a public sector municipal solid waste infrastructure has been discussed in Armstrong County during previous planning development periods. It has never been a serious consideration at the County level. There is no indication from any of the municipalities that such interests or plans exist. It is anticipated that these roles or attitudes will not change during the Plan's implementation period.

Chapter 9

Laws, Regulations, and Contracts

IMPLEMENTATION AND ENFORCEMENT MECHANISMS

Act 101 shifted the responsibility for developing and implementing municipal solid waste management plans from the municipalities to the counties. The Act also provided counties with the authority to enter into contracts and to enact ordinances, rules and regulations necessary to enforce the goals and objectives of the plans. The County has the ability to establish standards for proper waste storage, collection, transportation and disposal for municipal waste generators as well as those engaged in the business of municipal solid waste management. It can also provide for penalties for violations of those rules.

This chapter outlines the tools and mechanisms, which were developed to ensure compliance with the provisions of the 2011 Armstrong County Municipal Solid Waste Management Plan. During the ten-year period of the plan, as circumstances present themselves, changes may be necessary. It should be noted that the County is not precluded from amending, modifying or repealing any of the items referenced here, provided such changes comply with Act 101 and the conditions of the approved Plan.

MUNICIPAL WASTE DISPOSAL CAPACITY AGREEMENT

Armstrong County conducted an extensive procurement process to secure disposal capacity. To prevent inadvertently offering an unfair competitive advantage to one facility over another, the Municipal Waste Disposal Capacity Agreement contains universal terms, conditions, and standards applicable to all facilities. The contractual agreement establishes the service and reporting requirements for each site. It commits the facility to the types and volumes of waste; the maximum tipping fees; emergency provisions; and other items

provided in the contractor's proposal.. Each and every facility, which was designated to be in the Plan as a result of the procurement process, as well as any that might petition the County for inclusion in the future, must agree to the provisions of the Municipal Waste Disposal Capacity Agreement. The Request for Proposals located in Appendix D includes the contractual agreement.

PETITION TO ADD A PROCESSING/DISPOSAL FACILITY IN THE PLAN

In the ten-year period of the Plan it is reasonable to assume that new facilities or technical processing opportunities may become available. Changes in facility ownership, construction and permitting of a transfer station, or other business strategies could facilitate requests to direct waste to sites not proposed previously. It is to the County's advantage to consider such opportunities as they arise. To accommodate such requests, the County provides a mechanism to review, approve and add facilities in the future. Appendix F 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 Authority will be subject to the same criteria set forth in the original Request for Proposals that is included in Appendix F. The PADEP and the municipalities must be notified of the inclusion of the new facility.

SOLID WASTE MANAGEMENT ORDINANCE

The County adopted Ordinance 92-2 to ensure compliance with and facilitate enforcement of the Plan. It was amended in 2005 to provide for transporter licensing and facilitate reporting requirements.. Upon the enactment of the Waste Transportation Safety Act, Act 90, the courts determined that issues. Such as administrative fees and transporter authorization and licensing are not within the statutory powers of counties and municipalities. Although the new ordinance abandons a licensing program, it still requires those collecting municipal waste in Armstrong County to provide their state issued authorizations to the County. In addition, haulers must transport municipal waste to facilities with contractual arrangements guaranteeing capacity to the County. These disposal sites are designated in the Plan. The ordinance is located in Appendix H.

AGREEMENT WITH THE PROGRESSIVE WORKSHOP

The Armstrong County Recycling Center is the hallmark of the County's recycling efforts. It is operated under an agreement with the Progressive Workshop. The agreement outlines the

responsibilities of the County to fund the operation at a predetermined level and to assist and facilitate in applying for and securing available grant funding for equipment and enhancements to the facility. The agreement also specifies the role of the Progressive Workshop in supporting the growth and sustainability of the recycling program throughout the County. A copy of the agreement is provided in Appendix H.

RESOLUTION TO ADOPT THE PLAN REVISIONS

Upon completion of this Plan revision, the Armstrong County Board of Commissioners will adopt the revised Plan in the form of a resolution contained in Appendix I.

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Chapter 10

Refocusing Resources and Efforts

THE SURVIVAL OF CORE SERVICES

Periodic reviews and evaluations of a county's municipal solid waste management plan are required by Act 101. The purpose is to determine if decisions made in the past are still appropriate. It is a time when the costs and benefits of providing programs and services should be examined. New technologies and advancements in waste management and environmental protection should be investigated. The findings of this exercise often lead to policy changes. Additions and deletions in service offerings occur. Prevailing circumstances and new priorities prompt the redirection of resources.

The 2016 Armstrong County Municipal Solid Waste Management Plan and a study of the Recycling Center prior to the Plan Update, identified opportunities for change and improvement. Both projects focused on serving the long-term needs of the County as a whole. Some recommendations affect certain municipalities more directly than others through the elimination of the Circuit Rider Program. However, the inconveniences felt by some are outweighed by the benefits derived in ensuring the survivability of the core programs. Great efforts were taken to communicate the pending changes in advance.

ONGOING EFFORTS AND TRANSITION

The ten year anniversary of the Plan is not the only time to evaluate performance and explore new ideas. The Armstrong County Municipal Solid Waste Management Plan is a dynamic instrument meant to allow for unforeseen events and opportunities. The Plan takes a big picture look at waste management and recycling practices in the County. Key indicators brought to light issues or concepts that warrant further analysis and investigation. The County should explore these items as outlined in Chapter 5.

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Chapter 11

Fair and Open Markets

PROTECTING THE FREEDOM TO OPERATE

Within the Commonwealth of Pennsylvania, all counties are required by Act 101 to secure disposal capacity and demonstrate methods to attain the state's recycling goals. These issues are commonly addressed during the development of a municipal solid waste management plan. Similar requirements are common throughout the nation. Today's state of the art disposal facilities require a considerable investment to design, permit, construct and operate. Based on the economies of scale, it is unreasonable to think that every county would meet its capacity obligations with either its own disposal facility or one operating within its borders. Therefore, to ensure proper management and disposal, it is necessary for waste to move across county and state lines. These same issues apply to the processing and marketing of recyclable commodities.

SHARED ACCESS TO CAPACITY

The Armstrong County Municipal Solid Waste Management Plan directs transporters delivering Armstrong County municipal waste for disposal to select from a menu of facilities, which have guaranteed capacity to the County. The list includes sites which all operate outside of Armstrong County. As discussed previously in this document, the provision of multiple facilities allows for a fair, open market and for sufficient capacity available to the County. The same approach was utilized in other counties' plans. Therefore, municipal waste flows naturally through a network of transporters and facilities that have no local, state, or national boundaries.

COOPERATION AND COMMITMENTS

To manage its waste, Armstrong County relies on the cooperation of other counties and states, which permit the operation of disposal facilities in their jurisdictions. In return, Armstrong County respects the contractual obligations of the local existing facility. In addition, the County understands the operator's need to design, finance, and construct reasonable expansions to meet the required capacity commitments. Therefore, the County will not interfere with the normal operational and regulatory process involved with such expansions. Armstrong County will neither inhibit the free enterprise of the facility nor prevent it from generating the necessary profits to support those projects.

Chapter 12

Stakeholder Perspectives

COMMUNITY INVOLVEMENT IN THE PLANNING PROCESS

We all generate and need to dispose of municipal waste. Our familiarity with the issue fuels strong opinions regarding municipal waste management. Our viewpoints reflect personal perspectives based on environmental, economic, political, and social influences.

Most individuals and businesses believe that the way they manage municipal waste is the norm. Often grounded in local culture and long standing tradition, when people perceive these practices are threatened, the result is often public outcry.

To avoid miscalculating the public's tolerance for change, experience teaches us that bringing the various interest groups together during the planning process is a vital step in building consensus for future policies and programs. Allowing for this exchange and interaction ultimately leads to better understanding and cooperation when new practices are implemented.

The opinions and ideas of local stakeholders were actively sought during the development of the Armstrong County Municipal Solid Waste Management Plan. The representative composition of the participants, the nature of the interactions and issues targeted for discussions are outlined in this chapter.

INVITING A BROAD SPECTRUM OF OPINIONS

On an ongoing basis, the Armstrong County Department of Planning and Development serves as the liaison between the community and the Board of Commissioners on solid waste and recycling issues. The Department also acts as the agent of the County to implement the Plan and to oversee the programs and services contracted to the Progressive Workshop on behalf of the County. To avoid the appearance of bias or a conflict of interest, Act 101 requires

an additional group of people to be assigned with the task of supporting the Department during Plan development.

SOLID WASTE ADVISORY COMMITTEE

To ensure that the Plan would provide a fair and balanced view of conditions in Armstrong County, the Solid Waste Advisory Committee (SWAC) was established. The Board of Commissioners appointed individuals to represent a specific segment of Armstrong County as defined by Act 101. These special interest groups included: cities, townships and boroughs; environmental interest groups, private waste and recycling industry companies, local industries, and social service agencies. Ultimately, 13 people were invited to accept positions on the Solid Waste Advisory Committee. The Committee structure and participants are shown in Figure 12-1

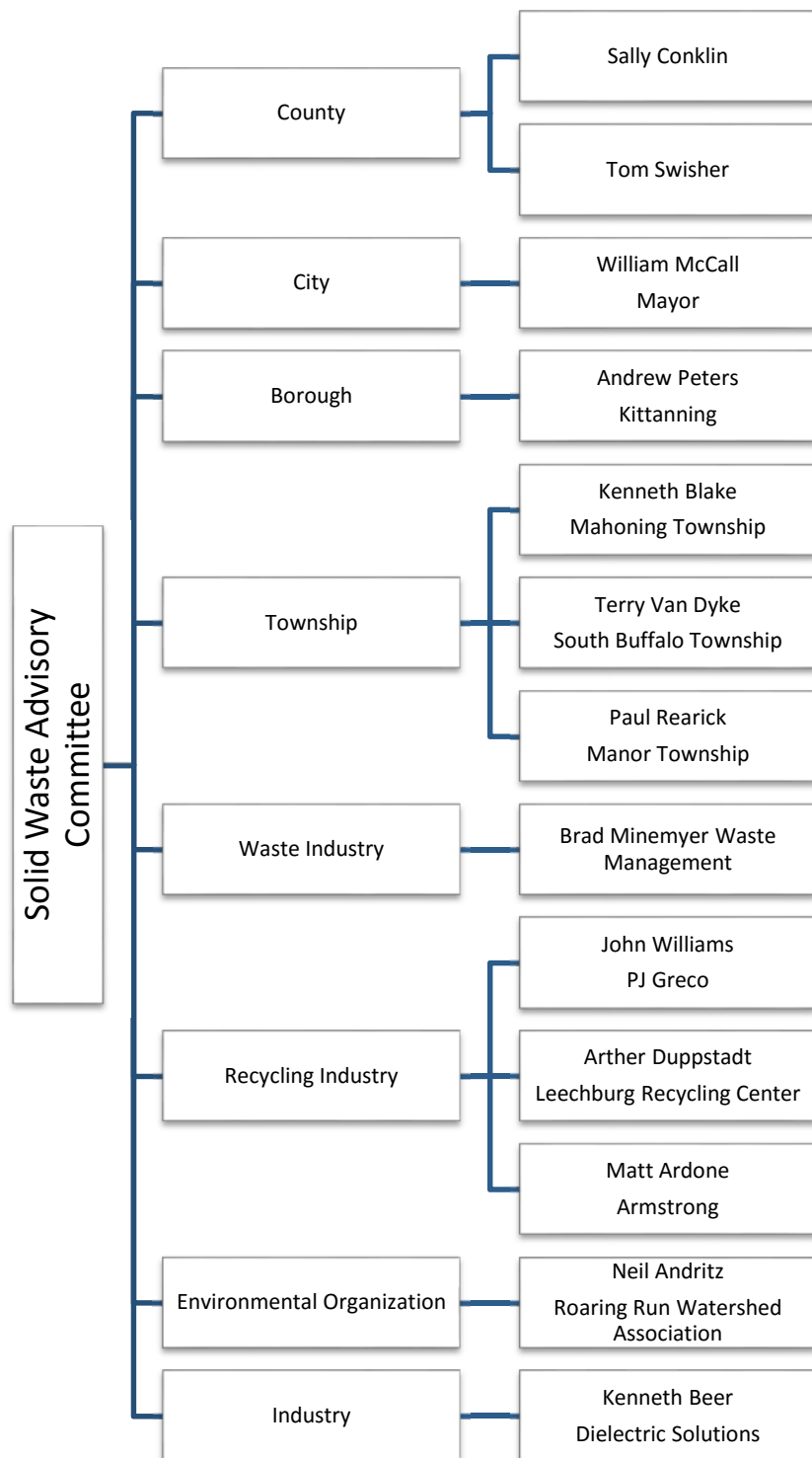
The Committee served an important role in providing realistic reactions and the likelihood of public acceptance for proposed programs and policies. Their contributions are reflected in the final selection and justification of the programs in the Revised Plan. The recommendations and timeline for implementation are provided in Chapter 5.

MEETING CONTENT

In a series of meetings spanning two years, community members offered their perspective on local needs and conditions. To ensure that the discussions would be productive and result in feasible recommendations, the participants were exposed to background information from a variety of sources. From this information, the Committee voiced their opinions.

The Municipal Waste Planning, Recycling and Waste Reduction Act, as well as other federal and state laws were reviewed. Current and historical local data was presented along with explanations of the leading indicators of performance for both the solid waste and recycling programs. Success stories and failures from other counties were shared.

Each meeting concentrated on a specific segment of the Plan. The Project Consultant introduced the varied issues required for consideration as part of the planning process. In addition, the Project Consultant presented raw data and analyses based on accepted professional standards and recognized sources all of which are seen throughout this document. The Committee actively discussed a variety of options to address program weaknesses in every meeting. Short and long term implications of program and service decisions on the County, municipalities, and service providers were considered.



PRIMARY CONCERNS AND OBJECTIVES

Long-term preservation of the County's programs and services was considered essential in protecting public health and safety. However, the ability to implement economically self-sustaining programs with minimal reliance on government subsidies was generally deemed a necessity. The Committee acknowledged the need for the Armstrong County Recycling Center and the drop-off collection program to diversify. The addition of materials, services and revenue sources were discussed. The Committee wished to ensure a fair and competitive marketplace for waste disposal and collection. Issues such as the need for mandatory residential collection prompted consensus, but differing opinions on the ability to correct the situation. Overwhelmingly, the Committee agreed that public education, particularly school programs, was the key to promoting proper waste management practices.

The Solid Waste Advisory Committee expressed strong views on the need to ensure, to all residents of the County, the availability of convenient and accessible outlets for municipal waste and recyclables. The development of centralized convenient centers to handle recyclables, bulk items, discarded electronics, and tires was favored by Committee members, but how to fund these operations was left unanswered.

Based on the views offered by the SWAC members the Plan revisions reflect service changes, program enhancements, and policy amendments related to these items. Recommendations and solutions are presented in Chapter 5.

RECORD OF ACTIVITIES AND COMMENTS

Documentation of the topics and issues considered and discussed at the Solid Waste Advisory Meetings, along with comments received from municipalities, PADEP and the general public are located in Appendix J.

Appendix A

Definitions and Acronyms

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§ DEFINITIONS AND ACRONYMS

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

Abatement—The restoration, reclamation, recovery and the like of a natural resource adversely affected by the activity of a person, permittee or municipality.

Access road—A roadway or course providing access to a municipal waste processing or disposal facility, or areas within the facility, from a road that is under Federal, Commonwealth or local control.

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

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

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

Aluminum—Refers to cans comprised of 100% aluminum.

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

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

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

C&D— Construction Demolition Waste.

Chemotherapeutic waste—Waste resulting from the production or use of antineoplastic agents used for the purpose of inhibiting or stopping the growth of malignant cells or killing malignant cells. The term does not include waste containing antineoplastic agents that are hazardous wastes under Chapter 261a (relating to identification and listing of hazardous waste) and 40 CFR Part 261 (relating to identification and listing of hazardous waste) to the extent that Part 261 is incorporated in § 261a.1 (relating to incorporation by reference, purpose and scope).

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

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

COG — Council of Governments.

Collateral bond—A penal bond agreement in a sum certain, payable to the Department, executed by the operator and supported by the deposit with the Department of cash, negotiable bonds of the United States, the Commonwealth, the Turnpike Commission, the General State Authority, the State Public School Building Authority or a Commonwealth municipality, Commonwealth bank automatically renewable and assignable certificates of deposit or irrevocable and standby Commonwealth bank letters of credit.

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

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

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

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

Community activities—Events sponsored in whole or in part by a municipality, or conducted within a municipality and sponsored privately, which include, but are not limited to, fairs,

bazaars, socials, picnics and organized sporting events that will be attended by 200 or more individuals per day.

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

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

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

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

- (i) Uncontaminated soil, rock, stone, gravel, brick and block, concrete and used asphalt.
- (ii) Waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material.

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

Construction material—The engineered use of municipal waste as a substitute for a raw material or a commercial product in a construction activity, if the waste has the same engineering characteristics as the raw material or commercial product for which it is

substituting. The term includes the use of municipal waste as a roadbed material, for pipe bedding and in similar operations. The term does not include valley fills, the use of municipal waste to fill open pits from coal or other fills or the use of municipal waste solely to level an area or bring the area to grade when a construction activity is not completed promptly after the placement of the solid waste.

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

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

DEP— Department of Environmental Protection.

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

Disinfection—The treatment or processing of infectious waste so that it poses no risk of infection or other health risk to individuals handling or otherwise coming into contact with the waste. The term includes autoclaving; dry heat, gas or chemical disinfection; radiation and irradiation; and incineration.

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

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

EPA—The United States Environmental Protection Agency.

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

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

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

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

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

Friable asbestos containing waste—Waste containing more than 1% asbestos by weight that hand pressure can crumble, pulverize or reduce to powder when dry. The term also includes nonfriable asbestos containing waste, which is rendered friable during management.

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

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

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

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

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

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

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

HDPE—High Density Polyethylene.

HHW— Household hazardous waste.

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

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

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

ICW— Infectious Chemotherapeutic Waste.

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

Incorporating—Injecting sludge beneath the surface of the soil or mixing sludge with the surface soil.

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

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

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

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

(C) Human blood and body fluid waste.

(I) Liquid waste human blood.

(II) Blood products.

(III) Items saturated or dripping with human blood.

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

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

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

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

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

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

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

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

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

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

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

(ii) Mixtures.

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

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

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

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

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

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

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

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

(F) Ash residue from the incineration of materials identified in subparagraphs (i) and (ii) if the incineration was conducted in accordance with § 283.402 (relating to infectious waste

monitoring requirements). The ash residue shall be managed as special handling municipal waste.

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

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

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

(J) Mixtures of materials identified in subparagraph (i) and regulated radioactive waste shall be managed as radioactive waste in accordance with applicable Commonwealth and Federal statutes and regulations, including, but not limited to, § 236.521 (relating to minimum requirements for classes of waste).

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

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

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

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

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

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

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

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

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

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

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

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

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

Mobile infectious waste processing facility—An infectious waste processing unit which is moved from one waste generation site to another for the purpose of onsite processing of a generator's infectious waste. The term refers to any processing activity designed to disinfect infectious waste in accordance with § 284.321 (relating to infectious waste monitoring requirements) to render the waste noninfectious. The term does not include any permanently placed waste processing units.

MRF— Materials Recovery Facility.

MSW— Municipal solid waste.

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

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

Municipal waste—Garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this

section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility.

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

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

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

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

NPDES—National Pollutant Discharge Elimination System.

Normal farming operations—The customary and generally accepted activities, practices and procedures that farms adopt, use or engage in year after year in the production and preparation for market of poultry, livestock and their products; and in the production, harvesting and preparation for market of agricultural, agronomic, horticultural, silvicultural and aquicultural crops and commodities; if the operations are conducted in compliance with applicable laws, and if the use or disposal of these materials will not pollute the air, water or other natural resources of this Commonwealth. The term includes the storage and utilization of agricultural and food process wastes for animal feed, and the agricultural utilization of septic tank cleanings and sewage sludges, which are, generated offsite. The term also includes the management,

collection, storage, transportation, use or disposal of manure, other agricultural waste and food processing waste on land where the materials will improve the condition of the soil, the growth of crops or in the restoration of the land for the same purposes.

OCC— Old corrugated cardboard.

ONP— Old newsprint.

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

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

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

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

PAYT— Pay as you throw. A method of charging for waste collection that is based on incremental volume.

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

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

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

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

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

PET—PolyethyleneTeraphthalate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Recycling facility—A facility employing a technology that is a process that separates or classifies municipal waste and creates or recovers reusable materials that can be sold to or reused by a manufacturer as a substitute for or a supplement to virgin raw materials. The term

does not include transfer facilities, municipal waste landfills, composting facilities or resource recovery facilities.

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

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

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

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

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

Residual waste—Garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations; and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act (52 P. S. § § 30.51—30.66). The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under The Clean Streams Law (35 P. S. § § 691.1—691.1001).

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

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

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

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

(v) The term does not include:

(A) A composting facility.

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

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

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

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

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

Sharps—Broken glass that has been in contact with pathogenic organisms, hypodermic needles and syringes to which a needle can be attached, with or without the attached needle,

suture needles, disposable razors, Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, culture dishes, suture needles, slides, cover slips and other broken or unbroken glass or plastic ware.

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

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

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

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

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

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

Source separated recyclable materials—Materials that are separated from municipal waste at the point of origin for the purpose of recycling. The term is limited to clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper, plastics and other marketable grades of paper.

Special handling waste—Solid waste that requires the application of special storage, collection, transportation, processing or disposal techniques due to the quantity of material

generated or its unique physical, chemical or biological characteristics. The term includes dredged material, sewage sludge, infectious waste, chemotherapeutic waste, ash residue from a solid waste incineration facility, friable asbestos containing waste, PCB containing waste and waste oil that is not hazardous waste.

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

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

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

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

SWAC— Solid Waste Advisory Committee.

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

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

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

Treatment—A method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of waste to neutralize the waste or to

render the waste nonhazardous, safer for transport, suitable for recovery, suitable for storage or reduced in volume. The term includes an activity or processing designed to change the physical form or chemical composition of waste to render it neutral or nonhazardous.

Unrecognizable infectious waste—All components of the waste have been processed to produce indistinguishable and unusable pieces smaller than 3/4 of an inch, except that all sharps must be smaller than 1/2 inch. The term does not mean compaction or encapsulation except through:

(i) Processes such as thermal treatment or melting, during which disinfection and destruction occur.

(ii) Processes such as shredding, grinding, tearing or breaking, during or after disinfection occurs.

(ii) Processes that melt plastics and fully encapsulate metallic or other sharps and seals waste completely in a container that will not be penetrated by untreated sharps.

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

USEPA— United States Environmental Protection Agency.

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

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

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

(i) Design or manufacturing activities which minimize the weight or volume of materials contained in a product, or increase durability or recyclability.

(ii) The use of products that contain as little material as possible, are capable of being reused or recycled or have an extended useful life.

WWTP— Waste Water Treatment Plant.

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

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

Sources PA Title 25. ENVIRONMENTAL PROTECTION Article VIII. MUNICIPAL WASTE CHAPTER 271. MUNICIPAL WASTE MANAGEMENT—GENERAL PROVISIONS

Appendix B

References and Acknowledgements

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The following books, documents, articles and other publications were used as professional sources of information during the development of the Plan revisions.

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Appendix C

Public Solicitation for Capacity Assurance

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REQUEST FOR PROPOSALS FOR MUNICIPAL SOLID WASTE DISPOSAL AND/OR PROCESSING CAPACITY

ARMSTRONG COUNTY PENNSYLVANIA

The Request for Proposals will be available from the Armstrong County Department of Planning and Development, 402 East Market Street, Kittanning, PA 16201, on or after Monday, May 4, 2015. Proposals are due June 9, 2015

The hyperlink in the title is <http://www.co.armstrong.pa.us/bidsrfp>

**REQUESTS PROPOSALS FOR
MUNICIPAL SOLID WASTE
DISPOSAL AND/OR PROCESSING CAPACITY
ARMSTRONG COUNTY BOARD OF COMMISSIONERS,
KITANNING, 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), the Board of Commissioners of Armstrong County has determined that additional waste disposal or processing capacity for municipal solid waste (MSW), including construction/demolition (C/D) waste and sewage sludge generated within the County is required for a period covering the next ten years. The Armstrong County Department of Planning and Development on behalf of the Armstrong County Board of Commissioners is hereby soliciting proposals for disposal capacity for MSW generated in Armstrong County PA with contract approval and execution anticipated by September 2015.

The Request for Proposals (RFP.) will be available from the Armstrong County Department of Planning and Development on or after Monday, May 4, 2015. There is a \$50 fee for printed copies. All proposals must be made on and inclusive of the required Proposal Forms and be in accordance with the Requirements for Submitting Proposals contained in the Request for Proposals. Proposers may withdraw their proposal at any time prior to the scheduled closing time for receipt of proposals. The Armstrong County Board of Commissioners reserves 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

The Armstrong County Department of Planning and Development will receive sealed proposals until 3:00 p.m., Prevailing Time on Tuesday, June 9, 2015. The Proposer is required to submit two (2) hard copies, each executed in blue ink and labeled "original," and two (2) separate electronic media, (CD-ROMs or Flash Drives) each with a copy of the proposal in MS Word or pdf format. The proposals must be packaged, sealed, and clearly labeled to show the statement "Proposal Disposal Capacity" and the name and address of the Proposer.

Proposals should be submitted and be addressed to: **Ms. Sally Conklin**

Planning Division Director, Armstrong County Department of Planning and Development, 402 East Market Street, Kittanning, PA 16201

Appendix D

Process to Secure Capacity Assurance

REQUEST FOR PROPOSALS AND SAMPLE CONTRACT

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ARMSTRONG COUNTY PENNSYLVANIA

Department of Planning and Development

on behalf of the

Board of County Commissioners

Request for Proposals

Released May 4, 2015

**Deadline for Proposal
Submissions**

June 9, 2015, 3:00 PM

MUNICIPAL SOLID WASTE DISPOSAL AND PROCESSING CAPACITY

**Armstrong County Department of Planning and
Development**

Ms. Sally Conklin

Planning Division Director

**Armstrong County Department of Planning and
Development**

402 East Market Street

Project Consultant

Primary Contact for Proposal Related Questions

Michele Nestor

Nestor Resources, Inc.

Valencia, PA 16059

Phone: (724) 898-3489

INTRODUCTION

The Armstrong County Department of Planning and Development on behalf of the Armstrong County Board of Commissioners is accepting proposals for the disposal and processing of Municipal Waste generated within the County of Armstrong. 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 Armstrong 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 Tuesday, June 9, 2015, by 3:00 PM. At the offices of: Armstrong County Department of Planning and Development
402 East Market Street, Kittanning, PA 16201
Attention: Ms. Sally Conklin, Planning Division Director**

To qualify for consideration, the Proposer must submit two (2) hard copies, each executed in blue ink and labeled "original," and two (2) "copies" formatted as MS Word or pdf files each on separate electronic media, CD-ROMs or Flash Drives. The outside of each sealed envelope must be marked "Proposal-Disposal Capacity."

The Department of Planning and Development 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. The Department of Planning and Development 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 Armstrong County Board of Commissioners 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 and to perform disposal and processing service 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 Armstrong County Board of Commissioners 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 minimum 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 Armstrong County Board of Commissioners. The County anticipates that the proposals will be reviewed, accepted and contracts executed on or about September 15, 2015. The contract term will commence immediately upon execution by the Armstrong County Board of Commissioners.

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 Armstrong County Board of Commissioners 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" and be addressed to: ***Armstrong County Department of Planning and Development, 402 East Market Street, Kittanning, PA 16201, Attention: Ms. Sally Conklin, Planning Division Director***

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.
- Two (2) CD-ROMs or Flash Drives with each containing a copy of the proposal formatted as a pdf file. Each "copy" must contain all of the required information, forms, contract and certifications. The electronic file must be saved to clearly identify the facility by name.

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** Two (2) CD-ROMs or Flash Drives with each containing a copy of the proposal for each facility formatted as an MS Word or a pdf file. Each "copy" 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 CD-ROM or 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.

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:**

1. Cover Letter
2. Statement of Qualifications
3. Experience and Qualifications of Managers and Supervisors
4. Compliance History
5. Certificate of Permit
6. Facility Design and Operational Plan
7. Permitted Volumes in Tons, Operating Hours and Performance Guarantee
8. Current Available Permitted Capacity in Cubic Yards
9. Financial Assurances
10. Completed and Signed Contract
 - a. Cost of Processing and Disposal
 - b. Reserved Capacity
11. Representations and Certifications
12. Contractor Information

COVER LETTER AND SIGNATURE REQUIREMENTS

A cover letter, which is addressed to Ms. Sally Conklin, Planning Division Director Armstrong County Department of Planning and Development, 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 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.**

The other copies shall be submitted as electronic media, (CD-ROMs or Flash Drives) 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, skill, management, and resources required to provide consistent, reliable, and legal disposal and processing facilities to Armstrong County. A list of the counties currently contracting with the facility for disposal and processing capacity shall be included. A list of the municipalities with which the facility has secured host agreements shall be included. Experience in the successful operation of disposal and processing facilities shall be documented. **This section should be limited to 5 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.

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. Approved permit modifications, which may alter or impact the date shown on the actual operating permit since its issuance should also be included.

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.

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.

Pennsylvania Facilities *should not* include the full Form 14 from their permit application. Please provide only short excerpts to demonstrate each point.

All facilities must include in their descriptions: (a paragraph or two describing the general procedural mechanism will be sufficient to address each item. It is not necessary, or desirable, to have the complete description from the facility's permit included)

- ✓ 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:

- ✓ 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 methods of handling the byproducts.

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

PERMITTED VOLUMES AND OPERATING HOURS AND PERFORMANCE GUARANTEE

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.

The organization submitting the proposal shall also outline the preferred procedures for accepting an excessive amount of waste resulting from a natural disaster or other emergency in the County at the facility it intends to utilize in response to this RFP.

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 shall be included. The method by which uninterrupted disposal and processing service will be provided to Armstrong County in the event that an emergency or other uncontrollable circumstance precludes the use of the facility shall be included. **Back-**

up facilities for this purpose must also submit a response to this RFP along with a signed contract. 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; 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.

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.

ADDITIONAL REQUIRED FORMS

Form C- Representations and Certifications

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

Form D -Contractor Information

The organization submitting the proposal shall submit a Form D 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

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 and the value or importance each has in the selection criteria

Financial Stability

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

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

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

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 utilization, ash management, ground water monitoring systems, waste acceptance plans and radiation monitoring are considered important.

Solid Waste Management Experience

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

Contractors will be evaluated on their ability to accept all or some of the municipal solid waste generated by Armstrong 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. "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

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. 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.

Based upon these criteria, the contractor(s) will be selected. The Armstrong County Board of Commissioners 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.

Section 3

ARMSTRONG COUNTY BACKGROUND INFORMATION

LOCATION AND GENERAL CHARACTERISTICS

Armstrong County is situated approximately 50 miles north of the City of Pittsburgh along the PA State Route 28 corridor. Likewise, the County is within a 50 mile drive of the Ohio border using PA State Route 422. In spite of its proximity to the Pittsburgh Metro complex, Armstrong County is primarily rural, but with concentrated clusters of population in areas which once supported a variety of major industrial concerns, most notably steel and glass. Coal mining has always played an important role in the local economy as well. The decline in these industries has had a similar impact on the County's population, which has decreased by nearly five percent between the 2000 and 2010 Census.

Figure 1 General Location of Armstrong County, Pennsylvania



CURRENT PROCESSING AND DISPOSAL PRACTICES

In 1990, the Armstrong County Commissioners approved and the municipalities ratified a ten-year solid waste management plan in accordance with the provisions of Act 101. The plan received approval from

PADEP in 1992 and was revised in 1993 and again in 2004. The plan included both assurances for disposal capacity and also transporter licensing, which required waste to be delivered to designated disposal facilities. The licensing requirement was eliminated when the enabling authority to license transporters at the county level was superseded by the Waste Transportation Safety Act (Act 90 of 2002). Municipal ordinances, which require all commercial and residential accounts to contract for waste collection are not universally adopted in the County.

The plan was and continues to be totally reliant on disposal and processing services for municipal waste provided by the private sector. Collection as well, is dominated by the few remaining private companies that provide services in the area. One local municipality does collect residential waste. Private subscription collection service prevails. Only a few municipalities utilize a contractual bidding process and even fewer have opted to provide the service to the whole community using municipal employees.

Eight landfills entered into agreements with the County in 2005 to provide disposal capacity, and were designated as facilities where Armstrong County municipal waste must be delivered for disposal. The agreements required the facilities to provide a predetermined amount of disposal capacity for municipal waste generated in Armstrong County for a period of ten years. Consequently, these contracts are set to expire in 2015. The cumulative amount of capacity guaranteed by the eight facilities was more than adequate to meet the needs of Armstrong County. A ninth landfill also executed the capacity agreement. However, the facility closed.

The contracts outlined the specific waste streams categorized as municipal waste, which would be considered. These included municipal waste, construction & demolition waste, sewage sludge, and regulated medical waste that is approved for disposal at the facility. In addition, guidelines for reporting and other operating criteria were defined. No guarantees, or put or pay provisions, were made by Armstrong County for minimum waste volumes to be delivered for disposal were included as part of any of the existing agreements.

All of the Armstrong County disposed municipal waste was reported by the designated facilities according to information submitted to PADEP and the County. Although varying quantities were reported by each landfill over the ten year period, Evergreen Landfill, located in Indiana County, consistently received the greatest quantities of the County's municipal waste.

HISTORIC TRENDS IN WASTE GENERATION AND DISPOSAL

The loss of population coupled with a lower waste generation rate per person, a trend shared across the nation, has resulted in steadily diminishing tons of Armstrong County's municipal waste disposed each year. During the period of the current MSW Plan, Armstrong County's municipal waste disposed dropped by about 10,000 tons. This trend is not expected to reverse, however, it appears to have stabilized.

PROJECTED LANDFILL CAPACITY REQUIREMENTS

This section presents the estimated future disposal capacity required for Armstrong 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 in Table 1 are

county totals from the 2010 Census and projections for 2010 to 2040. Population was extrapolated to 2025 based on the projected rate of change from 2020 to 2030. Over the period 2000 through 2030, the population of Armstrong County is projected to decrease by 5.6%.

Table 1. Pennsylvania Population Projections: 2000-2030

	July 1, 2010	July 1, 2020	July 1, 2030	July 1, 2040	% Change	% Change	% Change
	Census	Projection	Projection	Projection	2010- 2020	2010- 2030	2010- 2040
Pennsylvania	12,711,308	13,230,170	13,759,594	14,132,588	4.1%	8.2%	11.2%
Armstrong County	68,864	66,750	64,982	62,474	-3.1%	-5.6%	-9.3%

Estimated Future Generation Rate for MSW. 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. Thus, for projection purposes, it was assumed that per capita generation rates will remain unchanged.

However, it should be noted that the reported disposal rate of municipal waste, was only 0.45 tons/person/year, slightly below the national discard rate of 0.525 tons/person/year for the same material. USEPA does not include sewage sludge, construction & demolition waste, medical waste in its national statistics. Those materials accounted for another 0.04 tons/person/year for Armstrong County. Thus, it is presumed that some quantities of Armstrong County waste may be misreported as coming from other counties. For instance, Clarion County has a transfer station which likely accepts Armstrong County waste. In addition, the close proximity to Ohio, with low disposal rates and from where no data was reported, would also contribute to the lower than average expected results.

Table 2 presents projected disposal capacity requirements for the years 2015 through 2025. The figures are based on a constant per capita disposal rate with adjustments due to projected population changes and. For Armstrong County, the population is based on the 2010 census figures and extrapolated out using the PA Data Center's projections from 2010 to 2030.

Table 2. Armstrong County Projected Landfill Capacity Requirements in Tons

	Population	MSW	Sewage Sludge	Regulated Medical Waste	Construction/ Demolition	Total
2015	67,803	30,986	1,034	31	1,837	33,888
2016	67,593	30,890	1,031	31	1,832	33,783
2017	67,383	30,794	1,028	31	1,826	33,678
2018	67,175	30,699	1,024	31	1,820	33,574
2019	66,966	30,604	1,021	31	1,815	33,470
2020	66,750	30,505	1,018	31	1,809	33,362
2021	66,573	30,424	1,015	30	1,804	33,273
2022	66,397	30,343	1,012	30	1,799	33,185
2023	66,221	30,263	1,010	30	1,794	33,097
2024	66,045	30,183	1,007	30	1,790	33,010
2025	65,870	30,103	1,004	30	1,785	32,922

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 remaining two electronically formatted copies. The contract shall become effective on the date the agreement is signed by the Armstrong 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 this ____ day of _____, by and between

THE COUNTY OF ARMSTRONG, Kittanning, Pennsylvania, hereinafter jointly referred to as the "County" AND _____ hereinafter referred to as the

(Name of Facility/Parent Company)

"Contractor" whose permitted processing and disposal facility Permit No _____ issued by _____ is located in

_____(Municipality)(ies),

____ County, _____ State.

WITNESSETH:

WHEREAS, the Board of County Commissioners, acting through the Armstrong County Department of Planning and Development, have developed and adopted the 1990 Municipal Waste Management Plan for Armstrong County and its revisions in 1993 and 2003 and 2015 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 Armstrong County have duly approved and ratified this 1990 Municipal Waste Management Plan for Armstrong County pursuant to the requirements of section 501 of Act 101; and,

WHEREAS, this 1990 Municipal Waste Management Plan for Armstrong County and its revisions in 1993 and 2003 and 2015 requires that all municipal waste generated within Armstrong County must be disposed only at a municipal waste processing or disposal facility that is designated by the County pursuant to this plan to insure the availability of adequate permitted processing and disposal capacity for the municipal waste generated in Armstrong County; and

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

WHEREAS, the Contractor wishes to be designated by the County as one of the Municipal Waste processing or disposal facilities where the Municipal Waste generated within Armstrong County must be disposed; and,

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

WHEREAS, the County and the Contractor now desire to enter into this Contract in order to effectuate the goals of the Municipal Waste Management Plan for Armstrong 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, 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.

Armstrong County- a sixth class county located in the Commonwealth of Pennsylvania

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 Armstrong, Pennsylvania, acting by and through the Armstrong County Board of Commissioners and the Department of Planning and Development or their designated representative.

Department of Planning and Development - An agency of Armstrong County Government delegated with the responsibility of developing and implementing the Armstrong County Municipal Solid Waste Management Act and associated programs and services.

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.

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 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.

The Contractor certifies that it is not currently under suspension or debarment by the Commonwealth of Pennsylvania or the Federal Government. The Contractor shall not enter into any subcontract for any work under this contract with any subcontractor who is currently suspended or debarred by the Commonwealth of Pennsylvania or the Federal Government. A list of suspended and debarred contractors may be obtained by contacting the following: Department of General Services, Office of Chief Counsel, 603 North Office Building, Harrisburg, PA 17125; Phone: 717-763-6472, Fax: 717-787-9138.

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

9. Change of Ownership

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

10. Waivers

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

11. County's Obligations

County shall not be obligated by the terms of this 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 Armstrong County Board of Commissioners. Once the Contract is duly executed by the Armstrong 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. Any existing Host County Fee Agreements between the parties shall remain in full force and effect notwithstanding any provisions of 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 Request For Proposals (RFP) submitted by 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:

**County: *Armstrong County Department of Planning and Development*
*402 East Market Street, Kittanning, PA 16201***

Attention: Ms. Sally Conklin, Planning Division Director

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 originating from sources located in Armstrong County, in accordance with all applicable Federal, state and local regulations. Nothing herein shall prohibit any Contractor from entering into any separate contract with another person or municipality to provide such waste collection and/or transportation services.

2. Types and Quantities of Municipal Waste

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

Annual adjustments to the maximum Municipal Waste quantities 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 as 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 90 as well as those regularly engaged in the business of waste transportation but are exempt. 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 the Pennsylvania Waste Transportation Safety Act 90 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 Armstrong 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 the Pennsylvania Waste Transportation Safety Act 90 as well as those regularly engaged in the business of waste collection and transportation in Armstrong 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 Armstrong 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, that is greater than the maximum rates established by this Contract for each type of waste. Nothing in this Contract shall be construed to prevent or preclude the Contractor from negotiating alternate tipping fees with any waste hauler provided such fees do not exceed the maximum rates under this Contract.

11. Rate Escalation and Adjustments

A. 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. **RESERVED County Administration/Recycling Surcharge**

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

IV. RECORD KEEPING AND REPORTING REGULATED WASTE

1. The Contractor will be required to install and maintain a scale to weigh all incoming waste to the contractor's Municipal Waste processing or 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 to the Weights and Measurement Act of 1965 (73 P.S. sections 1651- 1692) and applicable regulations thereunder; the operator of the scale shall be a licensed public weighmaster under the Public Weighmasters Act (13 P.S. sections 1771-1796) and any regulations.

2. **Daily Operational Records**

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

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

3. The total amount of tons of Armstrong County Municipal Waste transported from the transfer station to each disposal facility designated in the Plan to receive waste from Armstrong County.

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

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 60-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 Pa. C.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 ARMSTRONG,

BOARD OF COMMISSIONERS

CHAIR DATE _____

Chairman

(SEAL)

ATTEST: _____

, Chief Clerk,

CONTRACTOR

CONTRACTOR: _____

WITNESS; _____

TITLE: _____

Form A – Cost of Processing and Disposal

Name of Facility _____

Maximum Tipping Fees Per Ton For Each Category of Waste

The maximum tipping fee shall not exceed the posted gate rate.

Include all applicable surcharges, fees, taxes from Legislation, Regulation, or Programs of State, Federal, County or Host Municipalities

Show a breakdown of those fees in the following table

Indicate any annual escalators that will apply or attach a separate table demonstrating future rates.

	MSW	Construction Demolition	Sewage Sludge	Approved Regulated Medical Waste	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 Armstrong County MSW					
Total Tipping Fee including all fees and surcharges						

Form B -Reserved Capacity

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
2015-2016						
Tons Per Day						
Tons Per Year						
2016-2017						
Tons Per Day						
Tons Per Year						
2017-2018						
Tons Per Day						
Tons Per Year						
2018-2019						
Tons Per Day						
Tons Per Year						
2019-2020						
Tons Per Day						
Tons Per Year						
2020-2021						
Tons Per Day						
Tons Per Year						
2021-2022						
Tons Per Day						
Tons Per Year						
2022-2023						
Tons Per Day						
Tons Per Year						
2023-2024						
Tons Per Day						
Tons Per Year						

Form B - Part II Reserved Capacity

Total Combined Quantities of all Accepted Categories of Municipal Waste

YEAR	TOTAL ARMSTRONG MSW TONS PER YEAR * (all categories)	PERCENTAGE Reserving Capacity for % of Armstrong MSW Annually (all categories)	ANNUAL TONS Reserving Capacity for #Tons Armstrong MSW Annually (all categories)	OPERATING DAYS Estimated Annual Working Days	TONS PER DAY Reserving Capacity for #Tons Armstrong MSW Daily (all categories)
2015	33,888				
2016	33,783				
2017	33,678				
2018	33,574				
2019	33,470				
2020	33,362				
2021	33,273				
2022	33,185				
2023	33,097				
2024	33,010				

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

Indicate tons of Armstrong County Municipal Waste donated by Contractor per year for non-profit activities including but not limited to road adoptions and open dump clean-ups: _____ tons

Notices

All notices, demands, requests, and other communications under this contract shall be delivered to:

Contractor: _____

Address: _____

Attention: _____

With a copy to: _____ Attention: _____

Section 5

REQUIRED FORMS

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

1. Form C- Representations and Certifications
2. Form D- Contractor Information

FORM C- 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 Armstrong 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 Armstrong 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 Armstrong 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 2015, at* _____

By_ _____ *(name)*

_____ *(title)*

SEAL _____ *(company)*

Date:_____

On _ _____, 2015, 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 _ _____ 2015.

Notary _____

My Commission expires_____ Notary Public

FORM D- 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 2015 at _____

By _____ (name)

_____ (title)

SEAL *_____ (company)*

Date: _____

On _____, 2015, 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 _____ 2015

My Commission expires _____ Notary Public

Appendix E

Process to Secure Capacity Assurance

TECHNICAL REVIEW OF DISPOSAL CAPACITY PROPOSALS

ARMSTRONG COUNTY PENNSYLVANIA

Department of Planning and Development
on behalf of the
Board of County Commissioners

Procurement Process To Secure
Municipal Solid Waste Disposal And
Processing Capacity For Armstrong
County
2015-2024

Administrative and
Technical Review

Evaluation of Proposals

Recommendations For
Designation Of Facilities



Nestor Resources, Inc.

DETERMINATION OF FUTURE DISPOSAL CAPACITY NEEDS

The procurement of disposal capacity begins by projecting the needs of the County over the ten year period of the Plan. Waste generation is primarily influenced by population, however other demographic factors do play a role. For Armstrong County population and demographic projections developed by the U.S. Census Bureau and the Pennsylvania State Data Center, Harrisburg Campus were used for this project. Data regarding historic waste generation, recycling and disposal was taken from local sources and facility reports submitted to PADEP. Some adjustments were made to compensate for suspected reporting errors from disposal and processing facilities. 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 Armstrong County's current disposal practices were reviewed. Armstrong County's actual use of the regional disposal facilities designated in the past Plan was identified. In addition, the consumption of disposal capacity at those facilities by other counties, states, and industrial generators was evaluated. The impact of recycling efforts was also factored into the projections. The capacity projections, when compared to the current volumes of waste reportedly received from all sources at regional landfill showed no indication of pending capacity deficits. However, because current agreements are set to expire within the next year, it was necessary for the County to secure new guarantees.

METHOD TO SECURE DISPOSAL CAPACITY

The Armstrong County Municipal Solid Waste Management Plan is the mechanism through which the County fulfills its obligation to provide for sufficient disposal capacity for municipal waste projected to be generated within its borders. Capacity guarantees are to provide for a 10-year span. The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), establishes this responsibility as a primary goal for counties in the planning process. Counties may determine how to solicit for and secure guarantees for disposal capacity, provided that the process adheres to legal and statutory guidelines. Armstrong County has historically utilized a formal contractual agreement as the preferred guarantee of capacity and continues to do so for 2015-16 Plan.

PUBLIC SOLICITATION FOR CAPACITY

To ensure that the greatest number of interested parties would be aware of the County's intentions to enter into a contractual arrangement for guaranteed disposal capacity, the Armstrong County Department of Planning and Development publicly solicited for proposals in the PA Bulletin and Waste 360, a national trade magazine. The PADEP was notified of the County's solicitation. Disposal and processing facilities that have traditionally accepted waste from Armstrong County were invited to submit proposals. In addition, facilities that operated within a broad geographic proximity to the County, were directly notified. These combined efforts assured that facilities located both within and out of the state would be informed of the County's request.

PRE-ESTABLISHED SELECTION CRITERIA

The format and content required for administrative completeness and technical merit review was well defined in the Request for Proposals. No one criteria held particular weight over another. Built into the technical review process, was the ability to make inquiries regarding the content of the proposals, ask for supplemental documentation, or request further clarifications. To maintain an open, transparent, and non-biased selection process, equal consideration and opportunity were granted to all facilities that submitted proposals.

KEY FACTORS FOR EVALUATING THE PROPOSALS

Permit Status

- Proof of a current operating permit issued by the PADEP or the equivalent state regulatory agency for non-Pennsylvania facilities.

Remaining Capacity

- Documentation of the projected life of the facility and
- Proven ability to provide all or some portion of the capacity during the period of the Plan.

Regulatory Compliance

- Demonstrated history of regulatory compliance for the parent company and each facility proposed

Financial Strength

- Documented credit worthiness and financial stability of the operator.

Risk Assessment

- Proof of public and environmental liability protection.

Experience & Qualifications

- Documented performance in related contractual scenarios.
- Credentials of key personnel.

Facility Design

- Proven ability to meet Federal, State, and Local standards.
- Demonstrated use of proven and accepted technology, alternatives, and best engineering practices.

Operating Plans

- Established screening and waste acceptance plan
- Approved plans for safety and emergency management
- Contingencies for pollution prevention and control
- Documented program for energy production

Potential Cost

- Provision of a pricing matrix with established price ceilings
- Identification of all federal, state and local fees and surcharges

PROPOSAL REVIEW AND EVALUATION

Combined, proposals for a total of thirteen landfills and one resource recovery facility offered daily, annual, or contingency capacity assurances to the County. All submissions were subject to an equal examination and review to determine compliance with the submission and selection criteria. During the review and evaluation process, minor mistakes were noted. Several requests were made to eliminate deficiencies that occurred in regards to incomplete submissions for the back-up facilities. Answers and clarifications were provided and have been incorporated into the original submissions. The facilities that meet the criteria will be officially designated after the final approval of the Plan.

Respondents to the Request for Proposals included:

Advanced Disposal Services

Casella Waste Management

Clinton County Solid Waste Authority

Republic Services

Vogel Holding

Waste Management

York County Solid Waste & Refuse Authority

HIGHLIGHTS

The results of the facility evaluations are presented in five sections following these narratives. Each section represents a segment of the legal Proposal, technical, operational, and financial selection criteria. Tables show the proposed facilities with their responses and demonstrated information condensed for presentation purposes.

MAXIMUM GATE RATES

No conditions were imposed on the disposal rate other than the facility-defined cap. The maximum rates do not preclude the ability of parties to negotiate lower fees based on business relationships and other factors.

ALTERNATIVE TECHNOLOGIES

Although proposals were invited for new or alternative disposal technologies, none was received in this solicitation process.

PUBLIC/PRIVATE PARTNERSHIPS AND INVESTMENTS

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.

SECTION 1 CONTRACTORS, PROPOSED FACILITIES, LEGAL FORMALITIES

Facility			Contacts		Capacity Agreement		
Site Name	Owner	Site Location	Technical	Operational	All Required Forms and Signatures	Agreed to Contract Terms and Conditions Exceptions or Comments	Requires Put or Pay or Minimum Tonnage
Evergreen Landfill	Waste Management	Route 119 & Luciusboro Road, Coral, PA 15731	Brad Minemyer	Brad Minemyer	YES	YES	NO
Greenridge Landfill	Allied/Republic Waste Services	234 Landfill Road, Scottdale, PA 15683	David Borwicz	Chris Baker	YES	YES	NO
Greentree Landfill	Advanced Disposal Services	635 Toby Road Kersey, PA 15846	Don Henrichs	Don Henrichs	YES	YES	NO
Hyland Landfill	Casella Waste Management	6653 Herdman Road Angelica, NY	Terry Lunn	Joseph Boyles	YES	YES	NO
Imperial Landfill	Allied Waste Systems of PA LLC Republic Services, Inc.	11 Boggs Road, Imperial , PA 15126	David Borwicz	Matt Spencer	YES	YES	NO
Laurel Highlands Landfill	Waste Management	196 Wagner Road, Vintondale, PA 15961	Brad Minemyer	Brad Minemyer	YES	YES	NO
McKean Landfill	Casella Waste Management	19 Ness Lane Kane, PA 16735	Mark Milliman	Randy Jensen	YES	YES	NO
Monroeville Landfill	Waste Management	600 Thomas Street, Monroeville, PA 15146	Tom Pullet	Brad Minemyer	YES	YES	NO
Mostoller Landfill	Advanced Disposal Services	7095 Glades Pike Somerset, PA 15501	Don Henrichs	Don Henrichs	YES	YES	NO

Facility	Contacts	Capacity Agreement					
Site Name	Owner	Site Location	Technical	Operational	All Required Forms and Signatures	Agreed to Contract Terms and Conditions Exceptions or Comments	Requires Put or Pay or Minimum Tonnage
Northwest Sanitary Landfill	Waste Management	1436 West Sunbury Road West Sunbury, PA 16061	Thomas Lewis	James Short	YES	YES	NO
Seneca Landfill	Vogel Holding Inc.	421 Hartman Road Evans City, PA 16033	Edward R. Vogel	Edward R. Vogel	YES	YES	NO
Valley Landfill	Waste Management	6015 Pleasant Valley Road, Irwin, PA 15642	Brad Minemyer	Brad Minemyer	YES	YES	NO
Wayne Township Landfill	Clinton County Solid Waste Authority	264 Landfill Lane PO Box 209 McElhattan, PA 17748	Jay Alexander	Jay Alexander	YES	YES	NO
York County Resource Recovery Center	York County Solid Waste & Refuse Authority	York County Solid Waste Authority	2700 Blackbridge Road York, PA	Greg Pearson	YES	YES	NO

SECTION 2 PERMIT STATUS AND CONDITIONS OF OPERATIONS

Facility	Local	Permitted	Accessibility and Terms of Use			
Site Name	Host Agreements	Permit # Issuing State Expiration Date	Remaining Permitted Capacity 2011	Current Constraints or Limitations	Operating Days Per Year	Operating Hours
Evergreen Landfill	Brush Valley Township Center Township Indiana County	PA 100434 7/26/2017	8,300,112 cyds	NONE	Monday-Friday (260)	8:00AM-4:00PM
Greenridge Reclamation Landfill	East Huntingdon Township Westmoreland County	PA 100281 10/22/2017	3,457,430 cyds	Potential to Close Prior to End of Plan 10/2020	Monday-Saturday (310)	6:00AM-2:00PM Monday-Friday (Sat-7:00 AM-9:00 AM)
Greentree Landfill	Fox Township Elk County	PA 101397 12/8/2018	33,513,574 cyds	NONE	Monday-Saturday (308)	7:00AM-4:00PM Monday-Friday (Sat-7:00 AM-11:00 AM)
Hyland	Angelica Allegany County, NY	NY 9-0232-00003/00002 5/1/2015 renewal pending	9,733,784 cyds	NONE Proposed as back-up facility only	Monday-Saturday (266)	7:00AM-900PM Monday- Saturday
Imperial Landfill	Findlay Township West Allegheny Schools Allegheny County	PA 100620 9/22/2015	21,409,687 cyds	NONE	Monday-Saturday (312)	12:00 AM- 3:00 PM (Sat-6:00AM -10:00 AM)
Laurel Highlands Landfill	Jackson Township Cambria County	PA 100534 2/22/2018	26,497,004 cyds	NONE	Monday-Friday (260)	7:00AM-2:00PM
McKean	Sergeant Township McKean County	PA 100361 2/23/2021	30,164,800cyds + 3,172,085 cyds	NONE	Monday-Saturday (312)	5:00AM-6:00PM Monday-Friday (Sat-5:00AM-5:00PM)

Facility	Local	Permitted	Accessibility and Terms of Use			
Site Name	Host Agreements	Permit # Issuing State Expiration Date	Remaining Permitted Capacity 2011	Current Constraints or Limitations	Operating Days Per Year	Operating Hours
Monroeville Landfill	Municipality of Monroeville Allegheny County	PA 100549 10/5/2020	12,829,672 cyds	NONE	Monday-Saturday (312)	4:30AM-3:00PM Monday-Friday 4:30AM-noon Saturday
Mostoller Landfill	Brothers Valley Township Somerset Township Somerset County	PA 101571 12/30/2024	5,921,570 cyds	NONE	Monday-Saturday (312)	7:00AM-3:00PM Monday-Friday (Sat-7:00 AM-9:00 AM)
Northwest Sanitary Landfill	Clay Township Butler County	PA 100585 3/23/2016	1,693,263 cyds	NONE	Monday-Friday (260)	7:00 AM-4:00PM Monday-Friday
Seneca Landfill	Jackson Township Lancaster Township Butler County	PA 100403 10/5/2017	6,6654,263 cyds	NONE	Monday -Saturday (313)	800AM-3:00PM Monday- Friday (Sat-8:00 AM-11:00 AM)
Valley Landfill	Penn Township Westmoreland	PA 100280 7/21/2016	9,768,291 cyds	NONE	Monday-Friday (260)	6:00AM-3:30PM Monday-Friday
Wayne Township Landfill	Wayne Township Clinton County	PA 100955 9/14/2036	13,613,710 cyds	NONE	Monday - Saturday (311)	7:00AM-4:00PM Monday-Friday (Sat-7:00 AM-noon)
York County Resource Recovery Center	Manchester Township	PA 400561 5/5/2013	1344 tpd based on BTU value	Limited to Processable MSW Temporary Combustor maintenance outages occur but with advance notice	Monday - Saturday (275)	6:00AM-4:00PM Monday-Friday (Sat-6:00 AM-noon)

SECTION 3 FACILITY DESIGN, REGULATORY COMPLIANCE, AND FINANCIAL ASSURANCES

Facility		Design and Contingencies			Regulatory Compliance			Financial Assurance		
Site Name	Design, Leachate Treatment	Waste Plan for Emergency Disasters	Waste Plan for Facility Emergencies	# Violations	# Penalties, Consent Orders, Settlement Agreements	Unresolved Violations	Financial Disclosure	Public Liability Protection	Environment Pollution & Liability Protection	
Evergreen Landfill	60 mil double liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for proposed back-up landfills	1	1	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$1.2 million	
Greenridge Reclamation Landfill	60 mil double liner/ Treatment On site	YES	YES submitted capacity agreements for proposed back-up landfills				Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$15.2 million	
Greentree Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfills	8	0	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$22.6 million	
Hyland	Double composite liner Treatment Off site	YES	Submitted capacity agreements strictly as a back-up landfill	8	1	0	Publicly Held Company Shareholders Report	\$3 million	Surety Bond \$6,346,376	
Imperial Landfill	Double composite liner Treatment Off site	YES	YES submitted capacity agreements for proposed back-up landfill	25	9	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$22.5 million	
Laurel Highlands Landfill	60 mil double liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for proposed back-up landfills	2	1	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$6.9 million	
McKean	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfill	6	2	0	Publicly Held Company Shareholders Report	\$3 million	Surety Bond \$25.3 million	

Facility		Design and Contingencies			Regulatory Compliance		Financial Assurance		
Site Name	Design, Leachate Treatment	Waste Plan for Emergency Disasters	Waste Plan for Facility Emergencies	# Violations	# Penalties, Consent Orders, Settlement Agreements	Unresolved Violations	Financial Disclosure	Public Liability Protection	Environment Pollution & Liability Protection
Monroeville Landfill	Double composite liner Treatment Off site	YES	YES submitted capacity agreements for proposed back-up landfill	2	1	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$15.4 million
Mostoller Landfill	Double composite liner Treatment Off site at Somerset SCI	YES	YES submitted capacity agreements for proposed back-up landfills	10	3	0	Provided Financial Summary of Equity Resources	\$2 million	Surety Bond \$15.5 million
Northwest Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfills	8	4	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$2.9 million \$5.4 million
Seneca Landfill	60 mil double liner Treatment On site	YES	YES on site transfer station would haul to other County designated facilities	30	5	0	Privately Held Company/ Provided upon request	\$2 million	Surety Bond \$9.8 million
Valley Landfill	60 mil double liner/ Treatment Off site POTW	YES	YES submitted capacity agreements for proposed back-up landfills	2	0	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$13.9 million
Wayne Township Landfill	60 mil double liner/ Treatment Off site POTW	YES	YES on site transfer station would haul to other County designated facilities	1	1 Consent Agreement	0	Municipal Authority	\$2 million	Irrevocable Line of Credit \$6.4 million
York County Resource Recovery Center	Three Boiler WTE Facility	YES	YES has reciprocal agreements for proposed back-up facility	21	18	0	Municipal Authority	\$2 million	Collateral Bond \$436,000

SECTION 4 DAILY AND ANNUAL CAPACITY GUARANTEES

Facility		Guarantees for Lawrence Waste Volumes		Daily Tons Reserved Capacity for Types of Waste				
Site Name	Owner	Maximum Annual Volume in Tons	% Armstrong Waste will accept	MSW	C&D	Sludge	Other	Donated Tons for Non Profits
Evergreen :Landfill	Waste Management	13,000	38%	50	0	0	0	50
Greenridge Reclamation Landfill	Republic Services, Inc.	39,000	100%	31,200	7,800	0	0	0
Greentree Landfill	Advanced Disposal (previously Veolia Environmental Services)	16,944	50%	60	0	0	0	0
Hyland	Casella Waste	33,888	100%	119.18	7.07	3.98	0.12	0
Imperial Landfill	Allied Waste Systems of PA LLC Republic Services, Inc.	39,000	100%	100	25	0	0	0
Laurel Highlands	Waste Management	13,000	38%	50				
McKean	Casella Waste	33,888	100%	119.18	7.07	3.98	0.12	0
Monroeville Landfill	Waste Management	4,680	13.8%	10	5	0	0	0
Mostoller Landfill	Advanced Disposal (previously Interstate Waste Services)	16,860	50%	60	0	0	0	0
Northwest Landfill	Waste Management	33,888	100%	130.3				
Seneca Landfill	Vogel Holding Inc.	6,602	20%	16.2	2.2	2.2	1.1	1
Valley Landfill	Waste Management	18,200	53.7%	70	0	0	0	0
Wayne Township Landfill	Clinton County Solid Waste Authority	15,600	46%	50	0	0	0	0
York County Resource Recovery Center	York County Solid Waste &Refuse Authority	2,750	0.03%	10	0	0	0	0

SECTION 5 SCHEDULE OF MAXIMUM CHARGES

Facility	Maximum Base Disposal Rate 1st Year					Add-on Costs	Total Maximum Disposal Rate with Fees 1st Year				
Site Name	MSW	C&D	SEWAGE SLUDGE	Approved Regulated Medical Waste	OTHER	Fees, Taxes, Surcharges	MSW	C&D	SEWAGE SLUDGE	Approved Regulated Medical Waste	OTHER
Evergreen Landfill	\$53.69	\$3.69	\$53.69	\$59.94		\$8.31	\$62.00	\$62.00	\$62.00	\$62.00	
Greenridge Reclamation Landfill	\$72.00	\$72.00	N/A	N/A	N/A	\$7.52	\$79.52	\$79.52	N/A	N/A	N/A
Greentree Landfill	\$41.60	\$41.60	\$41.60	N/A	N/A	\$7.90	\$49.50	\$49.50	\$49.50	N/A	N/A
Hyland Landfill	\$35.00	\$35.00	\$38.00	N/A	N/A	\$3.69	\$38.69	\$38.69	\$41.69	N/A	N/A
Imperial Landfill	\$71.00	\$71.00	N/A	N/A	N/A	\$9.33	\$80.33	\$80.33	N/A	N/A	N/A
Laurel Highlands Landfill	\$53.69	\$3.69	\$53.69	\$59.94		\$8.31	\$62.00	\$62.00	\$62.00	\$62.00	\$53.69
McKean County Landfill	\$35.00	\$35.00	\$35.00	N/A	N/A	\$7.25	\$42.25	\$42.25	\$42.25	N/A	N/A
Monroeville Landfill	\$78.41	\$78.41	N/A	N/A	N/A	\$7.50	\$85.91	\$85.91	N/A	N/A	N/A
Mostoller Landfill	\$41.60	\$41.60	\$41.60	N/A	N/A	\$10.65	\$49.50	\$49.50	\$49.50	N/A	N/A
Northwest Landfill	\$62.40	\$62.40	\$62.40	\$62.40		\$7.60	\$70.00	\$70.00	\$70.00	\$70.00	N/A
Seneca Landfill	\$101.90	\$101.90	\$101.90	\$126.90	\$126.90	\$8.10	\$110.00	\$110.00	\$110.00	\$135.00	\$135.00
Valley Landfill	\$78.41	\$78.41	N/A	N/A	N/A	\$7.76	\$86.20	\$86.20	N/A	N/A	N/A
Wayne Township Landfill	\$41.00	\$41.00	\$41.00	\$41.00	\$41.00	\$9.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
York County Resource Recovery Center	\$80	\$80	N/A	N/A	N/A	\$3.00	\$83.00	N/A	N/A	N/A	N/A

RECOMMENDATIONS FOR DISPOSAL FACILITY DESIGNATION

The review and evaluation of the proposals determined that all but of the facilities meet the established selection criteria. Some of the facilities are operating with permits that will expire before 20245. 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. At least one of the facilities projects its closure before the end of the Plan's implementation period. All qualify to become designated disposal facilities in the Armstrong County Municipal Solid Waste Management Plan.

In summary, Armstrong 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

Advanced Disposal Services	Mostoller Landfill
	Greentree Landfill
Casella Waste Management	McKean County Landfill
	Hyland Landfill* *Back-up Facility Only
Republic Services	Greenridge Reclamation Landfill
	Imperial Landfill
Vogel Holding	Seneca Landfill
Waste Management	Evergreen Landfill
	Laurel Highlands :Landfill
	Monroeville Landfill
	Northwest Landfill
	Valley Landfill
Clinton County Solid Waste Authority	Wayne Township Landfill
York County Solid Waste & Refuse Authority	York County Resource Recovery Center

Appendix F

Process to Secure Capacity Assurance

PETITION TO ADD A PROCESSING/DISPOSAL FACILITY

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Armstrong County Municipal Solid Waste Management Plan Petition for Facility Designation

The Armstrong County Department of Planning and Development secured Disposal Capacity Agreements sufficient to handle all municipal waste generated within Armstrong County from 2012-2022. Disposal of Armstrong County municipal solid waste is restricted to facilities designated in the Armstrong County Municipal Solid Waste Management Plan. Each met criteria established in a formal Request for Proposals and entered into a uniform agreement with the County. Additional facilities can be added to the list of disposal designees provided they meet the same criteria and execute the same contract specified in the original Request for Proposals.

Procedures and Instructions to Petitioner

- This form must be used to notify the Armstrong County Department of Planning and Development of a party's interest in using another facility. All costs associated with the Plan revision to add a facility shall be the responsibility of either the Petitioner or the Facility as indicated and authorized by a signature on this form.
- A disposal/processing facility, a hauler, a transfer station, a municipality or a business must complete and submit the petition form to the Armstrong County Department of Planning and Development
- Within 30 working days of the receipt of a petition, the Armstrong County Department of Planning and Development will send to the petitioner, a request for proposal for disposal capacity outlining the same requirements and format for submission as the original document utilized in the selection of those facilities currently designated in the Plan. The Authority will also inform the petitioner and the facility of the costs to process the petition.
- Upon receipt of the completed proposal from the petitioning facility, and the check for the processing costs, the Armstrong County Department of Planning and Development will notify the Armstrong County Board of Commissioners and the Pennsylvania Department of Environmental Protection of its intentions to add a facility.
- The Armstrong County Department of Planning and Development will review and respond to the information in the proposal within 45 working days.
- If information in the submitted proposal is complete, accurate and meets the accepted criteria, the Armstrong County Department of Planning and Development will notify by letter all municipalities within the County of the intent to add a facility to the Plan. The County will accept comments for a period of thirty days.
- After the thirty day comment period, the Armstrong County Department of Planning and Development will formally submit the addition of the facility and the Pennsylvania Department of Environmental Protection for approval.

- Upon approval by the Pennsylvania Department of Environmental Protection, the Armstrong County Department of Planning and Development will present the contract to the Armstrong County Board of Commissioners to execute .
- The Armstrong County Department of Planning and Development will notify by letter, the petitioner and all County municipalities that the facility has been added to the Plan.

Armstrong County Municipal Solid Waste Management Plan Petition for Facility Designation

Please complete and submit this form to:
Armstrong County Department of Planning and Development
Armstrong County Courthouse Annex
300 Center Street, PO Box 448, Ridgway, PA 15853
Phone: (814) 776-5374

Petitioner

Name: _____

Organization: _____

Street Address: _____

City/State/Zip Code _____

Phone Number: _____

Fax Number: _____

E-Mail Address: _____

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

Name _____ Title _____

Signature _____ Date _____

Facility

Name of Facility: _____

Owner/Operator of Facility: _____

Location of Facility:

Street Address: _____

City/State/Zip Code _____

Facility Contact Person: _____

Mailing Address if different than Facility

Street Address: _____

City/State/Zip Code _____

Contact Information

Phone Number: _____

Fax Number: _____

E-Mail Address: _____

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

Appendix G

Ordinances

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COUNTY SOLID WASTE AND RECYCLING TRANSPORTERS ORDINANCE

ORDINANCE NO. 2016-

COUNTY OF ARMSTRONG , PENNSYLVANIA

AN ORDINANCE OF THE COUNTY OF ARMSTRONG , PENNSYLVANIA, ESTABLISHING A HAULER REGISTRATION PROGRAM TO BE ADMINISTERED BY THE ARMSTRONG COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT FOR ALL PERSONS THAT COLLECT AND TRANSPORT MUNICIPAL WASTE AND/OR RECYCLABLES GENERATED FROM SOURCES LOCATED IN ARMSTRONG 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 can 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 1992 Armstrong County Municipal Waste Management Plan and non-substantial revisions in 1993, 2004 and 2016 in accordance with the requirements of Section 501 of Act 101, and said Plan has been duly ratified by the municipalities of Armstrong County; and

WHEREAS, the Board of County Commissioners has adopted and approved Ordinance 92-2 of 1992 as amended in 2005, 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 Armstrong 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)

Commercial Establishment - Any establishment engaged in nonmanufacturing or nonprocessing business, including, but not limited to, stores, markets, offices, restaurants, shopping centers and theaters.

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

County Authorization – An authorization from Armstrong County issued to any Transporter of municipal waste and recyclables that is not required by Act 90 to obtain Pennsylvania Waste Transportation Authorization.

County Registered Transporter - Any person, firm, partnership, corporation, or public agency who is engaged in the collection and/or transportation of municipal waste and/or recyclables currently registered with the County pursuant to 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

Industrial Establishment Any establishment engaged in manufacturing or production activities, including, but not limited to, factories, foundries, mills, processing plants, refineries, mines and slaughterhouses.

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 Armstrong 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 regulated medical waste and septage waste since all haulers of regulated medical 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).

Pennsylvania Waste Transportation Authorization – An authorization issued to municipal and residual waste Transporters pursuant to Act 90 of 2002.

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.

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.

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.

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.

Resource Recovery Facility -

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

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

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

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

(v) The term does not include:

(A) A composting facility.

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

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

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

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 collection or processing center that is only for source-separated recyclable materials, including clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics.

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

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

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

SECTION 3 -STANDARDS FOR COLLECTION AND TRANSPORTATION

1. All Transporters operating within the County must comply with the following minimum standards and regulations:
 - A. All trucks or other vehicles used for collection and transportation of municipal waste must comply with the requirements of Act 97, Act 90, and Act 101 as currently enacted or hereafter amended, and Department regulations adopted pursuant to Act 97, Act 90 and Act 101, including the Title 25, Chapter 285, Subchapter B Regulations for the Collection and Transportation of Municipal Waste as currently worded or hereafter amended .
 - 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.
2. All collection and transportation vehicles and equipment used by Transporters, shall be subject to inspection by the County or its authorized agents to determine compliance with the regulations in the section at any reasonable hour without prior notification.
 3. All Transporters shall be responsible for payment of all disposal, processing, resource recovery, or recycling fees.

SECTION 4 - REGISTRATION REQUIREMENTS

1. No person shall collect, remove, haul or transport any municipal waste and/or recyclables originating in Armstrong County through or upon the streets, alleys, highways, by-ways, township roads and any other public easement through any of the various municipalities within Armstrong County without first registering with the County of Armstrong in accordance with the provisions of this Ordinance.
2. . Any person who desires to collect, haul or transport municipal waste and/or recyclables within Armstrong County shall register for the first time at least thirty (30) days before beginning collection and/or transporting of municipal waste in the County.
3. Any person who desires to collect, haul or transport municipal waste and/or recyclables within Armstrong County shall submit a copy of its Pennsylvania Waste Transportation Authorization application and a copy of the proof of Authorization to the County at the time of registration.
4. In lieu of submitting Pennsylvania Waste Transportation Authorization application and the proof of Authorization, any person who desires to collect, haul or transport municipal waste and/or recyclables within Armstrong County that is not required by Act 90 to obtain Pennsylvania Waste Transportation Authorization, must complete the full registration form. At the time of registration all information required by the registration form must be provided to obtain an authorization from the County. The County shall have a minimum period of thirty (30) calendar days to review any authorization application and take approval or denial action.
5. . The County shall designate specific processing and disposal facilities where Transporters must transport and dispose of any municipal solid waste collected from sources within Armstrong County. No person shall dispose of municipal waste collected within Armstrong County, except at an approved processing and disposal facility. The County shall not designate specific facilities for the processing and/or marketing of recyclables.
6. . There shall be no registration or authorization fee.
7. The registration form, which will be supplied by the County, shall state the processing and disposal facilities that the applicant intends to use for the purpose of disposal of Armstrong County Municipal Waste as well as the recycling facilities or end use facilities where Armstrong County recyclables are marketed and shall set forth the minimum information required to establish the applicant's qualifications to collect and transport municipal waste and/or recyclables, including, but not necessarily limited to:

- A. Name together with actual mailing address of business location of the applicant,
 - B. Name and telephone number of contact person,
 - C. List of all collection vehicles to be used for the collection and transport of solid waste and recyclables and the Pennsylvania Waste Transportation Authorization identification number for each.
 - D. List of collection vehicles to be used for the collection and transport of solid waste and recyclables and to be covered under the County authorization rather than Pennsylvania Waste Transportation Authorization. The vehicle identification information and the vehicle license number for each vehicle. The company tax identification number; certificate(s) of insurance to present evidence that the applicant has valid liability, automobile and workmen's compensation insurance.
 - E. Type of municipal waste and/or recyclables collected and transported,
8. Any person who desires to collect, haul or transport municipal waste and/or recyclables within Armstrong County and who is currently registered shall submit a registration renewal application and if applicable an authorization renewal to the County at least sixty (60) days prior to the expiration date of their existing registration if renewal of the registration and authorization is desired.
 9. No new authorization or authorization renewal shall be approved and issued by the County to any person who fails to satisfy the minimum standards and requirements of this Ordinance
 10. Written complaints filed by residents or county designated facilities may result in the delay or denial of authorization renewal.

SECTION 5- PROHIBITED ACTIVITIES

1. It shall be unlawful for any person to collect and or transport municipal solid waste from any sources within Armstrong 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 Armstrong County to any processing and disposal facility other than the facilities that are designated disposal and processing sites or resource recovery facility under the approved Armstrong County Act 101 Municipal Waste Management Plan. The following types of municipal waste and materials are exempt from this sub-section:
 - A. Transporters of regulated medical 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.

SECTION 6- EXEMPTED ACTIVITIES

1. Municipalities and municipally owned vehicles participating in municipally sponsored clean-up days shall not be subject to the provisions of this ordinance with respect to standards for collection and transportation, licensing, prohibited activities, reporting requirements or penalties during the time that such vehicles or municipalities are engaged in those municipally sponsored clean-up activities.
2. Municipalities and municipally owned vehicles participating in county or municipally sponsored recycling collection shall not be subject to the provisions of this ordinance with respect to standards for collection and transportation, licensing, prohibited activities, reporting requirements or penalties during the time that such vehicles or municipalities are engaged in those county or municipally sponsored recycling activities.
3. 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.

SECTION 7- REPORTING REQUIREMENTS

1. All Transporters shall promptly report any significant changes in the collection vehicles or equipment covered under the authorization and insurance coverage changes to the County.
2. All County Registered Transporters shall maintain current, up-to-date records of the customers serviced within Armstrong County. Such records and customer list shall be subject to inspection and must be made available for view to the County or its authorized agents upon request.
3. Each Transporter shall prepare and submit on forms provided by the County, a typewritten or legibly printed quarterly report to the County Department of Planning and Development. 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 Armstrong 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 Armstrong 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 incident shall be considered a separate and distinct offense punishable under the provisions of this Ordinance.
2. The County shall have the right at any time, after a hearing to suspend or revoke the County issued authorization of any County Registered Transporter for any of the following causes:
 - A. Falsification or misrepresentation of any statements in any authorization application;

- B. Lapse or cancellation of any required insurance coverages;
- C. Collection and/or transportation of any municipal waste and/or recyclables in a careless or negligent manner or any other manner that does not comply with the requirements of this Ordinance;
- D. Transportation and disposal of any municipal waste collected from sources within Armstrong County at any site other than those processing or disposal facilities designated by the County; and
- E. Failure to meet the specific reporting requirements outlined in this Ordinance
- F. Violation of any part of this Ordinance, any other applicable county ordinances or other applicable Pennsylvania laws or regulations.

SECTION 9- INJUNCTIVE POWERS

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

SECTION 10 -SEVERABILITY

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

SECTION 11 -CONFLICT

Any ordinances or any part of any ordinances, which conflict with this Ordinance are hereby repealed insofar as the same is specifically inconsistent with this Ordinance.

SECTION 7. EXISTING CONTRACTS

1. Nothing in this Ordinance shall be construed to impair the obligations of any existing Contract in force prior to the effective date of this Ordinance.
2. No renewal or modification of any existing Contract, and no new Contract shall be entered into after the effective date of this Ordinance unless such renewal, modification, or new contract shall conform to the requirements of this Ordinance.

SECTION 13- EFFECTIVE DATE

This Ordinance shall take effect on _____ORDAINED AND ENACTED into an Ordinance this _____ day of 2016.
COUNTY OF ARMSTRONG

BOARD OF COUNTY COMMISSIONERS

ATTEST:

(County Seal)

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Appendix H

Agreement with Progressive Workshop

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AGREEMENT

THIS AGREEMENT made this _____ day of _____, 2012,

by and between

COUNTY OF ARMSTRONG, a sixth class county with its address as Armstrong County Courthouse, Kittanning, Pennsylvania, 16201, hereinafter referred to as "County",

A

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THE PROGRESSIVE WORKSHOP OF ARMSTRONG COUNTY, INC., a non-profit corporation organized under the laws of the Commonwealth of Pennsylvania, having its principal place of business at 301 Oak Avenue, Kittanning, Pennsylvania, 16201, hereinafter referred to as "Workshop",

WITNESSETH:

WHEREAS, County owns certain real estate situate in Rayburn Township, Armstrong County, Pennsylvania, which property includes a dairy barn that has been converted into a recycling center and a storage building, both hereinafter referred to as the "Center"; and,

WHEREAS, Workshop desires to lease said Center from County and to operate the Center for the mutual benefit of the parties hereto; and,

WHEREAS, the parties have reached an agreement for the leasing of the Center and for the subsequent operation of a recycling program as follows;

NOW, THEREFORE, in consideration of the covenants hereinafter contained the parties hereto agree as follows:

1. County shall lease the Center and surrounding two (2) acres as said area as described in the Armsdale Plan #1 Recorded September 27, 2011 and agreed upon by the parties hereto for a term of three (3) years commencing on _____, and terminating thereafter on _____. This lease shall include not only the real estate but, in addition thereto, all recycling equipment located on said premises and vehicles as the same are more specifically described in Attachment "A".
2. Workshop shall lease said real estate equipment and vehicles from County paying, therefore, the annual sum of One Dollar and 00/100 (\$1.00) payable in advance on the date of the commencement of this agreement and, thereafter, on the first and second anniversaries of the commencement of this agreement.
3. County shall maintain insurance on said premises, equipment, and county owned vehicles used in the operation of the recycling center, including but not limited to, fire insurance, liability insurance, and comprehensive and collision automobile insurance coverage, in amounts to be determined by County in its sole discretion. County shall at all times agree to render and save wholly harmless Workshop from any responsibility for damage to the premises, equipment or vehicles used in the operation of the Center.
4. Workshop shall maintain liability insurance on the operation of said premises with minimum coverage of One Million Dollars (\$1,000,000.00) per incident and shall, at all times, agree to render and save wholly harmless County from any liability arising out of the operation of the Center. Workshop shall additionally maintain content, operational and product liability insurance regarding the leased premises and the operation of the Center by Workshop in such amount as the parties may from time to time agree shall be necessary. Workshop shall, additionally, maintain any and

- all necessary workmen's compensation insurance or unemployment compensation insurance for any employees or client/trainees of Workshop used in the operation of the Center.
5. Each of the parties hereto shall cause to be named each other as an additional insured on any and all policies of insurance that may be required to be maintained under the terms of this Agreement.
 6. Workshop shall be solely responsible for all costs of repair and maintenance of the facilities, equipment and vehicles leased to it under the terms of the Agreement for the operation of the Center. Workshop shall at all times keep County informed of any and all repairs and maintenance performed on the facilities and equipment leased under the terms of this Agreement.
 7. The lease of said premises, equipment or vehicles may be extended beyond the initial term on a year-to-year basis upon the same terms by letter of mutual consent provided that said letter is executed a minimum of ninety (90) days before the expiration of the preceding term.
 8. The lease of all properties, real and personal, shall be non-assignable.
 9. Workshop shall have the option to purchase any and all equipment leased under the terms of this Agreement for the sum of One Dollar and 00/100 (\$1.00) upon request to so purchase after having first obtained written approval from the Pennsylvania Department of Environmental Protection or its successors and assigns, provided that this Agreement has been continuously in effect from the date hereof through the date said request is made. (Workshop shall have said option and shall be entitled to retain said equipment only so long as Workshop is using the same in the operation of a Recycling Center in and for Armstrong County. Should Workshop cease to use said equipment in the operation of such a center in and for Armstrong County, or should Workshop desire to sell said equipment, Armstrong County shall have the first right to purchase said equipment at a price not in excess of that price paid to County by Workshop for said equipment.)
 10. It is the specific intent of the parties to this Agreement that a cooperative arrangement be entered into for the purpose of developing and maintaining a recycling center that will promote and expand recycling services to the citizens and businesses of Armstrong County to the mutual benefit to both parties. To this end, the parties have already applied for and obtained certain funding necessary

for the development of a recycling center. In order to further assure the operation of a recycling center for a minimum period as per the terms of the lease hereinabove set forth, the parties further agree as follows:

(A) County shall:

- (1) Apply for annual performance grants from the Pennsylvania Department of Environmental Protection. In the event County is successful in obtaining such grants, 10% of said amount shall be retained by the County to cover administrative expenses. The balance shall be turned over to the Workshop for use as operational monies for the Center.
- (2) Initiate a recycling education program that will be reviewed annually by both parties to this Agreement.
- (3) Retain services of a recycling coordinator to carry out the educational responsibilities provided, however, that the obligation to retain such coordinator shall specifically be contingent upon the ability to continue to obtain state financial support through Recycling Coordinator Grants.
- (4) Continue to actively pursue funding from any and all sources available including the DEP Act 101 Section 903 Grant to insure the successful operation of the Center and, to this end, initiate or join in any necessary application of funds that can be used in the operation, maintenance and marketing of the Center.
- (5) Provide annual financial contributions not to exceed a total maximum amount of Thirty-Five Thousand Dollars (\$35,000.00), as follows:
 - (a) Provide an annual contribution in the amount of Twenty-Five Thousand Dollars (\$25,000.00) for operation expenses of the Center, said contribution to be made to Workshop by July 1 of each year during the term of the lease of the facility by Workshop.
 - (b) In addition, assume fifty percent (50%) of any annual operational deficit from said facility up to total maximum contribution by County not to exceed an additional Ten

Thousand Dollars (\$10,000.00). County shall make payment within thirty (30) days of receipt of annual report, which shall be no later than August 15 with deficits to be determined based upon an accounting report ending June 30 of each year.

- (c) Should the County not have contributed an amount equal to Thirty-Five Thousand Dollars (\$35,000.00) during the current annual period and should a contribution to said Capital Escrow fund be required to be made in that operational year pursuant to paragraph 11, and should the Workshop be unable to fund the contribution required to be made for that year, then the County shall make a contribution to said Capital Escrow Account in an amount up to the difference between that amount contributed by the Workshop and the maximum Ten Thousand Dollars (\$10,000.00) to be contributed, but in no event more than the difference between that amount that the County has already contributed under its obligations under the terms of this agreement, and the maximum total obligation of the County not to exceed Thirty-Five Thousand Dollars (\$35,000.00) annually.
 - (d) The County shall, at least annually, review the funds earmarked for recycling ventures. The purpose of this review is to determine if additional monies are available for additional capital expenditures and/or operations at the Center. Capital expenditures shall be mutually agreed upon by both parties as to need and appropriateness.
- (B) Workshop shall:
- (1) Operate the Center to minimum Pennsylvania Department of Environmental Protection mandates and requirements for a minimum period of three (3) years. The Center shall be open to accept materials during said term a minimum of one (1) day per week.
 - (2) Continue to actively pursue funding from any and all sources available to insure the successful operation of the Center and, to this end, to initiate or join in any necessary application of funds that can be used in the operation of the Center.

- (3) Assume fifty percent (50%) of all annual operational losses from said facility up to losses in the amount of Twenty Thousand Dollars (\$20,000.00), and for losses in excess of Twenty Thousand Dollars (\$20,000.00), to assume one hundred percent (100%) responsibility for any annual operational losses from the operation of said facility.
 - (4) Provide County an annual, cash-based operations report no later than August 15 of each year during the lease of said properties.
 - (5) Maintain all equipment in order to continue manufacturers' warranties in full force and effect and, upon expiration of any warranty, maintain all equipment in good working order.
11. In order to insure the availability of operational equipment such as may be necessary to maintain the Center, a Capital Reserve Escrow Account shall be established as follows:
- (A) County has initially funded this account by depositing therein the sum of Five Thousand Dollars (\$5,000.00), on the official opening date of the center.
 - (B) In the event of the occurrence of a year end operational surplus, the Progressive Workshop shall contribute Fifty Percent (50%) of said surplus into the escrow account up to a maximum annual contribution of Ten Thousand Dollars (\$10,000.00). Should a contribution to said Capital Escrow Account be required to be made in that operational year and should the Workshop be unable to, or not required to, fund the entire contribution required to be made for that year, and should the County not have contributed an amount equal to or in excess of Thirty-Five Thousand Dollars (\$35,000.00) during the current annual period under the terms of this agreement, then the County shall make a contribution to said Capital Escrow Fund in an amount an amount up to the difference between that amount contributed by the Workshop and the amount required to be contributed (ten Thousand Dollars (\$10,000.00) maximum), but in no event more than the difference between that amount which the County has already contributed under its obligations pursuant to the terms of this agreement, and the maximum total obligation of the County not to exceed Thirty-Five Thousand Dollars (\$35,000.00) annually.

- (C) Said Escrow Account shall at no time exceed Fifty Thousand Dollars (\$50,000.00) and, so long as said balance is maintained, no additional contribution shall be required.
- (D) All monies deposited into the Capital Escrow Account shall be used exclusively for, special recycling events, major building repairs or renovations, repair of major equipment, equipment purchase or matching funds for grants related to the recycling center project. Workshop shall be permitted to withdraw up to Two Thousand Dollars (\$2,000.00) per occasion and up to Five Thousand Dollars (\$5,000.00) annually without approval of the County for the reasons in this paragraph. The Workshop will notify the County Department of Planning and Development of all such occurrences within fifteen (15) day of such withdrawal. In the event a proposed expenditure exceeds either of these maximum amounts, Workshop shall request the prior written approval of the County Department of Planning and Development for such expenditures.
- (E) The Workshop, while awaiting reimbursements from the County, PADEP, or other revenue sources, may utilize funds from the Capital Escrow Account on a loan basis, as needed, upon request of prior approval from the County Department of Planning and Development, said approval not to be unreasonably withheld, to meet the operational cash flow requirements of the Center. The Workshop will notify the County Department of Planning and Development of all such occurrences within fifteen (15) days of such withdrawal. Repayment of the Capital Escrow Account shall be made within 30 days of receipt of the reimbursement.
- (F) Upon termination of the lease for cause by either of the parties hereto prior to satisfaction of any obligations due to the Pennsylvania Department of Environmental Protection, any funds in said Capital Reserve Escrow Account shall be refunded to the contributing parties in the amount that was contributed or as a percentage of the amount that each party contributed.
- (G) The Capital Escrow Account provided for herein shall be maintained throughout the term of this Agreement and any extension thereof.

12. The Nondiscrimination Clause, Contractor Integrity Provisions and Provisions concerning the Americans with Disabilities Act, attached hereto as Attachments "B", "C" and "D" shall and are hereby incorporated into the Agreement. It is understood that all references in the Attachments to "Contractor" shall, for the purpose of this Agreement, mean "Workshop".
13. This Agreement shall not be modifiable except upon the express written consent of the parties as may be evidenced by a letter of mutual consent by both parties at any time.

In WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

COUNTY OF ARMSTRONG

Attest:

THE PROGRESSIVE WORKSHOP OF ARMSTRONG COUNTY, INC.

Attest:

Year Purchased	Equipment	Supplier	Manufacturer	Model Number	Serial Number	Condition
1994-1995	Downstroke Baler	Bruce Mohny	Piqua Waste Equipment Inc.	HD 2200		fair
	Magnetic Separator/Elevator	Bruce Mohny	Dens-a-Can Can Elevator			poor
	Glass Crusher	Bruce Mohny	Dens-a-Can Int'l	GB 100	G0245295	good
	Hopper/Conveyor	Bruce Mohny	Remco			good
	Paper Baler	Bruce Mohny	Moren Engineering	14-S	994145	out of service
	Blower	Bruce Mohny	Peltz Mfg. Inc.	95	1343	out of service
	Chopper	Bruce Mohny	Peltz Mfg. Inc. Rotochopper	95	1341	out of service
	Conveyor	Bruce Mohny	Peltz Mfg. Inc. Rotochopper	95	1342	out of service
	Skid-loader	Crytzer Equipment	Case Industrial	JI Case 1840	JAF0172337	fair

	Platform Scale	Acme Scale	PA Scale Co.	7400M	34221485	good
	Pallet Truck	Grainer	BT Pallet Jack	12000U	1050265	out of service
1999	Horizontal Baler	Marathon Equipment	Marathon	G-3560	108620	good
2000	Vertical Baler	Bruce Mohney	Galbreath	PAT 3060	GVB C234	good
2002	6,000 gal. Oil Tank	Brookville Tanks	Brookville Tank Mfg.	6838	A429660	good
2004	Recycling Truck	Hunters	International	4200 VT 365	1HTMPAFN45H121731	good
	Box for Truck	Hunters	V8 True Body		408-1938	fair
	Lift Gate	Hunters	Anthony	SF Series AST 20CO	66400	poor
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	04087	fair
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	04054	fair
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	04086	fair

	Recycling Trailer	Dempster	Alleycat	RSWT-3000	04061	fair
	Recycling Truck	Allegheny	Ford	F 650 4X2	3FRNF65F66V318664	good
	Box for Truck	Allegheny	Morgan	GVS009724096	MPA05VB06038	good
	Lift Gate	Allegheny	Maxon	TE-20	120558690	good
	Can Densifier	Bruce Mohney	Dens a Can	DAC 1200 W Conv.	B193 05-05	good
	Pallet Truck	MSC	Multiton		305624-M50	out of service

Year Purchased	Equipment	Supplier	Manufacturer	Model Number	Serial Number	Condition
	Pallet Truck Lift	MSC	Multiton		14038635	out of service
	Pallet Truck	MSC	Multiton		308620-M50	good
	Pallet Truck Lift	MSC	Multiton		14038668	good
	Pallet Truck	MSC	Multiton		308625-M50	good
	Pallet Truck Lift	MSC	Multiton		14038688	good
2006	Pick-up Truck	Allegheny	Ford	F250	1FTNF21526EB82399	poor
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06035	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06036	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06045	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06038	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06039	good

	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06040	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06041	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06042	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06043	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06044	good
	Furnace 1	Rosenburger	Ag Solutions LLC	Model B 300	06H1926	good
	Furnace 2	Rosenburger	Ag Solutions LLC	Model B 300	05K1065	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06073	good
	Recycling Trailer	Dempster	Alleycat	RSWT-3000	06074	good
2011	Horizontal Baler	Reaction Distributing	Reaction Distributing	THB6048	11-004073	good

ATTACHMENT B

NON DISCRIMINATION CLAUSE

During the term of this contract, Contractor agrees as follows:

1. Contractor shall not discriminate against any employee, applicant for employment, independent contractor, or any other person because of race, color, religious creed, ancestry, national origin, age, or sex. Contractor shall take affirmative action to insure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, handicap, ancestry, national origin, age, or sex. Such affirmative action shall include, but is not limited to: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. Contractor shall post in conspicuous places, available to employees, agents, applicants for employment, and other persons, a notice to be provided by the contracting agency setting forth the provisions of this nondiscrimination clause.
2. Contractor shall, in advertisements or requests for employment placed by it or on its behalf, state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, handicap, ancestry, national origin, age, or sex.
3. Contractor shall send each labor union or workers' representative with which it has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representative of its commitment to this nondiscrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by Contractor.
4. It shall be no defense to a finding of noncompliance with this nondiscrimination clause that Contractor had delegated some of its employment practices to any union, training program, or other source of recruitment which prevents it from meeting its obligations. However, if the evidence indicates that the Contractor was not on notice of the third-party discrimination or made a good faith effort to correct it, such factor shall be considered in mitigation in determining appropriate sanctions.
5. Where the practices of a union or any training program or other source of recruitment will result in the exclusion of minority group persons, so that Contractor will be unable to meet its obligations under this nondiscrimination clause, Contractor shall then employ and fill vacancies through other nondiscriminatory employment procedures.
6. Contractor shall comply with all state and federal laws prohibiting discrimination in hiring or employment opportunities. In the event of Contractor's noncompliance with the nondiscrimination clause of this contract or with any such laws, this contract may be terminated or suspended, in whole or in part, and Contractor may be declared temporarily ineligible for further Commonwealth contracts, and other sanctions may be imposed and remedies invoked.
7. Contractor shall furnish all necessary employment documents and records to, and permit access to its books, records, and accounts by, the contracting agency for purposes of investigation to ascertain compliance with the provisions of this clause. If Contractor does not possess documents or records reflecting the necessary information requested, it shall furnish such information on reporting forms supplied by the contracting agency.

8. Contractor shall actively recruit minority and women subcontractors or subcontractors with substantial minority representation among their employees.
9. Contractor shall include the provisions of this nondiscrimination clause in every subcontract, so that such provisions will be binding upon each Subcontractor.
10. Contractor obligations under this clause are limited to the Contractor's facilities within Pennsylvania or, where the contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such goods are actually produced.

ATTACHMENT C

CONTRACTOR INTEGRITY PROVISIONS

1. Definitions

a. **Confidential information** means information that is not public knowledge, or available to the public on request, disclosure of which would give an unfair, unethical, or illegal advantage to another desiring to contract with the Commonwealth.

b. **Consent** means written permission signed by a duly authorized officer or employee of the Commonwealth, provided that where the material facts have been disclosed, in writing, by prequalification, bid, proposal, or contractual terms, the Commonwealth shall be deemed to have consented by virtue of execution of this agreement.

c. **Contractor** means the individual or entity that has entered into this agreement with the Commonwealth, including directors, officers, partners, managers, key employees, and owners of more than a five percent interest.

d. **Financial interest** means:

(1) ownership of more than a five percent interest in any business; or

(2) holding a position as an officer, director, trustee, partner, employee, or the like, or holding any position of management

e. **Gratuity** means any payment of more than nominal monetary value in the form of cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind.

2. The contractor shall maintain the highest standards of integrity in the performance of this agreement and shall take no action in violation of state or federal laws, regulations, or other requirements that govern contracting with the Commonwealth. The contractor shall not disclose to others any confidential information gained by virtue of this agreement.

3. The contractor shall not, in connection with this or any other agreement with the Commonwealth, directly or indirectly, offer, confer, or agree to confer any pecuniary benefit on anyone as consideration for the decision, opinion, recommendation, vote, other exercise of discretion, or violation of a known legal duty by any officer or employee of the Commonwealth.

4. The contractor shall not, in connection with this or any other agreement with the Commonwealth, directly or indirectly, offer, give, or agree or promise to give to anyone any gratuity for the benefit of or at the direction or request of any officer or employee of the Commonwealth.

5. Except with the consent of the Commonwealth, neither the contractor nor anyone in privity with him or her shall accept or agree to accept from, or give or agree to give to, any person, any gratuity from any person in connection with the performance of work under this agreement except as provided therein.

6. Except with the consent of the Commonwealth, the contractor shall not have a financial interest in any other contractor, subcontractor, or supplier providing services, labor, or material on this project.

7. The contractor, upon being informed that any violation of these provisions has occurred or may occur, shall immediately notify the Commonwealth in writing.

8. The contractor, by execution of this agreement and by the submission of any bills or invoices for payment pursuant thereto certifies and represents that he has not violated any of these provisions.

9. The contractor, upon the inquiry or request of the Inspector General of the Commonwealth or any of that official's agents or representatives, shall provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Inspector General to the contractor's integrity or responsibility, as those terms are defined by the Commonwealth's statutes, regulations, or management directives. Such information may include, but shall not be limited to, the contractor's business or financial records, documents or files of any type or form which refer to or concern this agreement. Such information shall be retained by the contractor for a period of three years beyond the termination of the contract unless otherwise provided by law.

10. For violation of any of the above provisions, the Commonwealth may terminate this and any other agreement with the contractor, claim liquidated damages in an amount equal to the value of anything received in breach of these provisions, claim damages for all expenses incurred in obtaining another contractor to complete performance hereunder and debar and suspend the contractor from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or nonuse of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law statute regulations or otherwise.

ATTACHMENT D

PROVISIONS CONCERNING THE AMERICANS WITH DISABILITIES ACT

During the term of this contract, the contractor agrees as follows:

1. Pursuant to federal regulations promulgated under the authority of The Americans With Disabilities Act, 28 C.F.R. §35.101 et seq., the Contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in this contract or from activities provided for under this contract. As a condition of accepting and executing this contract, the Contractor agrees to comply with the "General Prohibitions Against Discrimination," 28 C.F.R. §35.130, and all other regulations promulgated under Title II of The Americans With Disabilities Act which are applicable to the benefits, services, programs, and activities provided by the Commonwealth of Pennsylvania through contracts with outside contractors.
 2. The Contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth of Pennsylvania from all losses, damages, expenses, claims, demands, suits, and actions brought by any party against the Commonwealth of Pennsylvania as a result of the Contractor's failure to comply with the provisions of paragraph 1. above.
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Appendix I

Resolution to Approve Plan

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RESOLUTION #2016-31

Armstrong County Municipal Solid Waste Management Plan

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, including a County department or agency, 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 County Board of Commissioners designated the Armstrong County Department of Planning and Development as the agency to prepare the revision to its prior Plan; and

WHEREAS, pursuant to the request of the county Board of Commissioners, the Armstrong county Department of Planning and Development has prepared (as a revision to the prior Plan) the Armstrong county Municipal Solid Waste Management Plan of 2016-2025 (the 2016 Plan); and

WHEREAS, the County Board of Commissioners believes that the 2016-2025 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 2016-2025 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.

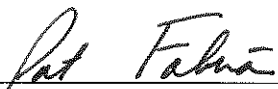
NOW, THEREFORE BE IT RESOLVED AND IT IS HEREBY ROSOLVED by the County of Armstrong Board of Commissioners that:

- The 2016 Armstrong County Municipal Solid Waste Management Plan is approved.
- The proper officers of the County are authorized and directed to take such actions and execute and deliver on behalf of the County such instruments as shall be necessary or appropriate to carry forth the 2016 Plan.

ADOPTED this 6th day of October 2016.



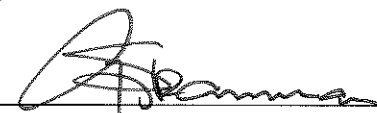
ARMSTRONG COUNTY
BOARD OF COMMISSIONERS


Pat Fabian, Chairman

ATTEST:


Daniel P. Lucovich,
Executive Director of Administration


Jason Renshaw, Vice Chairman


George J. Skamai, Secretary

Appendix J

Meeting Minutes and Public Comments

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SOLID WASTE ADVISORY COMMITTEE MEETING SEPTEMBER 9, 2014

The first Solid Waste Advisory Committee Meeting (SWAC) was held on September 9, 2014 at 7:00 p.m. in the Department of Planning and Development Conference Room. In attendance were: Dr. Arthur Duppsstadt, Corey Heller, Andy Peters, Paul Rearick, Dr. Ken Beer, Ken Blake, Brad Minemyer, Len Meneely, John Williams, Sharon Svitek, Michele Nestor and Sally Conklin.

Mrs. Conklin welcomed everyone to the meeting and provided an overview of the project stating that the County is required by the Department of Environmental Protection (DEP) to update their Solid Waste Management Plan (SWMP) every ten years. She then stated that as part of the process, the County would be securing contracts with landfill to accept waste from the County. Mrs. Conklin then introduced Michele Nestor with Nestor Resources Inc. stating that the County has contracted with Michele to complete the revision to the SWMP. Mrs. Conklin also provided an overview of the relationship between the County and the Progressive Workshop stating that Armstrong County owns the recycling center, but has contracted with the Progressive Workshop for the operation of the Center. She then stated that the Progressive Workshop with a non-profit agency that provided a training service to adults with a physical and or mental disability.

A handout from Nestor Resources Inc. was distributed to all of the SWAC Members (see attached). After introductions of the committee members, Mrs. Nestor began reviewing the process of the SWMP Revision. Discussion was held on many topics including littering, landfill capacity, state recycling rates, electronics recycling and the challenges that we face. Mrs. Nestor stated that she anticipates four to six meetings being held over the next fourteen months.

Mrs. Nestor encouraged the group to provide input regarding concerns and issues that they see. It was determined that the lack of available services has an impact on the program. Mrs. Nestor then stated that the state was soon going to be offering a grant in order to install convenience centers. She stated that the convenience centers would be for hard to recycle items such as televisions, electronics, appliances, tires, etc. She also stated that the state is looking into enforcement programs that would include educating the magistrates of the regulations. Mrs. Nestor then stated that Keep Pennsylvania Beautiful had some funds available to install temporary cameras at illegal dump sites as then seem to be a deterrent. Cleaning up illegal dump sites can cost approximately \$3,000. Several committee members stated that garbage and recycling collection should be county-wide.

Information was provided regarding the County's "Hard to Recycle" Day. Mrs. Nestor stated that over 6,000 tires have been collected along with 88 tons of scrap metal. Mr. Meneely requested that Mrs. Conklin forward the "Hard to Recycle" Day spreadsheet to the SWAC. Additional discussion was held regarding "Hard to Recycle" Day specifically regarding the issues regarding electronics collections specifically television monitors.

Dr. Duppstadt brought up discussion regarding a bottle bill. Mrs. Nestor explained that the beverage distributor have provided resistance to any regulations as they are not set up to back haul bottles. Discussion was also held regarding illegal dumping and how it is being addressed in some areas.

Discussion was held regarding Act 101 and whether it needed to be revised as the needs have shifted away from disposal capacity to way to assist municipalities with collections and providing access to collection opportunities for materials.

The SWAC held their second meeting on January 27, 2015 at 7:00 p.m. in the Department of Planning and Development Conference Room. Members in attendance were Terry Van Dyke, Neil Andritz, Fred Bowser, Andy Peters, Brad Minemyer and John Williams. Present from the public was Evelyn Andritz. Also present were Michele Nestor with Nestor Resources, Sharon Svitek and William Jester from the DEP and Sally Conklin with the Department of Planning and Development.

Sally thanked everyone for coming and requested that everyone sign the attendance sheet. She then distributed the handout titled Armstrong County Municipal Solid Waste Management Plan 2012 – 2013 Update and Revisions Review of Municipal Waste Disposal Trends.

Michele began a review of the handout stating that the first couple of slides provide a list of haulers located in Armstrong County that have a permit from DEP to haul waste along with haulers that haul waste from Armstrong County that are located outside of the County. Michele requested that if anyone has haulers to add to the list to provide them to either her or Sally. The following slide provides a list of septic haulers that advertise as servicing Armstrong County.

Michele stated that as part of the revision process, a review is conducted of what happened in the last ten years compared to what was projected in the plan. For example, the population was projected to increase during the ten year period, but instead it decreased. This in turn threw off the projections for the amount of municipal solid waste that was generated. A review of the report showed that the amount of waste generated dropped off. This has been the trend across the state. The drop in generated waste can negatively affect business plans.

She then presented the chart titled: Tons Disposed in Pennsylvania Landfills 2003 – 2013 with waste origin reported as Armstrong County. She explained that MSW included household trash, office and business waste, construction and demolition waste and sewage sludge. She then stated that RSW included everything else. Discussion was held regarding the spike in RSW in 2012. Michele stated that it was either due to a reporting error or Marcellus Shale drilling.

Michele stated that the list provided in the packet shows the landfills that are currently in the County Plan. As per the plan, haulers are only permitted to take waste to landfills that are part of the plan unless the waste is taken to an out of state facility. She then stated that the map on the following pages shows the location of the landfills in the surrounding area. The landfills shown in the black boxes are those that are part of the County Plan. The jagged line around Kittanning shows the area within a 60 minute drive. The bulk of the County's waste goes to Seneca, Northwest and Evergreen Landfills.

Michele stated that the Request for Proposals (RFP) for Landfill Capacity has been developed and will be provided to Sally for solicitor review. Once the review is complete, the RFP will be issued. It is proposed that RFP's will be due in early April with review and recommendations being due by late April. It is anticipated that landfill contracts will be signed in late June early July.

Discussion was then held regarding illegal dump sites. Michele stated that there are four types of illegal dump sites: legacy – ones that have been there forever, often former municipal dump sites; active commercial dumping – usually used by small haulers, tire haulers, roofers and junk haulers; active residential dumping; and public and private theft of services. She then stated that a lot a resources from a lot of different agencies are spent on illegal dumping. A list is provided in the packet. Michele identified some of the issues pertaining to illegal dumping. She also stated that an average cleanup costs \$2,947 per site using volunteers for labor. This is a big cost to municipalities that want to cleanup sites. Discussion was held regarding the illegal dump site study conducted in Armstrong County in 2009. This study found 176 visible sites with 585 estimated tons of garbage. Actions are being taken to remediate the identified sites. When viewing the map provided in the packet, it was found that sites are usually found in areas of lower population and on the fringe of towns.

Michele stated that Keep Pennsylvania Beautiful currently has cameras for loan for counties and municipalities to use. The stipulation is that they are required to prosecute and publish the names of anyone caught on camera illegal dumping.

Michele stated that legislation is being put into effect to provide funding to create convenience centers. This is being done as a way help reduce illegal dumping and provide a way to dispose of bulky items more conveniently.

Discussion was held pertaining to why everyone is not required to recycle. Michele stated that recycling can be required on the municipal level. Unfortunately, it is hard to enforce.

Sally stated that she would e-mail a color copy of the handout to the group. Michele stated that the next meeting will be held in June or July.

SOLID WASTE ADVISORY COMMITTEE MEETING JULY 7, 2015

The third SWAC Meeting was held on July 7, 2015 at 6:30 p.m. in the Department of Planning and Development Conference Room. In attendance were: Terry Van Dyke, Fred Bowser, Dr. Ken Beer, Paul Rearick, Brad Minemyer and John Williams. Also in attendance were William Jester with DEP, Michele Nester with Nestor Resources and Sally Conklin with the Department of Planning and Development.

Mrs. Conklin thanked everyone for coming and reminded everyone to sign the attendance sheet. She then distributed a handout titled: Armstrong County Pennsylvania Department of Planning and Development on behalf of the Board of County Commissioners: Procurement Process to secure Municipal Solid Waste Disposal and Processing Capacity for Armstrong County 2015 - 2024. She then turned the meeting over to Mrs. Nestor.

Mrs. Nestor provided an overview of the responses to the RFP for landfill capacity. In summary, responses were received from one county owned landfill, thirteen privately owned landfills and one waste to energy facility. Mrs. Nestor then reviewed the criteria used when reviewing the facilities to determine her recommendation for the plan. Section 1 of the handout provides a list of facilities that responded (please see attached). Section 2 provides an overview of the landfills hours and capacity. She then stated that several of the permits will expire before the ten years is up, but all but one plan to renew their permit. Based on the responses received, Armstrong County will have sufficient capacity for the next ten years. Mrs. Nestor then pointed out that Section 3 provides regulatory and compliance history of the facilities that responded. Based on her review, non-compliance issues were all minor. She also stated that some regions are stricter than others which could cause a difference in the amount of violations from one facility to another.

Mrs. Nestor then stated that Section 4 lists the amount of waste that will be accepted by each facility each year. She also stated that Armstrong County generates approximately 38,000 tons of waste each year. Section 5 lists the price per ton of waste brought to each facility. This price is a not to exceed price for each facility. Mrs. Nestor stated that the RFP did not call for fees to be submitted to the County by the landfills as other counties have tried and have been taken to court by the landfills.

Based upon Mrs. Nestor's review of the proposals, she recommended that the county contract will all facilities that responded. Mrs. Nestor then provided an update on the

convenience centers stating that it is anticipated that the manned centers will be placed in rural areas. As part of the convenience center, residents would be able to bring bagged waste. This would provide a location for residents without trash collection to take their waste. These centers would also have collection stations for electronics, bulky waste, white goods and recyclables. She then stated that it is anticipated that each county would have a facility.

SOLID WASTE ADVISORY COMMITTEE MEETING FEBRUARY 22, 2016

The fourth SWAC Meeting was held on February 22, 2016 at 4:30 p.m. in the Department of Planning and Development Conference Room. In attendance were: Andy Peters, Terry Van Dyke, Ken Blake, Dr. Ken Beer, and John Williams. Also in attendance were William Jester with DEP, Michele Nestor with Nestor Resources, and Matt Ardeno with the Progressive Workshop. Tom Swisher and Sally Conklin were in attendance to represent Armstrong County, Department of Planning and Development.

Mrs. Conklin thanked everyone for coming and reminded everyone to sign the attendance sheet.

Mrs. Nestor then distributed the Introduction and Chapter 1 from the draft report for the committee's review. Mrs. Nestor reminded everyone that the report is written with 2012 data and therefore may not be accurate to today's information.

Mrs. Nestor went through the handouts and discussed a few items of interest. First item of interest was according to the reported data, the county has about twenty thousand tons less waste than the national average. She asked if the group thought it was a reporting issue, or if waste was getting lost at the transfer stations or if we were noticing illegal dumping within the County. The Committee responded it was probably getting lost at the transfer stations.

While reviewing the draft chapters, the group reviewed Figure 1-7 Municipal Waste Generated Composition Changes and Figure 1-8 Composition of Municipal Waste Generated, Recovered, and disposed in USA.

The Committee discussed the issue of illegal dumping of televisions throughout the County. Everyone asked Mrs. Nestor what the solution was and how to rectify the problem. She suggested, we all should contact our local State Representatives. There is legislation within the House to aid with television disposal at the local level.

Mrs. Nestor also handed out a Catastrophic Events and Waste Management in the Wake of Disaster write up. She suggested this information should be included within the County's Hazard Mitigation Plan and/or local municipalities' Hazard Mitigation Plans.

Next meeting is scheduled for Monday, March 28 at 4:30 pm at Armstrong County Department of Planning and Development.

SOLID WASTE ADVISORY COMMITTEE MEETING MARCH 28, 2016

The fifth SWAC Meeting was held on March 28, 2016 at 4:30 p.m. in the Department of Planning and Development Conference Room. In attendance were: Corey Heller, Fred Bowser, and Ken Blake. Also in attendance were Michele Nestor of Nestor Resources, Matt Ardeno of the Progressive Workshop and Tom Swisher with the Armstrong County Department of Planning and Development.

Mr. Swisher thanked everyone for coming and reminded everyone to sign the attendance sheet.

Mrs. Nestor asked for comments on the draft Introduction and draft Chapter One. Fred Bowser mentioned the report might want to reflect that Parker services part of Butler County. Ken Blake approved the Introduction and Chapter One. After reviewing the data once again, Mrs. Nestor said she agrees with the group that the lost tonnage discussed at the last meeting is probably lost at the transfer stations.

Next, Mrs. Nestor discussed the highlights of Chapters Two, Three and Seven. Chapter Two reviews the infrastructure in place to handle the County's solid waste. Chapter Three looks into the future and projects the land fill usage. Chapter Seven gets into the implementation and administration of the solid waste plan for the County. Mr. Swisher informed everyone the Planning Department has all ready reviewed the chapters and sent comments to Mrs. Nestor. Mrs. Nestor asked the group to review the chapters and send feedback to her directly or to Mr. Swisher at the Planning Department.

While reviewing the Chapters the group came up with the following remarks and suggestions: Shumaker needs added to the list of haulers, Atwood's contract needs investigated and sewage haulers need added to the list. Mrs. Nestor said she will rename the septage hauler section to include sludge haulers. Mr. Blake asked about getting a landfill in the County. Mrs. Nestor said it is extremely difficult and is cost prohibitive. She said many landfills are closing. She also informed the group, the State is going to raise the solid waste taxes by \$1.75 per ton taking the tax to \$9.00 per ton. This tax increase is to fund the Growing Greener program but will probably have a negative impact on the existing landfills within the State.

Mr. Ardeno confirmed that the County owned the Recycle Center building and that the Progressive Workshop operates the building. A 902 Performance Grant and the annual \$35,000 allocation from the County supports the facility. Mr. Ardeno is to supply Mrs.

Nestor with more information about the Recycle Center including: materials, trucks and trailers. Mr. Ardeno informed the group the Progressive Workshop has applied for a grant to purchase more recycling collection trailers.

Mrs. Nestor she is currently writing an ordinance for adoption that will require haulers to register with the County. This is being done to obtain the required data for grant applications and help improve recycling.

Next meeting is scheduled for Tuesday, May 3 at 4:30 pm at Armstrong County Department of Planning and Development.

The sixth SWAC Meeting was held on May 3, 2016 at 4:30 p.m. in the Department of Planning and Development Conference Room. In attendance were: John Williams and Terry VanDyke, committee members; Michele Nestor of Nestor Resources; Matt Ardeno of the Progressive Workshop and Tom Swisher with the Armstrong County Department of Planning and Development.

Sign-in sheet was passed around to obtain attendance.

Mrs. Nestor shared chapters 4 and 5 with the group for review and discussion. Mrs. Nestor talked about the findings within the report should not be too big of a surprise. Volume is up at the recycling center, however, the tonnage and commodity prices are down. During the discussions of the proposed report, the group reviewed figure 4-8 while discussing source material.

Mr. Ardeno informed the group as to how the center utilized a broker for the sale of plastic, how long items were held on site before being sold and how the layout and workspace is utilized at the facility.

The group discussed changing the items that would be recycled at the center. These changes could increase sales, take better advantage of work space and still meet the needs of the County. Mrs. Nestor suggested the center look into recycling clothing and carpeting.

Mrs. Nestor explained the next steps for the plan would be: she would finalize the report, the County would post the Report on their website, the County would send letters to the municipalities looking for feedback, report would be sent to DEP for review and edits would be made per feedback, the Commissioners would vote to adopt the plan.

Appendix K

Executed Capacity Agreements

PLEASE NOTE:

In the original hard copy, published version of the Armstrong County Municipal Solid Waste Management Plan, the executed disposal capacity agreements are inserted behind this cover sheet. The original is kept in the files of the Armstrong County Department of Planning and Development. Printed copies of the Plan do not contain the executed agreements..

- For the cd rom electronic digital version of the plan, the executed disposal capacity agreements are not incorporated into the document, but are provided in a separate folder on the disk.
- For the internet version of the plan, the executed disposal capacity agreements are not incorporated into the document, but are available for review at the offices of the Armstrong County Department of Planning and Development.

