
Greene County Municipal Solid Waste Management Plan

Department of Economic Development

Revised 2010



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Greene County Municipal Solid Waste Management Plan

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“The environment, after all, is where we all meet, where we all have a mutual interest.

It is one thing that all of us share.

It is not only a mirror of ourselves, but a focusing lens on what we can become.”

“Lady Bird” Johnson 1912-2007

Former First Lady

Table of Contents

INTRODUCTION.....	9
CHAPTER 1.....	11
GENERATION AND COMPOSITION.....	11
<i>Understanding Municipal Waste in Greene County</i>	11
An Overview of the County.....	11
Figure 1-1 Map of Greene County	12
Table 1-1 Greene County Population by Municipality	13
General Demographics.....	14
Figure 1-2 Population Density	14
Table 1-2 Greene County Population Density and Housing Units by Municipality	15
Benchmarking.....	15
National and State Municipal Waste Trends.....	16
Figure 1-3 USEPA Composition of Municipal Waste Generated	16
Figure 1-4 PADEP Characterization and Composition of Municipal Waste Disposed	17
Table 1-3 Comparison of National and State Materials Disposed	17
The Impact of Recycling on Waste Generation and Disposal.....	18
Sources of Municipal Waste in Greene County.....	18
Single Family Homes and Multi Family Dwellings.....	19
Commercial Establishments, Government Offices and Buildings, Institutions.....	19
Table 1-5 Federal, State and Local Government Facilities	19
Educational Institutions.....	20
Table 1-6 Other Schools in Greene County	20
Table 1-7 Other Schools in Greene County	20
Residential Care Facilities.....	21
Table 1-8 Greene County Personal Care and Assisted Living Facilities	21
Greene County Waste Generation Rates.....	21
Table 1-9 Estimated Breakdown of MSW Generation by Municipality Based on Countywide Totals	23
Municipal Waste Composition.....	23
Table 1-10 Waste Composition in Southwestern Pennsylvania by Demographic Sector	24
Construction and Demolition Activities.....	24
Infectious and Chemotherapeutic Waste.....	25
Table 1-11 Infectious Chemotherapeutic Waste Sources in Greene County	26
Septage and Sewage Sludge.....	26
Table 1-12 Private Wastewater Treatment Plants in Greene County	27
Community Events.....	27
Table 1-13 Public Wastewater Treatment Facilities and Estimated Biosolids Generation	28
CHAPTER 2.....	29
MUNICIPAL WASTE TRANSPORT AND DISPOSAL.....	29
<i>Greene County's Current Management Practices</i>	29
Collection and Transportation of Municipal Solid Waste.....	29
Transporters of Municipal Waste.....	29
Table 2-1 Waste Transporters Servicing Greene County Area	30
Table 2-1 Waste Transporters Servicing Greene County Area (continued)	Error! Bookmark not defined.
Destination of Greene County's Municipal Waste.....	32
Landfills.....	32
Table 2-2 Landfills with Existing Capacity Agreements for Greene County Waste	32
Arden Landfill.....	33
Chestnut Valley Landfill (CBF).....	33
Greenridge Reclamation Landfill.....	33
Imperial Landfill.....	34
Kelly Run Landfill.....	34
Sanitary Landfill.....	34
Wetzel County Landfill.....	34

Reported Disposal Activity	34
Other Methods of Disposal	35
Illicit Dump Sites	35
Table 2-3 Landfills Reporting Disposed Tons of Greene County Waste 2004	36
Figure 2-1 Illegal Dumping Grounds Identified in Greene County	37
Littering	38
Open Burning	38
Special Handling of Municipal Solid Waste	38
Management of Biosolids and Residential Septage	39
Table 2-4 Sites for Land Application of Biosolids and Residential Septage	39
Septage Transporters	40
Table 2-5 Septage Transporters Operating within Greene County Service Area	40
Infectious Chemotherapeutic Waste Management	41
Table 2-6 Infectious Chemotherapeutic Waste Reported in 2004	41
Assessment of and Recommendations for the Disposal System	41
CHAPTER 3	43
PROJECTING FUTURE CAPACITY NEEDS	43
<i>Assurances from Disposal Facilities</i>	43
Annual Capacity Requirements	43
Table 3-1 Estimated Future Disposal Capacity	44
Waste Flow Control	44
Development of Alternative Technology	45
Impact of Residual Waste and Out of State Waste on Capacity	45
Generation and Management of Residual Waste	45
Table 3-2 Residual Waste Reported from Greene County Generators and Landfills in Tons	46
Out of State Waste	47
Requesting Proposals for Future Disposal or Processing Capacity	47
Figure 3-1 Solicitation for Municipal Solid Waste Disposal Services	48
CHAPTER 4	49
RECYCLING INITIATIVES	49
<i>Evaluating Program Effectiveness and Economics</i>	49
Challenges in Rural Residential Recycling Programs	49
History of the Greene ARC Recycling Program	50
Residential Drop-off Collection System	50
Commercial Recycling Services	50
Table 4-1 Location of Drop-off Collection Sites	51
Accomplishments and Expectations	52
Table 4-2 Greene County Performance and National Trends	53
Impact of Local Recycling Efforts	54
Analyzing the Results	54
Environmental Benefits	57
Table 4-3 Notable Environmental Benefits of Recycling in Greene County	57
Funding the Recycling Program	57
Facts, Figures and Conclusions	58
Future Recovery Potential	58
Availability of Material	58
Table 4-4 Proportion of MSW Materials Generated and Disposed	60
Table 4-5 Potential for Increased Revenue Generation through Material Recovery	62
Methods and Costs of Collecting More Material	63
Curbside Method	63
Table 4-6 Estimated Cost of Comprehensive Public Education Campaign for Greene County	64
Drop-off Method	65
Financial Concerns	65
Reassessing Goals	66
CHAPTER 5	67
NEW OPPORTUNITIES FOR GREENE COUNTY	67

<i>Restructuring for the Future</i>	67
Visions of Improvements	67
Table 5-1 Public Visions for Future Waste Management	68
Table 5-1 Public Visions for Future Waste Management (continued)	69
Pending Changes for Greene ARC.....	70
Relocation and Transition.....	70
Cost Comparison of Current Program and Transitional Alternatives	70
Current Program.....	71
Permanent Drop-Off Facility.....	71
Permanent Drop-Off Facility with a Thrift Store	71
Current Materials Recovery Facility Operations.....	72
Table 5-2 Cost of Operating Current Materials Recovery Facility	72
Permanent Convenience Center Operations.....	73
Table 5-3 Cost of Operating Permanent Convenient Center	73
Drop & Shop Center Operations	74
Table 5-4 Cost of Operating Drop & Shop Center	74
Funding the Programs.....	75
Collection Events.....	75
Household Hazardous Waste	75
Table 5-5 Estimated Costs of Drop-off Program Options Per Municipality	76
Table 5-6 Estimated County/Municipality Shared Costs of Drop-off Program Options	77
Electronics Recycling.....	78
Enforcement and Education	79
Expanding the Recycling Program	79
Paper Retriever Program	79
Institutional Organics Composting	80
Community Waste Exchange.....	81
Setting Priorities and a Schedule for Implementation.....	82
Table 5-7 Proposed Implementation Schedule for Greene County Municipal Solid Waste Management Plan	83
Summary of Recommendations.....	84
CHAPTER 6	85
FACILITIES FOR FUTURE WASTE MANAGEMENT.....	85
<i>Guaranteeing Disposal Capacity without Flow Control</i>	85
Controlling the Flow of Waste	85
Facility Selection Process.....	86
Table 6-1A Review of Proposals for Disposal & Processing Capacity	88
Table 6-1B Review of Proposals for Disposal & Processing Capacity (continued)	89
Table 6-1C Review of Proposals for Disposal & Processing Capacity (continued)	90
Table 6-1D Review of Proposals for Disposal & Processing Capacity (continued)	91
Designating Additional Facilities.....	92
CHAPTER 7	93
IMPLEMENTING AND ADMINISTERING THE PLAN	93
<i>Providing Oversight and Enforcement of the County's Programs</i>	93
Designated Entity.....	93
CHAPTER 8	95
PUBLIC OWNERSHIP AND OPERATION.....	95
<i>The Role of the County and Municipalities</i>	95
Private and Public Sector Participation.....	95
Greene County Facilities and Operations.....	96
CHAPTER 9	97
ORDINANCES, CONTRACTS, LICENSES	97
<i>Tools for Implementation and Enforcement of the Plan</i>	97
Solid Waste and Recycling Transporters Ordinance.....	97
Municipal Waste Disposal Capacity Agreement	97
Petition to Add a Processing/Disposal Facility in the Plan	98

Agreement with Greene ARC.....	98
Resolution to Adopt the Plan Revisions.....	98
CHAPTER 10	99
IMPACT ON EXISTING PROGRAMS.....	99
<i>Methods of Transition.....</i>	99
Transformation of Recycling Program.....	99
Existing Municipal Contracts and Operations	100
Future Research and Recommendations.....	101
CHAPTER 11	102
FAIR AND OPEN MARKET APPROACH	102
<i>Working with the Private Sector.....</i>	102
Sufficient Capacity for All.....	102
APPENDIX A	103
DEFINITIONS	103
Definitions and Acronyms	104
APPENDIX B	121
DISPOSAL CONTRACTS.....	121
<i>Agreements for Secured Capacity.....</i>	121
Contract Provisions.....	122
Form C – Cost of Disposal.....	141
Form D -Reserved Capacity	142
Form D - Part II Reserved Capacity	143
APPENDIX C	145
PETITION TO ADD A PROCESSING/DISPOSAL FACILITY.....	145
Procedures and Instructions to Petitioner	148
APPENDIX D	149
ORDINANCES	149
COUNTY SOLID WASTE AND RECYCLING TRANSPORTERS ORDINANCE.....	150
APPENDIX E	163
AGREEMENT WITH GREENE ARC.....	163
APPENDIX F.....	173
RESOLUTION TO APPROVE PLAN	173
APPENDIX G.....	175
REFERENCES AND ACKNOWLEDGEMENTS	175
APPENDIX H.....	179
MEETING AGENDAS AND PUBLIC COMMENTS	179
Solid Waste Advisory Committee Meeting August 3, 2005.....	180
Solid Waste Advisory Committee Meeting September 22, 2005.....	183
Solid Waste Advisory Committee Meeting June 6, 2006.....	189
APPENDIX I.....	194
ADDENDUMS.....	194

Introduction

The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), placed upon a county the responsibility for securing sufficient disposal capacity for its waste through contractual commitments with landfills or other processing facilities. Additionally, it required a county to demonstrate to what extent it could feasibly attain the state's recycling initiative. In 1993, in accordance with the provisions of Act 101, Greene County set forth plans for the management of Municipal Solid Waste generated within its boundaries for a ten- year period.

A Solid Waste Planning Advisory Committee comprised of municipal officials, representatives of the waste industry, and citizens at large spearheaded the project. Together they determined how municipal waste should be collected, transported, and disposed. The Plan they developed was approved by the County Commissioners, ratified by the municipalities, and accepted by the Pennsylvania Department of Environmental Resources (now the Department of Environmental Protection).

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. In Greene County, however, decisions were made for much of that authority to remain at the municipal level.

The Plan provided numerous benefits to Greene County. By securing disposal capacity in professionally operated state of the art landfills, the County ensured its citizens fair and equitable disposal costs and increased protection from future potential environmental liabilities. The licensing of waste transporters by municipalities reduced the occurrence of illicit dumping in the County thus enhancing public health and safety. Its voluntary recycling initiative conserved valuable natural resources.

This current project evaluated Greene County's ability to implement the existing Plan and to determine its effectiveness. Based on those findings, certain components were revised and programs were altered to compliment the current regulatory climate and the economic resources of Greene County. The document outlines the step-wise process from fact finding through analyses to final recommendations. It also provides a schedule by which the revised Plan must be implemented.

Chapter 1

Generation and Composition

Understanding Municipal Waste in Greene County

Establishing a community's waste profile is the key to planning an effective municipal solid waste management program. It requires gathering reliable and accurate information regarding what types and quantities of wastes are generated and by whom. Demographic factors such as population growth, housing density and business patterns must also be considered. When evaluated together, the sum of information provides a firm foundation upon which solid waste management decisions can be made.

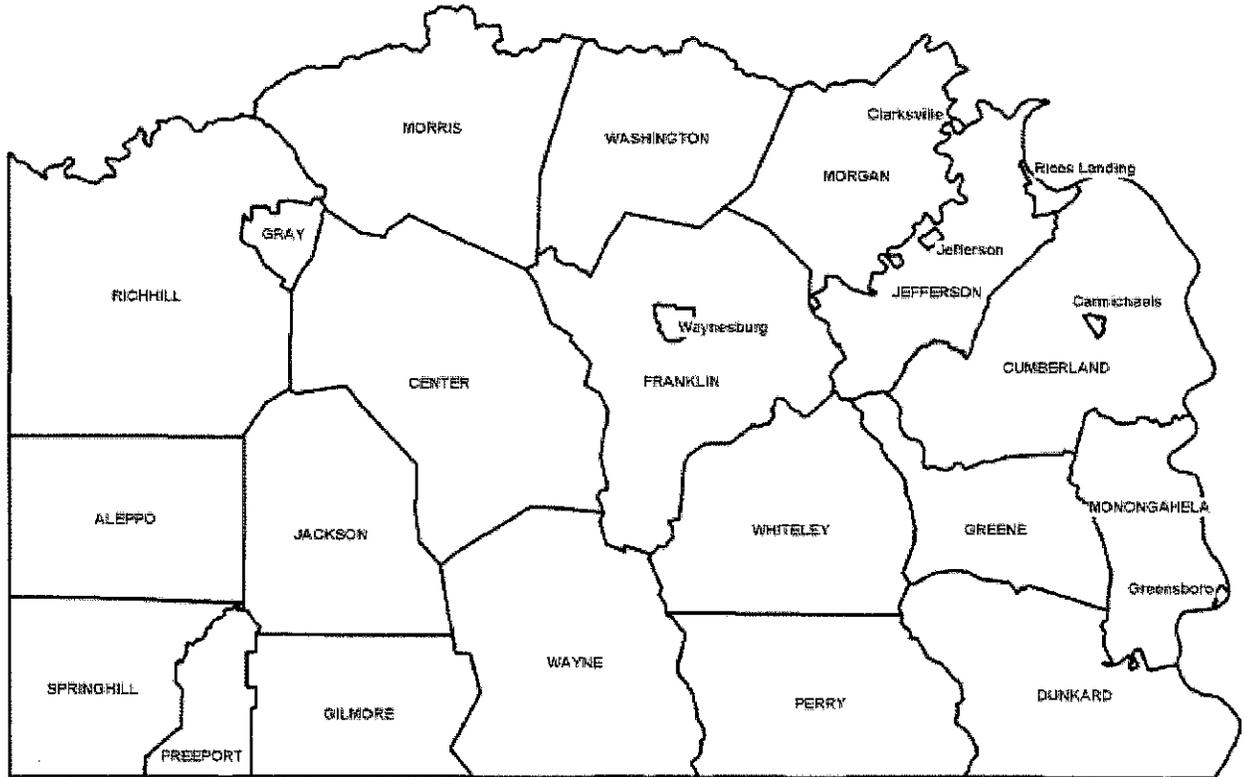
This chapter provides background on the volume of municipal solid waste and those who produce it in Greene County. A combination of tools including, but not limited to: historical data available from the County; data from similar communities and recognized published sources was used to identify current trends and predict future needs.

An Overview of the County

Greene County is located in the southernmost corner of Western Pennsylvania. Its economy, communities, and environment have long been dominated by the coal mining industry, which continues as its largest employer today. The County is abundant with open space. It has largely remained insulated from the suburban sprawl realized in other areas of Western Pennsylvania. Therefore, time and distance factor significantly in the provision and availability of countywide services. Figure 1-1 shows Greene County and its municipalities

In 1975, the U.S. Department of Agriculture developed a series of 10 rural-urban continuum codes to classify counties based on their degree of urban vs. suburban vs. rural character. These codes, ranging from 0 designating the most urban areas to 9 for those most rural, are updated after every decennial census. Greene County falls within the continuum code 6, a category including completely rural counties close to medium or small cities in adjoining counties. It is important to note that no other county in Southwestern Pennsylvania falls into this category.

Figure 1-1 Map of Greene County



A common assumption prevails that people's opinions, lifestyles, and sense of community are similar or dislike one another based on geographic location. In other words, it might be expected that residents in Greene, and neighboring Washington and Fayette counties should show no differences in the overall expectations of or willingness to pay for community services. Additionally, their income, purchasing habits, and subsequently waste generation and management practices would follow identical patterns. However, decades of research support the opposite idea.

According to *Pennsylvania Quality of Life and Views of Local Government: Variations Across the Commonwealth*, published in 2004, the average resident of Greene County differs significantly from a resident in neighboring Washington and Fayette counties. The study is part of an ongoing series conducted annually by the Institute for Public Affairs at Temple University, for civic leaders, policymakers, and researchers. For the series, extensive telephone interviews are conducted regarding such public service issues as:

- Litter prevention
- Road and street maintenance
- Quality of garbage service
- Transportation including roads, freeways, and public transit; and

- Satisfaction with local government officials

The series utilizes the rural urban continuum codes to compare and differentiate data. Their findings confirm the probability that people living within similar codes share common lifestyles. That Greene County stands uniquely among Southwestern Pennsylvania counties in this continuum code, is a leading indicator that its approach and solutions to municipal solid waste management will also differ from its neighbors.

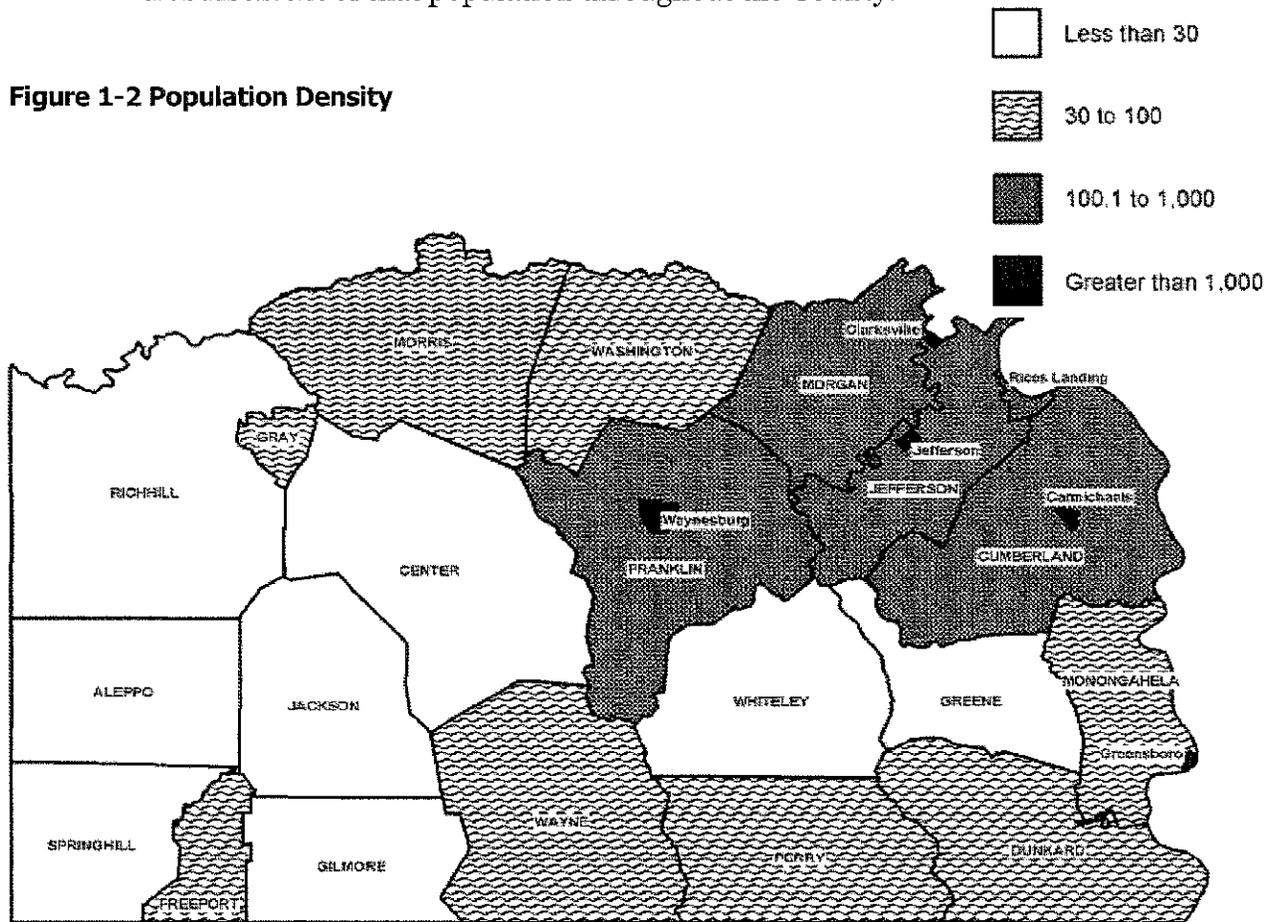
Table 1-1 Greene County Population by Municipality

Greene County	Population
	40,672
Aleppo Township	597
Carmichaels Borough	556
Center Township	1393
Clarksville Borough	234
Cumberland Township	6564
Dunkard Township	2358
Franklin Township	7694
Freeport Township	302
Gilmore Township	295
Gray Township	236
Greene Township	445
Greensboro Borough	295
Jackson Township	516
Jefferson Borough	337
Jefferson Township	2528
Monongahela Township	1714
Morgan Township	2600
Morris Township	1040
Perry Township	1720
Rices Landing Borough	443
Richhill Township	1062
Springhill Township	476
Washington Township	1106
Wayne Township	1223
Waynesburg Borough	4184
Whiteley Township	754

General Demographics

According to the US Census Bureau, 40,672 people lived within Greene County in 2000. That is a slight increase in population when compared with the 1990 census results. While minor fluctuations may occur from year to year, *County Population Projections for Pennsylvania, 1990-2020*, published by the Pennsylvania State Data Center projects neither significant loss nor growth in Greene County's population during the next decade. Table 1-1 shows Greene County's population by municipality. Figure 1-2 and Table 2-1 illustrate the disbursement of that population throughout the County.

Figure 1-2 Population Density



Source Pennsylvania State Data Center

Table 1-2 Greene County Population Density and Housing Units by Municipality

Geography	Population	Housing units	Area in Square Miles	Population per Square Mile
Greene County	40,672	16,678	577.95	70.6
Aleppo Township	597	282	27.27	21.9
Carmichaels Borough	556	255	0.19	3021.2
Center Township	1393	566	48.65	28.6
Clarksville Borough	234	90	0.1	2387.1
Cumberland Township	6564	2893	38.92	171.7
Dunkard Township	2358	1073	31.96	74.5
Franklin Township	7694	2291	40.92	188.2
Freeport Township	302	142	8.66	34.9
Gilmore Township	295	153	21.69	13.6
Gray Township	236	105	3.3	71.5
Greene Township	445	203	18.62	23.9
Greensboro Borough	295	140	0.15	2699.1
Jackson Township	516	228	29.43	17.5
Jefferson Borough	337	147	0.19	1801.8
Jefferson Township	2528	1087	21.76	116.8
Monongahela Township	1714	726	17.83	99.2
Morgan Township	2600	1117	24.55	106
Morris Township	1040	375	35.82	29
Perry Township	1720	771	30.29	56.8
Rices Landing Borough	443	190	0.89	574.8
Richhill Township	1062	518	56.07	19
Springhill Township	476	224	22.1	21.5
Washington Township	1106	435	27.02	41
Wayne Township	1223	536	39.48	31
Waynesburg Borough	4184	1811	0.83	5038.6
Whiteley Township	754	320	31.26	24.1

Benchmarking

An important first step in the development of revisions to the Greene County Municipal Solid Waste Management Plan includes using benchmarks both from within the region as well as those from a broader national approach in order to understand the characteristics of Greene County's municipal waste. This methodology provides better insight on the volume, materials, and overall management options that will have the most significant impact on future solutions.

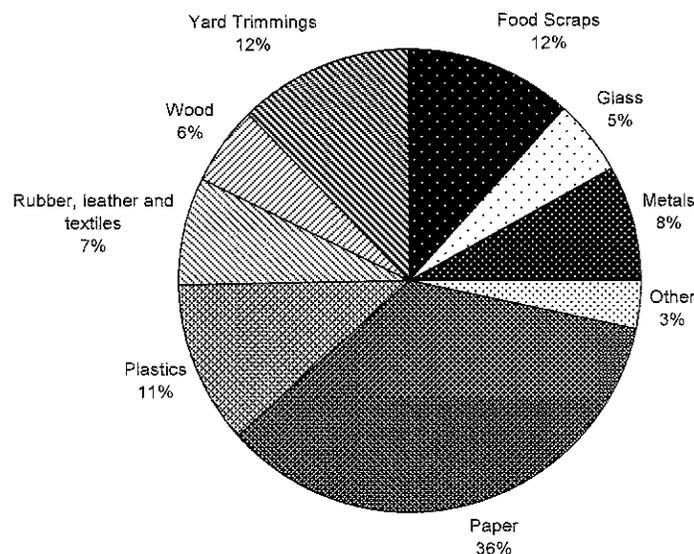
National and State Municipal Waste Trends

Municipal solid waste integrates our daily lives. We all generate municipal solid waste. Newspapers, kitchen scraps, wood, grass clippings, old clothing, cardboard boxes, bottles, cans, appliances, etc. are all considered municipal solid waste. It includes durable goods, non-durable goods, containers and packaging, food wastes, yard wastes, and miscellaneous inorganic wastes from residential, commercial, and institutional establishments.

Figure 1-3 shows a breakdown of the percentage of materials that can be found in municipal solid waste. The illustration is taken from “Municipal Solid Waste in the United States: 2003 Facts and Figures” an ongoing study and series of publications, sponsored by the USEPA, and conducted by Franklin Associates of Kansas. The conclusions in the study are based on data collected from 1960 through 2003. Previously this series of reports was titled, “Characterization of Municipal Solid Waste in the United States” and has often been referred to as “The Franklin Study”. It has served as the definitive survey on the characterization and composition of the national waste stream.

Figure 1-3 USEPA Composition of Municipal Waste Generated

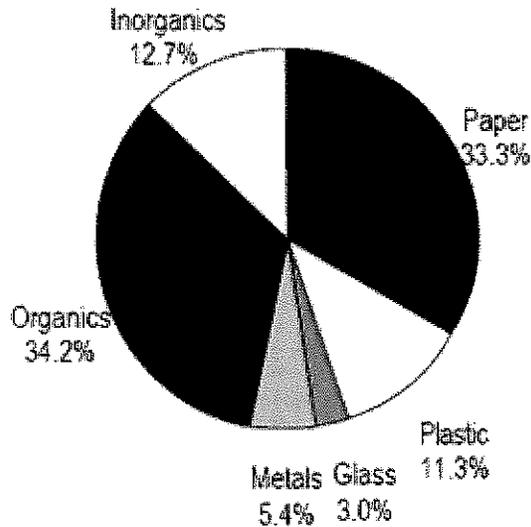
A percentage of each material shown is recovered and diverted from disposal



In 2001, the Pennsylvania Department of Environmental Protection performed a statewide municipal solid waste characterization study of solid waste being disposed in Pennsylvania. The study was designed to estimate the composition of

municipal waste generated and disposed in the Commonwealth. According to the findings, organics (food waste, yard waste, etc.) and paper make up the largest segments of the waste stream, followed by inorganics, plastics, metals, and glass. Figure 1-4 is taken from the PADEP waste composition study, which was developed by R.W. Beck. It shows the aggregate percentage of materials that were found in the overall waste stream in Pennsylvania. It differs in some respects from the national averages.

Figure 1-4 PADEP Characterization and Composition of Municipal Waste Disposed



The USEPA graph shows waste generated and the PADEP graph shows waste disposed. In order to compare the studies more accurately one must look further into the USEPA study to determine the amount of material actually disposed. By subtracting the material recovered and diverted from disposal, and calculating the percentage of each remaining material in the overall amount disposed, a more similar comparison of data is possible. Table 1-3 shows the results of the USEPA and PADEP surveys.

Material	USEPA	PADEP
Organics	24%	34.2%
Paper	27%	33.3%
Metal	7%	5.4%
Glass	6%	3.1%
Plastics	15%	11.3%
Inorganics	21%	12.7%

Successful planning for future waste management program is reliant upon sound data regarding the quantity and type of material being generated. Since no local waste composition studies exist, information from the USEPA and PADEP studies was used to analyze and revise the municipal waste management practices and programs in Greene County.

The Impact of Recycling on Waste Generation and Disposal

The results of recycling specific materials in Pennsylvania is readily visible in Table 1-3 as metal, glass and plastics, are less prevalent in the State's disposed waste stream. Those materials are commonly found in municipal recycling programs due to the provisions of Act 101, the Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988. The percentages for glass, plastics, and metal could be skewed, however, by a disproportionate higher percentage of other materials disposed. Noticeable are the amounts of organics and paper found in Pennsylvania landfills, from 5-10% higher than the national average. Organics are often banned from landfills and targeted for large scale composting in other areas. Aggressive paper and corrugated cardboard recovery programs are also implemented. The local impact of designating certain materials for recycling in Greene County was an important consideration during the planning process.

Sources of Municipal Waste in Greene County

Determining what is municipal waste is based as much on who generates it or where it was generated as it is on specific physical characteristics of the material. According to the Pennsylvania Environmental Quality Board's Municipal Waste Regulations, municipal waste is 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" from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility.

That is a rather broad and inclusive categorization of materials for the County to manage. Municipal waste is generated where we live, work, and play. Every household, business, and community activity within Greene County is a generator of municipal waste in some form. A variety of sources can be identified as generators of the type of municipal waste with which most of us are familiar. They include residences, commercial establishments, government buildings, institutions, and community events. Others generate special types that are less recognizable as municipal solid waste to the average person. Therefore, as the County revised its Plan for proper solid waste management it examined many factors to ensure that the special needs and conditions of all of these entities were considered and incorporated.

Single Family Homes and Multi Family Dwellings

The most significant amount of municipal waste is generated in private homes. Families and individuals living in a detached home, a condominium, a trailer, or an apartment high-rise, all are residential municipal waste generators.

Commercial Establishments, Government Offices and Buildings, Institutions

The remainder of the general municipal waste stream can be attributed to retail stores, restaurants, offices, prisons, schools, hospitals, nursing homes, and similar facilities. While they differ in their functions and operations, they are similar in the manner in which their waste is stored and collected for disposal. In addition, many of the types of material found within the waste stream share the same characteristics. Therefore, it is easier to quantify these wastes into the commercial category as a whole although separate programs may be established for overall management of material at each type of location.

Table 1-5 Federal, State and Local Government Facilities

FEDERAL	STATE	COUNTY and LOCAL
United States Post Offices	Liquor Stores	Greene County Government Agencies
Congressional Representatives	State Department of Highways	Greene County Courthouse
	State Correctional Institution	Greene County Jail
	Bureau of Vocational Rehabilitation	Greene County Industrial Development Authority
	Department of Agriculture	County Fairgrounds
	Department Of Labor & Industry	Greene County Tourist Bureau
	Department of Health	District Magistrates and Justices
	Department of Public Welfare	Township and Borough Offices
	Driver's License Center	Municipal Authority Offices
	PA National Guard Company C 110 th Infantry	Police and Fire Departments
	Pennsylvania State Police	Public Libraries
	Parks and Recreation	
	State Congressional Representatives	

Educational Institutions

Five major public school districts, with student enrollments from primary through secondary, represent the largest segment of educational institutions in Greene County. Other learning centers also exist. These include a college, technical and vocational schools, and private schools. Tables 1-6 and 1-7 list by category the educational facilities within the County.

Table 1-6 Other Schools in Greene County

<p style="text-align: center;">CENTRAL GREENE</p> <ul style="list-style-type: none">• Waynesburg Central Elementary• Perry Elementary• Margaret Bell Miller Middle School• Waynesburg Central High School	<p style="text-align: center;">WEST GREENE</p> <ul style="list-style-type: none">• Aleppo Elementary• Graysville Elementary• Spring-Freeport Elementary• West Greene Middle School• West Greene High School
<p style="text-align: center;">SOUTHEASTERN GREENE</p> <ul style="list-style-type: none">• Bobtown Elementary• Mapletown Junior-Senior High School	<p style="text-align: center;">CARMICHAELS GREENE</p> <ul style="list-style-type: none">• Carmichaels Area Elementary• Carmichaels Area Junior High School• Carmichaels Area Senior High School
<p style="text-align: center;">JEFFERSON MORGAN</p> <ul style="list-style-type: none">• Jefferson-Morgan Elementary• Jefferson-Morgan Middle School• Jefferson-Morgan High School	

Table 1-7 Other Schools in Greene County

<p style="text-align: center;">PRIVATE SCHOOLS</p> <ul style="list-style-type: none">• Open Door Christian School• Rightway Academy	<p style="text-align: center;">COLLEGES</p> <ul style="list-style-type: none">• Waynesburg University of Pennsylvania• Westmoreland County Community College <p style="text-align: center;">VOCATIONAL AND TECHNICAL</p> <ul style="list-style-type: none">• Greene County Vocational Technical• Greene County Career Center
--	--

Residential Care Facilities

Along with Southwest Regional Medical Center, formerly Greene County Memorial Hospital, numerous skilled nursing, personal care, and assisted living facilities are found in the County. Due to the nature of their operations, a portion of the municipal waste generated in these facilities falls into a special category known as infectious chemotherapeutic waste. Table 1-8 shows the residential care facilities in Greene County.

Table 1-8 Greene County Personal Care and Assisted Living Facilities	
Evergreen Assisted Living Cedar Ridge Road Waynesburg, PA 15370	Ewing Manor 414 Jefferson Road Waynesburg, PA 15370
Ewing Manor West W. Roy Furman Highway Rogersville, PA	Haney's Personal Care Home 330 Carmichaels Street, Rices Landing, PA 15357
Scenic View Retirement Home Inc 190 Valley Church Road, Graysville, PA 15337	Precious Moments Personal Care 212 Randolph Street, Carmichaels, PA 15320
RespiCenter West 545 West High Street, Waynesburg, PA 15370	Braun's Personal Care Home 324 South Washington Street, Waynesburg, PA 15370
Golden Living Center 300 Center Avenue Waynesburg, PA 15370	Rolling Meadows Nursing Home 107 Curry Rd Waynesburg, PA 15370

Greene County Waste Generation Rates

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

Nationally, the majority of the population resides in urban and suburban areas. Greene County is predominantly rural in nature, as demonstrated by its rural-urban continuum code. About 80% of the population is rural, compared to Pennsylvania and nationally, where about 75% of the population resides in urban areas.

Nationally, and statewide the average MSW generation rate is about 0.8 ton per person per year or 4.38 lbs per person per day. The USEPA and the PADEP both utilize this standard of measurement when no local information is available.

Studies have shown that MSW disposal rates are lower in rural areas. Factors contributing to this situation include:

- **Open burning**

Paper and paper products account for approximately 39% of the total MSW nationally. Incineration, either through open burning or for heating purposes, is commonly used to dispose of a portion of these materials in rural locations.

- **Yard trim practices**

Reduced quantities of yard waste are common in rural areas. Yard waste accounts for approximately 13% of the total MSW nationally. In rural locations, these materials are often not collected or disposed by burning or composting.

- **Fewer and smaller newspapers**

Newspapers account for approximately 6% of the total MSW nationally. Lower subscription rates and smaller newspapers are factors that reduce the quantity of waste newspaper generated. Disposal through incineration is also a factor.

- **Alternative food waste management**

Food wastes account for approximately 10% of the total MSW nationally. Disposal through composting, animal feeding, or incineration are all factors that tend to reduce the quantity of food waste generated.

R.W. Beck for the Pennsylvania Department of Environmental Protection conducted a study of materials actually disposed in Pennsylvania landfills in 2001. The municipal solid waste composition study indicated that for Southwestern Pennsylvania, the average rate of municipal solid waste disposed was 3.92 lb per person per day. Using this area's average recycling rate of 15%, the expected diverted tons were applied to determine that the waste generation rate for Southwestern Pennsylvania was 4.50 lb per person per day. This figure compares well with the national and statewide average.

The same study presents figures for Greene County. The average disposal rate for the County was 2.93 lb per person per day. Including an additional 600 tons per year of reported recyclable material and an additional 4000 tons per year estimated to be directly recycled by commercial sources, yields an estimated

MSW generation rate of 3.55 lbs per person per day. This figure is about 80% of the state and national average. Table 1-9 shows the estimated waste generation per municipality based on the County's overall rate. The estimated portion of municipal waste projected to be generated by residents and commercial sources is illustrated.

Table 1-9 Estimated Breakdown of MSW Generation by Municipality Based on Countywide Totals			
Municipality	Total MSW Generated Tons per Year	Residential Tons per Year	Commercial Tons per Year
Aleppo Township	387	271	116
Carmichaels Borough	360	252	108
Center Township	902	632	271
Clarksville Borough	152	106	45
Cumberland Township	4,253	2,977	1,276
Dunkard Township	1,528	1,069	458
Franklin Township	4,985	3,489	1,495
Freeport Township	196	137	59
Gilmore Township	191	134	57
Gray Township	153	107	46
Greene Township	288	202	86
Greensboro Borough	191	134	57
Jackson Township	334	234	100
Jefferson Borough	218	153	66
Jefferson Township	1,638	1,146	491
Monongahela Township	1,110	777	333
Morgan Township	1,684	1,179	505
Morris Township	674	472	202
Perry Township	1,114	780	334
Rices Landing Borough	287	201	86
Richhill Township	688	482	206
Springhill Township	308	216	93
Washington Township	717	502	215
Wayne Township	792	555	238
Waynesburg Borough	2,711	1,897	813
Whiteley Township	488	342	147
COUNTY	26,350	18,445	7,905

Municipal Waste Composition

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

Table 1-10 Waste Composition in Southwestern Pennsylvania by Demographic Sector				
	Demographic Sector			
Material	Urban	Suburban	Rural	Aggregate
Paper	35.2%	32.0%	30.3%	32.1%
Plastic	8.2%	11.7%	11.2%	11.1%
Glass	2.2%	1.8%	2.9%	2.1%
Metals	5.0%	7.0%	7.6%	6.8%
Organics	35.5%	34.5%	33.5%	34.4%
Other Waste	14.0%	12.9%	14.5%	13.4%
Total	100.0%	100.0%	100.0%	100.0%

Another factor that the waste composition study revealed was a difference in the proportion of wastes from residential and commercial sources in rural areas. Statewide the ratio was 64% residential to 36% from commercial sources. In rural areas, the ratio was 72% to 28%. In analyzing data from Greene County, which is 80% rural, a ratio of 70% residential to 30% commercial was used. The average waste generation rate in Greene County is estimated to be 3.55 lb per person per day. The quantity generated from residences is 70% of this figure, or 2.48 lb per person per day.

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

Construction and Demolition Activities

Just as the name indicates, building, remodeling, and destruction of structures result in construction and demolition waste. Both residential and commercial generators are responsible for these activities. Because construction and demolition activities vary based on economic and seasonal conditions, the volume of material fluctuates more so than municipal waste as a whole. Therefore, it is much more difficult to project generation rates and quantities for a long term. Contributing to that difficulty is the lack of universal documented disposal activity. Inconsistent practices for collection, disposal, and reporting utilized by those involved make this a difficult type of waste to quantify accurately. A portion is disposed in out of state facilities that are not required to report construction demolition waste to a regulatory agency. Some waste that is classified as

industrial residual waste is considered construction demolition waste in other states causing the data to be inaccurate.

Complicating the tracking of disposal is the manner in which construction demolition waste is handled by the generators. Unlike MSW, C&D waste is not consistently collected and transported by municipalities or through ongoing arrangements with private garbage haulers. Much of it is handled by construction demolition contractors, or homeowners and businesses that generate the waste. These transporters commonly misidentify the origin of the waste when asked at a landfill. Whether due to lack of awareness, regulations controlling self-haulers or enforcement the material does not always make its way to a proper disposal facility. Some of the material is burned on construction sites and is never accounted. Another common method used by homeowners and contractors is illicit dumping.

On the other hand, all material that does not reach a landfill is not necessarily improperly managed or disposed. A good portion of brick and concrete and other masonry materials are used as clean fill. Resourceful contractors reuse doors, windows, hardware, etc. in other project applications.

Infectious and Chemotherapeutic Waste

Hospitals have traditionally been thought of as the primary generators of Infectious and Chemotherapeutic Waste (ICW). At one time, it was common for many of them to operate incinerators or autoclave units for onsite treatment and disposal. The decreasing volume of ICW at hospitals combined with tougher regulatory constraints for permitting and operating the incinerators have resulted in the abandonment of most on site units. Consequently, commercial transporters and treatment facilities developed in direct proportion to the demand for services.

In an attempt to control escalating costs outpatient medical care has grown in popularity and many of the procedures that formerly required hospitalization are now performed in the offices of physicians, dentists, and varying health practitioners as well as other resident care facilities. In counties with lower populations, centralized hospitals without patient services remain the primary generators of ICW. Service offerings the Southwest Regional Medical Center, formerly Greene County Memorial Hospital, confirm that assumption. Nevertheless, some ICW is still generated at the other remote facilities.

The amount of Infectious Chemotherapeutic Waste estimated in Greene County was calculated using the expected rate of generation by type of facility or medical practice, documented in the *Pennsylvania Infectious and Chemotherapeutic Waste Plan, 1990*. Hospital waste generation was adjusted to reflect the actual size of the operation based on number of employees (approx 300), rather than usual generation by a much larger facility. The results are shown in Table 1-11

Table 1-11 Infectious Chemotherapeutic Waste Sources in Greene County

Type of Facility	Number of Establishments	Estimated Annual ICW Generation in Tons 2005	Projected Annual ICW Generation in Tons 2015
Hospitals	1	26	30
Physicians	22	2	2
Dentists	8	1	1
Health Practitioners	14	2	2
Dialysis Centers	2	13	15
Outpatient Care Centers	8	1	1
Home Health Care Services	3	.50	1
Veterinary Practitioners	5	1	1
Funeral Homes	7	.50	1
Nursing or Residential Care Facilities	12	8	8
Total	84	55	62

Septage and Sewage Sludge

In 2004, the National Resources Defense Council (NRDC) published a report *Pollution Unchecked: A Case Study of Greene County, Pennsylvania*. The study focused on sources of air and water pollutants in the Monongahela Watershed. Pollution from sewage was one of the issues considered. According to the NRDC, as of 1997, approximately 90 percent of the Monongahela riverfront in Fayette and Greene Counties was not covered by municipal treatment service. Consequently, many communities along the river corridor and throughout Greene County rely on on-lot septic systems. The report claims that many of the on-lot systems do not use conventional septic tanks but rather discharge directly into the waterways of the County.

Many other Greene County communities have developed the proper infrastructure to collect and treat wastewater from its residents. Additionally, private developments, institutions and other facilities provide for wastewater pre-treatment at other locations throughout the County. These facilities are typically serviced by septage haulers, which transport the pre-treated liquid to a final treatment facility or for beneficial land application. Table 1-12 shows the private treatment facilities in Greene County.

Table 1-12 Private Wastewater Treatment Plants in Greene County		
Facility	Site ID	Municipality
Emerald Mine	251673	Center Township
Duquesne Light	252601	Dunkard Township
Titus Deep Mine	252641	Dunkard Township
Shuppe Rentals Trailer Park	613666	Dunkard Township
Dana Mining Company 4 West Mine	624403	Dunkard Township
Riviera Mobile Home Park	464479	Dunkard Township
Consol Coal Bailey Deep Mine	261050	Gray Township
PA Department of Corrections	251983	Morgan Township
Reesman Mobile Home Park	237789	Morgan Township
Cumberland Mine	480970	Perry Township
Pennsylvania DCNR Ryerson State Park	249824	Richhill Township
Greene ARC	237768	Washington Township
Davis Co, LLC Spraggs Elementary School	248866	Wayne Township
Welcome Centers Interstate 79	237886	Whitely Township

The overall amount of biosolids generated within Greene County is estimated to be 4169.5 tons per year. A breakdown of estimated biosolids generation by municipality is shown in Table 1-13. The estimates are based on the PADEP study, which indicates that it is reasonable to expect each Greene County household to generate approximately .25 tons of biosolids per year. Table 1-13 also shows which municipalities are serviced by a specific POTW.

Community Events

The National Solid Waste Management Association released a technical bulletin in 1985 that listed the amount of waste generated by tourists under a variety of conditions. The bulletin indicated that during a daylong event, depending upon the types of refreshments and activities available at each event, an average of 3 lbs. of waste per attendee per day can be expected. It is assumed that this includes waste generated by the vendors, as well. Greene County hosts several

major fairs and festivals during the year. These include; the Greene County Fair; Jacktown Fair; Pennsylvania Bituminous Coal Festival; Sheep and Fiber Fest; and Riverfest. A number of smaller events also occur throughout the year.

Table 1-13 Public Wastewater Treatment Facilities and Estimated Biosolids Generation			
Geography	Served by Wastewater Treatment Plant	Housing units	Tons per Year
Greene County		16,678	4169.5
Aleppo Township		282	70.5
Carmichaels Borough	Carmichaels Cumberland Joint Sewer Authority	255	63.75
Center Township	Rogersville Wastewater Treatment Plant	566	141.5
Clarksville Borough	Lower Ten Mile Joint Sewer Authority	90	22.5
Cumberland Township	Carmichaels Cumberland Joint Sewer Authority & Crucible Wastewater Treatment Plant	2893	723.25
Dunkard Township	Dunkard Bobtown Sewer Authority	1073	268.25
Franklin Township	Franklin Township Sewage Authority	2291	572.75
Freeport Township		142	35.5
Gilmore Township		153	38.25
Gray Township		105	26.25
Greene Township		203	50.75
Greensboro Borough	Greensboro Monongahela Joint Sewer Authority	140	35
Jackson Township		228	57
Jefferson Borough	Lower Ten Mile Joint Sewage Authority	147	36.75
Jefferson Township	Lower Ten Mile Joint Sewage Authority & Dry Tavern Sewer Authority	1087	271.75
Monongahela Township	Greensboro Monongahela Joint Sewer Authority	726	181.5
Morgan Township	Lower Ten Mile Joint Sewage Authority	1117	279.25
Morris Township		375	93.75
Perry Township	Mount Morris Water and Sewer Authority	771	192.75
Rices Landing Borough	Rices Landing Sewage Treatment Plant	190	47.5
Richhill Township		518	129.5
Springhill Township		224	56
Washington Township		435	108.75
Wayne Township	Brave Water & Sewer Authority	536	134
Waynesburg Borough	Waynesburg Borough Wastewater Treatment Plant	1811	452.75
Whiteley Township		320	80

Chapter 2

Municipal Waste Transport and Disposal

Greene County's Current Management Practices

The primary responsibility of each county in the planning process is to ensure that adequate disposal capacity is provided for municipal waste generated within its boundaries. Additionally, it must encourage proper storage and collection practices to protect the health and safety of its citizens. This chapter outlines how each type of municipal solid waste from Greene County is currently collected, transported, and where it is ultimately processed and disposed.

Collection and Transportation of Municipal Solid Waste

Whether from residents, businesses, or institutions, municipal solid waste is collected by a variety of private operators and transported to landfills or alternative disposal facilities. In some instances, municipalities secure these services for their residents through a competitive bidding process. Typically, transporters contract directly with homeowners or commercial establishments. Service is widely available throughout the County. Nevertheless, by either personal choice or economic circumstances, many do not opt to have waste collection. Occasionally, this decision is justified by individual efforts of conservation and use of environmentally friendly alternatives. However, most often, the absence of collection service signals the presence of undesirable disposal methods and environmental pollution.

Transporters of Municipal Waste

The Waste Safety Transportation Program, Act 90, was signed into law by the Governor in 2002. The program requires owners of waste transportation vehicles that regularly transport municipal or residual waste to a processing or disposal facility in the Commonwealth to obtain written authorization from PADEP. It prohibits municipal or residual waste processing or disposal facilities from accepting waste from vehicles that do not have a valid authorization sticker. Transporters that collect waste in Pennsylvania but utilize an out of state disposal

Table 2-1 Waste Transporters Servicing Greene County Area

Name	Address	County	PADEP Authorization	Vehicles
Hilltop Hauling	PO Box 10 Holbrook, PA 15341 (724) 852-2639	Greene	no license	1
D.C. Hauling	154 Old 21 Road Waynesburg, PA 15370 Phone: 724-627-9107	Greene	No license	1
William Becker	302 S Washington St Waynesburg, PA 15370- (724) 627-0303	Greene	WH5505	3
PENNDOT	Jefferson Road, Waynesburg, PA 15370 (724) 627-6131	Greene	WH2240	5
Rohanna Iron & Metal Inc	100 Jennings Avenue, Waynesburg, PA 15370 (724) 627-3164	Greene	WH0182	6
Thralls Contracting	222 Tollgate Run, Waynesburg, PA 15370 (724) 627-5829	Greene	WH6157	1
Wayne Lumber	542 West High Street, Waynesburg, PA 15370 (724) 627-3171	Greene	WH7232	1
Preferable Sanitation	306 Bunner Hill Road Mt Morris, PA 15349 (724) 324-9162	Greene	WH0006	1
Greene Waste Services	Greensboro, PA 15338 (724) 943-4232	Greene	WH2677	3
Holzer and Jesko	Mather	Greene	WH6679	1
Jason D.McDiffitt	Carmichaels, PA	Greene	WH4694	1
Clarksville Sanitation	540 Center Street, Fredericktown, PA 15333 (724) 377-1929	Washington	WH5796	1
Waste Management of PA Inc	Arden Station Road, Washington, PA 15301 (724) 222-3272	Washington	WH1436	11

Rozner's Refuse	1070 Wayne St, Washington, PA 15301 (724) 222-7711	Washington	WH0964	2
Veolia Waste Services	1184 McClellandtown Road, Mc Clellandtown, PA 15458 (724) 437-7336	Fayette	WH1502	29
J C Sanitation	McClellandtown PA 15401 (724) 425-9702	Fayette	WH2442	7
Kathryn Trucking	McClellandtown PA 15401	Fayette	WH2119	3
Fayette Waste	632 Old Route 51, Waltersburg, PA 15488 (724) 430-0100	Fayette	WH3215	8
Lynch Sanitation	Perryopolis	Fayette	WH0591	2
Marilungo's Disposal Service	15401 LeMont Furnace (724) 438-2602	Fayette	WH0111	1
D. B. Disposal	433 Rehobath Church Rd, Perryopolis, PA 15473 (724) 736-0937	Fayette	WH0161	11
County Hauling Corporation	901 Tyrol Boulevard, Belle Vernon, PA 15012 (724) 929-7694	Fayette	WH0048	10
Agape Trucking	RR 906, Belle Vernon, PA 15012 (724) 684-7388	Fayette	WH3443	5
Walls Sanitation	Blacksville, WV 26521 (304) 432-8300	West Virginia	WH3234	5

facility are not required to obtain authorization. Self-haulers of small quantities of waste are exempted from the license also.

Table 2-1 lists the licensed transporters of municipal waste operating within Greene County. It is important to note that not only those who collect municipal waste from residences and businesses are required to be licensed, but also those who haul construction demolition debris and significant quantities of materials from their own operations. Therefore, builders, developers, roofers, and remodeling contractors fall into this category.

Destination of Greene County's Municipal Waste

Greene County is situated near one of the highest concentrations of active disposal facilities in the country. Western Pennsylvania, Eastern Ohio, and the Panhandle of West Virginia provided optimal conditions for landfill operations owned by private interests and municipal government. Here, abandoned strip mines, idle farmland, and low population density, made real estate affordable and disposal service a profitable investment. Many of the original facilities are now closed and inactive. Those with financial resources and the ability to withstand the scrutiny of stricter regulatory controls and exclusionary criteria survived. In spite of the closures, landfill capacity remains abundant and exceeds the available volume of waste generated locally. Consequently, competition is high, tipping fees low, and landfills continue as the most feasible and economical disposal option today.

Landfills

There are no active permitted municipal waste disposal facilities remaining in Greene County. All of the sites previously operated by municipal government or private owners have closed. Fortunately, affordable disposal capacity is available within close proximity of the County. During the development of the County's Municipal Solid Waste Management Plan, approved in 1995, the Board of Commissioners of Greene County sought and secured capacity agreements with landfills for a period of ten years. These expired in 2006. The agreements offered no guarantee to deliver a specified amount of waste. The volume each landfill receives was and is dependent on its own collection and transport capabilities or upon its relationships with independent haulers. Facilities, which entered into agreements securing disposal capacity for Greene County, are shown in Table 2-2.

A brief description of each landfill, its current overall operation, and its remaining permitted capacity follows.

Table 2-2 Landfills with Existing Capacity Agreements for Greene County Waste				
Landfill	Permit	County/ Municipality	Address	Owner/Operator
Arden	100172	Washington/ Chartiers Twp	200 Rangos Ln Washington, PA 15301	Waste Management
Chestnut Valley CBF/J&J	100419	Fayette/ German Twp	1184 McClellandtown Rd McClellandtown, PA 15458	Onyx

Greenridge Reclamation	100281	Westmoreland/ E. Huntington Twp	RR 1 Box 716, Landfill Rd Scottdale, PA 15683	Allied/BFI
Imperial	100620	Allegheny/ Findlay Twp	11 Boggs Rd P O BOX 47 Imperial, PA 15126	Allied/BFI
Kelly Run Sanitation	100663	Allegheny/ Forward Twp	P O BOX 298 Elizabeth, PA 15037	Waste Management
Sanitary	100277	Westmoreland/ Rostraver Twp	901 Tyrol Blvd Belle Vernon, PA 15012	Westmoreland Waste LLC
Wetzel County Sanitary	102192	Wetzel/ New Martinsville	Route 1 P.O. Box 156A New Martinsville, WV 26155	J.P. Mascaro Lackawanna Transport

Arden Landfill

Arden Landfill is owned and operated by Waste Management, Inc. The site is located in Chartiers Township, near Canonsburg in Washington County, Pennsylvania. The site is permitted to receive 2,800 tons per day. At the time this document was being written, the landfill was in the process of renewing its operating permit for another ten years. Waste originating in Greene County is transported to the facility primarily by Washington Hauling, a Waste Management, Inc. company.

Chestnut Valley Landfill (CBF)

Veolia Environmental currently owns and operates the Chestnut Valley Landfill located in German Township, Fayette County. This landfill is known locally as CBF, most likely from past ownership. Its permit expires in 2010. The site can currently accept 1500 tons of waste per day. Veolia through its company CBF, Inc. transports Greene County waste to the facility. Additionally, independent haulers operating throughout the County are known to utilize the landfill for disposal.

Greenridge Reclamation Landfill

Owned and operated by Allied Waste Industries, Greenridge Reclamation is located in Scottdale, Westmoreland County. Distance and a lack of presence by an Allied Waste commercial and/or residential hauling division most likely hamper the landfill's ability to receive municipal solid waste from Greene County. The

landfill is currently permitted to accept up to 2,500 tons of material Its current operating permit expires February 1, 2012.

Imperial Landfill

Located in Findlay Township, Allegheny County, Imperial Landfill is also owned and operated by Allied Waste Industries. Imperial can accept up to 4,666 tons of waste per day and has a remaining permitted life of approximately 3 years. Similar to Greenridge, without commercial and residential collection routes present, its opportunity to receive Greene County municipal solid waste is diminished.

Kelly Run Landfill

Waste Management, Inc. also owns and operates Kelly Run Landfill. The facility receives an average of 500 tons per day with an average of less than 2 tons originating in Greene County. Located in Elizabeth Township, Allegheny County, its operational permit was renewed in 2005 and thus should not expire until 2010.

Sanitary Landfill

Sanitary Landfill operates in Belle Vernon, Rostraver Township, Westmoreland County, Pennsylvania. The landfill was issued a permit renewal in 2003 providing the site with a remaining 7 years of capacity and the ability to receive 2500 tons per day. Local independent haulers utilize the facility for disposal of waste from Greene County.

Wetzel County Landfill

Owned and operated by J.P. Mascaro and Sons, Wetzel County Landfill is located in New Martinsville, Wetzel County, West Virginia. The landfill receives waste primarily from Wetzel and surrounding counties in West Virginia and Pennsylvania. It is suspected that waste originating in Greene County is hauled to the site by independent haulers. However, no waste has ever been reported as disposed there.

Reported Disposal Activity

Most of the municipal solid waste collected in Greene County is disposed in landfills with capacity contracts. Through lower tipping fees, convenience, or misreporting, some appears to be delivered to facilities without Greene County disposal agreements. It is suspected that a minimal amount goes unreported by out-of state landfills, with or without capacity contracts. Table 2-3 illustrates the

types and amounts of waste from Greene County reported by Pennsylvania landfills in year 2004.

Other Methods of Disposal

Waste management options for residents of rural communities are often more utilitarian than those available in an urban setting. Backyard food and yard waste composting are more readily practiced since space constraints, proximity of neighbors and odor concerns are not an issue. Many store and self haul household waste to a local landfill. Different buying habits combined with self-reliant lifestyles create an environment where packaging is minimal and items are often accumulated and reused many times rather than recycled. While these methods are all admirable, some questionable disposal concerns are often inflicted upon rural areas by local homeowners, as well as, by non-residents.

Illicit Dump Sites

For years, rural areas have been the target of illegal dumping practices. Originally, permanent sites, though not “legal”, were developed out of necessity by the local residents. Organized municipal waste collection was often not available in more remote sections. Therefore, waste was “managed” by openly dumping in commonly known areas that typically contained material generated in the neighborhoods nearby.

Today, residential waste collection is available through subscription in nearly all parts of Greene County. It is rare, although not impossible, to see household putrescible waste thrown over a hillside, stream embankment or forested area. That is not to say that other types of illicit dumping are non-existent.

While Greene County’s communities themselves may have improved their waste management practices, many neighborhoods still find themselves the victims of random dumping. Although the sites have dramatically reduced in numbers, one can still spot dumping grounds for unwanted furniture, appliances, carpet

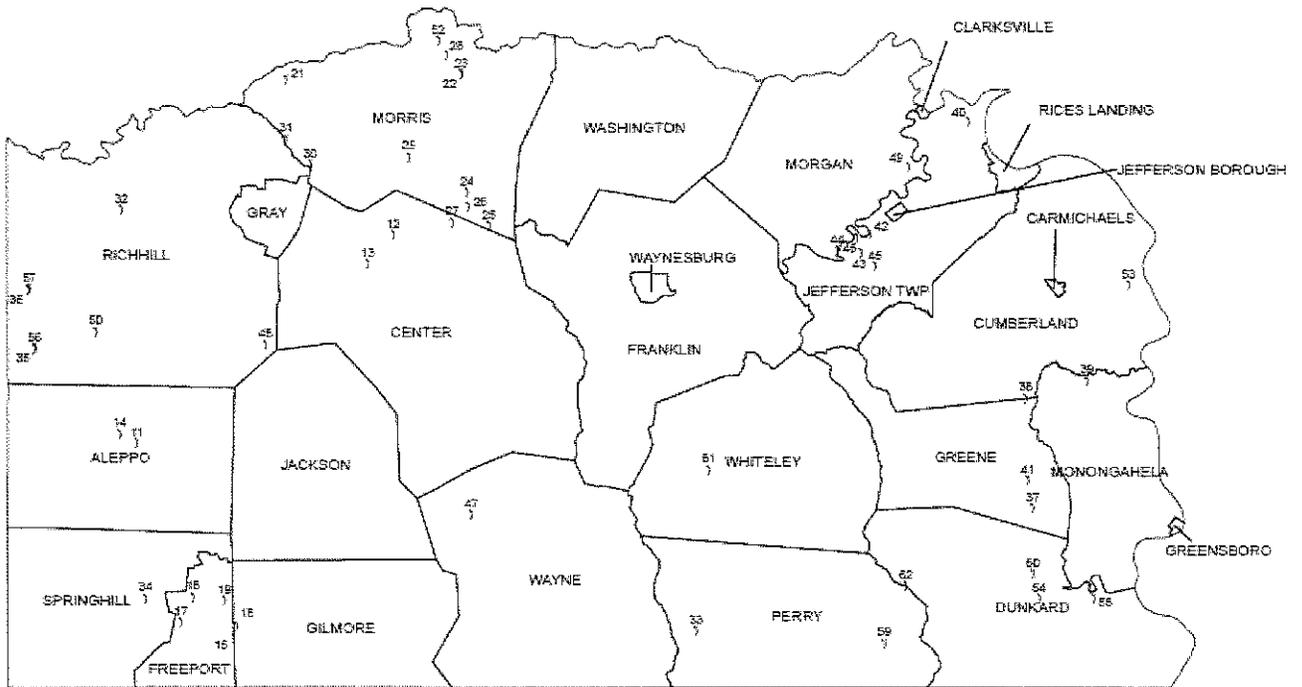
Table 2-3 Landfills Reporting Disposed Tons of Greene County Waste 2004

Landfill	Owner	Permit	County	Municipal	Residual	Sludge	Construction	Asbestos	Total Tons
Arden	Waste Management	100172	Washington	9119.4	0	177.2	3014.5	0	12311.1
Chestnut Valley/ CBF	Veolia	100419	Fayette	10565.2	8863.5	1038.7	1131.2	4.7	21603.3
Greenridge Reclamation	Allied Waste	100281	Westmoreland	0	879.1	0	0	0	879.1
Imperial	Allied Waste	100620	Allegheny	0	77.7	0	35.7	35.9	149.3
Sanitary	Westmoreland Waste	100277	Westmoreland	4017.8	08.3	0	239.1	9.6	4274.8
Shade Township	Waste Management	101421	Somerset	20.3	0	0	0	0	20.3
Total				23,722.70	9,828.60	1,215.90	4,420.50	50.20	39,237.90

remnants and other end of season debris. Equally common are discarded automobile and large truck tires. These sites present a financial burden to municipal officials charged with the removal and disposal of the unwanted debris.

Greene County has an active chapter of the statewide organization PA Cleanways. This non-profit group coordinates local volunteers to identify and remove debris from illegal dumpsites. In 2007, PA Cleanways completed a survey of illegal dumping sites located in the County. 49 sites with nearly 500 tons of debris were identified through these efforts. Many of the sites were targeted for clean-up events and successfully remediated by the organization. Figure 2-1 shows the dump sites. It is probable that many more sites exist.

Figure 2-1 Illegal Dumping Grounds Identified in Greene County



Source Pa Cleanways Greene County

Littering

As in other areas of Western Pennsylvania, uncaring motorists and pedestrians thoughtlessly discard paper, cans, bottles and cigarettes on the roadways and streets of Greene County. Littering is often the result of lack of awareness and civic pride. Although each instance is small in nature, the cumulative impact creates an unsightly nuisance, which can eventually inhibit economic development.

Open Burning

Neither Greene County nor the municipalities condone open burning of municipal solid waste. However, open burning is generally considered acceptable by residents. It is often more tolerated by those who live within greater distances of their closest neighbor. Most residents are unaware of the environmental and health issues related to open burning. Over the past 50 years more plastics and other synthetic material have entered the waste stream. When burned these materials emit pollutants. An EPA report, *The Evaluation of Emissions from the Open Burning of Household Waste in Barrels: Volume 1. Technical Report* published in November, 1997 shows that a single household burn barrel has the potential to emit as much toxic chemicals as a well-controlled municipal incinerator burning thousands of tons.

Even in areas where homeowners have access and subscribe to waste collection services, burning barrels, and pits are evident in many yards. The study, *Open Burning in Rural Northeastern Wisconsin: An Analysis of Potential Air Pollution* examined the motivations and behaviors associated with the burning of waste. The study found the major motivations for burning waste to be convenience, habit, avoided cost of trash collection, time savings by not having to self-haul trash, and the long distance to disposal outlet.

Special Handling of Municipal Solid Waste

A small percentage of the overall volume of municipal solid waste generated within Greene County is managed through specialized methods of processing and disposal. These include land application of biosolids, and incineration of infectious chemotherapeutic waste.

Management of Biosolids and Residential Septage

Wastewater from our homes and businesses is transported through pipelines to treatment facilities. Here the wastewater goes through a number of physical, chemical, and biological processes that clean it and remove the solids. The results are biosolids. Biosolids are not raw sewage, but are the nutrient-rich organic materials derived from wastewater solids that have been stabilized to meet specific processing and quality control standards. Biosolids often are disposed in landfills. Some biosolids are land-applied as a fertilizer to help rejuvenate farmland, forests and minelands.

In more rural area wastewater is held in a septic tank and periodically emptied by a septage transporter. There are essentially two acceptable methods of managing residential septage. The first option is to transport the septage to a municipal or private wastewater treatment facility or a septage treatment facility where it can be properly treated prior to final disposal. Because facilities within a reasonable driving distance may not be permitted to accept septage, this is not always a viable option. An alternative then is to beneficially use the septage by land application at an agricultural or reclamation site.

The statewide study conducted by the PADEP in 1993 indicates that 75% of the biosolids generated in the Commonwealth are land applied. However, less than 50% of sludge haulers and 70% of septage haulers had a permit for land application at that time. Based on the amount of registered transporters; the reported disposal tonnages compared to projected biosolids generation and the availability of land application sites, it is suspected that those conditions have improved today in Greene County. Two land application sites located in Greene County are recognized and inspected by the PADEP and are listed in Table 2-4.

Table 2-4 Sites for Land Application of Biosolids and Residential Septage			
Biosolids			
Operator	Permit	Site ID	Location
Burkey Lilly Farm	573152	558070	Dunkard Township
Beneficial Use of Residential Septage			
Operator	Permit	Site ID	Location
Watters Septic Service	PAG096101	531023	Whitely Township

Septage Transporters

Transporters of residential septage in Pennsylvania must register with the PADEP. The transporter keeps detailed records information for each load of septage that is collected and transported. Required information includes, at a minimum: the county and state where the waste was collected; the name and address of the hauler transporting the septage; the name and location of the transfer, processing, or disposal facility where the septage has been or will be delivered; the weight or volume of the septage; and a description of any handling problems or emergency disposal activities. Although a report is not filed, the information must be made available upon request to PADEP inspectors.

Table 2-5 Septage Transporters Operating within Greene County Service Area					
Company	ID	County	Address	Owner	Telephone
Teslovich Sanitation Service	26001	Fayette	219 Craft Moore Road Brownsville, PA 15417	John R. Teslovich	724-437-8909
Top Septic Service, Inc.	26002	Fayette	Moccasin Hollow Road Mount Pleasant, PA 15610	Don Zelmore	724-547-3697
R & D Watters Septic, Inc.	30001	Greene	1564 East Roy Furman Highway Carmichaels, PA 15320	Ronald Watters	724-966-2046
J & E Sanitation/Shipman Sanitary Service	30002	Greene	265 S. East Street Waynesburg, PA 15370	Joshua McNay	724-627-7825
Allan's Waste Water Service	30003	Greene	1487 Toms Run Road Holbrook, PA 15341	R. Allan Shipman	724-499-5601
Hapchuk, Inc.	63001	Washington	220 Rankin Road Washington, PA 15301	David P. Hapchuk	412-221-5755
Vincenty Sanitation	63003	Washington	28 Vincenty Road Cecil, PA 15321	David R. Vincenty	724-746-0771
M & G Enterprises, Inc.	65007	Westmoreland	1357 Ridge Road Belle Vernon, PA 15012	Stephen J. Manack	724-929-8152
A Affordable Sanitation	65010	Westmoreland	Charles Street Brownsville, PA 15417	Adam J. Skokut	724-785-2222
Hapchuk Sanitation Company	65011	Westmoreland	Rostraver Road Belle Vernon, PA 15012	George Hapchuk	724-929-2299

Septage cleanouts are done on a periodic as needed basis. Therefore, homeowners contact the transporter of choice. It is common for transporters to

cross county lines to provide such services. Table 2-5 lists those registered septage haulers located within or in close proximity to Greene County.

Infectious Chemotherapeutic Waste Management

Transporters of infectious chemotherapeutic waste also fall within the ranks of those requiring a license in Pennsylvania. A stipulation of the license is that each transporter must report the origin and ultimate destination of the waste. Table 2-6 shows the infectious chemotherapeutic waste from Greene County reported by transporters in 2004.

The amount reported closely reflects the expected volume generated by the County's sole hospital. All of the remaining medical facilities are likely small quantity generators of infectious chemotherapeutic waste. These types of facilities often utilize mail in programs for sharps and other materials. Small amounts of infectious chemotherapeutic waste generated in rural locations commonly finds its way into the regular municipal waste container.

Table 2-6 Infectious Chemotherapeutic Waste Reported in 2004		
Transporter/Processor	Location	Tons
Healthcare Waste Solutions of PA LLC DBA Genesis Environmental <i>License #PA-HC 0217 EPA ID# 000PA-HC0217</i>	380 Locust Street Industrial Manor II McKeesport, PA 15132	.26
Stericycle, Inc. <i>License# PA-HC 0196 EPA ID# PAD17527352</i>	1901 Pine Avenue Southeast Warren, OH 44483	26
	3472 Progress Drive Dunkirk, NY 14048	1.3
Total		27.56

Assessment of and Recommendations for the Disposal System

Through its current Plan, the County has promoted pollution prevention, and protection of the health and safety of the community. Overall the majority of Greene County's citizens and businesses act to manage municipal waste in an environmentally responsible fashion. Disposal capacity is available for all forms of

municipal waste generated. Many residents have access to waste collection opportunities. Still, there is room for improvement.

To enhance the waste management program, it is recommended that the County begin with a public awareness program. Additionally, the County should increase support and promotion of the volunteer organizations active in litter prevention and cleaning up illegal dumps. Opportunities should be considered to provide convenient and affordable disposal outlets for not only regular household waste, but bulky items and white goods as well. Together with the municipalities, the County should explore methods of enforcement.

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

Chapter 3

Projecting Future Capacity Needs

Assurances from Disposal Facilities

It is tempting to look at the volume of airspace permitted at the current landfills designated within the Plan, compare it to the projected municipal waste generation, and simply conclude that the available capacity is greater than the generated volume. However, several additional factors have to be considered in evaluating the County's needs for secured disposal capacity into the future. Inconsistencies are common in the manner in which each facility, based on its own operating practices and interpretation of requirements, calculates and reports its available airspace. The projections of future available airspace are normally based on the assumption that the current daily and annual tonnage accepted for disposal will remain constant. Unforeseeable changes in operational status; regulatory constraints, catastrophic events, windfall contracts, or economic conditions could alter those estimates. Therefore, it is prudent to consider that the airspace required by the County may not be available from all of its current sites on any given day.

This chapter demonstrates the County's projected future waste generation and subsequent disposal needs. Additionally, it presents issues that affect the selection of disposal options and the availability of capacity. The process utilized for site selection is also included.

Annual Capacity Requirements

Table 3-1 shows the estimated quantity of municipal solid waste generation and net disposal for the period 2000 through 2020. The projections were determined by using a combination of information provided by the County, and common accepted assumptions for municipal solid waste generation.

Population is based on the 2000 census figure of 40,672 persons. The population was projected to grow at 1.6% for the period 2000 to 2010 and at 1.8% for the period 2010 to 2020. These growth rates were projected by the Pennsylvania State Data Center.

Table 3-1 Estimated Future Disposal Capacity			
Year	Population	MSW Generated	MSW Disposed
2000	40672	26350	21748
2001	40737	26393	21783
2002	40802	26435	21818
2003	40868	26477	21853
2004	40933	26519	21888
2005	40998	26562	21923
2006	41064	26604	21958
2007	41130	26647	21993
2008	41196	26690	22029
2009	41261	26732	22063
2010	41332	26778	22101
2011	41406	26826	22141
2012	41481	26874	22180
2013	41556	26923	22221
2014	41630	26971	22261
2015	41705	27020	22301
2016	41780	27068	22341
2017	41856	27117	22381
2018	41931	27166	22422
2019	42006	27215	22462
2020	42076	27260	22499

The volume of MSW was based on an estimated disposal rate of 2.93 lb per person per day without escalation. This figure is based on landfill surveys of material actually disposed. In recent years, the Franklin study has estimated that nationally the generation rate has been more or less constant. The estimated solid waste generation rate for the county is 3.55 lb per person per day and includes material recycled, incinerated, or handled on other ways.

Waste Flow Control

The original Plan was based on the waste flow concept, which directs the flow of waste to designated landfills through a municipal licensing requirement of waste transporters operating in the County. With the knowledge that some of the County's waste was in fact disposed at landfills other than those designated in the Plan, and also that some types of municipal waste might not have been included

in the original agreements, it was necessary to evaluate the economic and environmental impact of abandoning waste flow control. In addition, to make a determination for a continuance of the waste flow requirement such factors as feasible daily access to capacity, the natural market conditions, and practices affecting the flow of waste also had to be taken into consideration. Ultimately, whether or not to continue waste flow hinges on the rulings of the Pennsylvania Commonwealth Court, which has determined that a municipality's authority to license waste transporters has been preempted by The Waste Safety Transportation Program, Act 90.

The contracts for disposal with the current landfills do not require any minimum volume of waste delivered to each site. In addition, they provide for adjustments in the commitment for capacity should the landfill not receive significant volumes of waste in any given year. An adjustment by one landfill to receive less waste while another consumes more airspace than originally anticipated would jeopardize Greene's available capacity if only conservative or limited provisions were considered.

Development of Alternative Technology

At the time of development of the original Plan, landfills were considered the most economically feasible method for managing Greene County's waste. However, other counties use processes including composting and incineration, as legitimate waste management options. Without exploring the current and future availability of those possibilities, the County could overlook the potential for an alternative source of capacity with potential reductions in operational costs or environmental risks.

Impact of Residual Waste and Out of State Waste on Capacity

Generation and Management of Residual Waste

Municipal Waste represents only 6% of the total amount of waste generated in Greene County. Residual waste represents the remaining 94%. With such an uneven ratio between the waste types for capacity competition from non-municipal waste streams and outside sources was examined. On any given day, a fluctuation in the amount of residual waste transported to a facility, especially from remediation projects, could diminish the permitted daily volume available for Greene County's Municipal Waste. In determining the need for future capacity, the County took into consideration the impact on a facility's overall available capacity based on the proportion of residual waste to its total volume disposed.

The most recent Residual Waste Generators Biennial Reports submitted to PADEP in March 2003 as well as the Municipal Waste Landfill Annual Operation Reports submitted in June 2004 indicate that in spite of the quantities of residual waste generated, it represents only 25% of the total waste generated in Greene County that is sent to municipal waste landfills. Veolia's Chestnut Valley Landfill reports receiving a significant portion of Greene County's residual waste. Greenridge Reclamation Landfill and to much lesser extents, Imperial Landfill and Sanitary Landfill also report amounts of residual waste originating in the County. Veolia receives 90% of the residual waste from Greene, which is disposed in Pennsylvania municipal waste landfills and Greenridge reports 8%. Onyx also receives over 50% of Greene County's municipal waste. Each of these sites indicated that residual waste from all sources in general represented at least 8% of their total volume and in some cases as much as 28%.

Waste Type	Municipal Waste Landfill	Residual Waste Processing Facility	Residual Waste Captive Landfill	Recycled/Beneficial Use
Coal Derived Fly-Ash			80,034	283,908
Metal Scrap Generic				6,896
Mixed Plastics				144
Non-Hazardous Solvents		7		
Oil Contaminated Waste		9		
Oily Wastewater		112		
Paint Filters		12		
Paints		12		
Paper, Cardboard				620
PCB Containing Waste		17		
Plant Trash	529			
Sandblast Abrasives	13			
Uncategorized	9,286.6			
Waste Oil		81		
Wastewater		1662		
Annual Total Tons	9,828.60	1982	80,034	291,568

The remaining 75% of the County's residual waste is handled in a variety of fashions. Coal derived fly ash overwhelming exceeds all other categories of residual waste from Greene County. Primarily, it is beneficially used in the reclamation and stabilization of abandon mines, or it is disposed at a captive residual waste facility designed specifically for this material. Table 3-2 shows the categories of residual reported from large quantity residual waste generators and also from the landfills. Table 3-2 also demonstrates how each of the waste streams is managed for processing, disposal, or reuse. Uncategorized waste reported by the landfills is a discrepancy from the total volume reported from generators. It is suspected to be cumulative quantities of non-hazardous contaminated soil or

other materials from random spills and clean-ups or, as often happens, wastes whose origin was inadvertently misidentified by the transporter.

Out of State Waste

All but one of the landfills currently designated in the Plan accept out of state waste, according to the most recent annual operations reports. Most of the waste is transported from Ohio and West Virginia. In fact, 25% of the municipal waste disposed at Veolia Chestnut Valley originates in West Virginia. At least two of the other sites have reported some quantities of waste originating in New York, New Jersey or other east coast states. Due to the changing needs of our contiguous states, coupled with the ease of access to landfills in Western Pennsylvania made possible by the network of Interstate Highways, and the Constitutional support for Interstate Commerce it is conceivable to expect that in the future, more out of state waste could occupy airspace now thought available to the County.

Requesting Proposals for Future Disposal or Processing Capacity

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

Figure 3-1 Solicitation for Municipal Solid Waste Disposal Services

**REQUESTS PROPOSALS FOR MUNICIPAL SOLID WASTE DISPOSAL
AND/OR PROCESSING CAPACITY**

**GREENE COUNTY BOARD OF COMMISSIONERS,
WAYNESBURG, 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), Greene County Board of Commissioners has determined that additional waste disposal or processing capacity for municipal solid waste (MSW), including construction/demolition (C/D) waste and sewage sludge generated within the County is required for a period covering the next ten years. Greene County Board of Commissioners is hereby soliciting proposals for disposal of County generated MSW, to begin on March 18, 2008

SOLICITATION FOR MUNICIPAL SOLID WASTE DISPOSAL SERVICES

The Greene County Board of Commissioners will receive sealed proposals until 4:00 p.m., Prevailing Time on Friday, April 18, 2008. All proposals must be made on the Proposal Forms and be formatted and organized in accordance with the Requirements for Submitting Proposals contained in the Request for Proposals. If multiple facilities are to be proposed for the County's consideration, the Proposer must complete and submit a separate package for each facility. The Proposer is required to submit one (1) original and one (1) copy of the Proposal to Greene County Department of Economic Development at the address listed below. Envelopes containing the proposals must be sealed and clearly labeled to show the name and address of the Proposer, the statement "Proposal Disposal Capacity" and be addressed to: Greene County Department of Economic Development % Nestor Resources, Inc., 208 Kozy Corner Road, Valencia, PA 16059, Attention: Ms. Michele Nestor, President. Proposers may withdraw their proposal at any time prior to the scheduled closing time for receipt of proposals. Greene County Board of Commissioners reserve the right to reject any or all proposals, to waive any irregularities and/or information in any proposal and to make an award in any manner, consistent with applicable laws, which is deemed to be in the best interest of the County

Printed copies of the Request for Proposals (RFP) may be purchased on or after March 18, 2008 directly from the County's consultant, Nestor Resources, Inc., 208 Kozy Corner Road, Valencia, PA 16059 by pre-payment of a non-refundable amount of \$50.00 per proposal. Contact information: phone: (724) 898-3489, email: resources@nauticom.net Proposers should make checks payable to Nestor Resources, Inc., A digital copy of the RFP that can be transmitted via email will be made available. Fees may be waived for digital copies. Allow a minimum of 5 days for hard copy requests and 2 days for digital requests.

Chapter 4

Recycling Initiatives

Evaluating Program Effectiveness and Economics

This chapter describes the collective accomplishments to date of all of those involved in recycling and waste minimization in Greene County. It also explores the constraints that may impact the future of recycling in the County. The origin and history of the activities; the economics of operating the program; along with a measurement of current results are presented. Issues such as the feasibility of various sources of revenue; the nature of grant funding; the availability of recoverable materials; and the pros and cons of alternative collection methods are also discussed.

Challenges in Rural Residential Recycling Programs

Unique challenges not found in more urban settings impact the development of recycling programs in rural areas. Low population density, lower waste generation and higher usage of burn barrels are just a few of the factors one needs to consider when assessing a rural community's potential for recycling. The methods of collection, the volume and even the types of material to include, require more thought to ensure implementation of a cost effective successful program. Finding markets for the materials, which are collected, is certainly a problem common to all. However, for rural areas, those difficulties are magnified. Low prices, coupled with long distances to markets, place greater pressures on program managers. Sometimes, recycling cannot be an economic priority for elected officials faced with a multitude of social needs.

With so many obstacles, is recycling a viable option for rural communities to consider? The Ford Foundation sponsored a project to research recycling programs across the country. The study, conducted by The Minnesota Project, a Minnesota-based community development organization, found some commonalities that made some full-service rural recycling programs successful while others failed.

Rural programs succeeded where:

- Recycling was treated as a public service, like sewage and water.
- Its primary aim was waste management and issues like creating jobs for disabled adults or making a profit were simply ancillary.
- Local governments picked up the net costs, removing the pressure to survive on recycling revenues alone.
- The unit of government involved in recycling was also responsible for waste collection and disposal.
- Citizens could directly see the connection between recycling and disposal
- The method of collecting trash and recycling collection was the same.

History of the Greene ARC Recycling Program

Greene ARC initiated the operation of a recycling collection and sorting program to employ its mentally challenged clients prior to the approval and ratification of the Greene County Municipal Solid Waste Management Plan in 1995. Greene ARC made the decision to enter into recycling as a replacement for previous client employment programs, which had proven unprofitable and costly to run. It was hoped that the sale of recyclable materials would provide sufficient revenue to support this program.

Residential Drop-off Collection System

A series of drop-off sites throughout the County serve as the foundation of the Greene ARC program. Since 1995, the program has grown to serve 19 locations. The majority of the sites are located at or near municipal office buildings or garages. Some are on school premises. The cost of collection is provided in-kind by the municipal officials and managers. Table 4-1 shows the names and locations of the current drop-off sites in the County.

Commercial Recycling Services

Not all material recovered by Greene ARC is the result of residential collections. Several commercial establishments pay Greene ARC a fee for collection of their recyclables on a regular basis. Commercial containerized collection of recyclables is also somewhat available in Greene County. Many of the haulers servicing these containers deliver materials to Greene ARC. Therefore, the Green ARC Program provides one of the few outlets in the County, for valuable commercial material that otherwise would be disposed.

Table 4-1 Location of Drop-off Collection Sites

Aleppo Township	Slag Pile across from Brethren Church
Carmichaels School District	Carmichaels Area High School
Center Township	Township Building in Rogersville
Cumberland Township	Township Building on Municipal Road
Freeport Township	Township Building
Friends of Dunkard Creek	Across from Bobtown Store
Greene Township	Township Building
Jackson Township	Township Building on PA Rt. 18 South Holbrook
Jefferson Borough	Jefferson Hotel
Jefferson Township	Township Building on Goslin Road
Monongahela Township	Monview Park
Morgan Township	Township Building
Morris Township	Township Building on PA Rt. 18 North near Nineveh
Perry Township	Township Building
Richhill Township	Township Gravel Site, west of Wind Ridge
Washington Township	Greene ARC Recycling Facility , Dunns Station Road, at Ruff Creek
Wayne Township	Across from Township Building in Spraggs
Waynesburg Borough	Impound lot on First Street across from Agway
West Greene School District	West Greene Middle/High School Complex

Accomplishments and Expectations

In 1986, the USEPA first commissioned a project to research the source and disposition of waste generated in the United States beginning with historical data from 1960 and thru 1986. The *Characterization of Municipal Solid Waste in the United States* was prepared and has been updated over the course of years by Franklin Associates LTD., of Prairie Village, Kansas. It is commonly referred to as “*The Franklin Study*”. While the report does not specifically address local and regional variations in the waste stream, the data in the report is considered reliable enough to develop estimates for planning purposes.

Different groups and organizations often report statistics and accomplishments for the same geographic area that vary drastically. In discussions and analyses of waste generation, composition, and recycling, it is important to establish a common ground so that comparisons and interpretations of available data are accurate and meaningful. Therefore, the USEPA requested that all state regulatory agencies use the same criteria in reporting waste generation and recovery rates. This allows both the federal and state agencies to establish realistic goals for recycling and monitor the actual performance of recovery programs. Pennsylvania currently requires counties to report using the USEPA methodology. Many of the assumptions in the USEPA formulas utilized in these reports have been derived from the findings of Franklin Associates.

Table 4-2 compares the results of Greene County’s reported activity projected by the Franklin Study. The quantities shown in the table are based on the 2000 census population for Greene County of 40,672 persons and an estimated MSW generation rate of 3.55 lb per person per day. As discussed elsewhere, the generation rate figure is based on national and state generation rates adjusted as a result of landfill surveys to account for the specific demographic profile of Greene County.

Over the years, the series of the updates published have reflected changes in generation and recovery trends based on economic conditions and the regulatory climate. Actual data often contradicts predictions made in previous years. Planning projections are therefore dependent on the trends reflected in the updated version utilized. To determine the impact of Greene County’s combined recycling efforts, its municipal solid waste generation and recycling recovery rates were compared to national figures based on the Franklin Study data for 2003.

Table 4-2 Greene County Performance and National Trends

**USEPA Estimated Projections
for Greene County**

**Actual Reported Results
for Greene County**

Material	Available Discards	Recovery Rate	Tons Recovered	Recovery Rate	Tons Recovered	Tons Recovered	% of Collected Recyclables	Performance: actual % of expected
Glass	1194	22.0%	263	6.7%	80	11.9%	30%	
Aluminum	216	35.6%	77	1.9%	4	0.6%	5%	
Bimetal	316	60.6%	191	13.3%	42	6.3%	22%	
OCC	4332	56.4%	2443	3.9%	168	25.1%	7%	
ONP	1410	82.4%	1162	19.7%	278	41.5%	24%	
Office Papers	798	55.8%	445	4.6%	37	5.5%	8%	
Mixed Plastic	1329	8.9%	118	4.6%	61	9.1%	52%	
Misc	16755	20.1%	3364	0%	0	0%	0%	
Totals/Averages	26350	30.6%	8063	2.5%	670	100.0%	8%	

Impact of Local Recycling Efforts

The first column in the table lists categories of materials in municipal solid waste (MSW) specified in Act 101 and commonly included in residential and/or commercial recycling programs. Assuming that these materials are present in the same proportion in Greene County as they are nationally, shown in the second column, is the estimated annual quantity of material in each category expected to be found in the County's MSW.

Column three lists the percentage of each material recovered from MSW nationwide according to the *Franklin Study's* projections. The column headed "*EPA Expected Recovery in Tons*", presents the quantity of various materials that would be recovered from Greene County's MSW if these materials were recovered at the same national percentages shown in column three. Columns five and six present the recovery of materials in tons as reported by Greene County and, based on national averages, the percentage of the total amount of each material expected in the county's municipal waste stream. The column entitled "*Greene County % of Collected Recyclables*" lists the percentage recovered that each material represents of the total quantity of material recovered from MSW in Greene County.

The final column presents Greene County's performance in recovering the various materials as a percentage of the rate achieved nationally. Thus for example, Greene County recovered 80 tons of glass, or 6.7% of the glass contained in the county's MSW. This performance is 30% of that attained nationally where 22% of the glass contained in MSW is recovered. Following is a more detailed discussion of the individual items and numbers presented in the table.

Analyzing the Results

In order to compare Greene County performance to the results of the Franklin Study, the numbers in the study need to be analyzed to derive the figures that are comparable to the recycling rates reported by Greene County. This analysis is required because the Franklin Study groups the materials in the national solid waste profile in categories different than the categories reported by Greene County. For example, Greene County reports numbers for glass recycling that are primarily the result of collection of packaging (jars and bottles) in the municipal wastes. In contrast, the Franklin Study reports glass as the total of glass packaging, (10.69 million tons per year) plus glass contained in durable goods (an additional 1.78 million tons per year). Thus, the numbers from the Franklin Study used for glass generated, recycled and disposed need to be the ones pertaining to glass containers and not all glass contained in the municipal waste stream. A discussion for each category of materials listed in the table is presented below.

Glass-The estimated annual quantity of glass generated nationally in 2003 was 12.47 million tons per year. Of this 1.78 million tons per year was contained in durable goods and not generally available for recycling. Thus, 10.69 million tons per year of glass in the form of containers was included in determining the proportion of waste shown as available discards in the glass category on the table. This material constituted 4.53% of the total municipal waste generated and was recovered nationally at the rate of 22.0%. The remaining glass in forms that were not available for recycling is included in the miscellaneous category. Greene County recovered 80 tons of glass, 6.7% of the anticipated total of 1194 tons contained in the county's MSW. This performance is 30% of the national average.

Aluminum- The estimated annual quantity of aluminum generated nationally in 2003 was 3.23 million tons per year. Of this 1.29 million tons per year was contained in durable and nondurable goods and was not generally available for recycling. Thus, 1.94 million tons per year of aluminum in the form of packaging was included in determining the proportion of waste shown as available discards in the aluminum category on the table. This material constituted 0.82% of the total municipal waste generated and was recovered nationally at the rate of 35.6%. The remaining aluminum in forms that were not available for recycling and non-packaging aluminum scrap is included in the miscellaneous category. Greene County recovered 4 tons of aluminum packaging, 1.9% of the anticipated total of 216 tons contained in the county's MSW. This performance is 5% of the national average.

Bimetal- Bimetal refers to tin cans, which are over 99% steel. Bimetal cans are included in the Franklin study in the category of ferrous metal wastes. The estimated annual quantity of ferrous metal wastes generated nationally in 2003 was 14.00 million tons per year. Of this 11.16 million tons per year was contained in durable and nondurable goods and not generally available for recycling. (On a national basis, 3.37 million tons per year of ferrous metal was recycled from durable goods for a rate of 30.2%.) Thus, 2.84 million tons per year of ferrous metal wastes in the form of containers and other packaging was used in determining the proportion of waste shown as available discards in the bimetal category on the table. This material constituted 1.20% of the total municipal waste generated and was recovered nationally at the rate of 60.6%. The remaining ferrous metal wastes in forms that were not available for residential recycling such as steel scrap and automobiles are included in the miscellaneous category.

Greene County recovered 42 tons of bimetal waste, 13.3% of the anticipated total of 316 tons contained in the county's MSW. This performance is 22% of the national average.

Paper- The estimated annual quantity of waste paper generated nationally in 2003 was 83.09 million tons per year. Of this, about 24.47 million tons per year

was in a form that was not generally available for recycling and is included in the miscellaneous category. Three categories of waste paper are included in the table. OCC refers to old corrugated cardboard. Included in this category are cardboard boxes, folding cartons, and paper bags. ONP refers to old newspaper. Included in this category is newsprint and newspaper inserts since the two materials are generally mixed together as disposed or recycled. Office paper includes high quality office paper and such as stationary, copy paper and computer paper.

OCC- The estimated annual quantity of OCC generated nationally in 2003 was 38.83 million tons per year. This material constituted 16.44% of the total municipal waste generated and was recovered nationally at the rate of 56.4%. Greene County recovered 168 tons of OCC, 3.9% of the anticipated total of 4332 tons contained in the county's MSW. This performance is 7% of the national average.

ONP- The estimated annual quantity of ONP generated nationally in 2003 was 12.64 million tons per year. This material constituted 5.35% of the total municipal waste generated and was recovered nationally at the rate of 82.4%. Greene County recovered 278 tons of ONP, 19.7% of the anticipated total of 1410 tons contained in the county's MSW. This performance is 24% of the national average.

Office Papers- The estimated annual quantity of office paper generated nationally in 2003 was 7.15 million tons per year. This material constituted 3.03% of the total municipal waste generated and was recovered nationally at the rate of 55.8%. Greene County recovered 37 tons of Office Papers, 4.6% of the anticipated total of 798 tons contained in the county's MSW. This performance is 8% of the national average.

Plastic- The estimated annual quantity of plastic waste generated nationally in 2003 was 26.65 million tons per year. Of this 14.74 million tons per year was contained in durable and nondurable goods and was not generally available for recycling. This material is included in the table in the miscellaneous category. Thus, 11.91 million tons per year of plastic in the form of packaging was included in determining the proportion of waste shown as available discards in the plastic categories on the table. This material constituted 5.04% of the total municipal waste generated and was recovered nationally at the rate of 8.9%. Greene County recovered 61 tons of mixed plastic, 4.6% of the anticipated total of 1329 tons contained in the county's MSW. This performance is 52% of the national average.

Miscellaneous- The quantity of available discards in the miscellaneous category shown on the table includes those wastes listed under the miscellaneous category in the Franklin Study plus wastes not accounted for elsewhere in the table. Miscellaneous wastes listed in the Franklin Study are comprised mostly of disposable diapers, car batteries and soil, rocks and debris. Other wastes categorized in the Franklin study, but not reported in Greene County include textiles, rubber, leather and wood. These wastes are included as miscellaneous in

the table. Also included in the table in the miscellaneous category are wastes contained in durable and nondurable goods not generally available for recycling. The materials included in the miscellaneous category comprise an estimated 63.59% of the total waste generated. A national recovery rate of 20.1% was calculated to give an average EPA recovery rate for all categories of 30.6%; the reported national average in 2003.

Environmental Benefits

Many of the positive returns from recycling efforts are not readily visible to a community. However, reductions in energy use and lower toxic air emissions are a real and quantifiable measure of recycling. The Northeast Recycling Council (NERC) developed an environmental benefits calculator to help communities determine the impact of their recycling programs. The tool incorporates data from the US Department of Energy, the US Climate Technology Cooperation Gateway, the Steel Recycling Institute, and the USEPA among others. Greene County's recycling performance results were entered into the NERC calculator to demonstrate the environmental benefits related to the program. The more notable results are shown in Table 4-3

Table 4-3 Notable Environmental Benefits of Recycling in Greene County							
Material Recycled (Tons)	Greenhouse Gas Emissions Reduced (MTCe)	Gasoline Saved (Gallons)	Energy Savings (Million BTU's)	Coal Saved Thru Recycling Steel (Tons)	Iron Ore Saved thru Recycling Steel (Tons)	Sand Saved thru Recycling Glass (Tons)	Landfill Space Saved thru Recycling Paper (Cubic Yards)
670	26	103,289	254	29	53	52	1,594

Funding the Recycling Program

Because Greene County had no legal responsibility or mandate to implement a countywide recycling program, it neither promised nor provided a financial commitment to support Greene ARC's creation and operation of the program. From the beginning, an informal understanding acknowledged that the full risk of operating the program, including the cost of labor, operations, and maintenance, as well as any revenues, remained with Greene ARC. The County endorsed such efforts by Greene ARC by applying for and securing from the PADEP recycling grant fund, monies to purchase buildings and equipment, for use by Greene ARC on Greene ARC's land. Additionally, the cost of transporting materials and maintaining drop-off sites was provided by participating municipalities.

Since its inception, Greene ARC's recycling program has operated at a loss. In the 1995 Greene County MSW Plan this issue is discussed. In spite of the indicators in the 1995 Plan that material for resale to support the program was not generated

in sufficient quantities to collect in a cost effective manner, a grass roots belief prevailed that revenue from material sales could fund the program. The program continued to operate under the pressure of that premise until the development of this Revised Plan.

Facts, Figures and Conclusions

Considering the longevity of the Greene ARC Program, it has been demonstrated that many Greene County residents will recycle when the opportunity is made available to them. So, at face value, it would be simple to assume that those residents, who have not participated to date, lack interest in recycling. A thought often prevails that the public education program has failed to reach and motivate a sufficient amount of people. Another quick assumption might be that increased participation will result in greater revenues through the resale of recovered materials.

While these may be valid points, acting on these assumptions alone may result in ineffective revisions to the current program. It is necessary, then, to dig deeper in an attempt to uncover other root factors with potential impact on recovery and profitability. Failure to look beyond the surface and consider issues that are more complicated would be a serious mistake.

Future Recovery Potential

Disposal and recovery reports were reviewed during the planning process. In addition, a waste generation and composition analysis was conducted to determine if attempts to obtain a greater volume of material would cost more than the resale value of that material. This section presents the findings of that analysis.

Availability of Material

Determining the actual Municipal Solid Waste generation rate is the first step in determining the quantity of waste generated and the rates of recycling and disposal in Greene County. If the waste composition is also known, then Greene County can be compared to other locales and the national average. With this information, potential sources of additional recyclable materials can be identified.

Studies have shown that the MSW generation rate for rural areas is lower than the national average. Nationally, the majority of the population resides in urban and suburban areas. Greene County is predominantly rural in nature. About 80% of the population is rural, compared to Pennsylvania and nationally, where about

75% of the population resides in urban areas. Nationally, and statewide the average MSW generation rate is about 0.8 ton/person/year or 4.38 lbs/person/day.

A waste composition study of materials actually disposed in Pennsylvania landfills was conducted recently. The study indicated that for southwestern Pennsylvania, the average rate of MSW disposed was 3.92 lb/person/day. When an average recycling rate of 15% is included, the rate was 4.50 lb/person/day, a figure that compares well with the national and statewide average. The same study presents figures for Greene County. The average disposal rate for the County was 2.93 lb/person/day. Including an additional 600 tons per year of reported recyclable material plus an additional 4000 tons per year estimated to be directly recycled by commercial sources, yields an estimated MSW generation rate of 3.55 lbs/person/day. This figure is about 80% of the state and national average.

Studies have shown that MSW generation rates are lower in rural areas. Factors contributing to this situation include:

- **Disposal of paper and other combustibles by burning.** Paper and paper products account for approximately 39% of the total MSW nationally. Incineration is commonly used to dispose of a portion of these materials in rural locations.
- **Reduced quantities of yard waste.** Yard waste accounts for approximately 13% of the total MSW nationally. In rural locations, these materials are often not collected or disposed by burning or composting.
- **Fewer and smaller newspapers.** Newspapers account for approximately 6% of the total MSW nationally. Lower subscription rates and smaller newspapers are factors that reduce the quantity of waste newspaper generated. Disposal through incineration is also a factor.
- **Less food waste.** Food wastes account for approximately 10% of the total MSW nationally. Disposal through composting, animal feeding, or incineration are all factors that tend to reduce the quantity of food waste landfilled.

The waste composition study also revealed that the proportion of materials in MSW from rural sources also differed from the average. A greater proportion of cans, bottles and other noncombustibles were present in rural areas than would be found in urban areas. This result is what would be expected if the amount of disposed paper, yard, and food wastes were reduced.

Another factor revealed in the composition study was a difference in the proportion of wastes from residential and commercial sources in rural areas. Statewide the ratio was 64% residential to 36% from commercial sources. In rural areas, the ratio was 72% to 28%. In analyzing data from Greene County, which is 80% rural, a ratio of 70% residential to 30% commercial was used. Some recyclable materials such as cardboard and office paper come primarily from

commercial sources. Others are primarily generated from residential sources. Therefore, considering the ratio of commercial to residential sources in Greene County will be useful in determining total MSW composition and identifying potential sources of recyclable materials in the county. The average disposal rate is 2.93 lb per person per day. The quantity collected from residences is 70% of this figure, or 2.05 lb person per day.

Table 4-4 shows a comparison of the constituents of MSW expected to be generated and disposed based on the national average composition of materials contained in MSW generated. The columns entitled MSW Generated lists the materials by percentage of total weight of materials frequently included in recycling programs. Also listed is the annual tonnage of the various materials expected to be generated in Greene County, if generated at the national average rate. A figure for "miscellaneous" is shown to account for material in MSW that are not normally recycled through public participation recycling programs.

Material	MSW Generated ¹		MSW Disposed ²		Missing Material ³		National Recovery Rate	Commercial	Residential
	%	Tons	%	Tons	Tons	%	% of MSW	%	%
Glass	4.76	1549	2.16	470	1079	10.0	22.0	18	82
Aluminum	0.85	277	.66	43	34	.2	40.0	18	82
Bi-Metal Cans	1.13	368	1.68	365	3	0	58.8	15	85
OCC	16.74	5447	6.00	1304	4143	38.4	55.5	90	10
ONP	5.32	1702	5.92	1278	424	3.9	60.2	15	85
Office Paper	3.24	1054	2.70	587	467	4.3	55.3	75	25
All Plastic	4.91	1598	11.20	2435	(837)	(7.8)	9.6	18	82
Yard Waste	12.21	3973	5.80	1261	2712	25.1	56.4	10	90
Miscellaneous	50.84	16542	63.90	13892	2650	24.5	11.7	--	
		32,510		21,735	5,362	50			

1. Based on Franklin Associates figure of 0.8 tons/pers/yr and a population of 40,672

2. Based on R.W. Beck statewide composition study, adjusted for 80% rural population

3. This material is either not being generated at the rate of the national average, or is being recycled other than through Greene ARC, or otherwise disposed, e.g. burning.

The columns entitled MSW Disposed lists the materials by percentage of total weight of materials expected to be included in waste disposed in landfills from MSW collected in Greene County. The annual tonnage of material disposed is also shown.

The columns entitled Missing Material show the difference in tons between what is expected to be generated and that expected to be disposed. It shows the amount of various materials that are either not being generated at the rate of the national average; or are being recycled other than through Greene ARC or otherwise disposed, e.g. burning.

The column entitled National Recovery Rate is the average recovery of each material nationally as a percentage of total MSW generated. It represents a benchmark for a very successful recycling program of what might be possible to recover from material currently being disposed.

The last column indicates the relative proportion of materials from either residential or commercial sources. Thus, cardboard (OCC) and Office Paper would be generated primarily by commercial sources while the remaining materials are primarily generated by residences.

The material listed as missing can largely be explained. Approximately 75% of the missing material is either in the categories of material recycled or yard waste. Several significant factors should be considered when examining the quantities listed as missing. For example, large quantities of glass are apparently missing. However, this material is balanced by larger quantities of plastic being disposed than are expected to be generated. This anomaly may reflect the shift away from glass to plastic packaging. Another factor is that due to glass breakage, some glass is unreported in the landfill composition studies.

The amount of aluminum missing is about the amount that would be expected to be recycled based on the national average recovery rate. It is possible that the missing material is being directly delivered to commercial recyclers, through charity collection drives or other programs. It is also possible that the material is not being generated in the quantity estimated due to the reduction in aluminum per can in newer packaging. Bimetal cans are being disposed at about the expected rate of generation.

A large quantity of OCC is missing from the totals. The total tonnage estimated to be generated agrees with estimates from other indicators, such as the dollars per pound of commercial business activity. Thus, it is expected the figure reflects large quantities of OCC being collected, baled and directly recycled by commercial establishments that generate most of the material. A survey should be conducted to capture the quantities being recycled and the results should be included in the county's annual recycling report.

The quantity of old newspaper (ONP) missing may reflect a lower generation rate due to smaller newspapers and a lower distribution rate than in larger metropolitan areas plus by consumers disposing the paper through burning.

Office papers are primarily generated by commercial sources. The missing material is likely the result of direct recycling by some businesses plus separate handling and disposal procedures by others. Banks, hospital and others often contract for record destruction services for the handling of sensitive records that are not disposed by conventional landfilling of MSW.

The excess quantity of plastic disposed over what is expected to be generated is reasonable considering the corresponding deficit for packaging discussed previously.

Yard waste in Greene County is expected to be disposed at rates substantially lower than in urban and suburban locations. Due to the largely rural nature of the County, much of this material is burned, composted, or simply not collected by residences.

Table 4-5 presents additional information on the source and value of targeted recyclable materials. The columns entitled quantity recycled presents the results of the current recycling program through Greene ARC under the heading "Current Recovery". The column headed "Budgeted Goal" is a breakdown by material type of the quantities that might be collected if the quantity of material now being disposed were collected for recycling at the national recovery rate. These amounts are equivalent to a 7.5% recovery rate from residential sources and 10% for OCC and office paper primarily generated by commercial sources. These figures are probably the upper limit of what is feasible with a drop-off collection program and targeted collection from commercial sources. Interestingly, as discussed separately, at these rates the rate of recycling would be about four times the current rate. However, based on market prices in 2006 when this plan was developed, the revenue generated is less than the cost of conducting the current program when costs for capital recovery are included. Additionally, achieving the levels of recycling listed as the goal in the table would likely increase the cost of Greene ARC's recycling operation significantly due to additional expenses for advertising, collection, processing and other factors.

Table 4-5 Potential for Increased Revenue Generation through Material Recovery							
Material	Quantity Recycled (tons)		2006 Value of Recovered Material		National Recovery Rate	Commercial	Residential
	Current Recovery	Budgeted Goal	\$/ton	Total \$	% of MSW	%	%
Glass	80	103	10	1,030	22.0	18	82
Aluminum	4	57	920	52,440	40.0	18	82
Bimetal Cans	42	215	114	24,510	58.8	15	85
OCC	168	732	73	53,436	55.5	90	10
ONP	278	769	62	47,678	60.2	15	85
Office Paper	37	325	95	30,875	55.3	75	25
All Plastic	61	234	160	37,440	9.6	18	82
Total:	670	2435	Total:	\$247,409			

Methods and Costs of Collecting More Material

Curbside Method

The most successful method of collecting recyclable material is by curbside collection. A rough estimate of the net collection cost for municipal waste in Greene County provides a benchmark to which the costs and feasibility of curbside collection of recyclable materials can be compared. Countywide curbside collection of recyclables is not being proposed; however, it is the method of collecting recyclables that has been shown to achieve the highest rate of collection. Up to 15% of total combined residential and commercial waste and up to 25% of residential waste is recovered in the most successful programs. Thus, it provides an upper maximum of the quantity of materials that might be feasible to collect from residential sources. Unfortunately, because of the predominantly rural nature of Greene County, the cost of collection exceeds the value of the recyclables that can be collected.

The cost of residential municipal waste collection in Greene County in 2006 was typically about \$200 per year per household, paid by the residents directly to hauling companies. Because these services are competitively purchased it is presumed that the cost reasonably reflects the cost of the service plus profit by the hauler. The gross cost per ton for this service is:

$$\text{\$200/household/year} / (2.5 \text{ person/household} \times 2.05 \text{ lbs/per/day}) = \text{\$214/ton}$$

This figure includes transportation from Greene County to the landfill plus tipping fees at the landfill. These items are estimated at \$40/ton and \$10/ton, respectively. (Hauling = 40 miles \times 25 cents/ton mile = \$10/ton). The net collection cost of transportation to the landfill and tipping fees is:

$$\text{\$214/ ton} - \text{\$40/ton tipping fee} - \text{\$10 hauling} = \text{\$164/ton.}$$

Assuming that the collection of recyclable materials is similar to the cost of refuse collection, then the cost of collecting recyclables is greater on a per ton basis since the weight collected is less per collection pick-up. Even successful curbside collection programs typically collect less than 25% of the quantity of residential municipal waste. If recyclables are collected at the same weekly frequency as municipal waste, but only collect 25% of the tonnage, then the collection cost per ton would be \$656/ton. If the collection frequency were reduced to every other week, then the cost of collecting recyclables would be \$328/ton. The quantity of material collected would be 4610 tons/year if a collection rate of 25% of residential municipal waste were achieved.

Table 4-6 Estimated Cost of Comprehensive Public Education Campaign for Greene County

Municipality	Population 2000	Housing Units	Quarterly Direct Mail includes design, printing and bulk postage	Promotional Items	Brochures, Direct Handouts includes design, printing	Mixed Media Radio Cable TV Newspaper	Total
Aleppo Township	597	282	\$1,410.00	\$895.50	\$447.75	\$81.78	\$2,835.03
Carmichaels Borough	556	255	\$1,275.00	\$834.00	\$417.00	\$73.95	\$2,599.95
Center Township	1,393	566	\$2,830.00	\$2,089.50	\$1,044.75	\$164.14	\$6,128.39
Clarksville Borough	234	90	\$450.00	\$351.00	\$175.50	\$26.10	\$1,002.60
Cumberland Township	6,564	2,893	\$14,465.00	\$9,846.00	\$4,923.00	\$838.97	\$30,072.97
Dunkard Township	2,358	1,073	\$5,365.00	\$3,537.00	\$1,768.50	\$311.17	\$10,981.67
Franklin Township	7,694	2,291	\$11,455.00	\$11,541.00	\$5,770.50	\$664.39	\$29,430.89
Freeport Township	302	142	\$710.00	\$453.00	\$226.50	\$41.18	\$1,430.68
Gilmore Township	295	153	\$765.00	\$442.50	\$221.25	\$44.37	\$1,473.12
Gray Township	236	105	\$525.00	\$354.00	\$177.00	\$30.45	\$1,086.45
Greene Township	445	203	\$1,015.00	\$667.50	\$333.75	\$58.87	\$2,075.12
Greensboro Borough	295	140	\$700.00	\$442.50	\$221.25	\$40.60	\$1,404.35
Jackson Township	516	228	\$1,140.00	\$774.00	\$387.00	\$66.12	\$2,367.12
Jefferson Borough	337	147	\$735.00	\$505.50	\$252.75	\$42.63	\$1,535.88
Jefferson Township	2,528	1,087	\$5,435.00	\$3,792.00	\$1,896.00	\$315.23	\$11,438.23
Monongahela Township	1,714	726	\$3,630.00	\$2,571.00	\$1,285.50	\$210.54	\$7,697.04
Morgan Township	2,600	1,117	\$5,585.00	\$3,900.00	\$1,950.00	\$323.93	\$11,758.93
Morris Township	1,040	375	\$1,875.00	\$1,560.00	\$780.00	\$108.75	\$4,323.75
Perry Township	1,720	771	\$3,855.00	\$2,580.00	\$1,290.00	\$223.59	\$7,948.59
Rices Landing Borough	443	190	\$950.00	\$664.50	\$332.25	\$55.10	\$2,001.85
Richhill Township	1,062	518	\$2,590.00	\$1,593.00	\$796.50	\$150.22	\$5,129.72
Springhill Township	476	224	\$1,120.00	\$714.00	\$357.00	\$64.96	\$2,255.96
Washington Township	1,106	435	\$2,175.00	\$1,659.00	\$829.50	\$126.15	\$4,789.65
Wayne Township	1,223	536	\$2,680.00	\$1,834.50	\$917.25	\$155.44	\$5,587.19
Waynesburg Borough	4,184	1,811	\$9,055.00	\$6,276.00	\$3,138.00	\$525.19	\$18,994.19
Whiteley Township	754	320	\$1,600.00	\$1,131.00	\$565.50	\$92.80	\$3,389.30
County Totals	40,672	16,678	\$83,390.00	\$61,008.00	\$30,504.00	\$4,836.62	\$179,738.62

These costs substantially exceed the value of the materials collected, before any costs of processing are considered. Further reducing the frequency of recyclable collection to only once per month would likely reduce the rate of material collected. Since recyclable materials would need to be stored for extended times between collection while the alternative of disposal is available at no additional cost, many consumers would chose to dispose of the material rather than store it for recycling.

Drop-off Method

Drop-off at recyclable collection sites is less effective than curbside collection. Very successful programs have collected as much as 7% of the residential municipal waste generated. In Greene County this collection rate would equal 1,291 tons/per year. The cost of the program would include collecting the recyclable material from the drop off locations. In addition, an intensive advertising campaign to promote the program would be required to achieve high enough participation rates to meet the budgeted goals. These costs, which are shown in Table 4-6, are estimated to be roughly \$179,000.

Impact of Avoided Disposal

Another factor in determining if the recovery of additional material is feasible is the impact of a successful curbside recycling program on the cost of residential municipal waste collection services. It is difficult to reduce incrementally municipal waste collection frequency. For example, if waste quantities are reduced by 10%, it is difficult to reduce the collection frequency a corresponding amount, e.g. once every 7.5 days instead of once per week. Thus, there is no cost savings to the consumer. In fact, a reduction in the volume of municipal waste collected increases the net collection cost on a per ton basis. A reduction of 25% in the volume of municipal waste as a result of recycling will result in an increase in the net cost of collection from \$164/ton to \$219/ton, and potentially drives the gross cost per ton for collection, transportation and disposal to \$269/ton. Even under this most optimistic scenario, the unit cost of disposing of municipal waste is still less than the cost of curbside collection of recyclables alone, before any cost of processing is considered. Thus, including a curbside recyclable collection program in a rural setting will only reduce total municipal waste costs if the recycling program is truly profitable. The profits achieved would not directly pass to the homeowner deciding to participate in the recycling program.

Financial Concerns

While operation of the recycling program has been of great benefit to the clients of Greene ARC, it has also been a hardship for the organization financially. The sale of materials does not provide sufficient revenue to cover the cost of the operation. Therefore, Greene ARC has disproportionately subsidized recycling through funds, which might have been dedicated more equitably to other programs. Greene ARC has contemplated abandonment of the recycling program over the

duration of the planning process. New controls and the future instability of MH/MR funds heightened those concerns. The increasing competition for grants and potential sunset of the Recycling Fund in 2012 highlighted the risks of operation and potential inability to repair and replace equipment. Without third party assistance, Greene ARC determined that it could no longer support the program.

In 2007, the Greene County Board of Commissioners entered into a five-year agreement with Greene ARC to subsidize specific operational costs of the program. In the agreement, the County dedicated monies received through Act 101 Section 903 grants, which reimburse up to half the salary and expenses of a Recycling Coordinator. Also directed to the Greene ARC program were Section 904 grants that reward recycling performance based on tons. Other costs would be covered by administrative fees, which could potentially be negotiated with landfills through disposal capacity contracts. The ability of the county to assess such fees is uncertain and dependent on the enactment of legislation still pending during the planning process. Any remaining expenses would have to be paid from the general fund. A copy of the agreement is located in Appendix E.

Reassessing Goals

The overall tonnage collected in all forms of residential programs and the volume of material reported from commercial establishments shows an existing interest in recycling by Greene County's citizens and its business community. With no mandated municipalities required to implement recycling programs by Act 101, Greene ARC has been the catalyst for much of the activity. Although the current programs have inspired many to recycle, their efforts have resulted in a countywide recovery rate of 8%, which approaches the best expectations for any rural drop-off program.

The cost of the program has and will continue to exceed by far the resale value of the materials recovered. Insufficient amounts of materials are recoverable in Greene County to generate the needed revenue to support the existing program and offset the added cost of collection and processing. Contributions from the County and potentially other outside sources will be essential for continuation of the program, as it currently exists.

Clearly, then, Greene ARC and the County must continually evaluate its waste management and recycling objectives and explore all feasible alternatives in the event the current operation proves too costly to sustain. The following chapter provides descriptions of those options that offer the most potential for future consideration. Additionally, it includes cost comparisons of the current program and those alternatives.

Chapter 5

New Opportunities for Greene County

Restructuring for the Future

Solid waste management decisions in rural areas are often complicated by the added challenges of poverty, geographic isolation, minimal local government staff resources, financial limitations, and other constraints. Pollution prevention and resource conservation solutions must remain affordable and sustainable while meeting regulatory requirements.

The revisions and recommendations contained in this document are intended to assist Greene County overcome current obstacles and transition to solid waste management alternatives with the flexibility to address future needs. Background data is provided for the supporting arguments and suggestions. Optional methods and tactics are included for consideration as often as possible. A timeline of proposed actions is also included.

Visions of Improvements

During development of the plan, public participants were engaged in a visioning session to discuss the methods Greene County and its municipalities could explore to increase residential participation in waste collection, recycling and reduce illicit dumping. Overwhelmingly, participants expressed the need for greater availability of waste collection opportunities throughout the county. Mandatory waste collection and recycling were offered as potential solutions. A need specifically for outlets for hard to manage items was stressed. These include large appliances, tires, paint, and other household chemicals, old electronic devices and construction demolition debris. The challenge for elected officials to build public consensus, implement, enforce, and pay for these services was a critical part of the discussion. Tables 5-1 illustrates the visions of the community along with the benefits and obstacles associated with each. Additionally, the tables offer methods of implementation and potential sources of revenue to support the systems.

A more detailed description of the most feasible options to achieve these visions and the costs for each option is provided later in this chapter.

Table 5-1 Public Visions for Future Waste Management	Benefits	Obstacles	Collection Methods	Administration & Enforcement	Potential Funding Sources
Increase Availability of Waste Collection	Reduce Illegal Dumping Convenience	Potential abuse from outside sources	Municipal drop-off	Municipality	Direct user fees Municipal Taxes
Mandatory Garbage Collection	Reduce Illegal Dumping Improves quality of life Increases property values Potential to reduce cost per unit	Political Risk Public Outcry Enforcement increases administrative & operational costs	Individual Subscription Municipal contract Municipal employees	Municipality	Direct user fees Municipal Taxes
Mandatory Drop-off Recycling	Minimal Increase in Material Recovery Minimal Increase in Participation	Political Risk Public Outcry Inability to enforce Increased collection costs Increased processing costs Increased Contamination	Municipal employees maintain sites & transfer material Municipal contract with Greene ARC or other public agency Municipal contract with private sector	Municipality County	Direct user fees County & Municipal Taxes
Mandatory Curbside Recycling	Convenience Maximize Material Recovery Maximum Increase in Participation Users pay for the service	Political Risk Public Outcry Doubles the cost of collection Significant increase in processing costs	Individual Subscription Municipal contract with private sector Municipal employees Municipal contract with Greene ARC or other public agency	Municipality	Direct user fees Municipal Taxes
Voluntary Curbside Recycling	Convenience	Inability to enforce Collection Cost prohibitive	Individual Subscription Municipal employees Greene ARC or other public agency charges directly	Municipality	Direct user fees

Table 5-1 Public Visions for Future Waste Management (continued)

Vision	Benefits	Obstacles	Collection Methods	Administration & Enforcement	Potential Funding Sources
Pick-up service for White Goods/Bulk Items	Reduce Illegal Dumping Convenience Increase Participation	Higher operational costs	Municipal contract with private sector Municipal employees Municipal contract with Greene ARC or other public agency Greene ARC or other public agency charges directly	Municipality County	Direct user fees Municipal Taxes
Drop-off for White Goods/Bulk Items	Reduce Illegal Dumping Resale value of some goods	Reluctance to Pay Potential for excessive disposal costs	Municipal employees maintain sites & transfer material Municipal contract with private sector Municipal contract with Greene ARC or other public agency Greene ARC or other public agency operates main site County contract with private sector	Municipality County	Direct user fees County & Municipal Taxes
Household Hazardous Waste Collection	Reduces Protects Groundwater	Reluctance to Pay Environmental Liabilities Sufficient C collection Outlets	County contract with private sector	County	Direct user fees Grants County Taxes
Electronics Discards Recycling	Reduces Illegal Dumping Protects Groundwater Saves Landfill Space	Reluctance to Pay Sufficient C collection Outlets	County contract with private sector	County	Direct user fees Grants County Taxes

Pending Changes for Greene ARC

For several years, Greene ARC has contemplated relocating its administrative offices and overall operation closer to the center of Waynesburg. Greene ARC currently has offers from outside sources to purchase its property in Washington Township. Sale of the property prompts the need either to relocate the Material Recovery Facility (MRF) or to eliminate or modify the recycling program, as it exists today. Because the MRF was purchased with grant funds, by the County and Washington Township, the fate of the MRF could trigger financial obligations to the PADEP. The terms and conditions of those obligations are presented in detail in Chapter 10. Whether or not the current real estate transfer occurs, Greene ARC has established its intent to relocate. Therefore, it is prudent for the County to prepare for the inevitable decisions it will face when such a move occurs.

Relocation and Transition

A potential relocation of the MRF will result in additional expenses to dismantle, move, and reinstall equipment. Availability and location of land and/or structures as well as constraints from local zoning issues could be problematic to the operation of a MRF. New construction or refurbishment of an existing structure whether for a MRF or alternative facility will increase the need for local funds.

Varieties of scenarios present themselves for consideration during this transition. One option, of course, is simply to continue the current program, albeit in a new location. Other options maintain the most basic functions of the current program while incorporating the visions expressed by the public participants during the planning process. To determine the best scenario for the County, each alternative must be evaluated by these criteria:

- financial responsibility to the Recycling Fund;
- impact on relocation expenses;
- future operating costs;
- effectiveness of service in relation to public needs;
- public acceptance;
- sources of revenue;

Cost Comparison of Current Program and Transitional Alternatives

Because the outlook for Greene ARC's program is dependent on relocation and a continuation of funding, the survivability of the program as it currently exists has some uncertainties. Therefore, it is important to explore feasible replacement options. Often when the effort to maintain a struggling program is reevaluated, new opportunities suddenly surface. These ideas frequently present more cost

effective methods to achieve the same goals. At a minimum, looking at other types of programs is a means to assess the performance of one's existing services.

Current Program

Table 5-2 summarizes the current annual operating costs for the MRF operated by Greene ARC. The bulleted list preceding highlights the details of the operation and the materials collected. The facility receives commingled items, which are collected in trailers from remote drop-off sites located throughout the county. Municipal employees transport the trailers to the MRF. Materials are sorted and processed at the MRF. Processing activities include compaction, shredding, and baling. Commercial material is also received at the facility.

Permanent Drop-Off Facility

Table 5-3 summarizes the annual operating costs for a permanent drop-off facility commonly known as a convenience center. The bulleted list preceding the table highlights the details of the operation and the materials collected. The facility would be located on a fenced site 150' by 150'. The facility would be manned and receive the source separated items listed in the table. An office trailer, two storage trailers and two recycling trailers would be located on the site. Roadways, storage, and recycling trailer areas would be concrete paved. The center of the site where the office trailer was located would be stone paved. Materials would receive only minimal processing. Compaction, shredding and baling would not be conducted. Recovery rates are reduced since commercial collection and the recycling trailers located at remote municipal sites would not be utilized in this system.

Permanent Drop-Off Facility with a Thrift Store

Table 5-4 summarizes the annual operating costs for a drop-off facility located in rented space adjoining a thrift store, also known as a "drop and shop." The bulleted list preceding the table highlights the details of the operation and the materials collected. The facility would be manned and receive the source separated items. Material processing would include only compaction and baling. Elimination of the sorting line reduces space requirements to 2/3 of the existing operation and the equipment by 1/2. Recovery rates are reduced since commercial collection and the recycling trailers are not included

Current Materials Recovery Facility Operations

- Multiple municipal drop-off sites
- Accepts commingled recyclables
- Aluminum, Bi-Metal, Plastics, Office Paper, ONP, OCC, Glass
- Municipalities transport material to facility in trailers
- Requires sorting & processing material

Table 5-2 Cost of Operating Current Materials Recovery Facility

EXPENSES		
OPERATING		
	Labor	92,160
	Fringes	23,040
	Utilities	10,800
	Disposal	3,350
	Drop-Off Collection	33,800
	Commercial Collection	7,984
	Equipment Maintenance	21,900
	Facility	7,780
	Insurance, misc.	9,216
	SUB-TOTAL	210,030
CAPITAL RECOVERY		
	Facility	38,000
	Equipment	43,800
	SUB-TOTAL	82,700
	TOTAL ANNUAL COST	292,730
REVENUE		
	Material Sales	50,538
	TOTAL ANNUAL REVENUE	50,538
NET PROFIT/(LOSS)		
		(242,192)
	NET WITH GREENE ARC SUBSIDIES	(150,032)*

* Greene ARC dedicates a portion of its MH/MR funding to support the recycling program. The impact of the subsidy shown in the table was calculated based on the best available information provided by Greene ARC. It assumes fund allocations on a per employed client basis and is therefore only an estimate.

Permanent Convenience Center Operations

- Centralized drop-off sites
- Accept source separated recyclables with highest dollar value
- Aluminum, Bi-Metal, ONP
- Accept white goods, and tires
- Material comes directly to facility by residents
- No sorting or processing

Table 5-3 Cost of Operating Permanent Convenient Center

EXPENSES		
OPERATING		
	Labor	34,560
	Fringes	8,640
	Utilities	1,500
	Disposal	965
	Equipment Maintenance	1,500
	Facility	600
	Office & Storage Trailer Rental	3,500
	Insurance, misc.	3,456
	SUB-TOTAL	54,721
CAPITAL RECOVERY		
	Facility	3,000
	Equipment	3,000
	SUB-TOTAL	6,000
	TOTAL ANNUAL COST	60,721
REVENUE		
	Material Sales	8,504
	TOTAL ANNUAL REVENUE	8,504
NET PROFIT/(LOSS)		
	TOTAL	(52,217)
	TOTAL WITH GREENE ARC SUBSIDIES	(17,657)

* Greene ARC dedicates a portion of its MH/MR funding to support the recycling program. The impact of the subsidy shown in the table was calculated based on the best available information provided by Greene ARC. It assumes fund allocations on a per employed client basis and is therefore only an estimate.

Drop & Shop Center Operations

- Centralized drop-off sites with thrift store
- Accept source separated recyclables with highest dollar value
- Aluminum, Bi-Metal, Office Paper, ONP, OCC, Textiles
- Accept bulky items, white goods, tires, textiles, household goods
- Material comes directly to facility by residents
- Requires processing material
- Resale on-site of useable clothing, furniture, etc.

Table 5-4 Cost of Operating Drop & Shop Center

EXPENSES		
OPERATING		
	Labor	92,160
	Fringes	23,040
	Utilities	7,200
	Disposal	1,840
	Equipment Maintenance	10,950
	Facility Rental	30,000
	Insurance, misc.	9,216
	SUB-TOTAL	174,406
CAPITAL RECOVERY		
	Facility	0
	Equipment	21,900
	SUB-TOTAL	21,900
	TOTAL ANNUAL COST	196,306
REVENUE		
	Material Sales	29,621
	TOTAL ANNUAL REVENUE	29,621
NET PROFIT/(LOSS)		
	TOTAL	(166,685)
	TOTAL WITH GREENE ARC SUBSIDIES	(74,525)

* Greene ARC dedicates a portion of its MH/MR funding to support the recycling program. The impact of the subsidy shown in the table was calculated based on the best available information provided by Greene ARC. It assumes fund allocations on a per employed client basis and is therefore only an estimate.

Funding the Programs

While recycling does generate revenue from the resale of material, rarely does it cover the entire cost of operation. To provide the service, government agencies must determine other sources of funding to sustain such programs. It is often easier to understand and justify the costs when they can be broken down into a common unit, such as the cost per home. Table 5-5 and Table 5-6 illustrate the cost of the current and alternative recycling programs per municipality. In Table 5-5, it is assumed that the municipalities would share the cost of the program. Table 5-6 assumes that the County would contribute half of the funding and the municipalities would pay the remainder. While the tables are provided simply as an example of the cost breakdown by housing units, the costs per home demonstrate how user fees could be structured in a tax or sewage and water bill.

Collection Events

Another possible alternative to address special materials and to prevent illegal dumping is to conduct periodic collection events or community clean-ups at locations throughout the county. The events could be held semi-annually. Many municipalities already provide this service to their residents. However, the service is not universal and there are many regions of the County whose residents do not have such opportunities. Discussions with vendors indicates that the cost per event typically is about \$5,000, It is assumed that 6 to 10 events could be held in Greene County per year at an annual cost of \$30,000 to \$50,000.

Household Hazardous Waste

According to the Pennsylvania Department of Environmental Protection, each person in Pennsylvania generates an average of four pounds of Household Hazardous Waste (HHW) each year. With a population of nearly 41,000, Greene County could expect to produce approximately 82 tons of HHW per year.

Communities in which residents remain at the same location for many years often find that the expected annual volume of HHW accumulates in homes over time rather than being disposed on a regular basis. Although some of the material is purposefully hoarded for potential use, in other cases, individuals unsure of how to dispose of the material properly simply return it to storage. Individuals faced with eventual removal of these accumulated quantities often encounter significant obstacles and associated costs.

Administered by the Pennsylvania Resources Council (PRC), the Southwest PA Household Hazardous Waste Task Force (SWPAHHW) provides support and assistance to counties wishing to host an HHW event. Essentially, PRC facilitates meetings, organizes collection events, spearheads fundraising and volunteer efforts, and develops education and outreach materials.

Table 5-5 Estimated Costs of Drop-off Program Options Per Municipality

Geography	# Housing units	% of units in County	Cost to Support Operation of Convenience Center		Cost to Support Operation of Drop & Shop		Cost to Support Operation of Current Recycling Facility	
			Annually per home \$1.06	Monthly per home \$0.08	Annually per home \$4.47	Monthly per home \$0.37	Annually per home \$9.00	Monthly per home \$0.75
Aleppo Township	282	1.69%	\$298.55	\$22.56	\$1,260.11	\$105.01	\$2,536.82	\$211.40
Carmichaels Borough	255	1.53%	\$269.97	\$20.40	\$1,139.46	\$94.95	\$2,293.93	\$191.16
Center Township	566	3.39%	\$599.22	\$45.28	\$2,529.15	\$210.76	\$5,091.62	\$424.30
Clarksville Borough	90	0.54%	\$95.28	\$7.20	\$402.16	\$33.51	\$809.62	\$67.47
Cumberland Township	2893	17.35%	\$3,062.82	\$231.44	\$12,927.26	\$1,077.27	\$26,024.86	\$2,168.74
Dunkard Township	1073	6.43%	\$1,135.99	\$85.84	\$4,794.66	\$399.55	\$9,652.50	\$804.37
Franklin Township	2291	13.74%	\$2,425.48	\$183.28	\$10,237.25	\$853.10	\$20,609.38	\$1,717.45
Freeport Township	142	0.85%	\$150.34	\$11.36	\$634.52	\$52.88	\$1,277.40	\$106.45
Gilmore Township	153	0.92%	\$161.98	\$12.24	\$683.67	\$56.97	\$1,376.36	\$114.70
Gray Township	105	0.63%	\$111.16	\$8.40	\$469.19	\$39.10	\$944.56	\$78.71
Greene Township	203	1.22%	\$214.92	\$16.24	\$907.10	\$75.59	\$1,826.15	\$152.18
Greensboro Borough	140	0.84%	\$148.22	\$11.20	\$625.58	\$52.13	\$1,259.41	\$104.95
Jackson Township	228	1.37%	\$241.38	\$18.24	\$1,018.81	\$84.90	\$2,051.04	\$170.92
Jefferson Borough	147	0.88%	\$155.63	\$11.76	\$656.86	\$54.74	\$1,322.38	\$110.20
Jefferson Township	1087	6.52%	\$1,150.81	\$86.96	\$4,857.22	\$404.77	\$9,778.44	\$814.87
Monongahela Township	726	4.35%	\$768.62	\$58.08	\$3,244.10	\$270.34	\$6,530.95	\$544.25
Morgan Township	1117	6.70%	\$1,182.57	\$89.36	\$4,991.27	\$415.94	\$10,048.31	\$837.36
Morris Township	375	2.25%	\$397.01	\$30.00	\$1,675.67	\$139.64	\$3,373.43	\$281.12
Perry Township	771	4.62%	\$816.26	\$61.68	\$3,445.18	\$287.10	\$6,935.76	\$577.98
Rices Landing Borough	190	1.14%	\$201.15	\$15.20	\$849.01	\$70.75	\$1,709.20	\$142.43
Richhill Township	518	3.11%	\$548.41	\$41.44	\$2,314.66	\$192.89	\$4,659.83	\$388.32
Springhill Township	224	1.34%	\$237.15	\$17.92	\$1,000.94	\$83.41	\$2,015.06	\$167.92
Washington Township	435	2.61%	\$460.53	\$34.80	\$1,943.78	\$161.98	\$3,913.17	\$326.10
Wayne Township	536	3.21%	\$567.46	\$42.88	\$2,395.10	\$199.59	\$4,821.75	\$401.81
Waynesburg Borough	1811	10.86%	\$1,917.31	\$144.88	\$8,092.38	\$674.36	\$16,291.40	\$1,357.62
Whiteley Township	320	1.92%	\$338.78	\$25.60	\$1,429.91	\$119.16	\$2,878.66	\$239.89
Total	16678	100.00%	\$17,657.00	\$1,412.56	\$74,525.00	\$6,210.41	\$150,032.00	\$12,502.66

Table 5-6 Estimated County/Municipality Shared Costs of Drop-off Program Options

Geography	# Housing units	% of units in County	50/50 Share Cost to Support Operation of Convenience Center		50/50 Share Cost to Support Operation of Drop & Shop		50/50 Share Cost to Support Operation of Current Recycling Facility	
			Annually per home \$1.06	Monthly per home \$0.08	Annually per home \$4.47	Monthly per home \$0.37	Annually per home \$9.00	Monthly per home \$0.75
Greene County	16678	100.00%	\$8,828.50	\$706.28	\$37,262.50	\$3,105.21	\$75,016.00	\$6,251.33
Aleppo Township	282	1.69%	\$149.28	\$11.94	\$630.05	\$52.50	\$1,268.41	\$105.70
Carmichaels Borough	255	1.53%	\$134.98	\$10.80	\$569.73	\$47.48	\$2,293.93	\$95.58
Center Township	566	3.39%	\$299.61	\$23.97	\$1,264.57	\$105.38	\$5,091.62	\$212.15
Clarksville Borough	90	0.54%	\$47.64	\$3.81	\$201.08	\$16.76	\$809.62	\$33.73
Cumberland Township	2893	17.35%	\$1,531.41	\$122.51	\$6,463.63	\$538.64	\$26,024.86	\$1,084.37
Dunkard Township	1073	6.43%	\$567.99	\$45.44	\$2,397.33	\$199.78	\$9,652.50	\$402.19
Franklin Township	2291	13.74%	\$1,212.74	\$97.02	\$5,118.62	\$426.55	\$20,609.38	\$858.72
Freeport Township	142	0.85%	\$75.17	\$6.01	\$317.26	\$26.44	\$1,277.40	\$53.23
Gilmore Township	153	0.92%	\$80.99	\$6.48	\$341.84	\$28.49	\$1,376.36	\$57.35
Gray Township	105	0.63%	\$55.58	\$4.45	\$234.59	\$19.55	\$944.56	\$39.36
Greene Township	203	1.22%	\$107.46	\$8.60	\$453.55	\$37.80	\$1,826.15	\$76.09
Greensboro Borough	140	0.84%	\$74.11	\$5.93	\$312.79	\$26.07	\$1,259.41	\$52.48
Jackson Township	228	1.37%	\$120.69	\$9.66	\$509.40	\$42.45	\$2,051.04	\$85.46
Jefferson Borough	147	0.88%	\$77.81	\$6.23	\$328.43	\$27.37	\$1,322.38	\$55.10
Jefferson Township	1087	6.52%	\$575.40	\$46.03	\$2,428.61	\$202.38	\$9,778.44	\$407.43
Monongahela Township	726	4.35%	\$384.31	\$30.74	\$1,622.05	\$135.17	\$6,530.95	\$272.12
Morgan Township	1117	6.70%	\$591.28	\$47.30	\$2,495.64	\$207.97	\$10,048.31	\$418.68
Morris Township	375	2.25%	\$198.51	\$15.88	\$837.84	\$69.82	\$3,373.43	\$140.56
Perry Township	771	4.62%	\$408.13	\$32.65	\$1,722.59	\$143.55	\$6,935.76	\$288.99
Rices Landing Borough	190	1.14%	\$100.58	\$8.05	\$424.50	\$35.38	\$1,709.20	\$71.22
Richhill Township	518	3.11%	\$274.20	\$21.94	\$1,157.33	\$96.44	\$4,659.83	\$194.16
Springhill Township	224	1.34%	\$118.57	\$9.49	\$500.47	\$41.71	\$2,015.06	\$83.96
Washington Township	435	2.61%	\$230.27	\$18.42	\$971.89	\$80.99	\$3,913.17	\$163.05
Wayne Township	536	3.21%	\$283.73	\$22.70	\$1,197.55	\$99.80	\$4,821.75	\$200.91
Waynesburg Borough	1811	10.86%	\$958.65	\$76.69	\$4,046.19	\$337.18	\$16,291.40	\$678.81
Whiteley Township	320	1.92%	\$169.39	\$13.55	\$714.95	\$59.58	\$2,878.66	\$119.94

Partial reimbursement for such events is currently available through the PADEP Household Hazardous Waste Program. User fees, as well as in-kind services, are other means to finance the event. Greene County should plan to host several HHW events throughout the Plan period.

Electronics Recycling

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

Increasingly, counties and municipalities are offering computer and electronics collections as part of household hazardous waste collections or separate special events. In addition, electronic manufacturers have emerged that accept computers and other electronics for recycling. Several counties throughout Pennsylvania held e-cycling events as part of a pilot program sponsored by the USEPA. Public response to the drop-off events was favorable. The final report of the pilot indicated that the amount of material recovered from one day collections was substantial. However, it still appeared minimal in comparison to the volume known to exist. Programs that collected material more frequently were shown to have a higher degree of participation and increased recovery.

Although, it will not capture the full volume of electronics discarded, an electronics collection event could serve as a convenient outlet for residents wishing to properly manage their equipment. A private sector program, still in the developmental stage, is promising more frequent collection at a reasonable price in Western Pennsylvania locations. The company is proposing to accept consumer electronics on a price per carload basis. Alternative one time event programs often charge by the pound or by the category of item (i.e. television, computer, cell phone). Greene County should consider, at a minimum, hosting an individual collection event or exploring the potential for frequent events. Partial reimbursement for such events is currently available through the PADEP Household Hazardous Waste Program. Most programs require participants to pay fees sufficient to cover the remaining costs.

Enforcement and Education

Considering the advances made in improving the local disposal practices since the implementation of the original plan, the County should focus some effort toward eliminating these lingering problems. In order to curb the use of burning as a means of waste management, the County should consider an education campaign on the health hazards of backyard burning. To address illicit dumping and littering the County should form a partnership with both the Pennsylvania Resources Council (PRC) and PA Cleanways. PRC has long been the champion of anti-littering campaigns in the Commonwealth and have produced excellent educational materials available for public use. Greene County has a chapter of PA Cleanways. That organization is well known for its clean-ups of illegal dump sites. It is also shown that by having active volunteers from PA Cleanways within the county, the instances of illicit dumping begins to diminish. It is suspected that this occurs from the publicity the clean-ups receive and the subsequent public perception that these sites may now be monitored.

Enforcement requires more effort than normally can be managed by one recycling coordinator and minimally staffed municipal law enforcement agencies. The County might want to research the success realized in other regions that are using a joint enforcement officer. The County and municipalities share the cost for these services, which encompass many disciplines and ordinances beyond waste management and recycling.

Expanding the Recycling Program

Currently, Greene County has a residential recycling rate of approximately 8% for the capture of the basic recyclables, designated in Act 101. These include bi-metal and aluminum cans, plastic containers and glass bottles, as well as newspapers. For the most part, that has been achieved through the successful Greene ARC Program. Although those accomplishments are admirable for a rural county with no mandated municipalities, there are other materials available for recovery that fall outside the operational capabilities of Greene ARC's program. Additionally, there are options available in the event Greene Arc decides to abandon its program.

Paper Retriever Program

An affordable alternative to the existing program might be one offered by Abitibi-Consolidated Inc. The company is the largest recycler of newspapers and magazines in North America. The community-based program for paper recycling is simple to establish and maintain. Additionally, it is a free service that generates much needed revenue for non-profit agencies. Bright green and yellow containers - called *Abitibi Paper Retrievers* - are placed in highly visible, convenient areas

where residents can drop off their newspaper, magazines, shopping catalogs and mail. Usually, the majority of the paper is received from the surrounding neighborhoods. Paper is collected and weighed at the time of collection on the collection vehicles. A monthly statement detailing the amount of paper collected for the month is accompanied by a check for the amount collected payable to the sponsoring agency.

Abitibi launched the program in Western Pennsylvania during 2005. *Abitibi Paper Retrievers* are currently located in Beaver, Westmoreland, and Washington Counties. It is recommended that the County, Greene ARC, or another non-profit agency explore a partnership with Abitibi if the current method of collection is ever abandoned.

Institutional Organics Composting

College campuses resemble small cities or large corporations. An abundance of resources are used to provide basic services and maintain the operation of the institution. In turn, a lot of waste is generated from the dining halls, dormitories, offices, and grounds. Likewise, correctional institutions, with moderate to large inmate population, experience the same issues. On a smaller scale, suburban and rural school districts with primary through secondary facilities located on a centralized campus operate similarly.

A growing number of these institutions have turned to composting to process their food and lawn waste. Diversion of food waste through composting can save on disposal costs. This is a practical consideration in any institutional setting.

However, the reasons for stressing waste prevention at colleges, universities, and school districts go far beyond targeting the basic economic element. Educational institutions are highly visible in the community and thus have the potential to serve as models of waste prevention. The whole practice of composting also offers a valuable learning tool for students.

Most schools limit their programs to food waste generated in the food prep areas of the cafeteria, although other schools include leftovers collected from the lunchroom. In some instances, paper products can also be introduced into the mix. Depending on the school, food discards can represent from 20% to 50% of the total solid waste by weight found in its waste collection containers.

In-vessel composting units are commonly used by institutions to expedite the composting process and to alleviate odor problems. A small unit with an upfront cost of \$90,000 can process up to 1,000 pounds of material per day. In Crawford County, Pennsylvania, in-vessel composters are used by the County Prison and at Allegheny College. Ridgway Elementary School in Elk County, Pennsylvania also utilizes an in-vessel unit.

When funding cannot support the purchase of an in-vessel composting unit, on-farm composting, a more economical method, presents a viable alternative. On-farm composting is practiced by Slippery Rock University and Penn State University.

At Penn State, the composting facility is located on the site of a former manure storage area. Pre-consumer food waste from the student dining commons, two hotels, and a daycare center located on the University complex is collected for the project. The food waste is mixed in with leaves, other organic landscape debris collected on campus, and manure from the University's dairy herd. At Slippery Rock, pre-consumer food waste is collected from the student dining halls and leaves are collected from the Borough of Slippery Rock. These are transported to a three-acre site at the University's Macoskey Center. Here they are mixed together in windrows to produce enough compost to support the Center's organic market garden and other agricultural initiatives at the University.

In some areas, local farmers are the recipients of the pre-consumer food waste. Material is transported to the farm site and the farmer uses existing equipment to incorporate it into manure piles. The end product is used as a valuable soil nutrient on the farm fields. An added bonus of some programs is the ability to collect commercial grade fats and greases, which can be converted to biodiesel fuel to power the farm equipment.

Food waste bound for composting is normally stored for collection in barrels or wheeled carts. It is collected more frequently to avoid odors. Collection and transportation of the material often provides a business opportunity to smaller haulers that previously were unable to offer large scale commercial collection services. It can also be done by institutional employees.

Waynesburg University, the correctional institutions located within Greene County, and several of the County's school districts have potential for utilization of individual onsite in-vessel units or alternatively, to partner together for a large scale on-farm composting project. A feasibility study should be conducted during the Plan period to determine the institutional interest and capabilities, along with the potential farm outlets. A successful program could eventually draw pre-consumer food waste from local restaurants and grocery stores.

Community Waste Exchange

A waste/materials exchange system could be one way to expand materials reuse opportunities. It could provide a mechanism for the effective exchange of smaller quantities of one-time or "lower value" materials on a local scale. Larger and more comprehensive exchange programs exist on a broader geographic scale. However, a regional rural exchange program would provide the means for

businesses and individuals to have ready access to materials available and desired locally.

A simple and proven way to facilitate the exchange of materials is through a web site, electronic newsletter, or similar forum. Since the exchange can be handled directly through the traders of the commodities, administration of the program by the County would be minimal. Typically, such programs operate with no charge to list with or use the service. No intermediary is required, since those with a need to acquire the materials listed on the site make direct contact with those listing the material. The County should conduct an investigation into the potential for providing this service to both residents and businesses in the community.

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 impact the greatest benefit and results. Therefore, a suggested prioritized timeline for implementing the recommendations and revisions is shown in Table 5-7.

Table 5-7 Proposed Implementation Schedule for Greene County Municipal Solid Waste Management Plan

ACTIVITIES			
YEAR	LEGAL AND ADMINISTRATIVE	STUDIES AND EDUCATION	COLLECTION AND PROCESSING
2008	Resolution to Adopt the Plan	Technical Assistance to explore sites for MRF and/or convenience centers	Dismantle MRF
	Secure Disposal Agreements with Disposal Facilities	Determine feasibility of relocating current facility	Build or refurbish
	Adopt Revisions to Solid Waste Ordinance	Determine the type of facility and level of services to provide	
2009			
2010	Work with municipalities to support a joint enforcement officer	Work with PA Cleanways to develop and launch a public awareness campaign on illicit dumping	Sponsor a Household Hazardous Waste Collection Event
	Review/Renew Agreement with Greene ARC		Sponsor an Electronic Recycling Collection Event
2012		Conduct a study to determine the feasibility of establishing a food waste composting program at Waynesburg University, local school districts, and correctional facilities	Sponsor a Household Hazardous Waste Collection Event
2013			Sponsor an Electronic Recycling Collection Event
2014			Sponsor a Household Hazardous Waste Collection Event
2015		Investigate the potential of developing a community waste exchange	Sponsor an Electronic Recycling Collection Event
2016		Begin Municipal Solid Waste Management Planning Process	Sponsor a Household Hazardous Waste Collection Event
			Sponsor an Electronic Recycling Collection Event
2017			Sponsor a Household Hazardous Waste Collection Event
2018			Sponsor a Household Hazardous Waste Collection Event
2019	Secure New Disposal Capacity Agreements	Finalize Municipal Solid Waste Management Plan Revisions and Updates	

Summary of Recommendations

Providing a countywide recycling collection system in a rural environment is a noteworthy accomplishment. Those efforts should be applauded for attempting to address a specific niche of municipal waste management. Abandonment of a service is always difficult to accept. It is time, however, to reconsider how to serve the best overall needs of the community. Programs must be identified, which will provide to the residents of Greene County the biggest return on investment, both economically and environmentally. With service offerings that include increasing convenience and diversification, the County could improve the quality of life in its communities. Therefore, the Revised Plan offers suggestions and ideas to renew interest, increase participation, and open new opportunities for comprehensive municipal solid waste management. The following list highlights some of those recommendations:

- Ensure that waste collection in some form is available to all residents
- Determine feasibility of convenience centers or resource recovery parks
- Increase enforcement through a joint enforcement officer
- Develop a public awareness campaign on illicit dumping and open burning
- Investigate the Paper Retriever Program for underserved areas of the County
- Explore opportunities for institutional food composting programs
- Investigate the potential of developing a community waste exchange
- Coordinate grant sponsored Household Hazardous Waste Events
- Coordinate grant sponsored Electronic Recycling Events

Chapter 6

Facilities for Future Waste Management

Guaranteeing Disposal Capacity without Flow Control

The responsibility to secure sufficient disposal capacity for the next decade is the primary goal for counties in the municipal solid waste planning process. Another element with equal, if not greater, impact on waste management practices is a decision regarding the continuation of flow controls for waste generated within the County. This chapter presents an analyses of the proposals submitted from disposal facilities and identifies those designated to contract with Greene County for future capacity. It also discusses the factors impacting waste flow control and the County's decision regarding this policy.

Controlling the Flow of Waste

The County has always maintained an extensive inventory of available landfills designated for disposal of municipal waste. This provided the haulers with the choice to use some of the facilities for economic reasons and others for convenience. Factors, such as convenient daily access to capacity, current market conditions, and practices affecting the control of waste, all played a role in their use of disposal sites.

Waste flow control has been a key factor in implementing the existing Greene County Municipal Waste Management Plan. A condition of licenses issued by the municipalities required haulers to use only those landfills designated in the County's Plan for disposal of Greene County's municipal waste served as the flow control the mechanism. Continuance of the waste flow requirement however, has been thwarted by the enactment of Act 90, the Waste Transportation Safety Program, which the Commonwealth Court has ruled preempts a municipality's ability to license at the local level. Likewise, the Court's determined that a County, which had not previously exercised its right to license transporters, was also preempted from implementing any such new licensing scheme.

It is anticipated that the abandonment of a formal flow control mechanism will be unnoticeable during the day to day collection and transport of municipal waste generated in Greene County. Consolidation in the waste industry through the past decade has resulted in ownership changes of hauling operations and disposal facilities. Many small independent operations have been consumed by acquisition. Most of the large corporate companies prefer to use their own landfills for disposal. Therefore, a noticeable shift in waste flow occurred naturally as, to accommodate the acquired customers, routes were adjusted and redirected to new disposal sites. Many of the landfills designated in the original plan failed to receive the volume of waste, which was anticipated. In fact, some never received any waste.

Facility Selection Process

Rather than deliberately exclude from the Plan, these or other facilities with a current interest in receiving waste, the Greene County Board of Commissioners requested proposals for disposal capacity for a ten- year period for municipal waste generated within the borders of the County. Facilities that had contracted for disposal under the existing Plan and any additional disposal or processing facilities, interested in making capacity available to the County were invited to obtain the document outlining the proposal specification and to submit offers. In order to reach all of those who might be potentially interested in supplying such services to the County, the request for proposals was posted twice in a display advertisement in *Waste News*, a national industry trade journal.

In this non-discriminatory procurement process, equal consideration and opportunity was given to both in state as well as out of state facilities. Ten facilities responded with proposals. Both in state and out of state facilities responded.

Proposals were expected to adhere to specific submission guidelines in providing the information for administrative and also technical merit review. Facilities were required to meet the completeness criteria and demonstrate that their operation and design was, at a minimum, equal to EPA standards for a Municipal Waste Disposal/Processing Facility. Facilities had to demonstrate possession of a current operating permit issued under the full standards of the environmental regulatory agency within the state in which the facility was located. Financial stability, compliance history, and operational experience were also viewed as significant factors.

Once a facility passed the review process, it qualified to enter into contract with the Board of County Commissioners. Details of that review can be found in Table 6-1. It follows the requirements of the advertised request for proposals and demonstrates the status and expected expiration date of the current permit. If

insufficient or sub standard information was provided, it is indicated in the appropriate category.

By entering into agreements with the qualifying sites, and since no other facilities responded to the advertised request, it is reasonable to conclude that Greene County took all possible steps to ensure fair and equitable market conditions would prevail. The use of multiple facilities assures that on any given day there is sufficient disposal capacity available for all of the municipal waste generated within the County's boundaries.

At least one of the facilities indicates that they can accept 100% of Greene County's waste on a daily basis. Caution must be taken however, because other counties confirm having similar contracts with these landfills. It is not uncommon for landfills to contract for more airspace than they may have available each day. A few of the landfills show soon to expire permits with limited available capacity should a reissuance or expansion be denied. Since residual waste and out of state waste, which is received at these sites, competes for the same airspace, it is prudent for Greene County to protect its interests by securing agreements with multiple facilities.

The proposal and subsequent negotiations process ensures a fair and equitable market for disposal facilities. In addition, the use of numerous qualified interested facilities benefits transporters of municipal waste by providing sufficient and convenient access along with competitive rates as they handle the daily volume of Greene County's waste.

In summary, the facilities selected include:

- Allied Waste Systems
 - Imperial
 - Greenridge Reclamation
- J. P. Mascaro and Sons
 - Brooke County
 - Wetzel County
- Veolia Environmental
 - CBF/Chestnut Valley

- Vogel Holdings
 - Seneca
 - Tri-County (pending permit approval)
- Westmoreland Waste Inc.
 - Sanitary
- Waste Management
 - Arden
 - South Hills Disposal

A sample of the disposal capacity agreement, which each of these facilities will be required to sign and execute is included in Appendix B.

Table 6-1A Review of Proposals for Disposal & Processing Capacity

Location	Allied Waste Imperial Landfill	Allied Waste Greenridge Reclamation Landfill	J.P. Mascaro & Sons Brooke County Landfill	J.P. Mascaro & Sons Wetzel County Landfill	Seneca Landfill	Tri County Landfill	Veolia Environmental Chestnut Valley Landfill	WM Arden Landfill	WM South Hills Disposal	Westmoreland LLC
Mailing Address	P.O. Box 47 Imperial, PA 15126	RD #1 Box 716 Scottsdale, PA 15683	Rd #2 Box 410, Colliers, WV	Rt. 1, Box 156A, New Martinsville, WV 26155	P.O. Box 1080, Mars, PA 16046	159 TCI Park Drive, Grove City, PA 15127	1184 McClellandtown Road, McClellandtown, PA 15458	Westpointe Corporate Center One, Suite 200, 1550 Coraopolis Heights Rd, Moon Township, PA 15108	Westpointe Corporate Center One, Suite 200, 1550 Coraopolis Heights Rd, Moon Township, PA 15108	1428 Delberts Drive, Unit 2, Monongahela, PA
Physical Address	11 Boggs Road Imperial, PA	Landfill Road Scottsdale, PA	Harmon Creek Road, State Rt 1, Colliers, WV	County Road 28/1, Cider Run Road, New Martinsville, WV	Hartman Road, Evans City, PA	159 TCI Park Drive, Grove City, PA 15127	1184 McClellandtown Road, McClellandtown, PA 15458	Arden Station Road, Washington, PA 15301	3100 Hill Road, South Park, A 15129	901 Tyrol Blvd. Belle Vernon, PA 15012
County/State	Allegheny/PA	Westmoreland /PA	Brooke/WV	Wetzel/WV	Butler/PA	Mercer/PA	Fayette/PA	Washington /PA	Allegheny/PA	Westmoreland/PA
Contacts										
Technical	Timothy Nystra	Timothy Nytra	Dennis McVeigh & Albert DeGennaro, Esq.	Dennis McVeigh & Albert DeGennaro, Esq.	Edward R. Vogel	Edward R. Vogel	William Binnie	Gary Groff	Gary Groff	Kit F. Petit
Site General Manager	Denny Marchetti	David Smith	Ryan Inch	Ryan Inch	Edward R. Vogel	Edward R. Vogel	Dean Mori	Terry Stine	Terry Stine	Michael Youchak & Richard Zollinger
Permit Status and Capacity										
Permit # Issuing State Expiration Date	PA 100620 expires 2015	PA 100281 expires February 2012	SWF-1013-WW0109029 expires December 11, 2008	SWF-1021MVD109185 expires March 14, 2009	PA 10043 expires October 5, 2010	PA 101295 expired 1990	PA 100419 Expired 2010	PA 100172 expires February 2013	PA 100592 expires June 9 20013	PA 100277 EXPIRES June 30, 2014
Operating Days	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)	M-Sat (306)
Current Operational Constraints	NONE	NONE	NONE	NONE	NONE	PERMIT APPLICATION DENIED CURRENTLY IN LITIGATION APPEAL	NONE	NONE	NONE	NONE

Table 6-1B Review of Proposals for Disposal & Processing Capacity (continued)

Meets Federal , State, Local Standards		Allied Waste Imperial Landfill	Allied Waste Greenridge Reclamation Landfill	J.P. Mascaro & Sons Brooke County Landfill	J.P. Mascaro & Sons Wezel County Landfill	Seneca Landfill	Tri County Landfill	Veolia Environmental Chestnut Valley Landfill	WMI Arden Landfill	WMI South Hills Disposal	Westmoreland LLC
Design	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners	Landfill with synthetic liners
Leachate Treatment	OFF SITE TREATMENT	ON SITE TREATMENT	OFF SITE TREATMENT	ON SITE TREATMENT	ON SITE TREATMENT	ON SITE TREATMENT	ON SITE TREATMENT	ON SITE TREATMENT	OFF SITE TREATMENT	OFF SITE TREATMENT	OFF SITE TREATMENT
Gas Collection and Use	FLARED AND ENERGY RECOVERY SYSTEM IN PROGRESS	FLARED AND ENERGY USED ON INTERMITTENT BASIS	FLARED AND ENERGY USED ON INTERMITTENT BASIS	FLARED AND ENERGY USED ON INTERMITTENT BASIS	FLARED AND ENERGY RECOVERY SYSTEM IN PROGRESS	FLARED AND ENERGY RECOVERY SYSTEM IN PROGRESS	PROPOSED ENERGY RECOVERY SYSTEM	FLARED	FLARED	FLARED	FLARED
Waste Plan for Emergency Disasters	NO Would deal with emergency situation as it occurs	NO Would deal with emergency situation as it occurs	NO Would deal with emergency situation as it occurs	YES	YES	YES	YES	YES	YES	YES	YES
Waste Plan for Facility Emergencies	YES, documentation of agreement with another facility	YES, documentation of agreement with another facility	YES, documentation of agreement with another facility	YES	YES, but no documentation of back-up contract	YES, but no documentation of back-up contract	YES, but no back-up contract	YES, documentation of agreements with multiple other facilities	YES, documentation of agreements with multiple other facilities	YES, documentation of agreements with multiple other facilities	YES, but no documentation of back-up contract
Host Municipality Agreements	FINDLEY TWP.	EAST HUNTINGDON TWP.	COLLIER	NEW MARTINSVILLE	JACKSON TWP.	PENDING	GERMAN TWP.	CHARTIERS TWP.	UNION AND SOUTH PARK TWS.	ROSTRAVER TWP.	

Table 6-1C Review of Proposals for Disposal & Processing Capacity (continued)

	Allied Waste Imperial Landfill	Allied Waste Greenridge Reclamation Landfill	J.P. Mascaro & Sons Brooke County Landfill	J.P. Mascaro & Sons Wetzel County Landfill	Seneca Landfill	Tri County Landfill	Veolia Environmental Chestnut Valley Landfill	WM Arden Landfill	WM South Hills Disposal	Westmoreland LLC
Regulatory Compliance										
Provided for Parent Company	NOT PROVIDED	NOT PROVIDED	Provided for Parent Company	Provided for Parent Company	Provided for Parent Company	Provided for Parent Company	NOT PROVIDED	NOT PROVIDED	NOT PROVIDED	YES
#Violations for this facility	10	6	21	13	20	NA	3	8	7	56
#Serious Violations	5 Civil Penalties	4 Civil Penalties	2 Civil Penalties	39 Civil Penalties or Consent Agreements	4 Penalties or Consent Agreements	NA	1 Consent Agreement	4 Penalties or Consent Agreements	2 Civil Penalties	39 Civil Penalties or Consent Agreements
#Repeat Violations	0	0	6	3	9	NA	0	0	8	8
Unresolved Violations	0	0	0	0	0	NA	0	0	0	0

Financial Assurances

Financial Disclosure	Publicly Held Company Annual Shareholders Report for Allied Waste	Publicly Held Company Annual Shareholders Report for Allied Waste	Privately Held Company Provided Statement of Financial Condition	Privately Held Company Provided Statement of Financial Condition	Privately Held Company provided upon request	Privately Held Company/ provided upon request	Publicly Held Company Provided Statement of Financial Condition	Publicly Held Company Annual Shareholders Report for Waste Management	Publicly Held Company Annual Shareholders Report for Waste Management	Privately Held Company/ provided upon request at time of negotiations
Public Liability Protection	\$5 million	\$5 million	\$2 million	\$2 million	\$2 million	\$2 million	\$5 million	\$5 million	\$2 million	\$2 million
Environment Pollution & Liability Protection	Surety Bond \$7.3 million	Surety Bond \$10.5 million	Surety Bond \$840,000	Escrow Account	Collateral Bonds \$10.7 million	Surety bond \$704,000	Collateral Bond \$10.2 million	Surety Bond \$14.6 million	Collateral Bond \$3.9 million	Collateral Bond \$15 million

Table 6-1D Review of Proposals for Disposal & Processing Capacity (continued)

Minimum and Maximum Waste Volumes	Allied Waste Imperial Landfill		Allied Waste Greenridge Reclamation Landfill		J.P. Mascaro & Sons Brooke County Landfill		J.P. Mascaro & Sons Weitzel County Landfill		Seneca Landfill		Tri County Landfill		Veolia Environmental Chestnut Valley Landfill		WM Arden Landfill		WM South Hills Disposal		Westmoreland LLC	
	4,666 TONS	2500 TONS	20,000 tons per month	9,999 tons per month	3000 TONS	PROPOSED 4000 TONS	775 TONS	2800 TONS	2,850	2500 TONS	1,427,796 TONS	765,000 TONS	240,000 TONS	119,988 TONS	918,000 TONS	PROPOSED 1,224,000 TONS	367,200 TONS	856,800 TONS	872,100 TONS	624,000 TONS
Maximum Daily Volume in tons	4,666 TONS	2500 TONS	20,000 tons per month	9,999 tons per month	3000 TONS	PROPOSED 4000 TONS	775 TONS	2800 TONS	2,850	2500 TONS	1,427,796 TONS	765,000 TONS	240,000 TONS	119,988 TONS	918,000 TONS	PROPOSED 1,224,000 TONS	367,200 TONS	856,800 TONS	872,100 TONS	624,000 TONS
Maximum Annual Volume in tons	1,427,796 TONS	765,000 TONS	240,000 TONS	119,988 TONS	918,000 TONS	PROPOSED 1,224,000 TONS	367,200 TONS	856,800 TONS	872,100 TONS	624,000 TONS	1,427,796 TONS	765,000 TONS	240,000 TONS	119,988 TONS	918,000 TONS	PROPOSED 1,224,000 TONS	367,200 TONS	856,800 TONS	872,100 TONS	624,000 TONS
Remaining Permitted Capacity in cubic yards	25,251,643 CYDS	5,994,343 CYDS	NOT PROVIDED	NOT PROVIDED	10,470,713 CYDS	(PERMIT PENDING)	3,950,625 CYDS	36,420,000 CYDS	12,550,000 CYDS	29.5 MILLION CYDS	25,251,643 CYDS	5,994,343 CYDS	NOT PROVIDED	NOT PROVIDED	10,470,713 CYDS	(PERMIT PENDING)	3,950,625 CYDS	36,420,000 CYDS	12,550,000 CYDS	29.5 MILLION CYDS
% Greene Waste will accept	2%	2%	57.30%	57.30%	23.45%	23.45%	100%	48.00%	48.00%	19.50%	2%	2%	57.30%	57.30%	23.45%	23.45%	100%	48.00%	48.00%	19.50%
Require put or pay or minimum tonnage	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Maximum Tipping Fees 1st Year																				
MSW	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$42.00	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$42.00
C&D	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$37.00	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$37.00
SEWAGE SLUDGE	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$39.00	\$75.00	\$75.00	\$35.25	\$28.75	\$100.00	\$100.00	\$45.00	\$55.65	\$55.65	\$39.00
OTHER																				
Total State, & Local Fees	\$9.26	\$7.25	\$12.09	\$8.75	\$8.10	\$8.10	\$13.12	\$12.38	\$12.38	\$7.25	\$9.26	\$7.25	\$12.09	\$8.75	\$8.10	\$8.10	\$13.12	\$12.38	\$12.38	\$7.25

Designating Additional Facilities

As was experienced over the past decade, circumstances and needs can change due to business decisions and regulatory requirements. In time, it is conceivable that landfills in the revised Plan and hauling companies currently in operation may change owners or cease to exist. New ownership may influence how and where waste can be transported. Thus, Greene County could find a need to utilize a disposal or processing facility that is not presently included.

Greene County has developed a mechanism, which can manage this need and expedite the process of incorporating any additional disposal/processing facilities into the Plan.

Procedures have been established to further simplify inclusion of a new facility. Initially, either a hauler or the facility itself must petition the County. Official forms provided by the Greene County Department of Economic Development must be submitted by the petitioner. The Processing/Disposal Facility Petition for Designation in the Greene County Municipal Solid Waste Management Plan is shown in Appendix C.

Upon receipt of the form, the County will send to the facility an information packet outlining the requirements of the facility to demonstrate its technical qualifications, compliance history, managerial experience, and permitted status. A copy of the contractual agreement, shown in Appendix B, will be included for the facility to review and prepare to execute. A set fee structure for disposal of municipal waste generated in Greene County will be incorporated into the contractual agreement.

When a Petition Form has been submitted to Greene County, the PADEP, the municipalities and the haulers will be notified. A facility must demonstrate that it meets all of the criteria required of other designated facilities named in the Plan.

Chapter 7

Implementing and Administering the Plan

Providing Oversight and Enforcement of the County's Programs

Greene County's revised Plan sets forth a schedule of objectives to be accomplished throughout the ten year period of implementation. To achieve these goals, the County must delegate an entity that will carry out the Plan's directives, programs, and activities. These objectives were developed through input from the Solid Waste Advisory Committee and approved by the Board of Commissioners and Pennsylvania Department of Environmental Protection. This chapter identifies the County's agent along with the accompanying duties and expectations.

Designated Entity

The Department of Economic Development will continue as the entity responsible for implementing the provisions of the Greene County Municipal Solid Waste Management Plan. Public awareness, enforcement and program design, at the County level, are initiated here. In addition, the Department is responsible for monitoring the disposal capacity agreements and reviewing the reports submitted by each facility.

The Executive Director of the Department has direct responsibility for ensuring that the guidelines and recommendations set forth in the Plan are implemented according to schedule. Additionally, the Executive Director of the Department of Economic Development serves as the liaison with the Pennsylvania Department of Environmental Protection and is ultimately responsible for regulatory compliance and reporting, including submission of the County's Annual Report. Outreach programs, special collection events, and feasibility studies are originated and conducted by the Executive Director, who has the responsibility to secure grants to fund those programs.

This individual also works with the municipalities, and other organizations, to ensure the successful enforcement of the Plan and to expand proper waste management practices within the County. Another duty includes communication and cooperation with other agencies and volunteer organizations supporting the County's municipal waste management and recycling efforts.

Chapter 8

Public Ownership and Operation

The Role of the County and Municipalities

The manner in which municipal solid waste management services are provided throughout the nation differ from jurisdiction to jurisdiction. Municipal public works departments often are responsible for collection. Counties may own and operate landfills or incinerators. Volunteer or non profit agencies run recycling programs. Private companies may offer one or all of the services. In many areas, a mixture of participants from the public and private sector are involved.

In this chapter, the equipment and services owned and operated by Greene County and or the municipalities are defined. Additionally, the private sector's role in municipal solid waste management is described. Any anticipated future changes are also discussed.

Private and Public Sector Participation

Solid waste collection and disposal services in Greene County are all provided by the private sector. Primarily through direct subscription from residents and commercial establishments, but in some instances through municipal contracts, private haulers collect the majority of the waste generated within Greene County. The few exceptions are self-haulers and construction contractors.

For recycling, the public sector and private sector both play a role. Recycling facilities are owned by the private sector, in the form of scrap operations, and by the public sector as material recovery facilities. Almost all of the collection for residential recycling is directly provided by government employees or those from non profit organizations. Large quantity generators of corrugated cardboard transport their material directly to market by contracting with broker haulers. Some commercial establishments that are part of a national retail chain do have containerized recycling collection from a private hauler, as do some of the larger office buildings. The college and other government facilities contract with a nonprofit agency.

It is suspected that the lack of mandates for recycling within the County, the existence of few municipal contracts, along with the rural nature of the communities, impacts the desire of the private sector to offer recycling services voluntarily. Changes in any of those could increase the availability of recycling to residents and businesses. However, the unwillingness to pay for such services by either group has a negative impact on the public sector program. It likely would hamper similar attempts to enlist a private concern.

Greene County Facilities and Operations

The County owns the building, which houses a material recovery facility operated by Greene ARC. It is located just outside of Waynesburg in Washington Township. In addition to processing material, Greene ARC also runs the drop-off program that collects materials from residents and also some businesses. Municipal employees transport materials to the Greene ARC facility. Equipment used in this program includes balers, vehicles, trailers, sorting bins, etc. It was purchased through grants provided by the Pennsylvania Department of Environmental Protection. It is anticipated that Greene ARC will relocate during the Plan implementation. At that time, the recycling program and services could be modified. An explanation of the implications and obligations of such a move are outlined in Chapter 10.

Chapter 9

Ordinances, Contracts, Licenses

Tools for Implementation and Enforcement of the Plan

It is essential that certain mechanisms are in place for Greene County to carry out the purpose and meaning of the Plan. Resolutions, ordinances, contracts and other procedures are utilized to ensure Plan implementation. By setting up rules and regulations as well as agreements for services, the expectations of all who have a role in municipal solid waste management are clearly established. These documents also serve as a direct means of enforcement. The tools designed for implementation of this plan are discussed in this chapter. Each document is provided in a separate section of the Appendices, with its specific location noted below.

Solid Waste and Recycling Transporters Ordinance

The County drafted the Solid Waste and Recycling Transporters Ordinance in response to the enactment of Act 90 which preempts the ability of municipalities to license waste haulers. Municipal licensing was the sole method of recording collection and disposal activity in the County. This ordinance ensures that those engaged in the activity of collecting and transporting municipal waste and recyclables in Greene County register and report their activities. This is necessary for the County to fulfill annual reporting requirements to PADEP. The ordinance is located in Appendix D.

Municipal Waste Disposal Capacity Agreement

The Municipal Waste Disposal Capacity Agreement (Appendix B) is the contract, which assures disposal capacity for Greene County municipal wastes at the facilities designated in this Plan and the Solid Waste Management Ordinance Amended. The agreement establishes the types and volumes of waste; the maximum tipping fees; the rate for administrative fees; and the reporting requirements for each site. Each and every facility currently included in the Plan,

as well as any in the future, must agree to the provisions of this Agreement. This ensures consistent and non-discriminatory terms, conditions and standards among all facilities that are to be used for disposal/processing of Greene County municipal solid waste.

Petition to Add a Processing/Disposal Facility in the Plan

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

Agreement with Greene ARC

The arrangements by which Greene ARC will act as the agency to operate the countywide recycling program is documented in a formal agreement with the County of Greene. The contract describes the duties of Greene ARC to operate the recycling collection and processing program; submit financial and operational reports; and to market the processed material. In addition, the agreement commits the County to certain levels of financial support, including but not limited to the allocation of Act 101, Section 903 and 904 grant funds. The agreement is located in Appendix E.

Resolution to Adopt the Plan Revisions

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

Chapter 10

Impact on Existing Programs

Methods of Transition

Greene County has worked together with representatives from the boroughs and townships, agencies and institutions, as well as the waste and recycling industry to ensure that revisions to the Plan are reasonable. Changes in program structure, services or County policies are designed to provide a feasible timeframe for compliance and implementation. This chapter demonstrates that the Plan updates offer a smooth transition for all stakeholders.

Transformation of Recycling Program

The ability of Greene ARC to develop and grow the countywide recycling program was heavily dependent on the funds obtained by the County and Washington Township through the Act 101, Section 902, equipment and implementation grants. These grants are made available from fees paid into the Recycling Fund by Pennsylvania landfills. The grants are issued with minimal constraints provided the items purchased are utilized for their intended purpose throughout their useful life.

Stipulations of the grants require recipients who sell grant funded equipment or facilities to use those monies for replacements. If a program is terminated, or if the equipment or facility is no longer part of a recycling program, the recipient must repay the equivalent dollar value to the Recycling Fund. Alternatively, the recipient may transfer equipment to other Pennsylvania government entities for use in their recycling programs.

Following is a list that describes a series of options, which the County could encounter during Greene ARC's real estate transfer, and the subsequent level of financial obligation to PADEP, which would be triggered by each:

1. MRF is purchased with the property and monies received through the sale are used to relocate equipment and retrofit another building to function as a MRF.
2. MRF is purchased with the property and monies received through the sale are used to relocate some of the equipment and retrofit another facility to function as an alternative to the current system. All equipment purchased through grants and no longer useful to the County's program must be transferred to other municipal programs or liquidated. Monies received through the sale of the unused equipment are returned to the State Recycling Fund.
3. MRF is purchased with the property. The program ceases to function. All equipment purchased through grants must be transferred to other municipal programs or liquidated. Monies received through the sale of the MRF and equipment are returned to the State Recycling Fund.
4. MRF is purchased with the property. The buyer leases back the building to allow continued operation of the program. Monies received through the sale of the MRF are returned to the State Recycling Fund.
5. MRF is not purchased with the property. The building must be dismantled and along with all of the grant funded equipment, relocated to another site where it must continue to function as a MRF.
6. MRF is not purchased with the property. The program ceases to function. The building must be dismantled and, along with all equipment purchased through grants must be transferred to other municipal programs or liquidated. Monies received through the sale of the MRF and equipment are returned to the State Recycling Fund.
7. The property on which the MRF is located is subdivided; purchased by the County; and the facility continues to function as a MRF.

Existing Municipal Contracts and Operations

The collection of waste from most homes in the county is provided through private subscription arranged directly with a hauling company. A few municipalities in Greene County contract with the private sector for those services. The terms and conditions of each of those contracts are assumed to comply with the original Plan as required by Act 101. Such contracts in existence

on the effective date of the Plan Revisions will be unaltered by the Plan Revisions and shall remain in effect until the contract expires as currently specified. Any contracts or public services initiated after the effective date of the Plan Revisions must comply with the appropriate guidelines of the revised Plan. This provides sufficient time for a municipality to prepare for any amendments that might be necessary to future bids or contracts. It also allows the County to work with a municipality to ensure its programs and services are consistent with the Plan.

Future Research and Recommendations

Revising the Plan is simply the first step to further the goal of sustainability within the County's municipal solid waste management system. The Plan lays out a schedule for implementation that includes a series of studies to determine the feasibility of launching new programs or processes. Those investigations will determine which projects should be incorporated into the overall waste management scheme. As a new service or program is recommended by the studies, the County will establish a reasonable time line for its introduction into the system. Special consideration will be given to the impact a new service may have on any existing programs. The County will utilize the timeline to ensure minimal disruption in the course of change.

Chapter 11

Fair and Open Market Approach

Working with the Private Sector

Along with all counties in Pennsylvania, Greene County is required by Act 101 to develop a municipal solid waste management plan that provides secured disposal capacity. Many neighboring states have similar requirements. In this chapter it is demonstrated that in fulfilling its Act 101 obligations, Greene County does not hamper the ability of waste management facilities to function in the marketplace, nor does it obstruct other counties from obtaining necessary disposal capacity.

Sufficient Capacity for All

Rather than to develop a site of its own, Greene County opted to seek the services of facilities in the private sector. Therefore, all types of waste are exported from Greene County to disposal and processing facilities located in other counties and, in some instances, in other states. The original Plan as well as its revision designate, for the County's municipal waste, use of disposal and processing facilities operating outside of Greene County. The use of multiple facilities, as demonstrated throughout the plan, allows for a fair and open market and provides sufficient capacity to the County. The same approach was utilized in other county plans. Many of them use the same landfills as Greene County.

The County respects the contractual obligations of these facilities to serve other counties as well as Greene. In addition, it understands their need to design, finance, and construct reasonable expansions to meet the required capacity specifications. Therefore, the County will not interfere with the normal operational and regulatory process involved with such expansions. Neither will the County inhibit the free enterprise of these facilities nor prevent them from generating the necessary profits to support those projects.

Appendix A

Definitions

Definitions and Acronyms

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

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

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.

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.

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.

Collection contractor—The definition from section 203 of the Small Business and Household Pollution Prevention Program Act (35 P. S. § 6029.203) is incorporated by reference.

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

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

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

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

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

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

Composting facility—A facility using land for processing of municipal waste by composting. The term includes land thereby affected during the lifetime of the operations, including, but not limited to, areas where composting actually occurs,

support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and postclosure care and maintenance activities and other activities in which the natural land surface has been disturbed as a result of or incidental to operation of the facility. The term does not include a facility for composting residential municipal waste that is located at the site where the waste was generated.

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

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

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

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

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

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

DEP— Department of Environmental Protection

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

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

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

EPA—The United States Environmental Protection Agency.

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

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

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

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

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

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).

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

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

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

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

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

HDPE—High Density Polyethylene

HHW— Household hazardous waste

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

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

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

ICW— Infectious Chemotherapeutic Waste

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

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

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

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

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

(C) Human blood and body fluid waste.

(I) Liquid waste human blood.

(II) Blood products.

(III) Items saturated or dripping with human blood.

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

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

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

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

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

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

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

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

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

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

(ii) Mixtures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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.

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.

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.

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.

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.

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.

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.

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

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

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

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

Used oil—A petroleum-based or synthetic oil which is used in an internal combustion engine as an engine lubricant, or as a product for lubricating motor

vehicle transmissions, gears or axles which, through use, storage or handling has become unsuitable for its original purpose due to the presence of chemical or physical impurities or loss of original properties.

USEPA — United States Environmental Protection Agency

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

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

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

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

WWTP— Waste Water Treatment Plant

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

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

Sources

PA Title 25. ENVIRONMENTAL PROTECTION Article VIII. MUNICIPAL WASTE

CHAPTER 271. MUNICIPAL WASTE MANAGEMENT—GENERAL PROVISIONS

Appendix B

Disposal Contracts

Agreements for Secured Capacity

Contract Provisions

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

MUNICIPAL WASTE DISPOSAL SERVICE CONTRACT

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

THE COUNTY OF GREENE, Greene County,
Pennsylvania, hereinafter referred to as the " County"

AND

"Name of Facility/Parent Company" hereinafter referred to as the "Contractor"

WITNESSETH:

WHEREAS, the Board of County Commissioners, acting through the Greene County Department of Planning and Development, have developed and adopted the 1995 Municipal Waste Management Plan for Greene County and its revisions in 2008 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 Greene County have duly approved and ratified this 1995 Municipal Waste Management Plan for Greene County pursuant to the requirements of section 501 of Act 101; and,

WHEREAS, this 1995 Municipal Waste Management Plan for Greene County and its revisions in 2008 requires that all municipal waste generated within Greene County must be disposed only at a municipal waste processing or disposal facility or transfer station 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 Greene County; and

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

evidencing the implementation of its approved Plan and insuring sufficient available processing or disposal capacity; and,

WHEREAS, the Contractor wishes to be designated by the County as one of the municipal waste processing or disposal facilities or transfer stations where the municipal waste generated within Greene 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 Greene County and to further set forth the agreements between the parties with respect thereto;

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

DEFINITIONS

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

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

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

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

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

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

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

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

County -The County of Greene, Pennsylvania, the Greene County Board of County Commissioners, the Greene County Department of Planning and Development or their designated representative.

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

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

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

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

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

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

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

Landfill -The Contractor's permitted landfill located in _____Township(s), County, _____State.

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

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

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

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

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

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

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

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

Proposal – Complete response to the February 2004 Request for Proposals for Municipal Waste Processing and Disposal Services that was submitted by Contractor to the County.

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

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

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

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

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

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

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

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

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

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

II. SCOPE OF CONTRACT

1. Designation as Disposal site

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

2. Effective Date

This Contract shall become effective on the date set forth below. The contractor shall begin providing municipal waste (transportation) (processing) (disposal), service for the County under the terms and conditions of this Contract on _____, 2008 or such earlier date as the landfill is approved by the DEP (or the equivalent regulatory agency in state which the facility is located) for receipt of municipal waste under the Permit.

3. Term of contract

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

4. Compliance with Applicable Laws

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

5. Breach of Contract

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

6. Penalties and Liquidated Damages

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

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

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

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

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

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

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

7. Force Majeure

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

8. Assignment of Contract

No transfer or assignment of the Contract or any right accruing under the Contract shall be made in whole or in part by the contractor without prior express written approval by the County (which approval shall not be unreasonably withheld) .The delegation of any Contract duties will require the

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

9. Change of ownership

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

10. Waivers

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

11. County's Obligations

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

12. Illegal and Invalid Provisions:

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

13. Joint and Severable Liability

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

14. Binding Effect

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

15. Amendments to the Contract

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

16. Meraer Clause

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

17. Notices

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

County: Greene County Commissioners
Greene County Office Building
93 East High Street - Third Floor
Waynesburg, Pennsylvania 15370

Contractor: _____

Address: _____

Attention: _____

With a copy to: _____

Attention: _____

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

SERVICE, OPERATIONS, AND PERFORMANCE

1. Services of the Contractor

The Contractor agrees to accept and (process) (dispose) specified quantities and types of Municipal Waste originating from sources located in Greene 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 D:

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 C:

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

4. Delivery of Wastes

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

5. Minimum Hours of Operation

Unless mutually agreed upon otherwise by the Contractor and the County, the Contractor will accept delivery of municipal waste from waste haulers licensed by the County during the/ hours from _____ to _____ Monday through Friday and from _____ to _____ on Saturdays, excluding generally recognized business holidays, including without limitation (President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas and New years Day). In the event of any lengthy travel time from sources in the County to an out-of-county disposal facility, the Contractor will be required to exhibit flexibility in the operating hours for accepting wastes from Greene 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 haulers permitted by the County regarding the acceptance of waste materials at his facility. Any complaints received by the county will be directed to the Contractor. In the event the Contractor cannot satisfactorily resolve a complaint within five (5) days after receipt of the complaint, the County shall have the right to demand a written explanation or satisfactory resolution of the complaint pursuant to the breach of contract provisions herein.

7. Municipal Recycling Programs

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

8. Title to Solid Waste

Except in the case where any unacceptable waste or Hazardous Waste is delivered to the Contractor's facility, the title to the Municipal Waste and any benefits of marketing any materials or energy recovered from the Municipal Waste shall pass to the Contractor upon delivery of the waste to the Contractor's facility and acceptance of the waste by the Contractor.

9. Unacceptable or Hazardous Waste

Licensed waste haulers shall not deposit or deliver any hazardous waste materials, except the normal household hazardous waste constituents in minimum quantities typically found in Municipal Waste, or any other types of Municipal Waste for which Contractor is not permitted or have been designated as unacceptable under the Contract is not permitted or have been designated as

unacceptable under the Contract to the Contractor's facility. 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 licensed by the county. The licensed waste haulers shall be responsible for the prompt removal and disposal of any such unacceptable waste and shall bear all costs associated with the subsequent removal, transportation, and disposal of such hazardous and/or unacceptable waste.

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.

8. 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, licensed or otherwise, to pay the Contractor's tipping fees and no such fees will be paid by the County. In the event County is notified of repeated delinquency or non-payment by any waste hauler of Contractor's tipping fees, County may enforce any remedies, which may be available under the terms of the issuance of permits by County to waste haulers.

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

11. Rate Escalation and Adjustments

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

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

C. The Contractor may also petition the County at any time for additional rate or fee adjustments on the basis of unforeseen changes in operating costs resulting from any new or revised federal, state or local laws, ordinances, regulations or permit requirements, which were not in effect at the time when the original Contract was awarded. The Contractor shall have the burden of preparing and submitting any necessary information to support and document any such rate adjustments. The County shall evaluate the evidence submitted and approve all reasonable and justifiable cost adjustments. The County shall have the right to inspect, by itself or by an independent auditor, any pertinent financial records that document the need for a rate adjustment using audit standards similar to the Federal procurement regulations. The county shall also have the right to modify the amount of a rate increase requested, modify the effective date of a rate adjustment or to reject a rate increase petition for lack of justification.

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

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

13. RESERVED County Administration/Recycling Surcharge

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

IV. RECORD KEEPING AND REPORTING REGULATED WASTE

1 The contractor will be required to install and maintain a scale to weigh all incoming waste to the contractor's municipal waste processing or landfill facility

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

2. Daily Operational Records

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

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

3. Quarterly Operation Reports

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

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

E. A summary of the total weight, by municipality, of Municipal Waste received from each municipality in Greene County delivering Municipal Waste to the Contractor during each month.

4. Annual Operation Report

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

A. The total weight of each type of Municipal Waste received from all sources during the annual reporting period;

B. The names of the waste haulers or transporters and self- haulers that delivered waste originating from sources in Greene County;

C. A summary of the total weight, by municipality, of each type of Municipal Waste received each month from each waste hauler or transporter and self-hauler delivering waste originating from sources in Greene County; and

D. A summary of the total weight, by municipality, of each type of Municipal Waste received each month from all waste haulers delivering waste originating from sources in Greene county; F. 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;

G. A current Certificate of Insurance as evidence of continuing insurance coverage for public liability insurance as required under the Contract;

H. For resource recovery or municipal waste processing facilities, the name and the location of the landfill disposal facilities where any bypassed wastes, unprocessable waste and waste by-products, such as incinerator ash, were untimely disposed;

I. 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

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

K. The annual operating reports that must be prepared and submitted to the DEP by Pennsylvania processing and disposal facilities (or equivalent regulatory agency in the state in which the facility is located) may constitute acceptable

information for portions of the annual operating report for the purposes of the Contract, provided they are accompanied by completed and accurate forms provided by the County along with any required supporting information.

5. Administrative Inspections

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

6. Special Reporting Requirements

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

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

V. PUBLIC LIABILITY INSURANCE REQUIREMENTS

1. Insurance Requirement

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

2. Proof of Insurance Coverage

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

- A. States the name of the insurance company, the insured owner and facility covered by the policy.
- B. Identifies the kinds of coverage provided by the policy and the amounts of coverage, exclusive of legal costs.
- C. Identifies the beginning and ending dates for the policy.
- D. Specifies that a minimum 120-day period written notice shall be given by the insurer to the county and the owner, by certified mail, before any cancellation or other termination of the policy becomes effective.
- E. States that the insurer is liable for payment on the policy without regard for the bankruptcy or insolvency of the insured.
- F. Be signed by an authorized, licensed agent of the insurance company.

3. Maintenance of Insurance Coverage

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

VI. NONDISCRIMINATION

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

VII. INDEMNIFICATION

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

actions, legal proceedings, claims, demands, damages, costs, expenses and other attorney fees arising out of the award of this Contract or the willful or negligent act or omission of the County, their officers, agents, servants and employees.

VIII. PERMITS

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

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

COUNTY OF GREENE,

BOARD OF COMMISSIONERS

ATTEST: _____

CHIEF CLERK

(SEAL)

CONTRACTOR: _____

Title: _____

WITNESS: _____

Form D -Reserved Capacity

Greene County Municipal Solid Waste

FACILITY: _____.

Year	MSW Generated tons/year	Reserving Capacity for % of Greene MSW Annually	Reserving Capacity for #Tons Greene MSW Annually	Facility's Estimated Annual Working Days	Reserving Capacity for #Tons Greene MSW Daily
2008	26690				
2009	26732				
2010	26778				
2011	26826				
2012	26874				
2013	26923				
2014	26971				
2015	27020				
2016	27068				
2017	27117				

Types and Quantities of Municipal Solid Waste

Specify tons per day and tons per year

	MSW		Construction Demolition		Sewage Sludge		Other		Other	
	Per Day	Per Year	Per Day	Per Year	Per Day	Per Year	Per Day	Per Year	Per Day	Per Year
2008										
2009										
2010										
2011										
2012										
2013										
2014										
2015										
2016										
2017										

Form D - Part II Reserved Capacity

Appendix C

Petition to Add a Processing/Disposal Facility

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

Greene County has secured Disposal Capacity Agreements for a sufficient amount of disposal capacity for all municipal waste generated within the County. The process to obtain the guaranteed capacity included a formal Request for Proposals. Qualified respondents were designated in the plan to receive waste from Greene County. A process by which additional facilities can be added to the Plan has been provided to haulers, municipalities or processing/disposal facilities other than those designated in the County's Municipal Waste Management Plan. This form must be used to notify the County of a party's interest in using another facility. Information provided in this form will be used by the County to contact a facility representative and send the requirements necessary to qualify the facility as a participant in the Plan. Any and all costs associated with adding a facility to the Plan shall be the responsibility of either the Petitioner or the Facility as indicated and authorized by a signature on this form.

Please complete and submit the form to:

Greene County Department of Economic Development, Washington Street Waynesburg, PA
Phone: 724- 852-5300

Petitioner

Name: _____
Organization: _____
Address: _____

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

Facility

Name of Facility: _____
Contact Person: _____
Address: _____

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

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

Party responsible for total costs to add facility:

Name _____	Title _____
Signature _____	Date _____

Procedures and Instructions to Petitioner

- A disposal/processing facility, a County licensed hauler, a municipality or a business must complete and submit the petition form to the Greene County Department of Economic Development. A fee, equivalent to the total prevailing costs to add a facility, will be charged to the designated party indicated on the petition form. This will include all costs associated with notification of interested parties, municipalities and the any costs for printing, postage, etc.
- Within 15 working days of the receipt of a petition, the Greene County Department of Economic 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.
- Upon receipt of the completed proposal from the petitioning facility, the Greene County Department of Economic Development will notify the Pennsylvania Department of Environmental Protection, the municipalities and the haulers of its intention to add a facility.
- The Greene County Department of Economic Development will review and respond to the information in the proposal within 45 working days.
- At that time the requesting facility, hauler, municipality or business will also be notified that the facility is formally designated in the Plan for disposal of Greene County generated municipal waste.

Appendix D

Ordinances

COUNTY SOLID WASTE AND RECYCLING

TRANSPORTERS ORDINANCE

ORDINANCE NO. 2010-11-18-3
COUNTY OF GREENE, PENNSYLVANIA

AN ORDINANCE OF THE COUNTY OF GREENE, PENNSYLVANIA, ESTABLISHING A HAULER REGISTRATION PROGRAM TO BE ADMINISTERED BY THE GREENE COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT FOR ALL PERSONS THAT COLLECT AND TRANSPORT MUNICIPAL WASTE AND/OR RECYCLABLES GENERATED FROM SOURCES LOCATED IN GREENE 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 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 1995 Greene County Municipal Waste Management Plan and a non-substantial revision in 2010 in accordance with the requirements of Section 501 of Act 101, and said Plan has been duly ratified by the municipalities of Greene County; 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 Greene 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 --Greene County or any agency designated as the County's representative for the purposes of this Ordinance.

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, churches 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 Greene County. A city, borough, incorporated town, township, county or an authority created by any of the foregoing.

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

Municipal waste disposal or processing facility - A facility using land for disposing or processing of municipal waste. The facility includes land affected during the lifetime of operations, including, but not limited to, areas where disposal or processing

activities actually occur, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated onsite or contiguous collection, transportation and storage facilities, closure and post closure 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 post closure 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).

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.

Sewage Sludge—Liquid or solid sludge and other residues from a municipal sewage collection and treatment system; and liquid or solid sludge and other residues from septic and holding tank pumping 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 pumping.

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

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

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

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

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

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

SECTION 3 -STANDARDS FOR COLLECTION AND TRANSPORTATION

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

recyclables and the specific type of municipal waste and/or recyclables transported by the vehicle. All such signs shall have lettering, which is at least six inches in height as required by Act 101.

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.

Section 4 - Registration Requirements

1. No person shall collect, remove, haul or transport any municipal waste and/or recyclables originating in Greene County through or upon the streets, alleys, highways, by-ways, township roads and any other public easement through any of the various municipalities in the county within Greene County without first registering with the County of Greene in accordance with the provisions of this Ordinance.

2. Any person who desires to collect, haul or transport municipal waste and/or recyclables within Greene 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 Greene County shall submit a copy of its Pennsylvania Waste Transportation Authorization to the County at the time of registration.

4. Any person who desires to collect, haul or transport municipal waste and/or recyclables within Greene County that is not required by Act 90 to obtain Pennsylvania Waste Transportation Authorization must submit an application to obtain a license from the County at the time of registration. The County shall have a minimum period of thirty (30) calendar days to review any license application and take approval or denial action.

5. The County shall designate specific processing and/or disposal facilities where Transporters must transport and dispose of any municipal solid waste collected from sources within Greene County. No person shall dispose of municipal waste collected within Greene County, except at an approved processing and/or disposal facility. The County shall not designate specific facilities for the processing and/or marketing of recyclables.

6. There shall be no registration fee. The license fee shall be set by resolution by the Greene County Board of Commissioners on an annual basis. All licenses are non-transferable and shall be issued for a period of one year. There shall be no reduction or pro-rated fee any license issued, provided however, a license issued in November shall be valid until December of the following year.

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 Greene County Municipal Waste as well as the recycling facilities or end use facilities where Greene 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 license 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 Greene County and who is currently registered shall submit a registration renewal application and if applicable, a license fee to the County at least sixty (60) days prior to the expiration date of their existing registration if renewal of the registration and license is desired.

9. No new license or license 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 license 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 Greene 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 Greene County to any processing or disposal facility other than the facilities that are designated disposal sites under the approved Greene County Act 101 Municipal Waste Management Plan. The following types of municipal waste and materials are exempt from this sub-section:
 - a. Transporters of infectious/chemotherapeutic waste shall be exempted from use of the designated disposal facilities.
 - b. Transporters of sewage sludge shall be exempted from use of the designated disposal facilities if proof of an approved land application or composting facility is provided.
 - c. Transporters of septage shall be exempted from use of the designated disposal facilities but must provide proof of use of a DEP approved land application or permitted wastewater treatment facility for disposal.
 - d. Transporters of recyclables shall be exempted from use of the designated disposal facilities but must provide proof that the recyclables are taken to a material recovery processing facility or marketed for end use.

SECTION 6- EXEMPTED ACTIVITIES

A. 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.

B. 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.

C. 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 license and insurance coverage changes to the County.

2. All County Licensed Transporters shall maintain current, up-to-date records of the customers serviced within Greene County. Such records and customer list shall be subject to inspection and must be made available 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 Department of Economic 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 Greene 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 Greene 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 no 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, without refund of any license fee, to suspend or revoke the license of any county Licensed Transporter for any of the following causes:

A. Falsification or misrepresentation of any statements in any license application;

B. Lapse or cancellation of any required insurance coverage;

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 Greene 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 Greene 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.

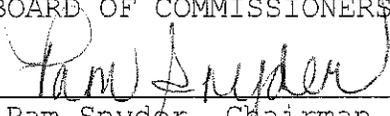
SECTION 12- EFFECTIVE DATE

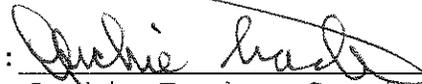
This Ordinance is hereby ORDAINED AND ENACTED and shall take effect this 18th day of November 2010.

COUNTY OF GREENE
BOARD OF COMMISSIONERS

ATTEST:

By: 
Jeffrey Marshall, Chief Clerk

By: 
Pam Snyder, Chairman

By: 
Archie Trader, Commissioner

By: 
Charles J. Morris, Commissioner

Appendix E

Agreement with Greene ARC

**RECYCLING PROGRAM AGREEMENT
COUNTY OF GREENE
AND
GREENEARC, INC.**

THIS AGREEMENT made this ___29___ day of December 2006,

by and between

COUNTY OF GREENE, a sixth class county with its address as the Office of Chief Clerk, 93 East High Street, Waynesburg PA 15370, hereinafter referred to as "County",

AND

GreeneARC, Inc., a non-profit corporation organized under the laws of the Commonwealth of Pennsylvania, having its principal place of business at 197 Dunn Station Road, Prosperity, PA, hereinafter referred to as "GreeneARC".

WITNESSETH:

WHEREAS, GreeneARC owns certain real estate situate in Washington Township, Greene County, Pennsylvania which includes two buildings that have been used as the County Recycling Center for several years, hereinafter referred to as the "Center"; and,

WHEREAS, GreeneARC and the County desire to update and reaffirm their working relationship for the continued use and operation as the County Recycling Center, such operation being for the mutual benefit of the parties hereto, and the Commonwealth of Pennsylvania; 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 that the County Recycling Program is a program of the County and the Commonwealth of Pennsylvania, Department of Environmental Protection, which will be managed by GreeneARC according to the terms of this Agreement, as follows:

1. **PAST PRACTICES:** GreeneARC agrees to manage, and the County agrees to contract the management of the County Recycling Center, to GreeneARC, in a manner consistent with past practices, and for the mutual benefit of GreeneARC, the County, and the Commonwealth of Pennsylvania. Both parties acknowledge that the program now serves fourteen (14) municipalities.

2. **TERM:** The term of this Lease/Management Agreement is for five (5) years, commencing January 1, 2007, and terminating December 31, 2011, unless otherwise agreed to in writing by the parties.

3. **BUILDING OWNERSHIP** County and the Commonwealth of Pennsylvania is acknowledged to be the owner of two metal buildings, now located on GreeneARC property. At the expiration of this Agreement, December 31, 2011, GreeneARC, or its assigns, shall have the option to purchase the building, and any other building now attached or built after this Agreement, for the appraised value of the buildings, subject to the approval of Commonwealth of Pennsylvania. Said property shall then become the exclusive property of GreeneARC, or its grantees and/or assigns. (I would bet that PADEP may want a little more clarification here)

4. **EQUIPMENT OWNERSHIP:** County and the Commonwealth of Pennsylvania are acknowledged to be the owners of all recycling equipment used at the Center being more specifically described in Attachment "A".

5. **COUNTY LEASES:** County hereby leases from GreeneARC, and GreeneARC does hereby lease to the County, the real estate immediately underneath and surrounding said buildings that serve as the "County Recycling Center," more specifically described in Attachment "B". GreeneARC leases said real estate to the County for the term of this agreement for the annual sum of One (\$1.00) Dollar.

6. **GREENEARC LEASEBACK:** County then, hereby leases back to GreeneARC, all of the buildings, equipment and vehicles, on-site and not on-site, to GreeneARC for the annual sum of One Dollar and 00/100 (\$1.00) in advance, for managing the County Recycling Program.

7. **RENEWAL:** This Lease/Management Agreement of the said premises, equipment and vehicles may be extended beyond the initial five-year term, on a year-to-year basis, by letter of mutual consent signed prior to the expiration of this agreement, or by mutual agreement evidenced by continued operation.

8. **ABANDONMENT:** In the event that the County and/or the State, chooses to close the Recycling Program, the parties acknowledge that the personal property used in recycling is the property of the County, who shall then immediately have the responsibility to remove such property. In the event that the County abandon such property, (defined by not removing it for 90 days after the last day of use) GreeneARC shall, at the option of Greene ARC, (and/or its assigns) purchase any and all personal property and equipment leased under the terms of this Agreement for the sum of One Dollar and 00/100 (\$1.00), after having first obtained written approval from the Pennsylvania Department of Environmental Protection.

9. **NON-ASSIGNMENT:** The lease of all properties, real and personal, shall be non-assignable by either party, unless authorized by both parties, in writing.

10. **COOPERATION FOR FUNDING:** It is the specific intent of the parties to this Agreement that it be a cooperative arrangement for the purpose of developing, growing and maintaining a recycling center that will promote and expand recycling services to the citizens and businesses of Greene County to the mutual benefit of both parties. To this end, the County will be the responsible party for grant funding necessary to the continued development of a County Recycling Center and Program. GreeneARC will assist the County, as needed.

11. **VOLUME OF MATERIALS:** Parties shall mutually determine whether to add townships and/or boroughs that will increase and/or decrease volume of recycling materials.

12. **LOCATION:** County has the sole authority to determine the overall location of its Recycling Program and drop off sites, which now is the GreeneArc Washington Township facility and the following drop-off sites: Freeport Township, Greene Township, Penn DOT parking lot, Grey Township, Carmichaels School District, Morgan Township, Aleppo Township, Monongahela Township, Jackson Township, West Greene School District, Richhill Township, Waynesburg Borough, Jefferson Township, Cumberland Township, Morris Township and Wayne Township. Both parties as to need and appropriateness shall mutually agree upon all capital expenditures.

13. **INSURANCE:** County shall maintain adequate insurance on said premises, equipment, County owned vehicles, trailers, and pick-up sites used in the operation of the Recycling Center, including but not limited to, fire insurance, liability insurance, and comprehensive and collision vehicle insurance coverage. The County, and not GreeneARC, assumes the "risk of loss."

14. **HOLD HARMLESS:** County shall render and save wholly harmless GreeneARC, from any responsibility for the depreciation of the Center or damage to the premises, equipment or vehicles used in the operation of the Center, except for acts determined to be intentional, reckless, and or willful and wanton, by GreeneARC, its clients and/or contractors. **AMOUNT OF GREENEARC LIABILITY COVERAGE:** GreeneARC shall maintain liability insurance on the operation of said premises with minimum coverage of \$1,000,000 per incident (and aggregate of \$3,000,000) and shall, at all times, agree to render and save wholly harmless County from any liability arising out of the operation of the Center.

15. **ADDITIONALLY INSURED:** 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.

16. **WORKMEN'S COMPENSATION:** GreeneARC shall maintain any and all necessary workmen's compensation insurance or unemployment compensation

insurance for any employees or client/trainees of GreeneARC used in the operation of the Center

17. **UTILITIES:** County shall be responsible for payment of all separately metered utilities costs associated with the operation of the Recycling Center. Utility accounts of garbage, gas and electricity shall be placed in the name of County of Greene during the term of this Agreement. Utilities costs shall be a portion of the County's contribution.

18. **PARKING & ACCESS AREAS:** County shall be responsible for the reasonable costs of repair and maintenance of the facilities, parking and access areas, equipment and vehicles leased to GreeneARC for the operation of the Center as described in Attached B. GreeneARC shall retain responsibility for winter maintenance of parking and access areas.

19. **BUDGET:** The County shall annually review with GreeneARC the funds earmarked for recycling. The purpose of this review is to determine if additional monies are available for additional capital expenditures and/or operations of the Program. County and GreeneARC shall both continue to actively pursue funding from any and all sources available to insure the successful operation of the Center and, to this end, initiate or join in any necessary application for funds that can be used in the growth, maintenance and operation of the Center. With the assistance of GreeneARC, County shall apply for annual performance grants from the Pennsylvania Department of Environmental Protection, which shall be made available to GreeneARC, for: a)Operational monies for the Center, and /or b) Recycling education program(s)

20. **2006 CASH CONTRIBUTION:** Upon the execution of this Agreement, County shall provide a one time contribution to GreeneARC for 2006 calendar year Recycling operations of Twenty-four thousand dollars (\$24,000) acknowledged by GreeneARC to have already been paid.

21. **COST REIMBURSEMENT:** County shall reimburse GreeneARC monthly for all necessary and reasonable operation expenses of the Center, less actual reimbursements to GreeneARC for client programming, administration and other sources of income. This shall include costs incurred in meeting mandates to GreeneARC, by the Commonwealth of Pennsylvania. GreeneARC shall bill the County for any and all repairs and maintenance performed on the facilities and equipment leased under the terms of this Agreement in a detailed monthly report, subject to audit at any time, which shall be promptly paid by the County.

22. **COUNTY CONTRIBUTION CAP:** The County's total contribution to the cost reimbursement of the Recycling Program shall be limited to not more than Fifty-thousand Dollars, per year, unless otherwise agreed. This is a limit to the amount to be reimbursed for costs, but is not meant to include the County's annual contribution of Five thousand dollars to the Recycling Escrow Fund.

Building location, construction, maintenance and improvements is the responsibility of the County and its employees. Costs of relocating the Recycling Center shall not be the responsibility of GreeneARC.

Machinery and equipment acquisition, placement and maintenance are also the responsibility of the County. GreeneARC's Coordinator must have authorization from the appropriate County official(s) for all maintenance and repair expenses above \$500.

23. **NECESSARY AND REASONABLE OPERATION EXPENSES:** GreeneArc now processes 475 tons of recycled materials per annual with an average workforce of fourteen (14) employees per year. (11 HR Clients and 3 Full-Time VASW, Vocational Adjustment Service Worker) (The current output by the current staffing defines "necessary and reasonable."

24. **QUARTERLY REPORT:** GreeneARC shall provide the County with a quarterly detailed written report of all income and expenses incurred in the program. Said report(s) shall provide information necessary for County submission of Annual Department of Environmental Protection Recycling Performance Grant and State required Annual Report. Quarterly reports are due the last day of January, April, July and October.

25. **TIPPING FEE:** The solid waste "tipping fee" shall be paid to GreeneARC.

26. **904 GRANT:** The "904 – Tonnage" Grant shall be paid to GreeneARC.

27. **RECYCLING COORDINATOR:** GreeneARC shall provide the services of a "recycling coordinator" to carry out the educational responsibilities provided, however, that the obligation to retain such coordinator should specifically be contingent upon the ability to continue to obtain state financial support through Recycling Coordinator Grants. County shall annually apply for an Act 101, Section 903 Grant (County Recycling Coordinators Grant) from the PADEP. The application shall include allowable costs incurred by both County and GreeneARC assigned Recycling Coordinator(s), not to exceed an average 35 hours per week. (The PADEP does not allow for the split on the Recycling coordinators grant anymore. You will have to designate either the county or Greene ARC. That was confirmed by PADEP) Annual grant award shall be distributed in the manner described in Section 903 application and is contingent upon approval by the PADEP.

28. **ESCROW ACCOUNT – "RECYCLING ESCROW FUND":** In order to insure the availability of operational capacity such as may be necessary to maintain and/or grow the Center, County agrees to establish and maintain a "RECYCLING ESCROW FUND" for the purposes of making available funds, which are dedicated to the Recycling Program. County agrees to contribute \$5,000.00 per year to such fund throughout the term of this agreement and any extension thereof. The Capital Escrow Account provided for herein shall be maintained throughout the term of this Agreement and any extension thereof.

The money in this account, or any portion, can be accessed by the County, or GreeneARC by written request to the County, which will not be unreasonably denied.

All monies deposited into the Recycling Escrow Fund 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

GreeneARC, while awaiting reimbursements from the County, PADEP, or other revenue sources, may utilize funds from the Recycling Escrow Fund on a loan basis, as needed,

upon request of prior approval from the County Department of Economic Development, said approval not to be unreasonably withheld, to meet the operational cash flow requirements of the Center. GreeneARC will make such request of the County Department of Economic Development.

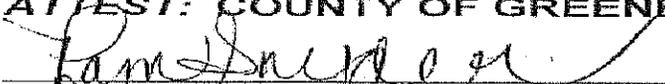
29. **MANAGEMENT:** GreeneARC shall have the responsibility for the day-to-day management of the facility, program and services. GreeneARC shall decide when and how much inventory to store or sell. GreeneARC shall set the rates. GreeneARC, in consultation with County, shall establish all collection points, determine materials to be collected, control the disposition of materials, utilize only county owned and maintained trailers, determine all commercial curb side pick-ups, the location of pick-ups, when pick-ups are to occur, manage staffing according to MR policies, decide hours of operation, retain all proceeds from sales, pick-ups and any other sources and manage any outside or contracted, or subcontracted workforce.

GreeneARC shall operate the Center to standards established by the Pennsylvania Department of Environmental Protection for five (5) years. The Center shall be open to accept materials five days per week, subject to inclement weather as announced and GreeneARC's published Holiday closure schedule, as follows: New Years Day, Martin Luther King Day, Presidents day, Easter, Memorial Day Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving, Christmas Eve Day and Christmas Day.

30. **MAINTENANCE STANDARD:** GreeneARC shall 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.
31. **MODIFICATION:** 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.

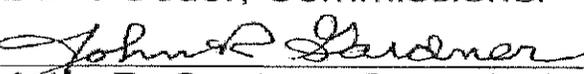
ATTEST: COUNTY OF GREENE



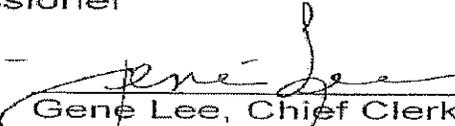
Pam Snyder, Chairman



Dave Coder, Commissioner

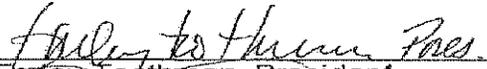


John R. Gardner, Commissioner

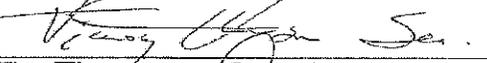


Gene Lee, Chief Clerk

ATTEST: GREENEARC, INC



Farley Toothman, President



Tim Thompson, Secretary

Attest:



Cynthia Dias, Executive Director

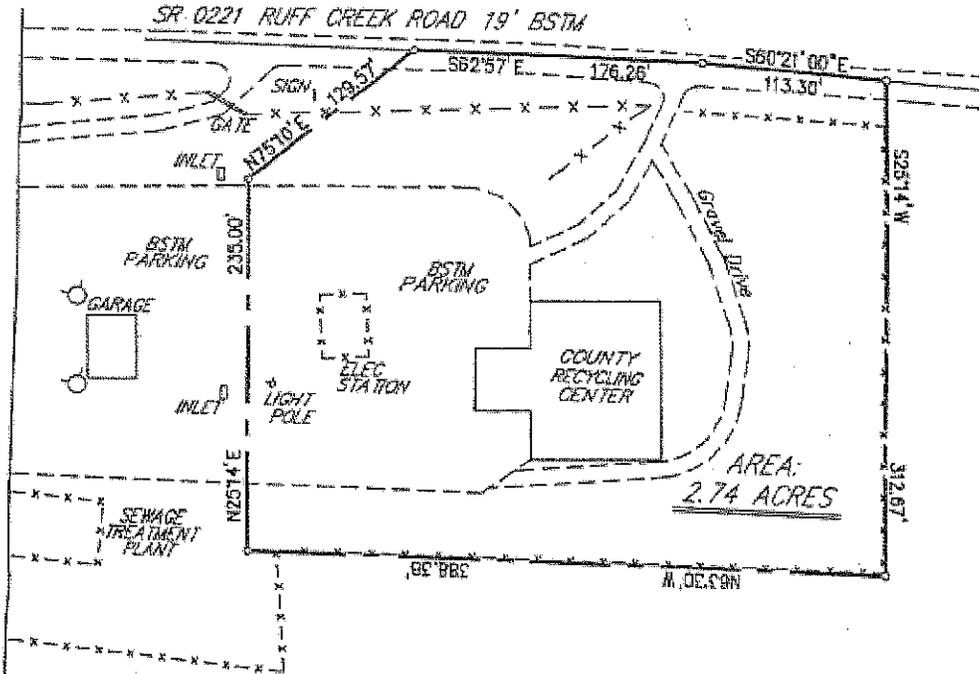
Attachment "A"

List of all recycling equipment

Equipment Type	Make	Model	Purpose	Age	Serial Number
Baler (Vertical)	Cram-A-Lot	?	Bale cardboard	10 yrs.	F200
Baler (Vertical)	Piqua	?	Bale cardboard	10 yrs.	F389
Baler (Horizontal)	International Baler Corp	NA-1260 HD	Bale plastics	7 yrs.	0197238
Baler (Horizontal)	International Baler Corp	LD-60-00	Bale newspaper	3 yrs.	0101207
Conveyor (Baler)	International Baler Corp	?	Bale newspaper	3 yrs.	0101004
Densifier	Dens-A-Can	DAC 3000	Densify tin cans	10 yrs.	A0132SP101
Densifier	Dens-A-Can	DAC 1200	Densify aluminum cans	10 yrs.	B0122SPI494
Glass crusher	fabricated	?	Crush brown glass bottles	11 yrs.	N/A
Glass crusher	fabricated	?	Crush clear glass bottles	11 yrs.	N/A
Glass crusher	fabricated	?	Crush brown glass bottles	11 yrs.	N/A
Sorting Table w/conveyor	fabricated	?	Sort material	7 yrs.	N/A
Plastic Perforator	Recycling Equipment Manufacturer	Perf-5	Perforate containers	?	4736-00-A
Plastic Perforator	Recycling Equipment Manufacturer	Perf-5	Perforate containers	?	4736-00-B
Forklift w/rotating head & forks	Clark	CMP20	Loading & Unloading	1 yrs.	230L-301-9586
Skid steer w/bucket, forks, & claw	Bobcat	751	Loading & Unloading	?	514713242
(20) "Tip" Dumpsters	Galbreath	?	Holding material	?	N/A
(30) wheeled carts	?	?	Handling material	?	N/A
(12) 10' x 10' wooden sheds	fabricated	?	Collecting material	?	N/A
14' Box Truck	2003 Mitsubishi	FE649	Transporting material	3 yrs.	JW6BBEH43L000381
(11) Small Trailers	D&L Fabrication		Transporting material	6 yrs.	County owned
(6) Large Trailers	Alley Cat		Transporting material	1 yrs.	County owned

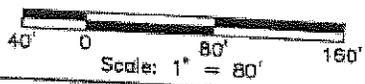
Attachment "B"

Real estate description
Survey Attached



Deed Reference: DEED BOOK 0120
PAGE 746

Tax Map No.: 2405-106-B



ATTACHMENT "B"
for
COUNTY OF GREENE & GREENE ARC
WASHINGTON TOWNSHIP, GREENE COUNTY, PENNSYLVANIA
Scale: 1" = 80'
November 15, 2006

Charles F. Gritman P.S.

Prepared by
WIDMER ENGINEERING, INC.
225 West Crawford Avenue
Connellsville, PA 1542
(724) 626-1909

Job. No. 081013

Appendix F

Resolution to Approve Plan

RESOLUTION NO. 2010-11-18

RESOLUTION BY THE GREENE COUNTY BOARD OF COMMISSIONERS
ADOPTING THE REVISED MUNICIPAL SOLID WASTE MANAGEMENT PLAN

WHEREAS, the Greene County Board of Commissioners, acting through the Greene County Department of Economic Development, have undertaken the development of a revised Municipal Solid Waste Management Plan for Greene County in accordance with the requirements of the Solid Waste Management Act of 1980 (Act 97) and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101); and

WHEREAS, this revised Municipal Solid Waste Management Plan for Greene County will be financed by a grant from the Pennsylvania Department of Environmental Protection and local funds and services provided by the Greene County Commissioners and the Greene County Department of Economic Development; and

WHEREAS, upon the recommendations of the Greene County Department of Economic Development and the Greene County Solid Waste Advisory Committee, the Board of County Commissioners have reviewed and approved the recommendations of this proposed plan to insure the availability of adequate permitted processing and disposal capacity for the municipal waste generated within Greene County.

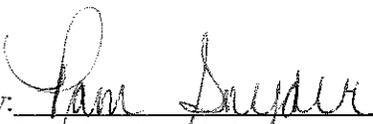
NOW, THEREFORE, BE IT RESOLVED, that the Greene County Board of Commissioners do hereby approve and adopt the 2010 Revised Municipal Solid Waste Management Plan for Greene County pursuant to the requirements of Section 501 of the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101).

PASSED AND APPROVED on the 18th day of November 2010,

COUNTY OF GREENE
BOARD OF COMMISSIONERS

ATTEST:

By: 
Jeffrey Marshall, Chief Clerk

By: 
Pam Snyder, Chairman

By: 
Archie Trader, Commissioner

By: 
Charles J. Morris, Commissioner

Appendix G

References and Acknowledgements

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

A Guidebook for Rural Solid Waste Management Services. 2002 Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, Oklahoma State University. Stillwater Oklahoma

Annual Facility Capacity Reports. 2004 Pennsylvania Department of Environmental Protection, Bureau of Waste Management, Southwest Regional Office. Pittsburgh, Pennsylvania

Barriers to Changing Waste Management Practices in Rural Areas and Small Towns. 1992. Prepared for the National Recycling Coalition's Rural and Small Town Recycling Council and the Tennessee Valley Authority's Valley Resource Center by Susan Schmidt. First National Symposium on Rural Waste Management Issues Gatlinburg, Tennessee.

Case Studies in Rural Solid Waste Recycling. 1997. Susan Schmidt. The Ford Foundation and the Minnesota Project, St. Paul, Minnesota.

County Population Projections: Pennsylvania 1990-2020. 1998. Pennsylvania State Data Center. Harrisburg, Pennsylvania

Decision Makers Guide to Solid Waste Management, Second Edition. 1995. Prepared for the United States Environmental Protection Agency by ICF Incorporated, Fairfax, Virginia

Evaluation of Emissions from the Open Burning of Household Waste in Barrels: Volume 1. Technical Report. 1997. Prepared for the United States Environmental Protection Agency

Handbook for the Collection, Transportation, Disposal and Land Application of Residential Septage in Pennsylvania. 2004. Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

How to Price Residential Solid Waste Collection Services for Profit. 1997. Tim Clark Consulting, Inc. Hanover, Pennsylvania

Municipal Solid Waste in the United States, 2001. Prepared for the United States Environmental Protection Agency by Franklin Associates, Prairie Village, Kansas

Municipal Solid Waste Generation, Recycling and Disposal in the United States: Facts and Figures for 2003. Prepared for the United States Environmental Protection Agency by Franklin Associates, Prairie Village, Kansas

Municipal Waste Landfill Annual Operation Reports. 2004 Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management. Harrisburg, Pennsylvania.

Pennsylvania County Data Book ,Greene County. 2005 Pennsylvania State Data Center, Institute of State and Regional Affairs, Harrisburg, Pennsylvania

Pennsylvania Infectious and Chemotherapeutic Waste Plan. 1990 Prepared for the Pennsylvania Department of Environmental Resources by Jack Faucett Associates, Inc.

Pennsylvania Licensed Infectious and Chemotherapeutic Waste Transporters Report. 2006. Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management. Harrisburg, Pennsylvania

Pennsylvania Quality of Life and Views of Local Government: Variations Across the Commonwealth. 2004 Institute for Public Affairs at Temple University, Philadelphia, PA.

Pollution Unchecked: A Case Study of Greene County, Pennsylvania. 2004 Erik D. Olson and Mayra Quirindongo. National Resources Defense Council, Washington, D.C.

Practical Recycling Economics: Making the Numbers Work for Your Program. 1999 Prepared for the New Jersey Department of Environmental Protection, Division of Solid and Hazardous Waste by Cook College Office of Continuing Professional Education Rutgers, the State University of New Jersey, New Brunswick, NJ

Registered Septage Haulers in Pennsylvania. 2006 Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

Residential Open Burning in Pennsylvania. Fact Sheet. Pennsylvania Department of Environmental Protection, Bureau of Air Quality. Harrisburg, Pennsylvania

Sewage Sludge and Septage Management in Pennsylvania. 1998 Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

Statewide Waste Composition Study. 2003. prepared for the Pennsylvania Department of Environmental Protection by R.W. Beck. Harrisburg, Pennsylvania.

Study spotlights Rural Recycling Efforts. 1988. Lansing Shepard. Resource Recycling Magazine

Appendix H

Meeting Agendas and Public Comments

Solid Waste Advisory Committee

**Charles Martin
Rodney Bristor
William C Groves
Steve Coss
Charles Wise
Clancy Murray
Mickey Dikun
Shirl Barnhart
Allen D. Lemley
Karen Lyons**

**Wayne Miller
Jeff Radish
Jed Howard
Theresa Matscherz
Lou Folino
Brian Strelick
Dave Calvario
James Gebicki
Clay Gifford
Ronald Mimnaugh**

Solid Waste Advisory Committee Meeting August 3, 2005

Greene County Municipal Solid Waste Management Plan Revisions
Solid Waste Advisory Committee
August 3, 2005

Goals & Objectives of Planning Process

Establish realistic generation rates for Greene based on current census data
Determine future needs and guidelines for disposal capacity agreements and hauler licensing
Establish benchmarks in existing program to measure future performance
Determine realistic potential to meet the state's recycling goals

What are our responsibilities?

Determine the types and amounts of materials we generate in Greene County
Review the impact the existing plan has on how these materials are currently collected and processed for disposal or reuse
Explore reasonable methods and alternatives to complement and enhance the existing plan, and comply with PADEP guidelines
Provide the tools to ensure the plan can be implemented and programs sustained

How does it become a plan?

Meetings to cover the most significant issues
Input from committee
Analyses and recommendations
Final Approval - County Commissioners, PADEP

Strengths and Weaknesses of the Current Plan

Where did we succeed?

Private Enterprise
Limited Drop-off Recycling
County Entity Directs Programs

What are the weak areas?

Recycling Rate
Education/Awareness
Reporting Problems
Unlicensed Haulers
Illicit Dumping

Enforcement Issues
Lack of Ordinances, Contracts, Agreements
Funding Mechanisms
Compliance with PADEP regulations

Securing Capacity for Disposal or Processing

Determining capacity requirements

Need for Requesting Disposal Capacity

- Expiration of existing agreements
- Alternative processing or technology
- Waste flow & interstate commerce
- Fees & impact to the program

Disposal Agreements Potential Changes

- Clear, consistent definitions
- Standardized reporting requirements
- Previous vs. Current requirements by PADEP
- Amount of fees
- Types of material subject to fees

Actions We'll Be Taking

- Calculating future capacity requirements
- Issue nationally advertised request for proposal for disposal capacity
- Review responses for accuracy/completeness
- Enter into negotiations with qualified respondents
- Secure agreements
- Provide a simple mechanism to include facilities in the future

Hauler Licensing

- Standardized reporting requirements
- Impact of current Waste Transporters Legislation - Act 90
- Define who and what is included
- Alternatives to Licensing
- Enforcement

Topics for Future SWAC Meetings

- Our recommendations based on our analyses and the questions/comments presented during these meetings
- Results of the request for disposal capacity
- Potential draft ordinances required by analyses/recommendations
- Progress report and outline of next planning phase

2008
August 3rd @ 6 PM, 2nd Floor

SOLID WASTE ADVISORY COMMITTEE - Meeting

- | | |
|---|---------------------------------|
| 1. Charles Martin | Alper |
| 2. Gregory DeBor | Caruba |
| 3. William D. Stone | Cumberland |
| 4. Melissa Goss | Fiorillo |
| 5. Charles Wise | Gilmore |
| 6. Charney Murray | Jelks |
| 7. Mickey Jilani | Jefferson |
| 8. Matt Bechtel | Johnson |
| 9. Carlos D. Lopez | Perry |
| 10. Karen Lyons | Shingill |
| 11. Wayne Miller | Steele |
| 12. Jeff Redlich | Waldington |
| 13. Edward Howard (Tech) | Waldley |
| 14. Theresa Holschwarz | Westling, Marc |
| 15. Luc Felling, Superintendent | PA Cleanways of Greene Co |
| 16. Brian Shellor | SCU Greene |
| 17. Dave Collins | Central Greene Schom. District |
| 18. Jim Gaskins/PA/AG/MSD | Waynesburg College |
| 19. Clay Gilford | Waste Management |
| 20. Tom Geyer | HEI Top Quality |
| 21. Harley Touchman | Greene APC Board of Directors |
| 22. Gordon Nelson | Greene APC Board of Directors |
| 23. Karen Hainé | Greene APC Board of Directors |
| 24. Ron G. Minnaugh | Greene APC Board of Directors |
| 25. Anne Pitts | Nesler Resources, Inc. |
| 26. Michelle Steier | DEP, Waste Management Program |
| 27. Sharon Stark, Recycling Coordinator | Dr. P. White Management Program |
| 28. Stephen Sales | |

Solid Waste Advisory Committee Meeting September 22, 2005

Greene County Solid Waste Advisory Committee September 22, 2005 Tonight's Agenda

- Waste Generation and Composition
 - Material available for recovery/recycling
- Greene County's Recycling Program
 - Overview of the program
 - Cost of operating the program
 - Comparison to other county programs
 - Funding mechanisms

Tools we used

- Landfill reports
- PA studies done at local landfills
- Greene ARC reports
- National studies
- Census demographics
- Comparison to similar PA counties
- Field observations
- Industry experience

Factors influencing Rural Municipal Solid Waste

- Incineration
- Fewer and smaller newspapers
- Landscaping/yard waste
- Purchasing habits
- Agricultural utilization of food waste
- Fewer and smaller offices and retail

Municipal Waste Generation Greene County Disposal

- Landfills
- Backyard Burning
- Fireplaces/Stoves
- Illegal Dumping

Recycling

- Drop-off
- Collection
- Direct Broker
- Buy Back
- Donation for Reuse
- Composting

Greene ARC

- Over view of program
- Achievements
- Current Recovery for Recycling
 - Residential and Commercial
- Cost of Program
- Impact of MH/MR Funding
- Cost Revenue Comparison

Future Potential

- Sources of remaining material
- Methods of recovery
- Anticipated rate of recovery
- Cost of recovery
- Disposal is cheap in Western PA
- Collection = 75% of the total cost
- Curbside increases cost of collection
- Drop-off costs increase with amount of material collected

Options Utilized by Counties Pros & Cons

- Increase volume of material
- Reduce cost of operation
- Indirect user tax (landfill fees)
- Improve reporting for performance grants
- Municipal subsidies from General Fund
- County subsidies from General Fund
- Direct user tax
- Abandon program in the planning process

Open Discussion Questions & Answers

Solid Waste Advisory Council Meeting
 Sept 22, 2005
 Elgin in Elgin

1. ~~Michelle Minton - Washburn Park~~
2. ~~Bob Minton - " "~~
3. Ron McNaugh - Greene A/C Board
4. ~~Janeen Fine - Greene Co.~~
5. Charles R. Wise - Gilman Twp
6. Bob Bristol - Center Twp
7. ~~Sharon Mitchell - N. Clearfield~~
8. Ben Stralick - Central Greene School District
9. Michael Kuzmick - Waynesburg Board
10. ~~Michael Ferber - Elletts~~
11. ~~Jane Smith - PA Det~~
12. Tom Green - Greene A/C Acting Exec Dir
13. ~~Ernie Martin - Adams Co. Planning & Development~~
14. Dan Dauls - Sci Greene DC
15. Karen Lyons - Spring Hill Twp
16. Shirl Bardenst - Morgan Twp
17. Darlene Urban Corbett - Planning and Dev.
18. McKay Ripual - Leavenworth Twp
19. Chaney Murray - P. Franklin Twp

Solid Waste Advisory Committee Meeting November 17, 2005
SOLID WASTE & RECYCLING VISIONS - AS PRIORITIZED BY SWAC
[Each statement represents one comment, each plus sign represents an additional similar comment.]

Solid Waste:

Solid Waste Disposal Operations:

- +++++Manage all solid waste of housing, manufacturing, mining, industrial in Greene County
- ++++Garbage energy / power
- Develop Waste Authority with transfer station
- Reduce landfill, increase recycling
- SWAC (county & municipality) manages and reduces all solid waste
- No landfills in Greene County that accept out-of-county waste

Solid Waste Collection:

- Make an effort to standardize municipal participation

Solid Waste Special Collections:

- +++Find / make market to recycle tires
- ++Shredded tires are used in playground surfaces, mulch, concrete, asphalt
- Have drop-off days 2-3 times a year in each municipality
- Electronics recycling
- Market for glass to make floor tiles

Solid Waste Funding Mechanisms:

- +No financial deficit in solid waste program

Recycling:

Recycling Center Operations:

- ++++Regional expanded recycling center
- +++Plan for the future
- Larger / updated processing equipment

Recycling Collection Options:

- +++Recycling programs in all schools
- ++Greene Arc picks up recycling in townships, instead of reverse
- ++Move toward curbside pick-up / recognizing costs that will be involved
- +Make recycling convenient

Recycling Funding:

- ++++Economically sustainable recycling program
- +++County reimburses Greene Arc for recycling / supplement
- +++Turn solid waste labor into a DPW, Probation, work release, back-to-work, community service, tax relief program
- +Expand material collection / 7/5

+Growth opportunity / larger employment opportunity for folks with disabilities
Find new markets, expand existing markets
Greene moves recycling into the 21st Century / pay for recycling and garbage
Escrow account for equipment repair / operations

Education, Ordinances and Enforcement:

+++++Mandatory recycling
+++++Encourage recycling, promote recycling values
+++++Develop / enforce littering laws
+++++Educate people on what to do with all forms of waste
++++More public education in recycling / change people's values
+++Get all municipalities involved & key industries
+++County Recycling Coordinator works with municipalities to have recycling fairs / events regionally
++Develop incentives to promote recycling
+Bottle / can return deposit / enticement to recycling
+Legislators create more markets, more manufacturing, more funding
Make an effort to standardize municipal participation
Pass legislation for a prohibitive fine for littering with the reporter of the violation receiving 50% of the fine

Planning:

+++++Define, qualify and quantify our waste stream / solid waste
Advisory Board makes recommendations so that final action can be made planning for the future
Develop an action plan for the future
Make Greene County greener
Make Pennsylvania greener
Develop a strategy to reduce the volume of waste going to landfill that includes recycling, salvage, and organic composting at a minimum

SIGN-IN SHEET

NOV 17, 2005

JOINT MEETINGS BETWEEN GREENE ARC AND SWAC
Representatives

Name

- | | |
|---------------------------|-----------------------|
| 1. W. C. Speaks | Chickland Twp |
| 2. Glenn Adamsen | Morris Twp |
| 3. Ron Armstrong | Greene ARC |
| 4. Tom Geas | CHRC |
| 5. Tom Adamsen | Sandy Twp |
| 6. Allen Logan | Park Twp |
| 7. Larry Puck | Fireport Twp |
| 8. (Viggo Griffin) | Hawdon |
| 9. Mike Miller | Greene ARC |
| 10. Lynda Johnson | Greene County |
| 11. [unclear] | Greene |
| 12. Ruth A. Lindner | Amherst Reserve |
| 13. [unclear] | Hawdon Community |
| 14. Mickey Dikren | Zippesen Twp |
| 15. Jeff A. Mooney | Monroe Twp |
| 16. DORISNE UPPEN GILBERT | City of Greene |
| 17. SHIRL BARNHART | Melrose Twp |
| 18. Kevin McElroy | County Human Services |
| 19. Dick MacCesky | Greene Am. |
| 20. [unclear] | Greene County |

Solid Waste Advisory Committee Meeting June 6, 2006

Greene County Municipal Officials June 6, 2006

Tonight's Agenda

- Roles and Responsibilities
- Waste Management Fundamentals
- Follow-up from previous meetings
- Determining Costs of Recycling Programs

Greene ARC's Recycling Program

- History of the program
- Current and projected cost of the program
- Cost/benefit of future potential modifications
- Funding mechanisms
- Exploring Options/Alternatives

Roles and Responsibility

Greene County SWAC

- Develop Awareness and Understanding of Issues
- Offer Input from Balanced Spectrum of Stakeholders

Greene County's Consultant

- Provide Background and Experience
- Evaluate and Advise
- Facilitate County's Compliance

Greene ARC

- Operator of the Program
- Financial Decision Maker on Operation

Greene County

- Ultimate Approval of Plan and Submission to PADEP
- Implement and Enforce the Plan

Fundamentals for Evaluating Waste Management Options

Material

- Volume
- Make-up
- Sources

Logistics

- How many customers
- Distance between stops
- Distance to facilities
- Distance to markets

Competition

- Alternative handling methods
- Existing facilities
- Existing transporters
- Market price

Political

- Public willingness to pay
- NIMBY
- Public acceptance/participation
- Ease of enforcement

Regulatory Issues

- Legal authority of entity
- Flow control of material
- Exclusionary siting criteria
- Environmental liabilities

Economic

- Cost of Development
- Operational costs
- Stability of revenue sources
- Volatility of commodities
- Financial risks/liabilities

Follow-up and Review

Solid Waste Visions

Industrial/Mining Waste

- Waste to Energy
- Landfill in Greene County that does not accept out-of state waste
- Waste Authority operates transfer station
- SWAC (county and municipality) manages all solid waste
- Mandatory/Standardized Participation
- Market Development
- Bottle Bills
- Litter/Illicit Dumping Prevention
- Seasonal Drop-offs/Clean-ups
- Recycling Issues
- No Financial Deficit in Programs

Determining the Costs

- Accounting Methods

Options Utilized by Agencies Pros & Cons

- Increase volume of material
- Reduce cost of operation
- Indirect user tax (landfill fees)
- Improve reporting for performance grants
- Municipal subsidies from General Fund
- County subsidies from General Fund
- Direct user tax
- Agency absorbs the loss
- Abandon program in the planning process
- Explore Alternatives

Alternatives to Current Program

- Drop & Shop Center
- Convenience Center
- Rotating Regional Clean-ups

Residential Awareness Campaign

Annual Cost Estimates

- Based on lowest unit costs from local counties
- Assumed quarterly insert in a current municipal mailing
- Promotional Items are for fairs, events, etc.
- Brochures, handouts for events, special topics/collections, etc
- Breakdown by municipality available for cost sharing

Grades K-8 School Curriculum

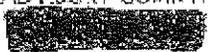
Development and Annual Cost Estimates

- Based on similar costs from local counties
- Curriculum guides are for teachers
- Classroom materials are worksheets, handouts, etc
- Promotional items reinforce desired behavior
- Breakdown by School/District available for cost sharing

Open Discussion

1/17/2010

SOLID WASTE ADVISORY COMMITTEE MEETING



June 16, 2010

Planning to attend:

- 1. *1/17/2010* ~~1.~~ ~~Arstner, Rodney~~ Center Township Supervisor
- 2. ~~2.~~ ~~Serick, Brian~~ Central Greene School District
- 3. ~~3.~~ ~~Heckert, Lisa~~ County of Greene
- 4. ~~4.~~ ~~Davis, Dan~~ SOI Greene
- 5. ~~5.~~ ~~Fike, Jackie~~ County of Greene
- 6. ~~6.~~ ~~Clarnock, Darlene Urban~~ County of Greene
- 7. ~~7.~~ ~~Green, Tom~~ Waste Management
- 8. ~~8.~~ ~~Malow, Karen~~ GARC
- 9. ~~9.~~ ~~Kathonmark, Mike~~ GARC Board - In Pym. - may be late, but plans to attend
- 10. ~~10.~~ ~~Lee, Gene~~ Waynesburg School
- 11. ~~11.~~ ~~Matscherz, Theresa~~ County of Greene
- 12. ~~12.~~ ~~Lensley, Alan D.~~ ~~Murray, Nancy~~ ~~Neison, Colleen~~ County of Greene / GARC Board
- 13. ~~13.~~ ~~Parry Township Supervisors~~
- 14. ~~14.~~ ~~Jefferson Township Supervisor~~
- 15. ~~15.~~ ~~Neberth, Martin~~ GARC Board
- 16. ~~16.~~ ~~Rochuti, Emma W.~~ County of Greene
- 17. ~~17.~~ ~~Thompson, Tim~~ GARC Board
- 18. ~~18.~~ ~~Trotter, Harley~~ County of Greene / GARC Board
- 19. ~~19.~~ ~~Wagner, Dan~~ GARC Board - has 2 banquets, will attend if possible
- 20. ~~20.~~ ~~Lynn, Dawn~~ Springgill Trip

Others to attend:

- 21. ~~21.~~ ~~Barnhart, Shirl~~ Morgan Township Supervisor
- 22. ~~22.~~ ~~Cass, Steve~~ Franklin Township Enforcement Officer
- 23. ~~23.~~ ~~Convas, Bill~~ Cumberland Township Supervisor
- 24. ~~24.~~ ~~Miller, Wayne~~ Washington Township Supervisor
- 25. ~~25.~~ ~~Raczinski, Jeff~~ Winlock Township Supervisor
- 26. ~~26.~~ ~~Siegel, Gary~~ CONSOL Director of Government Affairs
- 27. ~~27.~~ ~~Stark, Sherry~~
- 28. ~~28.~~ ~~Wester, Christine~~
- 29. ~~29.~~ ~~Wester, Dan~~
- 30. ~~30.~~ ~~Kriegel, Wendy~~

Appendix I

Addendums

There are no addendums to the document at this point in time.