Municipal Waste Management Plan Westmoreland County, Pennsylvania

An update to Act 101 Solid Waste Management Plan of 1990

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WESTMORELAND COUNTY, PENNSYLVANIA MUNICIPAL WASTE MANAGEMENT PLAN TABLE OF CONTENTS

Introductio	n	Page 1
Chapter 1 -	- Description of Waste and Future Capacity for Waste	3
1.1	Background	3
1.2	Population	4
1.3	Waste Tonnage to be Landfilled	5
1.4	Required Disposal Capacity	6
1.5	Other Waste Streams	6
Chapter 2 -	- Description of Recyclable Materials	8
2.1	Amounts of Material Recycled	8
2.2	Municipal Recycling Programs	12
2.3	County Recycling Programs	14
2.4	Changes in Act 101 and Impact of These Changes to the County	17
2.5	Recycling Facilities	18
2.6	Costs Associated with Recycling	18
2.7	Future Recycling Efforts	19
Chapter 3 -	Selection and Justification of Municipal Waste Program Background	24
3.1	Background	24
3.2	Waste Flow Control	24
Chapter 4 –	- Public Function	26
4.1	County Sponsored Recycling Programs	26
4.2	Leaf Composting	26
4.3	Household Hazardous Wastes	26
4.4	Marketing	26
4.5	New DEP Initiatives	27
Chapter 5 -	- Description of Facilities/Location/Orderly Extension	28
5.1	Landfills	28
5.2	Back-up Sites	29
5.3	Addition of Landfills to Plan	29
Chapter 6 –	- Implementation Entity Identification	31
6.1	Westmoreland County	31
6.2	Westmoreland Cleanways	31
6.3	Local Governments	32
Chapter 7 -	- Implementation Documents	34
7.1	Landfill Contracts	34
Chapter 8 -	- Public Participation	35
8.1	General	35

8.2 8.3	Solid Waste Advisory Committee (SWAC) Notice to Municipalities	35 35
Chapter 9 –	Implementation Schedule	36
SeM	ADEP Landfill Records from 2002 through 2006 ewage Authority Questionnaire funicipal Authorities List (Table E1-1) ermitted Biosolid Application Sites (Table E1-2)	

- Recycling (Tables E2-1 through E2-11)
- Map of Mandated Municipalities
- Act 140 (House Bill 1902)
- Recycling and Composting Facilities (Tables E2-12 and E2-13)
- Drop-off Program Locations and Addresses (Tables E2-14 and E2-15)
- Household Hazardous Waste (HHW) Flyer
- Westmoreland Cleanways HHW Collection Table
- 2007 Westmoreland Cleanways Recycling Guide
- Westmoreland Cleanways Annual Report 2005-06
- Westmoreland Cleanways Activity Totals Table
- Westmoreland Cleanways Fall '07 Newsletter (By The Way)
- Environmental Benefits Calculator

Exhibit E-3:

Original (1990) Act 101 Solid Waste Management Plan
 Pages 5-36 through 5-41

Exhibit E-4:

- Table E4-1 (landfill facilities in the Current Plan)
- Map of Landfill, Compost and Transfer Station Locations
- Table E4-2 (landfill facilities that accepted municipal waste in 2006)
- Letter to non-contracted landfills that receive waste from County
- Advertisement placed in Waste Age Magazine
- Advertisement placed in Tribune Review

Exhibit E-5:

- Model Landfill Agreement
- Petition Form to Add a Landfill to Approved Plan
- Draft County Ordinance
- Model Local Ordinance

Exhibit E-6:

- Notification letter to SWAC members
- List of SWAC Members

- Minutes of SWAC MeetingsAttendees List for SWAC Meetings

WESTMORELAND COUNTY MUNICIPAL SOLID WASTE MANAGEMENT PLAN - 2007

REVISION #1 - 07

to

WESTMORELAND COUNTY, PENNSYLVANIA MUNICIPAL WASTE MANAGEMENT PLAN NOVEMBER, 1990

INTRODUCTION

According to § 4000.303 of Act 101: "Each county shall have the power and its duty shall be to insure the availability of adequate permitted processing and disposal capacity for the municipal waste which is generated within its boundaries. As part of this power, a county:

- (1) May require all persons to obtain licenses to collect and transport municipal waste subject to the plan to a municipal waste processing or disposal facility designated pursuant to subsection (e).
- (2) Shall have the power and duty to implement its approved plan, including a plan approved under section 501(b), as it relates to the processing and disposal of municipal waste generated within its boundaries.
- (3) May plan for the processing and disposal of municipal waste generated outside its boundaries and to implement its approved plan as it relates to the processing and disposal of such waste.
- (4) May adopt ordinances, resolutions, regulations and standards for the recycling of municipal waste or source-separated recyclable material if one of the following requirements are met:
 - (i) Such ordinances, resolutions, regulations or standards are set forth in the approved plan and do not interfere with the implementation of any municipal recycling program under section 1501.
 - (ii) Such ordinances, resolutions, regulations or standards are necessary to implement a municipal recycling program under section 1501 which the municipality has delegated to the county pursuant to section 304.
- (5) May prohibit the siting of additional resource recovery facilities within its geographic boundaries where any additional resource recovery facility is inconsistent with the county plan pursuant to section 501(b) unless such facilities meet the criteria of section 502(c)(2) and (o)(1)(iii). [FN4]"

Westmoreland County's original Solid Waste Management Plan, prepared in accordance with the requirements of PA Act 101 of 1988, "Pennsylvania Municipal Waste Planning, Recycling & Waste Reduction Act" was titled the WESTMORELAND COUNTY, PENNSYLVANIA MUNICIPAL WASTE MANAGEMENT PLAN NOVEMBER, 1990 (1990 Plan).

The 1990 Plan included an investigation of the following disposal alternatives:

- 1. Use of one operating landfill to dispose of all municipal waste generated in the County.
- 2. Use of a number of operating landfills each to dispose of a portion of the municipal waste generated in the County.

- 3. Construction of a new publicly owned sanitary landfill.
- 4. Construction of a new publicly owned waste to energy facility (incinerator).

The analysis of these alternatives (See Exhibit 3, 1990 Plan, pages 5-36 to 5-41) indicated that the use of a number of landfills for disposal was the most effective method for the County to implement. Proposals were requested from operating landfills in and around the County and seven proposals were submitted. After review of those submissions, contracts for disposal capacity were entered into with each of the facilities. In addition, seven proposed facilities submitted an expression of interest and these facilities were also approved for inclusion in the Plan pending final issuance of operating permits from DEP. Some of those contracts have been extended at various times in the past and some of the facilities have closed.

§ 272.251 of the Commonwealth of Pennsylvania's Municipal Waste Regulations requires that the County submit a revised Plan to the DEP at the earliest of the following events:

- at least three years prior to the expiration of the capacity assurances necessary to dispose or process the municipal waste generated in the county
- at least 3 years prior to the expiration of the term of the County's approved plan
- or, when otherwise required by the Department

As a result of the events of the past 17 years and the requirements of Act 101 and the Municipal Waste Regulations, this revision will incorporate the following elements:

- 1. Use of current data to prepare estimates of future waste and recyclables generation.
- 2. Issuance of a request for disposal capacity at landfill sites approved to accept municipal waste generated in Westmoreland County.
- 3. Development of contracts for disposal capacity through December 31, 2017.

In addition, this revision will also discuss the County recycling programs, including:

- 1. Review of current municipal recycling activities in the County.
- 2. Methods for enhancement of recycling opportunities.
- 3. Alternative approaches to waste reduction and household hazardous waste (HHW) programs.

CHAPTER 1.0 DESCRIPTION OF WASTE (Section 272.223) and FUTURE CAPACITY (Section 272.225)

1.1 Background

The total amount of municipal waste generated is comprised of the amount of waste requiring disposal capacity at landfills and the amount of waste recycled. Some waste may be disposed of in an indiscriminate manner through burning, or open field or roadside dumping. However, the amount of this unaccounted for waste is assumed to be relatively small and will be accounted for in the total amount of capacity reserved.

The primary purpose for estimating the amount and composition of municipal waste which will be generated in Westmoreland County during the 10 year planning period is to provide the basis for determining the amount of disposal capacity required.

The method used in the 1990 Plan to estimate the total amount of waste expected to be generated involved the establishment of two factors:

- 1. a generation rate expressed in terms of pounds/person/time period for each waste source category (residential, employment, group quarters, etc.)
- 2. a population figure for each waste source category.

These figures were based on information obtained from municipalities in the County or from averages developed by DEP. It is to be noted that, in a number of cases, the information received from municipalities regarding residential waste amounts was reported in cubic yards per a given time period, and thus did not represent as accurate a figure as actual weights.

There are now two documents containing measured tonnages which can be used for purposes of estimating future waste generation quantities. The first is generated from quarterly reports submitted to the Pennsylvania Department of Environmental Protection (DEP) by each landfill in Pennsylvania and presents amounts of various categories of wastes accepted for disposal as well as the county in which that waste originated.

The second document is the annual recycling report submitted to DEP by the counties, which presents the amounts of each type of material recycled in that county. Individual municipalities submit these reports to the county in which they are located. These recycling reports may not be as accurate in quantifying the total amount of waste material recycled as the landfill reports are in quantifying the total amount of waste disposed, since individual municipalities may not be aware of the amount of materials being recycled by non-municipally-served facilities, such as apartment buildings, commercial establishments and construction/demolition material recyclers. Regardless of that possible defect, the municipal recycling reports represent the best information available for quantifying the amount of material recycled.

Information contained in the two reports cited will be used in conjunction with Westmoreland County population data developed by the Southwestern Pennsylvania

Commission (SPC) to develop total waste generation amounts. Once the original estimates have been prepared, calibration over the planning period can be used to fine tune the result.

Table 1-1 contains the categories of wastes included in the landfill reporting mechanism used by DEP.

TABLE 1-1 WASTE REPORTING CATEGORIES

Municipal
Residual
Sewage Sludge
Infectious
Construction/Demolition
Ash Residue
Asbestos

Infectious and residual wastes are not categorized as municipal wastes; therefore, the tonnages associated with these two categories will not be used in the calculation of a waste generation rate component for the amount of municipal waste to be disposed in landfills.

1.2 Population

Table 1-2 contains the SPC's Cycle 7 County baseline census data for 2000, and population estimates for 2010 and 2020.

Table 1-2 POPULATION DATA

Year	Household Population	Group Quarter Population	Total Population	Work Place Employment	Total Generating Population
2000	361,497	8,496	369,993	174,257	544,250
2010	355,695	8,722	364,417	174,954	539,371
2020	365,646	8,722	374,368	181,071	555,439

A review of this information indicates that, in spite of an initial drop in population by 2010, the Total Population is expected to increase over the 20-year period by

approximately 1% while the Work Place Employment is expected to increase by about 4%. Probably the one item that has the most bearing on the amount of waste generated is that the total number of municipal waste generators (residents + employees = Total Generating Population) is predicted to increase by about 2% over the span of 20 years.

1.3 Waste Tonnage to be Landfilled

Landfill records for 2002 through 2006 have been used to determine the disposal portion of the total generation rate. Exhibit E-1 contains copies of the DEP reports as they relate to waste generated in Westmoreland County. Table 1-3, below, presents a summary of that total data and Table 1-4 presents a summary of the municipal waste landfilled during that time period.

Table 1-3
Westmoreland County
Annual Waste Disposal Tonnage

			Sewage			Ash		
Year	Municipal	Residual	Sludge	Infectious	Construction	Residue	Asbestos	Total
2002	254,062.9	43,440.7	33,617.6	0.0	63,380.3	15.0	815.0	395,331.5
2003	265,401.8	46,246.6	29,295.9	0.0	59,819.8	0.0	1,012.3	401,776.4
2004	283,224.9	49,183.4	30,339.9	0.0	66,280.5	0.0	799.4	429,828.1
2005	275,559.4	39,414.4	28,259.1	0.0	63,962.5	0.0	431.4	407,626.8
2006	266,351.7	61,207.4	26,080.7	0.0	62,336.1	6.1	482.4	416,464.4
Total	1,344,600.7	239,492.5	147,593.2	0.0	315,779.2	21.1	3,540.5	2,051,027.2

Table 1-4
Westmoreland County
Annual Municipal Waste Disposal Tonnage

			Municipal
Year	Total	Residual	Waste
2002	395,331.5	43,440.7	351,890.8
2003	401,776.4	46,246.6	355,529.8
2004	429,828.1	49,183.4	380,644.7
2005	407,626.8	39,414.4	368,212.4
2006	416,464.4	61,207.4	355,257.0
Total	2,051,027.2	239,492.5	1,811,534.7

Note that tonnages of infectious wastes and residual wastes are not included in the total municipal waste figure. A review of the information in Table 1-4 indicates that a total of approximately 1,812,000 tons of Municipal Waste was landfilled over the five year period, or an average of slightly over 363,000 tons annually. It is to be noted that the 1990 Plan estimated that the total annual amount of municipal waste to be generated would be about 248,240 tons.

1.4 Required Disposal Capacity

As previously noted, the generating population is expected to increase by approximately 2% from 2000 to 2020 with the preponderance of that increase projected to occur between 2010 and 2020 (80% of the 2008 to 2017 planning period). To estimate the amount of landfill capacity required over that 10 year period, it is reasonable, therefore, to add 2% to the average of 363,000 tons landfilled annually over the five year period used as a base. That method results in an annual disposal capacity requirement of 370,260 tons. Thus, the County will have to contract for 3,702,600 tons of disposal capacity over the ten-year planning period.

During that period, comparison of the estimates of disposal capacity required with the actual disposal tonnages reported should be undertaken on an annual basis and the required amount of future disposal capacity revised as appropriate. These revisions should also take into account any changes resulting from new census data or new population projections.

1.5 Other Waste Streams

Residual Waste

In general, most municipal waste landfills have permits allowing them to dispose of certain types of residual wastes. The amount of residual waste disposed in landfills included in the current Plan averaged approximately 48,000 tons per year for the years 2002-2006. This amount is less than 15% of the total amount of Westmoreland County municipal waste disposed in those facilities during the same time period. As will be shown in Section 5.0 - Description of Facilities, the total landfill capacity available during the planning period is sufficient to accommodate the impact of this relatively small amount of residual waste generated in Westmoreland County.

Improperly Managed Waste

The sites identified in the original Westmoreland County Illegal Dump Survey completed by PA CleanWays several years ago have been cleaned up to all intents and purposes. As a result, Westmoreland Cleanways (the local successor to PA CleanWays) will undertake an update to that report in 2008. It is not anticipated that the relatively minor amount of waste identified in this update will have any measurable impact on the amount of landfill space available for disposal of Westmoreland County municipal waste generated over the tenyear planning period. Once the survey has been completed, a map of the County showing the location of these sites and a copy of the complete report can be obtained on the Westmoreland Cleanways web site at www.westmorelandcleanways.org.

Infectious/Chemotherapeutic

With regard to infectious and chemotherapeutic (I/C) wastes, letters were sent to all of the major medical facilities in the County requesting information regarding their method of management of these materials.

A written response from the Alle-Kiski Medical Center indicated that it utilizes the services of Healthcare Waste Solutions, a licensed I/C waste hauler for collection, transportation and incineration of the wastes generated at their facilities.

A verbal response from the Westmoreland, Latrobe and Frick Hospitals and a written response from the Mercy Jeannette Hospital indicate that they all use Stericycle for these same activities for management of I/C wastes generated at their facilities.

A questionnaire was sent to the 21 sewage authorities operating in the county asking for information regarding the disposal of sludge generated at those facilities. Fourteen authorities responded and all indicated that their sludge production was sent to landfills for final disposal. The questionnaire and a list of the authorities (Table E1-1) are included in Exhibit E-1.

Some facilities accept septic tank waste and/or sludge cake for additional treatment prior to transportation of the resulting sludge to a final disposal site. In addition, Wastewater Treatment Plant (WWTP) sludge can be applied at 13 biosolid land application sites which are permitted by DEP under a separate program. A list of those sites is included in Exhibit E-1, Table E1-2. (Note that it appears that the majority of the WWTP sludge land applied at the 13 Westmoreland County permitted sites comes from sources outside of the County.) However, for the purposes of this Plan, interim treatment and/or permitted land application of septic tank waste and/or sludge cake are not considered Municipal Waste Landfill Disposal operations.

CHAPTER 2.0 DESCRIPTION OF RECYCLABLE MATERIALS – Section 272.226

2.1 Amounts of Materials Recycled

Act 101 requires each municipality to submit to the county in which it is located a report "...describing the weight or volume of materials that were recycled by that municipal recycling program in the preceding calendar year." The data for those reports generally comes from two sources:

- 1. Residential programs from reports submitted to the municipality by the private sector firm with whom the municipality had contracted for recycling services.
- 2. Commercial programs from each individual establishment which had initiated a recycling program or from the private sector firm providing the recycling service.

Residential recycling programs are directly controlled by municipal governments, thus assuring that the amount reported is fairly representative of the amount of material actually recycled. However, information regarding the amount of material actually being recycled in commercial, industrial and apartment complex programs may be inaccurately reported since a comprehensive record of recycling from those sectors requires that each individual establishment or the collector provide complete, accurate information. This is a problem that needs to be addressed by the municipalities and is a requirement that is difficult to enforce (see Section 6.2—Implementing Entity Identification-Local Governments).

For the original (1990) Plan, the County and its consultant examined several alternatives for collection and processing of recyclables and compost, including the costs of public involvement and the potential for creation of a Material Recovery Facility (MRF). (See Section 4 of the 1990 Plan for a detailed assessment of alternatives.) The conclusion of this assessment was that, although there are a variety of collection and recycling alternatives available to individual municipalities, those municipalities that have actively pursued recycling and composting have felt that there was insufficient local processing capacity, and the decision was made to pursue collection and recycling through the private sector. For the most part, recycling has been linked to the existing municipal waste collection/disposal contracts. (A discussion of the role of County and local governments is located in Chapter 6.0)

The types and amounts of materials recycled during the past five years are presented in Exhibit E-2. A summary of that information is shown in Table 2-1, below. Note that the "County" values were obtained from the DEP website showing in-state and out-of-state disposal and Total MSW Recycled for the entire County. Individual "Municipal" totals were also obtained from the DEP website, but from a section covering specific municipalities and types of material recycled. As such, a slight discrepancy (probably due to the reporting methods) is noted. It is also noted that County data is reported from 2001 through 2005, whereas Municipal data is reported from 2002 through 2006.

TABLE 2-1 MATERIALS RECYCLED (TONS) 2001-2006

Source	2001	2002	2003	2004	2005	2006
County	10,317	72,472	51,710	42,294	18,639	N/A
Municipal	N/A	71,857	50,113	41,535	18,107	19,554
Net	N/A	615	1597	759	531	N/A
Difference						

Beyond the minor discrepancies noted between the two reporting tables, it is immediately noticeable that there has been a significant decrease in the total amount of material being recycled, with the major decreases in total tonnage between 2002-03 (roughly 20,760 tons) and 2004-05 (roughly 23,660 tons). The apparent explanation for this drop is a decrease in commercial recycling due to the decline of several manufacturing businesses in the area, principally the closing of the Sony plant, located in East Huntingdon Township.

Beginning in 2002, the County began to keep separate totals for municipal (curbside and drop off) and commercial recycling. Of the 71,857 tons accounted for in 2002 from municipal reports, a total of 8,503 tons were from municipal programs (6,517 tons collected curbside and 1,986 tons collected at drop-off locations) and 63,354 tons were from commercial recycling programs. That equates to about a 12% residential to 88% commercial split, while the average ratio in Pennsylvania is typically closer to 40%: 60% (residential to commercial). In 2004, the County percentage had dropped to 23%: 77%; and in 2006, it was 58%: 42%, with total residential recycling exceeding that from all commercial facilities.

Using the data obtained from the DEP website (see Table 1-4, in Section 1.3, above) between 2002 and 2006, the amount of municipal waste generated varied from roughly 351,891 tons (in 2002) to 380,645 tons (in 2004). Since the population estimate throughout this period is based on the 2000 Census, we can assume that the total population responsible for generation of this material is that noted in year 2000, or 544,250 people (see Table 1-2, in Section 1.2, above). This results in a municipal waste generation rate range of 0.65 to 0.70 tons per person per year.

Using this same logic, and the recycling values shown in the table above, the recycling rate range in Westmoreland County can be computed to be between 0.13 tons per person per year (71,857 tons recycled divided by 544,250 people in 2002) and 0.03 tons per person per year (in 2005).

Based on these same figures, the percentage of the total waste generated that is recycled ranged from 20.4% in 2002 (71,857 tons recycled versus 351,891 tons generated) to 4.8% in 2005 (18,107 tons recycled versus 380,645 tons generated) for the County. Again, the principal reason for the drop in percentage is the decrease in commercial recycling.

According to the Municipal Solid Waste Characterization Study conducted by R. W. Beck for the DEP, there were over 2 million tons of recyclable materials landfilled in 2001. This material included paper, plastic, glass, metal, organics, and inorganics.

The following page contains a table from the R. W. Beck study ("Table 1: Statewide Aggregate Landfilled Municipal Solid Waste Composition Detail"), which lists the type of each material and the tons disposed in 2001. Copies of the complete study can be obtained from the DEP web site at the following website location:

http://www.dep.state.pa.us/dep/deputate/airwaste/wm/RECYCLE/Waste_Comp/Study.htm.

This information shows that there is still considerable room for improvement in recycling. For municipalities to increase their recycling, they need to investigate expanding the types of materials collected curbside or drop off, improve the education of their residents, and focus on recycling in commercial, institutional, and multi-family facilities.

Table 1
Statewide Aggregate Landfilled MSW Composition Detail (Weight Percent)

	1		Tons	Mean	Standard	Confidence	e Interval	Sampling
		Material Categories	Disposed	Composition	Deviation		Upper (%)	Error
Paper			3,117,182	33.3%	20.0%	31.7%		4.9%
	1	Newspaper	389,263	4.2%	4.4%	3.9%	4.5%	8.2%
	2	Corrugated Cardboard	785,032	8.4%	10.7%	7.7%	9.3%	9.2%
	3	Office	341,975	3.7%	5.7%	3.3%	4.2%	13.0%
	4	Magazine/ Glossy	251,027	2.7%	4.1%	2.4%	3.1%	14.4%
		Polycoated/Aseptic Containers	49,074	0.5%	1.2%	0.5%	0.6%	13.3%
		Mixed Paper	433,821	4.6%	5.0%	4.3%	5.1%	7.8%
	7	Non-recyclable Paper	866,990	9.3%	7.5%	8.7%	10.0%	6.7%
Plastic			1,062,336	11.3%		10.7%	12.1%	6.3%
		#1 PET Bottles	87,601	0.9%	1.4%	0.9%	1.0%	9.7%
		#2 HDPE Bottles	68,082	0.7%	0.8%	0.7%	0.8%	8.0%
	10	#3-#7 Bottles	16,871	0.2%	0.4%	0.2%	0.2%	16.2%
		Expanded Polystyrene	71,088	0.8%	1.5%	0.7%	0.9%	12.5%
•)		Film Plastic	465,586	5.0%	4.8%	4.7%		7.1%
	13	Other Rigid Plastic	353,108	3.8%	5.1%	3.4%		10.8%
Glass			282,316	3.0%		2.7%		10.3%
		Clear Glass	129,923	1.4%	2.0%	1.3%		10.0%
		Green Glass	38,468	0.4%	1.1%	0.4%		18.6%
		Amber Glass	66,238	0.7%	1.9%	0.6%		23.6%
	17	Non-recyclable Glass	47,688	0.5%	2.1%	0.4%		15.8%
Metals		0.00 1.00009	508,702	5.4%		5.1%		7.3%
Metals		Steel Cans	102,532	1.1%	1.3%	1.0%		8.1%
		Aluminum Cans	48,844	0.5%	1.1%	0.5%		12.7%
		Other Ferrous	282,131	3.0%	8.0%	2.7%		12.1%
	21	Other Aluminum	43,057	0.5%	1.2%	0.4%		10.4%
	22	Other Non-Ferrous	32,138	0.3%	1.4%	0.3%		15.9%
Organics			3,204,208	34.2%	21.7%	32.8%	35.7%	4.2%
		Yard Waste- Grass	136,084	1.5%	3.9%	1.2%		21.7%
		Yard Waste- Other	347,164	3.7%	8.2%	3.1%		19.4%
		Wood- Unpainted	540,611	5.8%	15.8%	5.2%		12.9%
			234,406	2.5%	8.6%	2.3%		12.6%
			1,127,170	12.0%	11.8%	11.3%		7.7%
	28		352,570	3.8%	6.8%	3.5%		9.8%
			217,875	2.3%	4.1%	2.1%		10.5%
		Fines	92,451	1.0%	1.3%	0.9%		8.4%
	31	Other Organics	155,877	1.7%	4.1%	1.5%		12.7%
Inorganics			1,194,338	12.7%		11.8%		8.3%
		Electronics	137,299	1.5%	4.3%	1.3%		16.4%
·		Carpet	163,371	1.7%	6.2%	1.5%		17.4%
	_	Drywall	99,009	1.1%	6.1%	0.9%		15.7%
		Other C&D	446,516	4.8%	16.0%	4.2%		13.7%
1		HHW	28,203	0.3%	1.2%	0.3%		13.6%
· ·		Other Inorganics	207,682	2.2%	5.9%	2.0%		14.2%
	38	Furniture	112,258	1.2%	6.8%	1.0%	1.6%	25.5%
		Total	9,369,083	100.0%	20			

4-8 R.W. Beck

2.2 Municipal Recycling Programs

Within Westmoreland County, there are a total of 65 municipalities. Of these, 17 municipalities have been designated as Mandated Recycling Communities, based on the criteria contained in Act 101. The Act states that communities with populations of at least 10,000; or communities with populations between 5,000 and 10,000 and more than 300 persons per square mile, must implement curbside recycling programs. Table 2-2 provides a list of the mandated municipalities, with their population and population density figures from the 2000 census. If additional municipalities move into the above categories within the next 10 years, they will be added to the list of Mandated Communities.

TABLE 2-2
MANDATED RECYCLING COMMUNITIES

Municipality	2000 Population	Land Area (Sq. Miles)	Population Density (People per Sq. Mile)
Arnold City	5,667	0.7	8,096
Derry Township	14,726	94.5	156
Greensburg City	15,889	4.2	3,783
Hempfield Township	40,721	76.6	532
Jeannette City	10,654	2.4	4,439
Latrobe Borough	8,994	2.2	4,088
Lower Burrell City	12,608	11.6	1,087
Monessen City	8,669	2.9	2,989
Mount Pleasant Twp	11,153	55.7	200
Murrysville Municipality	18,872	36.9	511
New Kensington City	14,701	4.0	3,675
North Huntingdon Twp	29,123	27.4	1,063
Penn Twp	19,591	30.3	647
Rostraver Twp	11,634	32.2	361
Scottdale Borough	4,772	1.2	3,977
Unity Twp	21,137	67.0	315
Vandergrift Borough	5,455	1.3	4,196
Totals	249,594	449.9	555

Each of the Mandated municipalities have well defined recycling plans in place, and Table 2-3 indicates the total material recycled for the years 2002 through 2006, for each of the designated municipalities.

Note that in 2002, Mandated municipalities represented only 21% of the total County-wide material recycling; whereas in 2006, that percentage had increased to 86%. Unfortunately, it appears that this increase is not the result of a substantial increase in recycling in Mandated communities, but an overall decrease in the total County-wide recycling tonnages. (See the discussion of the decrease in commercial recycling, in Section 2.1, above.)

TABLE 2-3
MANDATED COMMUNITIES RECYCLING TOTALS

	2002	2003	2004	2005	2006
Arnold	191.6	197.5	168.3	460.9	443.9
Derry Twp	151.6	212.4	511.1	204.1	243.8
Greensburg	2,242.8	2,263.1	2,211.0	1,908.3	2,118.4
Hempfield Twp	1,629.5	1,454.1	2,990.0	1,067.0	1,807.0
Jeannette	2,525.9	751.2	774.7	412.5	439.1
Latrobe	753.8	516.2	459.3	710.2	751.8
Lower Burrell	703.2	704.2	725.0	732.8	629.5
Monessen	221.7	277.0	271.2	325.7	314.0
Mt. Pleasant Twp	152.6	147.1	629.9	112.2	110.6
Murrysville	1,220.4	1,144.3	3,760.4	1,498.7	2,848.0
New Kensington	602.5	1,246.3	1,495.5	1,211.3	1,055.2
North Huntingdon	877.4	1,866.1	1,685.7	1,685.6	1,910.7
Penn Twp	726.3	6,952.1	1,498.1	1,514.4	1,595.1
Rostraver Twp	2,510.3	2,764.6	2,966.5	2,211.3	955.0
Scottdale Boro	103.2	91.3	133.1	111.7	439.1
Unity	701.0	1,429.2	1,169.2	782.2	1,030.0
Vandergrift	104.6	104.9	85.7	181.5	181.1
Total Mandated	15,418.4	22,121.6	21,534.7	15,130.4	16,872.3
Total County-Wide	71,857.1	50,114	41,535	18,107	19,554
Mandated Percentage	21%	44%	52%	84%	86%

Note: the "Mandated Percentage" computed above represents the percentage of the total County-wide recycled material generated by those municipalities which are designated as Mandated. It is computed by dividing the annual Total Mandated tonnage by the Total County-Wide tonnage.

Of the 65 municipalities in Westmoreland County:

- All 17 mandated municipalities have curbside recycling collection. Five are operated by the municipality, and 12 are operated by an independent hauler. Of those, 3 are municipal, 4 are private subscription, and 10 are contracted through the municipality.
- Five of the non-mandated municipalities have some form of curbside collection, operated by an independent hauler. Of these, 3 are contracted; 2 are private subscription.
- The remaining 43 non-mandated municipalities have no curbside program, although 6 of these have populations over 5,000 but with a population density of less than 300 per square mile.
- Thirty-one of the 43 have dropoff programs in place.

Tables E2-1 through E2-5, in Exhibit E-2, show the recycling collectibles as reported to the PADEP for the years 2002 through 2006, by municipality. These tables further break down the recyclables to define the collection methodology (i.e., Curbside, Dropoff or Commercial).

Table E2-6 shows a trend analysis of the recycled materials by collection methodology over the 5-year period. Tables E2-7 through E2-9 show a more detailed analysis of each collection methodology, broken down by municipality and year.

Table E2-10 shows a breakdown of the materials recycled between 2002 and 2006, using the same material categories as are defined on the DEP website. Table E2-11 is a similar breakdown, but with material categories combined by type (i.e., paper, metal, etc.).

2.3 County Recycling Programs

The Westmoreland County recycling program is coordinated by Westmoreland Cleanways, per a Letter of Understanding dated September 22, 2005. In this agreement, the Westmoreland County Board of Commissioners designated Westmoreland Cleanways as the official recycling organization for the County. The partnership between the County and Westmoreland Cleanways is also intended to assist in the revision and implementation of the County's Solid Waste Management Plan.

Per the Agreement, Westmoreland Cleanways is to assume the following duties, for the period of July 1, 2005 through December 31, 2010, subject to available funding:

- 1. Assist the County in developing and implementing waste reduction, recycling, leaf and yard waste composting programs.
- 2. Identify and encourage opportunities for inter-municipal cooperation and cooperative efforts with other organizations' related programs.
- 3. Provide technical assistance to municipalities on developing and implementing recycling programs.
- 4. Develop education materials on waste reduction, recycling, leaf and yard waste composting programs.
- 5. Serve as the primary contact for waste recycling programs within the County.
- 6. Speak to schools, community, business and government organizations about recycling and related programs.

- 7. Assist municipalities in identifying materials capable of being marketed and local markets.
- 8. Encourage both mandated and non-mandated communities to expand recycling efforts.
- 9. Identify sources of recyclable products and products made from recycled materials and encourage the use of such products.
- 10. Develop recycling programs for special markets such as used oil, tires, household hazardous waste, and white goods, subject to County authorization.
- 11. Maintain communications with other recycling coordinators and municipal waste management professionals.
- 12. Maintain records and report annual recycling amounts to County officials and the Pennsylvania Department of Environmental Protection (DEP).

Since their inception in 1990, Westmoreland Cleanways (formerly part of Pennsylvania CleanWays) has assisted in the cleanup of 94 illegal dumpsites, resulting in the removal and proper disposal of 1,295 tons of trash. Their recycling efforts have continued to expand into new areas, and included the following activities in 2005-2006:

- Paper Recycling Program: now includes 40 municipalities, 14 public schools, 1 university, 16 businesses and the County government.
- The Loyalhanna Watershed Association operates the electronics drop off program in Ligonier, and since this program began in 2003, this facility has recycled nearly 250,000 pounds of electronics.
- Twelve Youth Groups participated in the fugitive tire collection program, bringing in over 1500 tires in 2006, and another 146 tires were collected through the Tire Recycling Assistance Program (TRAP).
- Household hazardous waste (HHW) collections have been undertaken by Westmoreland Cleanways for more than 10 years, totaling in excess of 488,430 pounds of HHW.
- Over 2,000 Christmas trees were chipped and used to beautify community parks or to provide wildlife habitat, with the participation of 17 municipalities, groups and individuals.

In addition, Westmoreland Cleanways provided a series of education programs and activities, including:

- Backyard Composting Workshops, in collaboration with the PADEP and PSU/Department of Soil Sciences.
- Westmoreland Earth Day, held on Earth Day to showcase the many resources and environmental programs available to County residents.
- Litter Activity Books were copied and distributed to schools, libraries and youth organizations.
- Litter IQ and Recycling Boards were used at various sites to test the knowledge of children and adults regarding waste management and recycling.
- Vermicomposting "Worm Bins" were used to allow children to observe the transformation of green waste to nutrient-rich compost.

Westmoreland Cleanways is also responsible for tracking the following recyclable/solid waste items:

- Glass clear, green & brown bottles and jars
- Newspaper glossy inserts at some locations

- Aluminum beverage cans
- Steel and bimetal cans
- Plastics No. 1 PET & No. 2 HDPE
- Scrap metal
- Tires fugitive tire program thru various Youth Groups, at 75 cents per tire, as well as 5 annual collections tires go to the Liberty Tire Company in Braddock
- Household hazardous waste see Exhibit E-2
- Christmas trees collected by both private and municipal entities
- Backyard composting thru Bin Education grants and DEP Give-Away program
- Composting Facilities, including:
 - 1. Municipal leaf collection
 - 2. Unity Twp dropoff
 - 3. Farms with land application permits approved by Conservation District, and having a Nutrient Management Plan (eligible for 902 Grant dollars)
- Electronics Recycling via Loyalhanna Watershed Association, Goodwill and Staples
- Construction & Demolition (C&D) Waste see Exhibit E-2, 2007 Recycling Guide for list
- Illegal Dumping Program an assessment was completed in late 1990's and is scheduled to be redone in 2008
- Infectious/Chemotherapy Wastes
- Paper (other than newsprint) see Exhibit E-2, 2007 Recycling Guide for list

2.4 Changes in Act 101 and Impact of These Changes to the County

Act 101 (P.L.556), originally enacted on July 28, 1988, was amended via the implementation of Act 140 (House Bill No. 1902, session of 2005, as Amended on 9/27/06). (For a complete copy, see Exhibit E-2.) This amendment created a series of changes (including extension of the sunset date for the recycling fee to January 1, 2012). Notable among the other changes, were specific changes to Section 2, with respect to Section 904 (a) and (b), regarding performance grants for municipal recycling programs. Among other requirements, the amendment expanded the level of documentation required to be included with the applicant's recycling and composting grant request submission, and this may effect funding received by municipalities beginning in 2007.

Specifically, under Section 2(d)(4), the amendment noted that all mandated municipalities and any non-mandated municipality receiving more than \$10,000 in funding must demonstrate to the Department's satisfaction that they "...have met the following performance requirements:

- requires, through ordinance, that all residents have waste and recycling service
- has an implemented residential recycling program and facilitates a commercial recycling program or participates in a similar county or multi-municipal program
- has a residential and business recycling education program
- has a program of enforcement that periodically monitors participation, receives complaints and issues warnings for required participants and provides fines, penalties, or both, in its recycling ordinance
- has provisions, participates in a county or multi-municipal program or facilitates a private sector program for the recycling of special materials
- sponsors a program, facilitates a program or supports an organization to address illegal dumping and/or littering problems
- has a person or entity designated as recycling coordinator who is responsible for recycling data collection and reporting recycling program performance in the municipality or municipalities."

Section 2(d)(5) goes on to say that "If the requirements of paragraph (4) are not satisfied by the municipality, then the grant funds awarded under this section shall be expended by the municipality only to satisfy the requirements of paragraph (4).", and Section 2(e) says that "The department may require budget documents or other expenditure records and may deny funding through this section if an applicant cannot demonstrate that funds have been expended on eligible activities."

There has been a notable decrease in the amount of funding awarded through Section 904 to mandated municipalities in Westmoreland County in the last 2 years. It is felt that this reduction in funding awards may be, in part, the result of a lack of municipal personnel to provide the services and prepare the documentation necessary to support the requirements of the Act. With that in mind, it is recommended that the County evaluate the role of Westmoreland Cleanways, and consider expansion of their responsibilities to address non-compliance issues within the mandated (and non-mandated) municipalities.

Specifically, it appears that the principal issues associated with non-compliance have revolved around the following, each of which may arguably be best addressed with assistance from Westmoreland Cleanways:

- A lack of commercial recycling and the twice-annual public education
- A lack of commercial recycling ordinances
- Inadequate leaf waste collection
- A lack of an enforcement program

2.5 Recycling Facilities

Tables E2-12, E2-13 and E2-14 list the material recovery facilities, yard waste composting sites and permitted biosolids land application sites serving Westmoreland County municipal programs. Tables E2-15 and E2-16 list the current Municipal Drop-Off Locations and Drop-Off Contacts, respectively, for facilities located throughout Westmoreland County. The Westmoreland County Recycling Guide 2007, prepared by Westmoreland Cleanways, lists the locations where various recyclable materials can be dropped off. A copy of that Guide is also included in Exhibit E-2, along with a copy of the Westmoreland Cleanways 2005-2006 Annual Report.

2.6 Costs Associated with Recycling

Westmoreland Cleanways currently has no cost data on existing municipal programs, since obtaining this information would require an extensive survey of each municipality. However, it is suspected that the expense of operating the current recycling programs outweighs historic revenues generated and avoided costs of disposal, combined. None of the municipalities with programs market their own recyclables, so an increase in volume will not provide a significant cost benefit.

Most of the collection and processing/sale of recycled items is conducted by contracted private haulers, so estimates of potential recycling revenues are also not readily available.

Municipal cost avoidance on recycled waste would most likely be offset by additional costs associated with increased collection, and any specific cost avoidance benefits would most likely be associated with commercial businesses.

Westmoreland Cleanways' budget reflects the cost of special recycling collections. Minimal revenue is generated at special collections in order to fund other programs where no fees are collected. New recycling programs are structured as partnerships to ensure that the hauler generates sufficient revenue to continue the program.

Westmoreland Cleanways derives recycling income from the AbitibiBowater Paper Retriever Program. However, this is a unique partnership with AbitibiBowater and not one that could be duplicated or used as an example for other commodities.

2.7 Future Recycling Efforts

As discussed above, there is still considerable room for improvement in recycling within Westmoreland County. For municipalities to increase their recycling, they need to investigate expanding the types of materials collected curbside or drop off, improve the education of their residents, and focus on recycling in commercial, institutional, and multi-family facilities. Westmoreland Cleanways will be instrumental in achieving improved recycling results, through their education and coordination efforts. A summary of specific issues to be addressed for Future Recycling Efforts follows:

Methods to Achieve a 35% Recycling Goal

It has been noted that most programs established during implementation of the original mandates now only maintain the bare minimum services required by the Act. The turnover of municipal officials has further eroded the knowledge-base of the original requirements. A few municipalities put more effort into their recycling programs and continue to do well, primarily through the effort of those municipal officials dedicated to providing quality municipal services. Other factors contributing to the low recycling rate are: relatively low tipping fees, resulting in recycling operations being more expensive to maintain than trash disposal; the rural nature of the county, which increases the operational cost of recycling collections; lack of affordable recycling services offered by the private sector; lack of recycling education to both residential and commercial sectors; and lack of enforcement of municipal recycling ordinances.

Westmoreland County's plan to increase its diversion rate begins with recognition of the historical factors which allowed the current state of recycling to occur. Westmoreland County officials have committed to re-establishing recycling as a major component of the 2007 Solid Waste Plan, and support the efforts of its recycling coordinator to implement those portions of the plan related to recycling. Westmoreland County currently contracts with Westmoreland Cleanways, to serve as the designated county recycling coordinator as required by Act 101. Westmoreland Cleanways has and will continue to perform the duties of the recycling coordinator, including public education, technical assistance to municipalities, developing partnerships with the private sector to provide additional commercial and residential recycling opportunities, and improving reporting methodology and compliance with Act 101 requirements.

Westmoreland County and Westmoreland Cleanways believe that, although this will be a fairly long and intensive process, significant results will be achievable by re-establishing relationships with municipal officials and private sector partners to improve or implement recycling programs; re-educating all sectors on the importance of proper solid waste management; and improving data collection methods to accurately document the results of recycling on the total volume of municipal solid waste generated in Westmoreland County.

Each of the 17 Mandated municipalities have defined recycling plans in place, and in 2006, material from the Mandated municipalities represented 86% of the total County-wide material recycling. It would appear that the 48 non-Mandated municipalities are obvious targets for improved recycling within the County. However, the DEP conducted a recent audit of the Mandated municipalities and found that most are not meeting the full requirements of Act 101, with respect to recyclables. As such, a better short-term plan is to

begin with an expansion of services provided by the Mandated communities, to; improve the existing commercial recycling programs, educate commercial entities and residents every six months, enforce mandated recycling ordinances, and bring the leaf waste collection programs up to Act 101 standards. The larger population and commercial base in the mandated communities will yield results quicker than working in the non-mandated rural communities.

In addition, as was discussed in Section 2.1, there has been a substantial drop in the total recyclables collected from commercial entities. While this tonnage drop may be primarily the result of the closure of several factories in the area, commercial recycling should also be a focus for improved collections.

Specific recyclable materials which appear to be good candidates for improved collection include:

- cardboard (primarily commercial, but also residential)
- electronics (there is currently only one electronics drop-off center, and multiple locations might increase collections)
- non-ferrous metal (primarily commercial)
- glass (although the total glass content in the waste stream has typically decreased over the years due to expanded use of plastic bottles)
- C&D and wood waste materials (there has been no reported C&D collectables since 2003 and wood waste collection has declined dramatically since 2004)
- General plastic material (which has shown a steady collection decline since 2002)

Westmoreland Cleanways instituted a county-wide single stream dropoff recycling program to serve residents and businesses that do not have access to curbside recycling or other recycling programs, and to collect material not otherwise collected in existing curbside or commercial collection programs. Acceptable materials include: OCC, newsprint, magazines/catalogs, junk mail/office paper, telephone books, chipboard, aluminum and bimetal cans, and #1 thru #7 plastic.

Note that there is a particularly high expectation for increased electronics collections given the proposed transition from analog to digital televisions in 2009. (Under current law, full-power broadcast stations must complete the transition to digital television by Feb. 17, 2009. After that date, analog TV broadcasts will cease.) One estimate is that 1 of every 4 households will dispose of at least 1 TV in the Spring of 2009. With a Westmoreland County household population estimate of 355,695 people by 2010, and assuming that the average household has 2.4 members (per the 2000 census), this would yield an estimate of nearly 148,000 households, or almost **37,000 TVs** requiring disposal. This is estimated to be more than 1,000 tons of material, some of which will be considered toxic, although many of the components are recyclable. The current recycling infrastructure will certainly not be able to handle this volume within 18 months, and it is recommended that a more comprehensive plan be instituted.

Westmoreland Cleanways partners with licensed electronics waste recyclers to collect e-waste at hard-to-dispose collection events throughout the year. Discussions are on-going for an expanded or permanent e-waste collection site.

Recycling or specialty waste areas which are not currently being addressed include:

- Fluorescent light bulbs and ballast
- Pharmaceuticals (prescription and non-prescription drugs)
- Hypodermic needles (from home use as opposed to hospital use)
- Radioactive material
- Explosive material

The latter two materials (radioactive and explosive wastes) are specialty wastes that are not necessary to be addressed by the County Solid Waste Plan.

Note that a Pharmaceuticals Collection program doesn't look promising at the current time because of PA Department of Health regulations. In addition, the PA Pharmacist's organization is concerned about liability issues related to a registered pharmacist assisting with collection of prescription drugs.

Municipal Cooperation for Combined Collection & Management of Leaf Waste

Several options may exist for combining municipal agreements, which could lead to cost savings and increases in total recycling volumes. This would involve; an extensive process of gaining buy-in and approval from municipal officials, coordination of existing service contracts, the cost of implementing educational programs and the purchase of additional equipment. Each proposal would have to be evaluated individually and each program would have its own unique circumstances.

Some examples of possible Municipal Cooperation efforts which Westmoreland Cleanways is considering include:

• Hempfield Township / City of Greensburg / Southwest Greensburg Borough / South Greensburg Borough (combined population approximately 65,000 residents):

The City of Greensburg, and Southwest Greensburg and South Greensburg Boroughs are completely surrounded by Hempfield Township. The City and Hempfield Township are mandated, provide curbside collection, and contract with a private hauler for waste and recycling services. The City has its own leaf collection and takes material to a commercial compost facility. Hempfield Township contracts with its waste hauler to collect leaf waste for disposal at a landfill. The Boroughs of Southwest and South Greensburg are both non-mandated, and do not have curbside recycling, but operate municipal waste service for their residents. Southwest Greensburg provides voluntary leaf waste collection that is contracted to a private hauler. South Greensburg provides no leaf waste collection.

A number of hybrid programs could be proposed for these municipalities. In 2005, the municipalities developed a 10-year comprehensive plan and investigated the possibility of starting a municipal composting site to address leaf waste. Start-up cost, on donated land, was estimated to be \$1,250,000, with an estimated annual operating cost of \$25,000.

While two of the municipalities currently operate their own municipal trash collections, neither combined would have enough equipment to cover the entire region.

Possible savings might be realized if the municipalities joined in one multi-municipal waste and recycling contract. However, additional funds would be needed for a new education campaign, and for the purchase of approximately 4,600 additional curbside recycling bins for the new households. Savings might be realized if the two smaller municipalities could eliminate their own municipal waste collection, or the equipment currently in use for trash could be used to provide a more comprehensive leaf waste collection.

However, the political ramifications of an inter-municipal agreement, the possible loss of employment in the smaller boroughs, and other issues could complicate negotiations beyond the point of cooperation.

• <u>Derry Township/Derry Borough/New Alexandria Borough (combined population 18,312):</u>

These municipalities completed a 10-year comprehensive plan several years ago, which did not address waste disposal. Derry and New Alexandria Boroughs are completely surrounded by Derry Township. Derry Township is a mandated municipality with private subscription trash and contracted leaf waste collection. Derry Borough and New Alexandria have private subscription trash collection. Derry Borough provides municipal leaf waste collection, and all municipalities use the same hauler. Derry Township officials investigated the possibility of developing a municipal compost site but did not pursue the matter when they learned of the extensive and rigorous permitting process required. Derry Township is the largest township in the state, covering 96 square miles, 47% of which is considered rural.

This municipal group may benefit from an inter-municipal waste agreement if the waste hauler has enough incentive to do so. The benefit would be realized by forcing the hauler to provide recycling service to the two smaller boroughs in exchange for a waste contract with all three municipalities. All three municipalities currently have drop-off collection sites for mixed paper. In addition, Derry Township hosts a commingled drop-off center which is well-used by residents without trash service, businesses, and some residents of Derry Borough. This commingled recycling roll-off is currently provided to Derry Township at no cost by their waste hauler.

New Alexandria Borough has been preliminarily identified to host a single-stream recycling roll-off in place of the paper recycling bins currently in place. This program is scheduled to be implemented in early 2008. A more cost effective plan may be to provide Derry Borough residents with curbside recycling containers that they can transport to the Derry Township dropoff center at their convenience.

• The Cities of Arnold, Lower Burrell and New Kensington (combined population 32,976):

The City of Lower Burrell borders New Kensington's entire eastern border. New Kensington surrounds Arnold on 3 sides, and the fourth side is the Allegheny River. All 3 cities are mandated. Arnold and New Kensington operate their own municipal waste and recycling service, while Lower Burrell uses a contract with private subscription. Lower Burrell and New Kensington both have permitted compost sites and Arnold contracts for leaf waste removal.

A number of hybrid programs could be proposed for these municipalities, such as combining municipal waste collection equipment to service the entire region, or combining leaf waste collections, if either municipal compost site is large enough to accommodate the entire region. Economies of scale could be realized with a multi-municipal agreement if the combined equipment from Arnold and New Kensington would be enough to cover the region. The larger volume of recyclables collected would benefit the joint marketing of recyclables, as well.

CHAPTER 3.0 SELECTION AND JUSTIFICATION OF MUNICIPAL WASTE MANAGEMENT PROGRAM - Section 272.227

3.1 Background

As noted in the introduction to this plan revision, a number of alternatives were investigated during the preparation of the 1990 Municipal Waste Management Plan. The recommendation made at that time involved the use of privately owned landfills, either currently operational or anticipated to become operational during the planning period. For the 1990 Plan, a formal RFP process was used to select the designated municipal waste processing and disposal facilities. The County determined, based on a detailed review of the responses to this request, that it is in the best interests of the County, municipalities and local residents to designate and make available multiple facilities for the long-term handling and disposal of Westmoreland County's municipal waste. The County decided to continue to rely on existing and proposed privately- and municipally-owned municipal waste processing and disposal facilities for the long-term handling of waste. Construction of new publicly-owned waste processing or disposal facilities was not recommended. Costs associated with transportation and disposal of waste at available facilities was found to be generally comparable to the estimated cost of constructing a new, publicly-owned landfill facility within the County. (See Exhibit E-3 for a copy of pages 5-36 through 5-41 of the 1990 Plan.)

Nothing has occurred to alter the basic elements of the recommended program since the 1990 Plan was prepared and approved. Waste-to-energy systems are still much more expensive than landfilling and mixed refuse composting programs are still not viewed as a universally accepted alternative. See Section 5.0 for a discussion of the assurances of disposal capacity for all municipal waste estimated to be generated in Westmoreland County during the planning period. Local governments continue to manage their own waste and recycling programs.

3.2 Waste Flow Control

The original 1990 Plan, and this update, both stipulate that all municipal waste generated in the County can be disposed only at landfills included in the Plan. As a means of enforcing this Plan element, the original Plan called for the County to license municipal waste collection and hauling vehicles. However, recent court decisions have negated the County's licensing authority, thus eliminating that method of enforcement As a result, the County is currently considering the adoption of an ordinance (See Exhibit E-5), containing the following primary conditions:

- 1. All municipal waste generated within Westmoreland County (except source-separated recyclable material) shall be transported to and disposed at only those facilities which are cited in the approved Westmoreland County Municipal Solid Waste Management Plan 2008 or any subsequent revision thereto.
- 2. Each city, borough, township or home rule municipality within Westmoreland County shall be responsible to assure that their bids for municipal waste collection and disposal adhere to the Plan. The County will provide a Model Local Ordinance (See Exhibit E-5) which can be adopted by each municipality, and which will indicate that bidding of local

- waste collection and disposal must adhere to the conditions of the approved Westmoreland County Municipal Solid Waste Management Plan 2008 or any subsequent revision thereto.
- 3. Using information available from the PADEP, Westmoreland County will annually identify landfills accepting municipal waste generated within Westmoreland County (except source-separated recyclable material) without an agreement. Once identified, the County will attempt to obtain an agreement. If that is not possible, the County will approach DEP for assistance (since the DEP landfill permits include a clause that requires that landfill operators abide by the County Solid Waste Plans).

Note that, for the purposes of this ordinance, municipal waste transfer stations, as well as sludge processing facilities and permitted biosolids land application sites (described in Section 1.5 – Other Waste Streams), will be considered as <u>interim processing</u>, and not <u>disposal</u> facilities.

Section 5.0 (Description of Facilities) describes the conditions under which a landfill will be included in this Plan revision or at any time during the ensuing 10 year planning period.

CHAPTER 4.0 PUBLIC FUNCTION - Section 227.230

4.1 County Sponsored Recycling Programs

As a complement to municipal recycling programs, the County's Recycling Coordinator, Westmoreland Cleanways has sponsored a series of activities aimed at collecting and recycling a variety of materials (telephone books, used oil, tires, electronics, etc.). The Westmoreland Cleanways Annual Report for 2005-2006 contains a more detailed description of these activities and can be found in Exhibit E-2.

4.2 Leaf Composting

Westmoreland Cleanways, in partnership with Penn State Master Gardeners, conducts regularly scheduled backyard composting workshops for the general public and upon request. Since 1994, 1,700 residents have attended the workshops, and more than 5,550 backyard compost bins have been distributed.

Westmoreland Cleanways maintains a Compost Demonstration Site on the grounds of Donohoe Center in Hempfield Township, and Westmoreland Cleanways' Guide to Home Composting is available on the Westmoreland Cleanways website at www.westmorelandcleanways.org.

In 2008, Westmorland Cleanways contracted with Nestor Resources, Inc. under Recycling Technical Assistance Project #443, to prepare a *Feasibility of expanding yard waste collection throughout the county*. The study noted that: there is a high potential to collect yard waste throughout the County; if yard waste is banned for disposal, the County could easily respond to the need for expanded composting; inter-municipal sharing of equipment would be encouraged; there is an existing large, centrally-located private sector facility. A complete copy of the report is included in Exhibit E-2.

4.3 Household Hazardous Wastes

Westmoreland Cleanways has sponsored a series of HHW collection drives over the past several years and will continue to do so in the future. A copy of the flyer advertising the September, 2006 event is included in Exhibit E-2. A table summarizing the total tons of HHW for each municipality between 1997 and 2007 is also included in Exhibit E-2.

4.4 Marketing

DEP has recently created a Recycling Markets Center – a free standing non-profit organization whose purpose is to promote the use of more of the materials currently in the recycling stream as well as the use of other recyclable materials not currently in the recycling stream. This effort will be aimed at both increasing the amount of material currently used by existing companies which manufacture new products from post consumer wastes and in promoting the establishment of new industries which will use either current or newly recycled materials. While the RMC headquarters is located in Harrisburg, there

will be a branch office in New Kensington, Westmoreland County which will be capable of providing service to industries in counties in the southwestern corner of Pennsylvania.

4.5 New DEP Initiatives

In addition to establishing the RMC, DEP is planning to implement two new programs in southwestern Pennsylvania in the near future. The first program envisions the establishment of the Greater Pittsburgh Commercial Recycling Council similar to the Council established in Philadelphia several years ago. The Council's mission is to support environmental managers through peer-to-peer consultation, state-of-the-art information, professional educational opportunities, technical assistance, and networking. This effort should have a positive impact on commercial recycling results.

The second program will address the lack of recycling of materials currently being discarded from building construction sites. A series of meetings will be held with contractors to discuss the means by which many of the materials now being discarded can be put into a recycling stream.

CHAPTER 5.0 DESCRIPTION OF FACILITIES - Section 272.224 LOCATION - Section 272.228 ORDERLY EXTENSION - Section 272.232

5.1 Landfills

As noted in Section 1 of this document, the original plan envisioned signing disposal contracts with then currently operational facilities including seven (7) landfills and one (1) waste to energy plant. In addition, the Plan allowed for additional disposal contracts with seven (7) proposed landfills at such time as they might become operational.

Currently, there are nine (9) landfills included in the Westmoreland County Plan. Three of the landfills are located in Westmoreland County, two are located in Allegheny County and there is one each in Washington, Cambria, Indiana and Somerset Counties. Table E4-1 lists those facilities and a map showing their locations is included in Exhibit E-4. The map also indicates the location of a transfer station and a leaf composting site currently operating in the County.

The initial term of the landfill contracts included a termination date of May 31, 2002. Prior to that date, the contracts were amended to extend the term for five additional years setting a new termination date of May 31, 2007. The waste-to-energy plant closed on December 31, 1997.

A letter was sent to representatives of all landfills currently in the Plan inviting them to meet with the County on June 12, 2007 to discuss an extension of the existing contracts through the end of 2007. This seven month extension was agreed to by the landfill representatives in order to allow for time to negotiate new contracts which would run from January 1, 2008 through December 31, 2017.

Two (2) items of discussion at the June 12 meeting included the County's waste transportation vehicle permitting program and the \$1.35 per ton implementation fee. Both of these issues have surfaced as a result of recent court decisions. With regard to the permitting program, it was stated that the County was discontinuing this effort. With regard to the implementation fee, all parties agreed that the outcome of current legislative activities in Harrisburg would have a large impact on this issue and that further discussions on this subject would take place at future negotiation sessions regarding new contract language. A letter was sent to all attendees confirming the discussions held.

An ad was placed in the November issue of Waste Age, and in the October 14th & 17th editions of the Tribune Review (local paper), stating that any facility desiring to be considered for inclusion in the Plan should submit notice of that desire to the County (Exhibit E-4). The County received no responses to this advertisement, so it is assumed herein that only those landfills currently accepting Westmoreland County municipal waste will be included in the new Solid Waste Plan, although a provision to include new landfills has been included in Exhibit E-5.

The DEP landfill data for 2006 revealed that 15 landfills reported receiving municipal waste generated in Westmoreland County. A complete list of those landfills, the tonnages of the various amounts of waste they received and their average and maximum permitted daily intakes are presented in Exhibit E-4, Table E4-2.

Those landfills listed in the report but without a signed contract with the County were contacted by letter and invited to participate in future discussions.

Subsequent to the June 12 meeting, proposed contract language was prepared and submitted to the County Commissioners for review and approval. Following approval by the Commissioners, this document will be submitted in draft form to the Municipalities for review and comment. Upon receipt of all comments, a revised copy will be submitted to the PADEP for comment, and a meeting will be held with the 15 landfills having recently received municipal waste from the County. Negotiations with individual landfill companies will be initiated by the County to assure that adequate permitted disposal capacity is available for Westmoreland County waste totaling approximately 3.7 million tons annually.

5.2 Back-up Sites

The use of back-up sites will, upon approval of the Westmoreland County, be allowed to be used in cases of emergency at a landfill included in this Plan revision. Language relating to that approval is contained in the current contract with landfills and is included in the model contract (Exhibit 7) discussed in Section 7.0 – Implementing Documents.

5.3 Addition of Landfills to the Plan

It is entirely possible that over the 10 year planning period, generators or collectors of municipal waste in Westmoreland County may wish to utilize a landfill that is not currently approved for acceptance of that waste. In order to facilitate the addition of a landfill to the Plan and still only include in the Plan those landfills actually accepting municipal waste generated in the County, the following procedure has been established as part of this plan revision.

If a DEP licensed hauler, or a municipality or business desires to use a facility for disposing of municipal waste other than those currently included in this Plan, the following procedure is to be used:

- 1. A DEP licensed hauler, a municipality or a business must petition the County using the one page form (see *Petition Form to Add a Landfill to Approved Plan* in Exhibit E-5), to propose that a specific facility be added to the Plan.
- 2. Within 10 working days of receipt of the petition form, the County will forward a Facility Qualification Review Form (FQRF) to the facility being requested for inclusion in the Plan.
- 3. The FQRF will require the following information:
 - a. Name and location of the landfill
 - b. Name(s) of owner of record.

- c. Copy of the permit(s) issued by all agencies of the municipality, county and/or state in which the landfill is located which have regulatory oversight over the landfill.
- d. Approved amount of daily and annual municipal waste intake.
- e. Average daily and annual amount of municipal waste which the landfill currently accepts.
- f. Minimum amount of municipal waste generated in Westmoreland County which the landfill agrees to accept on a daily and annual basis.
- g. Notification from the municipality, county and state in which the landfill is located that there is no objection to having the landfill added to the approved list of landfills in the Westmoreland County Solid Waste Management Plan.
- h. Acceptance of the terms of the standard Westmoreland County landfill contract.
- 4. Upon receipt of the completed FQRF from the facility in question, the County will review and respond to the information submitted within 30 working days.
- 5. If the request for inclusion in the Plan is denied, the County will notify by letter the landfill and the requesting hauler, municipality or business of the reason(s) for that denial.
- 6. If information in the completed FQRF is approved as being complete and accurate, the County will notify by letter the landfill and the requesting hauler, municipality or business that the facility is formally designated in the Plan for disposal of municipal waste generated in Westmoreland County.
- 7. At the same time, the County will notify by letter all County municipalities and DEP that the landfill has been added to the Plan.

CHAPTER 6.0 IMPLEMENTING ENTITY IDENTIFICATION - Section 272.229

Implementing responsibilities include those activities delineated in the 1990 Plan, those which have been undertaken since that Plan was approved and those which should be undertaken in the future.

6.1 Westmoreland County

- Preparation of Plan and Plan revisions
- Maintenance of landfill contracts for disposal capacity
- Approval or denial of additional landfills
- Approval or denial of requests to use back-up sites
- Working with the Recycling Markets Center (RMC) and Westmoreland Cleanways to encourage development of increased use of current recyclables or new recycling businesses
- Assisting Westmoreland Cleanways with promotion of purchase of materials with recycled content
- Assisting Westmoreland Cleanways with promotion of 'green' shopping habits and waste minimization
- Providing assistance to local governments and the community at large on matters of solid waste management
- Assisting Westmoreland Cleanways with participation with DEP in development and implementation of a construction materials recycling program
- Assisting Westmoreland Cleanways to address the need to develop a more comprehensive electronics recycling program in Westmoreland County

6.2 Westmoreland Cleanways

- Working with the Recycling Markets Center (RMC) and the Westmoreland County Planning Group to encourage development of increased use of current recyclables or new recycling businesses
- Development and distribution of educational materials
- Continuation of HHW programs
- Promotion of purchase of materials with recycled content
- Promotion of 'green' shopping habits and waste minimization
- Providing assistance to local governments and the community at large on matters of recycling
- Providing assistance to local governments with the development of annual reports as required by the DEP for Chapter 904 Grant requests
- Participation with DEP in development and implementation of a construction materials recycling program
- Preparing an Annual Report documenting Westmoreland Cleanways activities, as well as municipal recycling accomplishments, for the year. This will meet the requirements of Act 101 for the Annual Recycling Report.
- Addressing the need to develop a more comprehensive electronics recycling program

With regard to public education, Westmoreland Cleanways will prepare and distribute generic materials that can be used by a local government to assist in complying with the requirement to publicize its recycling program every six months [Section 1501 (d) of Act 101]. This information will be in the form of announcements that can be used by competing information specific to a given program (PSAs, flyers, handouts, etc)

It is to be noted that Pennsylvania House of Representatives HB 1902 of Session 2005, entitled An Act amending the Act of July 28, 1988 (P.L. 556, No. 101), known as the Municipal Waste Planning, Recycling and Waste Reduction Act, further providing for sunset for recycling fee and for performance grants for municipal recycling programs currently being considered by the Pennsylvania House of Representatives would continue the collection of the \$2.00 per ton recycling fee at landfills and would also require that all mandated municipalities (and non-mandated municipalities receiving more than \$10000 in a Section 904 Performance Grant) institute a program aimed at enhancement of commercial recycling in that municipality. The program would include mandatory education of commercial facility owners, operators and/or employees. In this area, the County could prepare generic flyers, handouts, etc. to be used by all affected local governments.

6.3 Local Governments

- Implementation of mandates specified in Act 101 and the Plan
- Include in their bid specifications for collection services a stipulation that materials designated by the municipality for inclusion in the municipal recycling program not be collected and disposed with the municipal waste
- Include in their bid specifications for collection services a stipulation that solid waste materials collected will only be taken to landfill facilities that are included in the current Plan
- Enforcement of local mandates, ordinances and bid specifications to assure compliance with the intent of the Plan
- Preparation of reports to the County as required by Act 101
- Development and distribution of specific educational materials
- Promotion of purchase of materials with recycled content
- Promotion of 'green' shopping habits and waste minimization
- Foster the improvement of recycling for commercial, institutional, and multi-family facilities

Local governments can promote additional recycling activities as noted in the following paragraphs. For commercial recycling, HB 1902, if enacted, will require local governments to take a more proactive approach to this effort.

With regard to increasing residential recycling, local governments may consider the implementation of PAYT programs. These programs charge residents for waste removal services on the quantity of material discarded. Some may have a set rate per container, while others use a combination of fixed fee plus a variable fee based on service. Currently over 200 municipalities in Pennsylvania have instituted these types of programs.

The benefits of PAYT programs include:

- Fairness each household pays based on its use of solid waste services
- Increased Recycling residents have a financial incentive to recycle
- Waste Reduction consumers become more aware that they can purchase recyclable packaging, avoid excessive packaging and consider alternatives to disposable products.

CHAPTER 7.0 IMPLEMENTING DOCUMENTS Section 272.231

7.1 Landfill Contracts

A copy of the model contract form is contained in Exhibit E-5. This contract is slightly different than the model that had been used in the 1990 Plan, and subsequent updates, since it accounts for current legislation.

As in the current contracts, temporary alternate sites will be permitted if emergency or other situations beyond the Operators control necessitate the temporary suspension of the handling of solid waste at the landfill and the Operator wishes to temporarily use another landfill(s) owned by the Operator but not specifically designated in the Plan. Details regarding approval of temporary alternate sites are contained in Section 4(e) of the model contract.

CHAPTER 8.0 PUBLIC PARTICIPATION Section 272.222

8.1 General

Public participation elements associated with this Plan revision include:

- Notification to DEP regarding Plan revision undertaking
- Activities of the Solid Waste Advisory Committee
- Notifications to local governments

Formal notification of the County's intent to prepare a revision to its approved Plan was given to DEP by letter dated September 19, 2006. An application for a planning grant was submitted to DEP in March, 2007. The following paragraphs give specific details associated with other public participation activities which were undertaken from inception of the planning process through completion of that process and submittal of the Plan to DEP.

8.2 Solid Waste Advisory Committee (SWAC)

The SWAC held its first meeting on this Plan revision on June 12, 2007, in response to a letter sent to each member dated May 21, 2007. Attachments to that memo included a list of the SWAC members, the charge of the SWAC, background information and the agenda for the first meeting. Additional meetings of the SWAC were held on August 14, 2007 and October 9, 2007 to review progress on work efforts to date. A final meeting of the SWAC was held on December 11, 2007 to review and comment on the pre-final draft before it was presented to the County for approval.

Copies of the notifications to DEP and SWAC, agendas and minutes of the SWAC meetings and a list of the SWAC members are contained in Exhibit E-6.

8.3 Notice to Municipalities

Notification to municipalities of the intent to undertake this Plan revision was submitted to each municipality in October of 2006.

CHAPTER 9.0 IMPLEMENTATION SCHEDULE Section 272.245

The above-referenced section of Act 101 requires that the County submit to DEP, within one year after DEP approval of the Plan or Plan revision, copies of executed ordinances, contracts or other requirements to implement its approved Plan, that will be used to insure sufficient available capacity to properly dispose or process municipal waste that is expected to be generated within the County for the next 10 years.

Activities that fall in this category include:

- 1. Preparation and Implementation of a County Ordinance for Waste Flow Control.
- 2. Securing final contracts to assure adequate landfill space.
- 3. Assist Mandated communities with Implementation
- 4. Development and dissemination of public education material dealing with waste minimization, HHW and infectious wastes generated in the home.

Anticipated dates for completion of the aforementioned actions are:

1. Final Plan Review

- a. 11/2008 Final Plan Submitted to Municipalities for Comment
- b. 12/17/08 30-day Comment Period Ended with receipt of comments

2. County Solid Waste Ordinance

- a. 12/2007 Initial Draft Ordinance submitted to Commissioners
- b. 10/2008 Final Draft Ordinance received from Commissioners
- c. 10/2009 Ordinance Adopted by County Commissioners (within one year of final approval of the Plan by the PADEP)

3. Landfill Contracts

- a. 12/2007 Draft Agreement submitted to Commissioners
- b. 12/2008 Formal County approval to enter into contracts
- c. 1/2009 Distribution of contracts to landfill owner(s)
- d. 10/2009 Obtain County signatures and submit contracts to DEP (Note that the DEP allows a maximum of 1 year for final implementation of the Plan after final "Approval")

4. Assist Mandated communities through Westmoreland Cleanways

- a. 4/2009 Enforcement of their mandated recycling ordinances
- b. 6/2009 Educating residents and the commercial, municipal and institutional establishments
- c. 10/2009 Cooperative efforts to compost leaf waste and bring collections up to Act 101 standards

4. Public Education Material through Westmoreland Cleanways

- a. Continue with the quarterly recycling pamphlet (*By The Way*) for circulation to municipalities, at educational events, and for posting on the Westmoreland Cleanways website (see Exhibit E-2)
- b. Update the Westmoreland Cleanways Recycling web page, as needed.

c.	Develop other various forms of public awareness/outreach including flyers to be distributed to residential and commercial populations	brochures	and