

WARREN COUNTY SOLID WASTE MANAGEMENT PLAN

2007

August 7, 2007

Prepared for

Warren County Board of Chosen Freeholders

In cooperation with

Warren County Solid Waste Advisory Council

Prepared by

Warren County Planning Department

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INTRODUCTION

In accordance with the requirements of Public Law 1975, Chapter 326, Laws of New Jersey, each county in the state is designated as a solid waste management district and is responsible for the preparation and implementation of a plan for the collection and disposal of its solid waste. In addition, each county has the responsibility of evaluating and modifying the county plan, as necessary, on a biennial basis following the adoption of the plan.

The primary objectives of the 2007 Solid Waste Management Plan are to evaluate the adopted district plan, to measure the progress that has been made toward achieving the goals of the plan, and to bring it into conformance with the objectives of the Statewide Solid Waste Management Plan that was approved by the Commissioner of the New Jersey Department of Environmental Protection on January 3, 2006. The Warren County SWAC has updated the information concerning solid waste generation, long-term landfill needs, and the recycling goals and policies.

In 1983, Warren County completed the first required review and evaluation of its solid waste management plan. It represented a revaluation and update of the district plan in terms of the progress that has been made toward the implementation of the solid waste management plan. The selection of resource recovery technology, siting, design, construction, start up of the facility, and the siting and design of the district landfill represents the experience on which this plan is based and the beginning point for the district to be alert to new approaches for solving the long-term solid waste management needs of the county. It was prepared by various task groups that are part of the district's Solid Waste Advisory Council (SWAC).

In the April 1984 Plan, the Pollution Control Financing Authority (PCFA) was designated as the implementation agency for the Warren County Solid Waste Management Plan (WCSWMP). The PCFA was established in 1974 as the Industrial Pollution Control Financing Authority, as an agency for assisting in the reduction and prevention of environmental pollution. Its name was changed in 1984, per State Statute, and assumed its current role.

In August of 1984, the site for the Resource Recovery Facility (RRF) was selected. The site is known locally as the Oxford Quarry Site 89, in Oxford Township.

In 1985, Blount Energy Resource Corporation was selected as the full service operator of the RRF, and a site was selected and designated in the adopted plan for a district landfill for residuals and bypass materials.

In 1986, construction of the resource recovery facility commenced and was completed in June 1988. The resource recovery facility began operations in July 1988. In the spring of 1991, Ogden Martin Systems purchased Blount's interest in the resource recovery facility and took over its operation. In 2002 Covanta Energy assumed control of the RRF.

The Warren County District Landfill (WCDL) site was chosen near the (RRF), in White Township. This site is 355 acres and construction of the first phase of the WCDL began in 1987. The County Recycling Center was relocated from the County Road Department site on County Route 519 to the Landfill site and began operation on January 15, 2007.

Lastly, the Warren County Solid Waste Advisory Council reaffirms its insistence that:

- any and all waste management systems be designed and developed to be both environmentally sound and socially acceptable, as well as functionally effective and economically feasible;
- all reasonable approaches, whether of the high-technology or the low technology variety, be explored for applicability to the county's needs;
- the closest possible watch be kept on the development of new technological data, new scientific insights and new information, so that the Warren County solid waste management facilities represent the best attainable techniques, methods or approaches;
- the public participate fully, through the vigorous, open and uninhibited proceedings of the SWAC and its task groups and committees, in the development of the plan as it evolves to meet changing situations and in the general oversight of the implementation of the plan.

Section 1: Existing and Future Solid Waste Generation

Historical Generation

According to the 2004 statistics released by the New Jersey Department of Environmental Protection, Warren County generated approximately 193,935 tons of waste in 2004 consisting of 95,823 tons of municipal solid waste (MSW) and 98,113 tons of bulky waste. 75,983 tons of MSW were disposed of and 19,840 tons were recycled. This equates to a recycling rate of 20.73% for MSW.

For bulky waste in 2004, there were 32,281 tons disposed of as bulky waste and 65,831 tons recycled. This equates to a 67.1% recycling rate for bulky wastes. The total recycling rate for all waste in Warren County was 44.2%.

Warren County's estimated population in 2004 was 109,687 persons. This equates to a generation rate of 1.77 tons of total waste per person per year. For MSW the generation rate is .87 tons per person per year. In comparison, the entire state generates 1.17 tons per person per year of MSW.

As shown in Table 7-B in the Recycling Section of this plan, since the year 2000, the trend in municipal solid waste generation in Warren County has varied from .78 tons per person per year in 2001 to .91 ton per person per year in 2002. The generation rates for 2000 and 2004 were .87 tons and .86 tons respectively. The average generation rate over the five year period is .858 tons per person per year. The difference between .78 and .91 equates to a person throwing away 11.2 ounces more garbage per day. In comparison, the state generation rate ranged from 1.09 to 1.17 tons/person with an average rate of 1.12 tons per year.

For total solid waste, since the year 2000, the trend in Warren County has varied from 1.35 tons per person per year in 2001 to 1.87 tons per person per year in 2003. The generation rates for 2000, 2002, and 2004 were 1.42 tons, 1.68 tons, and 1.77 tons respectively. The average generation rate for total solid waste over the five year period is 1.62 tons per person per year. In comparison, the state generation rates per person range from 2.04 tons/yr. to 2.51 tons per year averaging 2.27 tons per year in 2004 the entire state generated 2.5 tons per person per year.

Because Warren County is generating less MSW and total waste per person than the state average, it appears that Warren County residents may be reducing the waste stream through source reduction and reuse. Consequently, it is Warren County's position that a bonus or financial credit be given to Warren County and to any other county that generates less waste than the state average.

2007 Estimate

For the year 2007, the first year of the updated Warren County Solid Waste Plan, and using the county five year average MSW generation rate of .858, and a preliminary population estimate of 112,500 persons the amount of MSW generated is projected to be 96,525 tons per year. Using average total waste generation rate of 1.62 tons per year, the total amount of waste generated in Warren County will be 182,250 tons. The figures are shown in Table 1-A

Year 2017

Two methods are used to project the amount of solid waste that will be generated in 2017, the horizon of the Solid Waste Plan. The first is based on the average generation rate and population growth. The New Jersey Department of Labor projects that the population will grow to 125,900 persons in 2015. The Warren County Planning Department projection for 2015 is 123,528. Assuming that the NJDOL projections are high for 2015, because of pertinent growth limiting impacts of the Highlands Act, they will be used as a reasonable number for the year 2017. Assuming that the average generation rate of 1.62 tons per person per year for total waste will remain constant, the amount of total waste generated in 2017, will be 203,958 tons per year. Based on the average per capita MSW generation factor of .858 tons/person/year calculated above, the amount of MSW generated in 2017 will be 108,022 tons.

The second method to project waste generation in 2017, uses a regression analysis of population vs. solid waste generation. Using this method, the generation of total waste is projected to be 289,495 tons and the generation of MSW is projected to be 146,943 tons. These figures represent a per capita generation rate of and 2.31 tons of total waste and 1.17 tons of MSW annually.

The regression analysis is a statistical analysis that considers the trend in Warren County's solid waste generation vs. population from 1995 through 2004. The correlation of waste generation vs. population has a R^2 of .832 for MSW and .784 for total solid waste. This is a high correlation rate with 1 being the highest possible correlation. Therefore the regression analysis can be used a reliable tool to project the amount of waste generated in 2017.

Because the methods project two very different numbers it was decided to average the two projection methods rather than rely on one or the another. The rationale to average the two is the following. Historical patterns confirm that the generation rate per person increases over time. However, national and state policies are to reduce the amount of waste generated through source reduction and reuse. Averaging the two will balance current trend with the governmental policy to reduce the amount of waste generated.

For planning purposes the projected amount of total waste and MSW generated in 2017 will be as follows:

1. Total waste generated in 2017 -- 246,726 tons (generation rate of 1.96 tons per person)
2. MSW generation in 2017 – 127, 482 tons (generation rate of 1.01 tons per person)

Disposal Needs using Current (2004) Recycling Rates

If it is assumed that the 2017 recycling rate for the total waste stream will be the same as the 2004 recycling rate at 44.17%, the total amount to be disposed of in 2017 will be 137,747 tons (377 tons per day) consisting of 101,093 tons (277 tons per day) of MSW and 36,654 tons (100 tons per day) of bulky waste.

Disposal Needs Assuming State Recycling Goals are Met (50% MSW) (60% Total)

If it is assumed that the overall total waste stream recycling rate meets the State mandated and County Recycling Plan’s goal of 60% and the MSW goal of 50%, the total amount to be disposed of in 2017 will be 98,690 tons (270 tons per day) consisting of 63,741 tons (175 tons per day) of MSW and 34,949 tons (96 tons per day) of bulky waste.

TABLE 1-A WASTE GENERATION AND DISPOSAL 2007 AND 2017 (TONS)					
2007			2017		
	Generated	Disposal (Assuming 2004 Recycling Rate)	Generated	Disposal (Assuming 2004 Recycling Rate)	Disposal (Meeting State Recycling Goals)
ID10 (MSW)	96,525	76,544	127,482	101,093	63,741
ID13 (Bulky)	85,725	28,203	119,244	36,654	34,949
TOTAL	182,250	104,747	246,726	137,747	98,690

Table 1-B depicts the amount of ID10 and ID13 waste generated in Warren County, the amount recycled, and the amount disposed of at the RRF and Landfill (Warren Facilities) and the amount disposed of out of county. As the table shows 20% to 26% of ID10 waste is transported outside the county for disposal. Approximately 2.5% to 5.5% of ID13 waste is disposed of outside the county.

TABLE 1-B**TONS OF ID 10, 13, 13C WASTE GENERATED IN WARREN COUNTY, RECYCLED, and GENERAL DISPOSAL LOCATION**

	2000	2001	2002	2003	2004	2005(1)
Population	102,437	105,044	106,654	108,549	109,687	110,885
ID 10 Generated	89,320	81,676	97,384	93,882	95,823	93,663
ID 10 Recycled	16,834	14,693	24,671	18,116	19,840	18,982
ID 10 Disposed at Warren Facilities	53,678	46,269	47,207	51,149	56,168	55,087
ID 10 Disposed outside Warren County	18,808	20,714	25,505	24,616	19,815	19,594
'% disposed outside WC	21.06%	25.36%	26.19%	26.22%	20.68%	20.92%
ID 13, 13 C Generated	56,233	60,080	81,416	109,585	98,113	49,216
ID 13, 13 C Recycled	30,213	32,787	51,003	77,397	65,831	16,171
ID 13, 13C Disposed at Warren Facilities	24,511	24,547	28,023	26,201	35,306	33,311
ID 13, 13C Disposed outside WC	1,509	2,746	2,390	5,987	-3,024	-266 (2)
'% disposed outside WC	2.68%	4.57%	2.94%	5.46%	-3.08%	-0.54%
Total ID 10, 13, 13C Waste Disposed Outside Warren County	20,317	23,460	27,895	30,603	16,791	19,328
Total ID 10, 13, 13C Waste Generated	145,553	141,756	178,799	203,467	193,936	142,897
Total Waste Recycled	30,213	47,480	75,674	95,513	85,671	35,153
% Total Recycled	32.30%	33.49%	42.32%	46.94%	44.17%	24.60%

(1) 2005 numbers are not official. They are based on the 30 day desk audit reports for recycling tonnage and unpublished solid waste generation

(2) The negative numbers are the result of inaccuracy in data reporting and the method used by NJDEP to adjust reported data

Section 2: Existing Solid Waste Facilities

Resource Recovery Facility

The resource recovery facility (RRF) is located in Oxford Township at 218 Mt. Pisgah Avenue on Block 26 Lots 88, 88.01, 89, 87.02, and 84.03. Lots 87.02 and 84.03 are the Access Road to the RRF and the Landfill and is known as Jensen Drive. It has a permitted capacity to handle 548 tons of municipal solid waste per day. The combustion technology used at the Covanta Energy facility is mass fired water wall. The system has two boilers each designed for the combustion of refuse having a heating value of 5,300 Btu/lb. and generates steam at 630 pounds per square inch gauge and at 752° Fahrenheit. Combustion gas temperature is maintained between 1,800°F and 2,200°F in the combustion chamber to assure complete destruction of undesirable toxic substances. The RRF has the capability of generating 112, 434 pounds per hour of superheated steam from the two process trains. Capability to add a third train was built into the RRF's design. Adding a third train is not endorsed in the Warren County Solid Waste Management Plan (WCSWMP) and is mentioned for information purposes only.

The steam output from the two-process trains power a turbine generator for generation of electricity. Extraction steam is utilized to provide feed water heating. Approximately 70 million kilowatt hours per year of electricity are available to be sold. This is enough electricity to supply the annual needs of about 10,000 average homes.

A four cell, wet cooling tower is utilized at the facility. The tower is a counter flow, induced draft type, equipped with two speed fan motors. The multi-cell tower allows for maintenance work while operating at reduced capacity.

Dry scrubbers for acid gas control and bag house filters for particulate collection have been installed as air pollution control equipment. In addition, a carbon injection system has been installed to assist in removing mercury. Wastewater from the RRF is discharged to the Warren County Pequest River Municipal Utilities Authority's Oxford Township Sewage Treatment Plant for treatment and disposal.

Currently, water for the RRF is obtained from two wells (400 gallons per minute capacity each), located approximately 200 feet from the south bank of the Pequest River and 1,300 feet east of Edison Road. The wells are 225 and 255 feet deep, respectively, and 425 feet apart. The Water Diversion Permit issued by the New Jersey Department of Environmental Protection (NJDEP) to the Company allows for the withdrawal of a maximum of 17.0 million gallons of water during any month at a maximum rate of 400 gallons per minute. The PCFA and Covanta are exploring the possibility of using the leachate collected at the landfill for the facility's operation.

The waste types that are permitted at the RRF are the acceptable portions of those identified by the NJDEP as follows:

- ID 10 - Municipal Waste (household, commercial and institutional)
- ID 23 - Vegetative Waste
- ID 27 - Dry Industrial Waste (except for certain prohibited categories which are directed to the district landfill)

All waste is delivered to the RRF during the hours of 7 a.m. to 5 p.m. on Monday through Friday and during the hours of 7 a.m. to 12 noon on Saturday.

The RRF is designed to receive and dispose of acceptable, burnable, non-hazardous municipal and industrial solid waste for at least a 20 year planning period, and is consistent with the goals of the WCSWMP, which called for the development of a long-term solid waste disposal facility.

The information presented in Tables 2-A depict the trend in waste disposal at the Resource Recovery Facility by waste type from 1998 through 2006. As shown, the tonnage of waste by origin disposed of at the Resource Recovery Facility has been consistent throughout the nine year period for in county and out of county waste.

Warren County District Landfill

The landfill designated to serve the basic waste management needs of Warren County in the district solid waste management plan, as originally approved, was the High Point Sanitation Company facility in Franklin Township, Warren County. After protracted litigation, in which Warren County and the NJDEP joined forces to compel the closure of the facility, landfilling ceased at this site in October 1983. Warren County wastes were then redirected to the Ocean County landfill in Manchester Township, Ocean County, with the option available to haulers of using out-of-state alternatives.

Evaluation of sites for a future district landfill was initially undertaken in midsummer 1983 by a SWAC task group. After the closing of High Point, the Warren County Board of Chosen Freeholders determined that, in the County's best interest, a landfill within the county, and under public control, was essential to the success of the proposed resource recovery facilities. A contract was accordingly negotiated with the consultant firm of Metcalf & Eddy, Inc. for comprehensive study, analysis and screening of potential landfill sites. Under the terms of this contract, the entire county was studied for suitability in terms of distance from occupied structures, accessibility, hydrogeology, slope, water table, food hazard, availability of water, existing land use, zoning preference of the host community, ease of acquisition, and other criteria, both technical and sociological. Metcalf & Eddy, Inc. was instructed to specify the landfill size in terms of the requirements for disposing of all county wastes by landfilling in the event a resource recovery facility was not operational. Following this evaluation of resources and environmental limitations, the consultant recommended that a site of approximately 355 acres in White Township be acquired consisting of Block 32 Lots 12, 13, 14, 12.01, 17, 18, 22, and Block 34 Lots 17, 18, 18.01, 18.02 and Block 42 Lot 7.

This site was designated as the Warren County District Landfill (WCDL) by action of the Board of Chosen Freeholders on January 16, 1985, and construction began at the site in late 1987. The WCDL began accepting ash from the RRF in September 1990 and raw waste was first accepted in April 1991. Commingling of ash and raw waste was permitted on November 1, 1995.

The permitted waste at the WCDL includes:

- ID 10 - Municipal Waste (household, commercial and institutional, when bypassed from the resource recovery facility)
- ID 13 - Bulky Waste
- ID 13C - Construction and Demolition
- ID 23 - Vegetative Waste (excluding leaves)
- ID 25 - Animal and Food Processing Waste
- ID 27 - Dry Industrial Waste
- ID 27I - Waste Material consisting of incinerator ash or ash containing waste

The WCDL is open from 7 a.m. to 4 p.m. on Monday through Friday and 7 a.m. to 11 a.m. on Saturday. Vehicles delivering waste to the Warren County solid waste facilities are restricted to using the RRF road (now called Jensen Drive) from New Jersey Route 31.

Table 2-B depicts the tonnage of waste disposal by origin from 1998 to 2006. It shows that landfill waste deliveries spiked in 2004 due to out of county waste deliveries of MSW (ID10) and ID 13. The amount of ID 13 waste disposed from Warren County ranged from 25,000 in 2000 to 36,000 tons per year in 2006.

On March 23, 2005, the Board of Chosen Freeholders adopted a plan amendment to close the landfill in 2006 with final capping in 2007. On September 13, 2006, the Board of Chosen Freeholders adopted a resolution to cease waste acceptance at the end of 2007 when the WCDL was anticipated to reach its permitted capacity. The PCFA was to commence the closure and final capping of the WCDL starting in 2008.

After further financial analysis and to ensure that Warren County residents and businesses will have a long term disposal site available locally, the current Solid Waste Plan provides for the continuing operation of the landfill beyond the previous closure date of 2007. The construction of cell #5 will be completed and the vertical expansion of the landfill will be permitted. Based on a average disposal rate of approximately 100,000 tons per year beginning in 2009, which is equivalent to the quantity of waste generated in Warren County, it is projected that, the life of the landfill will last until 2020. This is consistent with the letter from the host community dated February 27, 2007 and found in the Appendix.

TABLE 2-A
TREND IN SOLID WASTE DISPOSAL AT WARREN COUNTY RESOURCE RECOVERY FACILITY

WASTE TYPE IDENTIFICATION (ID)

	10	13	13C	23	25	27	27A	27I	OTHER	TOTAL
1998										
Warren County	44,135	0	0	0	0	6,773	0	0	0	50,908
Other	99,787					12				99,799
TOTAL	143,922					6,785				150,707
1999										
Warren County	46,752					2,146				48,898
Other	93,814									93,814
TOTAL	140,566	0	0	0	0	2,146	0	0	0	142,712
2000										
Warren County	51,996					2,090		158	0	54,244
Other	84,408									84,408
TOTAL	136,404	0	0	0	0	2,090	0	158	0	138,652
2001										
Warren County	46,120					2,466				48,587
Other	117,299									117,299
TOTAL	163,420	0	0	0	0	2,466	0	0	0	165,886
2002										
Warren County	45,903	0	0	0	0	2,221	0	0	0	48,124
Other	99,725									99,725
TOTAL	145,628	0	0	0	0	2,221	0	0	0	147,849
2003										
Warren County	40,739	0	0	0	0	1,291	0	117	163	42,307
Other	98,645									98,645
TOTAL	139,382	0	0	0	0	1,291	0	117	163	140,952
2004										
Warren County	46,127	0	0	0	0	1,367	0	0	113	47,607
Other	99,307									99,307
TOTAL	145,434	0	0	0	0	1,367	0	0	113	146,914
2005										
Warren County	51,146	0	0	0	0	1,162	0	99	0	52,408
Other	92,101	0	0	0	0	0	0	0	0	92,101
TOTAL	143,247	0	0	0	0	1,162	0	99	0	144,508
2006										
Warren County	52,669	0	0	0	0	1,115	0	0	0	53,784
Other	93,225	0	0	0	0	15	0	0	0	93,241
TOTAL	145,894	0	0	0	0	1,130	0	0	0	147,025

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TABLE 2-B

TREND IN SOLID WASTE DISPOSAL AT WARREN COUNTY DISTRICT LANDFILL

WASTE TYPE IDENTIFICATION (ID)

	10	13	13C	23	25	27	27A	27I	OTHER	TOTAL
1998										
Warren County	365	11,595				754		41,671		54,385
Other	41,200	53,069				0				94,269
TOTAL	41,565	64,664	0	0	0	754	0	41,671	0	148,654
1999 *										
Warren County	497	17,750		1		4,285		33,708		15,722
Other	18,284	32,828			16	17		0		51,146
TOTAL	18,781	50,578	0	1	16	4,302	0	33,708	0	66,868
2000										
Warren County	1,682	24,511		4	27	4,837		35,694		66,756
Other	55,533	53,053		0	118	959		0		109,663
TOTAL	57,215	77,564	0	4	145	5,796	0	35,694	0	176,419
2001										
Warren County	148	24,547		3	27	10,561		26,364		61,649
Other	52,164	86,523		0	226	2,435		877		142,226
TOTAL	52,312	111,070	0	3	253	12,996	0	27,241	0	203,875
2002										
Warren County	1,304	28,023		0.43	8	1,921	211	37,034	0	68,502
Other	57,767	117,174		0	232	3,855				179,027
TOTAL	59,070	145,197	0	0.43	240	5,776	211	37,034	0	247,529
2003										
Warren County	6,284	26,201	0	6	13	8,006	0	28,556	143	69,198
Other	139,395	45,973		0	382	1,989		377		188,119
TOTAL	145,679	72,175	0	6	395	9,995	0	28,933	143	257,317
2004										
Warren County	10,041	35,306	0	14	90	1,412	0	31,536	98	78,497
Other	181,453	75,241		0	506	2,790				259,990
TOTAL	191,494	110,547	0	14	596	4,202	0	31,536	98	338,487
2005										
Warren County	3,941	33,311	0	13	382	1,100	0	22,582	58	61,387
Other	119,259	46,971		0	154	2,054				168,438
TOTAL	123,200	80,282	0	13	536	3,154	0	22,582	98	229,865
2006										
Warren County	2,419	35,538	0	10	303	968	0	17,865	0	57,103
Other	1,252	18,469		3	224	1,304				21,252
TOTAL	3,671	54,007	0	13	527	2,272	0	17,865	0	78,355

* January Report is missing

Source: Solid Waste Landfill Facility Monthly Volume Reports January 1998 through December 2006

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Recycling

The recycling center is operated through an interlocal agreement between the PCFA and the County of Warren and was formerly located on the site of the Warren County Road Department Garage in White Township. It was designed to handle separated glass, aluminum cans, steel cans and plastic containers. Through an administrative action by the Board of Chosen Freeholders dated June 14, 2006 the center was relocated from the County Road Department to the landfill site in White Township on Block 17 Lot 14, and opened for business on January 15, 2007. It receives commingled glass bottles, plastic bottles, aluminum cans, steel and tin cans and it receives newspaper, mixed office paper, magazines, glossy paper, and white paper. It is open Monday through Friday 7:00 a.m. to 4 p.m. and Saturday 7:00 a.m. to 11:00 a.m. In addition a convenience center is located at the WCDL to drop off bagged garbage, residential bulky waste, and source separated recyclable material. Containers are provided for residents to drop off many traditional recycling materials. It is open the same hours as the WCDL.

A copy of the agreement is in the Appendix.

Other Landfills

Certain solid waste generators within the county have unique situations that require special planning efforts in order to be a part of the comprehensive waste management plan. In particular, the Ingersoll-Rand Company, which was, for many years, the county's largest employer, had maintained a landfill on its site in Phillipsburg for construction debris and foundry sand. The company discontinued the use of the landfill when the NJDEP adopted rules and regulations that affected the operation of that type of disposal facility. In response to changing world markets, the Ingersoll-Rand Company planned substantial modifications to the plant facilities that required the demolition of many of the old buildings on the Phillipsburg site. This demolition waste could be accommodated at the WCDL; however, the quantity of material to be disposed of was so large that an alternate disposal facility would be in the best interest of the county in order to preserve needed capacity in the county landfill.

The Ingersoll-Rand Company developed and continues to operate a Class II landfill on a four acre area adjacent to the inoperative existing landfill to accommodate construction debris and foundry sand. Detailed site evaluation, engineering plans and an environmental health impact statement have been prepared and reviewed. The plan for the Ingersoll-Rand Class II landfill on a portion of tax account 70773 has been approved by the Board of Chosen Freeholders with the recommendation that the leachate from the landfill "be directed to an on-site storage facility until such time as applicable testing procedures have been performed to determine its ultimate disposition." Although foundry sand is permitted at the landfill, it is no longer disposed there since the foundry plant has closed down.

On March 8, 2006, the Warren County Board of Freeholders approved an administrative action to recognize the transfer of ownership of the Ingersoll-Rand landfill to

Phillipsburg Associates, III, L.P. Phillipsburg Associates will be redeveloping the former Ingersoll-Rand facility.

Section 3: Waste Flow Direction and Interdistrict Agreements

Pre – Atlantic Coast Decision, 1997

The original flow strategy for waste management involved the processing of all acceptable waste at the Resource Recovery Facility (RRF) and the disposal of residual ash at the Warren County District Landfill (WCDL). Ash generated from the operations of the facility was managed as an ID 27 non-hazardous industrial waste and was landfilled in accordance with all New Jersey Department of Environmental Protection (NJDEP) regulations. At those times when the RRF was unable to process waste or when certain waste types were not acceptable at the RRF, those wastes were directed to the WCDL. The Warren County Solid Waste Management Plan (WCSWMP) required that all acceptable waste generated within Warren County be directed to the Warren County solid waste facilities, consisting of the RRF in Oxford Township, and the WCDL in White Township. In addition, one hundred tons per day of waste from Hunterdon County, which was accommodated in the interdistrict agreement between Hunterdon and Warren Counties was also directed to the Warren County RRF or WCDL if the RRF was inoperable. Further, according to the terms of an interdistrict agreement between Warren County, the Pollution Control Financing Authority (PCFA) of Warren County and Somerset County, Somerset County was to provide the Warren County RRF 1,400 tons per week of acceptable waste. This interdistrict agreement continued the Emergency Waste Flow Order redirection from the NJDEP and the New Jersey Board of Public Utilities (NJBPU), which directed up to 250 tons per day (7 days/week) of acceptable waste from Somerset County to the Warren County RRF. The solid waste management plan incorporated the provisions of the NJBPU and NJDEP Waste Flow Order of June 6, 1989.

Post – Atlantic Coast Decision

When New Jersey's waste flow regulations were invalidated in 1997, Somerset and Hunterdon Counties refused to honor the interdistrict agreement. Because no positive assistance was forthcoming from the New Jersey courts, legislature, Governor, or the NJDEP, the Warren County PCFA sued Somerset County and Bridgewater Resources Inc. Hunterdon agreed to send its required tonnage while Somerset County's case was still pending. The PCFA and the County maintained that the agreements were still valid contracts and that shipments from both counties must be honored. The case has been settled.

United Haulers Decision, April 30, 2007

On April 30, 2007 in the U.S. Supreme Court Decision of United Haulers Association, Inc et al v. Oneida-Herkimer Solid Waste Management Authority et. al. the Court held that counties flow control ordinances that direct waste to government owned facilities do not discriminate against interstate commerce. The court said that the commerce clause is not intended to control public efforts to enact flow control ordinances because waste disposal is typically and traditionally a function of local government exercising its police powers. The higher tipping fees that normally accompany waste flow will fall onto the citizens of the jurisdiction of the publicly owned facility it serves.

Given the facts of the United Haulers decision the County of Warren and the PCFA is reviewing the viability of imposing waste flow requirements of ID 13 and incinerator ash to the landfill. The decision to require waste flow will made in a future plan amendment.

Section 4: Solid Waste Collection Practices

As shown in Table 4A, the majority of households, business and industry in Warren County have private waste collection.

Alpha and Washington Borough have a municipal contract with private haulers to collect household waste and limited quantities from businesses. All the remaining waste is collected through private contract.

Belvidere, Oxford and Phillipsburg operate their own trucks for household and some commercial pick-up. In all cases, industrial wastes are picked up by private contractors.

SOLID WASTE COLLECTION PRACTICES

March 6, 2007

Table 4A

Municipality	Type Collection Services (Residential)	Approximate % of Municipality Served	Type Collection Services (Industrial)	of Approximate % of Municipality Served	Type Collection Services (Commercial)	of Approximate % of Municipality Served
Allamuchy	P	100%	N/A	----	P	100%
Alpha	C	100%	P	100%	C & P	50%/50%
Belvidere	M	100%	P	100%	M & P	100%
Blairstown	P	100%	P	100%	P	100%
Franklin	P	100%	P	100%	P	100%
Frelinghuysen	P	100%	P	100%	P	100%
Greenwich	P	100%	P	100%	P	100%
Hackettstown	P	100%	P	100%	P	100%
Hardwick	P	100%	N/A	----	P	100%
Harmony	P	100%	P	100%	P	100%
Hope	P	100%	P	100%	P	100%
Independence	P	100%	P	100%	P	100%
Knowlton	P	100%	P	100%	P	100%
Liberty	P	100%	P	100%	P	100%
Lopatcong	P	100%	P	100%	P	100%
Mansfield	P	100%	P	100%	P	100%
Oxford	M	100%	P	100%	M & P	50%/50%
Phillipsburg	M	100%	P	100%	M & P	20%/80%
Pohatcong	P	100%	P	100%	P	100%
Washington Boro	C	100%	P	100%	C & P	80%/20%
Washington Twp.	P	100%	P	100%	P	100%
White	P	100%	P	100%	P	100%

KEY TO COLLECTION TYPES:

M- Municipal Collection: Municipal Trucks and Crews

C- Municipal Contract: Private Trucks and Crews, paid by municipality pursuant to contract

P- Private Collection: Private Trucks and Crews, paid by individuals for their own waste disposal

SOURCE: Warren County Planning Department

Section 5: Municipal Solid Waste Collectors

MUNICIPALITY	MAJOR WASTE HAULERS
Allamuchy	Waste Management
Alpha	Waste Management
Belvidere	Town of Belvidere , Sanico & Gary Gray
Blairstown	Sanico, Gary Gray, & Balbi
Franklin	Gene/George Smith & Sanico
Frelinghuysen	Sanico & Balbi
Greenwich	Gene/George Smith
Hackettstown	Sanico & Waste Management
Hardwick	Sanico, Balbi & Gary Gray
Harmony	Gene/George Smith & Sanico
Hope	Sanico
Independence	Sanico, Waste Management & Gary Gray
Knowlton	Sanico & Gary Gray
Liberty	Sanico
Lopatcong	Gene/George Smith & Sanico
Mansfield	Sanico & Waste Management
Oxford	Town of Oxford
Phillipsburg	Town of Phillipsburg
Pohatcong	Gene/George Smith
Washington Boro	Blue Diamond
Washington Twp.	Sanico
White	Sanico

Section 6: Collection/Haul Analysis

Currently, waste in Warren County is being collected and disposed of by private haulers and municipalities at in-state and out-of-state facilities. Type 10, 23, and processible portions of 27 are accepted at the RRF. Type 10 (when bypassed from the RRF), 13, 23, 25, and 27 and 27I are directed to the Warren County District Landfill (WCDL).

Table 6A reflects the approximate distance collection vehicles must travel and the primary routes from each municipality to the resource recovery facility.

Access to the RRF is by way of an access road, which is connected directly to New Jersey State Highway Route 31, north of the village of Oxford. Waste delivered to the WCDL is directed through the resource recovery site via a road, which links the RRF to the WCDL. No development exists on these roads.

It is the county's objective to use federal and state highways for deliveries to the RRF and WCDL to the extent possible. Trucks coming from outside Warren County must use only state highways to access the RRF. Trucks, coming from the east on I-80, are required to travel to Exit 26, Budd Lake to U.S. Route 46 West to N.J. Route 31 or to Exit 4, Columbia, to U.S. Route 46 East to N.J. Route 31 South.

Trucks from eastern New Jersey or New York traveling I-78 must take Exit 17 and take N.J. Route 31 North to the RRF. Trucks from Pennsylvania using U.S. Route 22, must take U.S. Route 22 East to N.J. Route 57 North to N.J. Route 31 North. Trucks from Pennsylvania using I-78 must exit at Exit 3, take U.S. Rt. 22 West to the U-Turn at Second Street or Roseberry Street to U.S. Route 22 East to N.J. Route 57 North to Route 31 North.

For Class B, C, and D recycling centers, it is the County's objective to use federal and state highways for deliveries to the extent possible.

Trucks to Oxford Quarry shall use the same routes as provided above for the RRF. For Nature's Choice and Rotondi, trucks coming from the east on I-80 are required to travel to Exit 26, Budd Lake, to U.S. Route 46 west to CR 519 or, to Exit 4, Columbia, to U.S. Route 46 east to CR 519 south.

Trucks from eastern New Jersey or New York traveling I-78 must take Exit 3 to US Route 22 west to U-turn at Second Street or Roseberry Street to US Route 22 east to NJ Route 57 north to CR 519 north.

Trucks from Pennsylvania using U.S. Route 22 must take U.S. Route 22 east to N.J. Route 57 north to CR 519 north. Trucks from Pennsylvania using I-78 must exit at Exit 3, take U.S. Route 22 west to the U-turn at Second Street or Roseberry Street to U.S. Route 22 east to N.J. Route 57 north to CR 519 north.

EXISTING COLLECTION/HAUL ANALYSIS

Table 6A

MUNICIPALITY	DISPOSAL FACILITY	DISTANCE (one way) (miles)	PRIMARY ROUTE(s)	UTILIZATION OF TRANSFER STATION
Allamuchy	RR, Oxford Twp.	18	Rt. 517 to Rt. 46 to Rt. 31 to RR	No
Alpha	RR, Oxford Twp.	18	Rt. 519 to Rt. 57 to Rt. 31 to RR	No
Belvidere	RR, Oxford Twp.	6	Rt. 46 to Rt. 31 to RR	No
Blairstown	RR, Oxford Twp.	18	Rt. 521 to Rt. 519 to Rt. 46 to Rt. 31 to RR	No
Franklin	RR, Oxford Twp.	9	Rt. 57 to Rt. 31 to RR	No
Frelinghuysen	RR, Oxford Twp.	14	Rt. 519 to Rt. 46 to Rt. 31 to RR	No
Greenwich	RR, Oxford Twp.	14	Rt. 57 to Rt. 31 to RR	No
Hackettstown	RR, Oxford Twp.	15	Rt. 57 to Rt. 31 to RR	No
Hardwick	RR, Oxford Twp.	20	Rt. 521 to Rt. 519 to Rt. 46 to Rt. 31 to RR	No
Harmony	RR, Oxford Twp.	11	Rt. 519 to Rt. 46 to Rt. 31 to RR	No
Hope	RR, Oxford Twp.	8	Rt. 519 to Rt. 46 to Rt. 31 to RR	No
Independence	RR, Oxford Twp.	10	Rt. 46 to Rt. 31 to RR	No
Knowlton	RR, Oxford Twp.	13	Rt. 46 to Rt. 31 to RR	No
Liberty	RR, Oxford Twp.	5	Rt. 46 to Rt. 31 to RR	No
Lopatcong	RR, Oxford Twp.	17	Rt. 46 to Rt. 31 to RR	No
Mansfield	RR, Oxford Twp.	11	Rt. 46 to Rt. 31 to RR	No
Oxford	RR, Oxford Twp.	2	Local Roads to Rt. 31 to RR	No
Phillipsburg	RR, Oxford Twp.	17	Rt. 57 to Rt. 31 to RR	No
Pohatcong	RR, Oxford Twp.	20	Rt. 519 to Rt. 57 to Rt. 31 to RR	No
Washington Borough	RR, Oxford Twp.	6	Rt. 31 to RR	No
Washington Township	RR, Oxford Twp.	8	Rt. 31 to RR	No
White	RR, Oxford Twp.	6	Rt. 519 to Rt. 46 to Rt. 31 to RR	No

SOURCE: Warren County Planning Department

SECTION 7: RECYCLING

I. OVERVIEW

A. Previous Plans

The first Warren County Recycling Plan drafted by the Warren County Solid Waste Advisory Council (SWAC), adopted by the WCBCF and approved by the NJDEP on November 3, 1989, was developed to provide Warren County residents, businesses and industries, the SWAC, the Solid Waste Coordinator and the County Recycling Coordinator with the alternatives and opportunities for recycling in Warren County. The primary objective of the County's 1989 plan was to achieve the goal of 25 percent reduction in the county municipal solid waste stream via recycling. In addition to the 25 percent recycling goal, Warren County's other 1989 plan objectives were aimed at reducing the quantity of materials in the waste stream by recycling in order to make the Warren County Resource Recovery Facility (RRF) more efficient and to improve the quality of residue disposed at the Warren County District Landfill (WCDL).

The 1993 and 1994 Recycling Plans modified the 1989 plan to meet the goals of the Governor's Emergency Solid Waste Task Force to recycle 60% of the total waste stream by 1995. To meet the goal the 1993 and 1994 Plans designated additional materials, business and industry were called upon to expand their recycling efforts, enforcement programs were expanded, and opportunities to recycle were increased by the Pollution Control Financing Authority (PCFA) and haulers. Additional recycling centers were included to recycle concrete and yard waste.

In 1999 the 1994 Plan was updated to deal with the U.S. Supreme Court decision in 1997 that invalidated New Jersey's waste flow regulations. The basic recycling strategy did not change except that the 1999 Plan recognized the need to respond to changing technology, to adequately fund the county's recycling program, and to capture more materials at the recycling center and convenience center. The establishment of a reuse center was also recommended.

B. County Recycling Coordinator

In accordance with the provisions of the New Jersey Mandatory Recycling Act, Victor Camporine is designated as the Warren County Solid Waste Management District Recycling Coordinator. The County Recycling Coordinator can be reached at:

Warren County Planning Department
165 County Route 519
Belvidere, NJ 07823
908-475-6532

C. Responsibilities

Warren County

In consultation with the Solid Waste Advisory Council, the Board of Chosen Freeholders is responsible for developing policy for recycling by means of the Warren County Recycling Plan which is part of the Warren County District Solid Waste Management Plan (WCSWMP). Under an interlocal service agreement, the PCFA is partly responsible for implementing that policy and plan. The interlocal service agreement is located in the Appendix.

Municipalities

Governing bodies are responsible for appointing a Recycling Coordinator to ensure that the provisions of the County Recycling Plan and municipal source separation ordinances are carried out. Additionally the Coordinator is responsible for filing the tonnage reports to the NJDEP detailing the amount and type of waste that is recycled in their community. Lastly, municipalities are responsible for notifying all households, businesses, and institutions of the recycling requirements and the opportunities available to recycle.

Haulers

Haulers are responsible for developing recycling collection and marketing systems for their institutional, industrial and commercial customers as well as residential customers, throughout Warren County. There is a great need for this service, particularly for the commercial and industrial sectors.

Pollution Control Financing Authority (PCFA)

Under the authority of this recycling plan, the PCFA provides a depot and/or will designate other recycling/disposal outlets for acceptance of these materials.

Residents, Businesses, Institutions

All are responsible to ensure that the designated recyclables in the County Recycling Plan and municipal ordinance are separated from the waste stream and recycled. With the cooperation of all households, business and industry, schools, government buildings, and other institutions, the 50% goal can be reached.

II. GOALS

In accordance with the New Jersey Mandatory Recycling Act, and the adopted 2006 New Jersey Statewide Solid Waste Management Plan, Warren County's recycling goals are to reach and sustain the 60% recycling rate of the total solid waste stream and 50% of the municipal solid waste stream through the collection, processing and marketing of traditional recyclable materials, and through the recycling of non-traditional recyclable materials and

yard waste. The documentation for recycled yard waste is problematic for Warren and other rural counties as discussed later in this plan.

The municipal solid waste (MSW) stream includes household, residential, commercial institutional, yard waste, and other items, and are identified by the New Jersey Department of Environmental Protection as Waste Type 10 and Type 23 (vegetative waste). The total solid waste stream includes all municipal solid waste and the NJDEP designated waste types: 13 (bulky waste, including construction and demolition, automobiles/trucks and parts, scrap metal, furniture, tires, appliances, etc), 25 (animal and food processing waste), and 27 (dry, non-hazardous industrial waste).

The waste types can be further categorized into more specific materials as defined by the NJDEP in its tonnage report program and by the United States Environmental Protection Agency. Both sources are used in this plan in order to calculate an estimate of the amount of material recycled in each municipality. Table 7-A shows how the NJDEP and the USEPA categorizes Municipal Solid Waste (MSW) and other waste to make up the total solid waste stream. The USEPA portion of the table depicts the percentage of each waste type in the total waste stream.

**TABLE 7-A
CATAGORIZATION OF WASTE TYPES, NJDEP Tonnage Reports and USEPA**

NJ TONNAGE REPORT	USEPA	
MSW		
Corrugated	Yard Waste	17.64
Mixed Office Paper	Food Waste	13.05
Newspaper	Newspaper	7.41
Other Paper/Mags.Junk Mail	Corrugated	10.58
Glass Containers	Office Paper	4.06
Aluminum Containers	Other Paper	16.05
Steel Containers	Plastic Containers	1.59
Plastic Containers	Other Plastic Packaging	1.76
Anti Freeze	Other Plastic Scrap	6.70
Used Motor Oil	Glass Containers	4.41
Brush/Tree Parts (Yard Waste)	Other Glass	.71
Grass Clipping (Yard Waste)	Aluminum Cans	.53
Leaves (Yard Waste)	Tin & BiMetal Cans	.88
Batteries (Dry Cell) (O.M.V.)	Other Bulky & Construct/Demo	14.64
Food Waste		
Other Glass	Other Waste	% of Other Waste Stream
Other Plastic	Foils & Closures	.23
Textiles (O.M.V.)	Other Aluminum Scrap	.46
	Vehicular Batteries	.23
Other Waste	Other Non-Ferrous Scrap	2.08
Heavy Iron	White Goods & Sheet Iron	5.54
NonFerrous/Aluminum Scrap	Junked Autos	4.62
White Goods and Light Iron	Heavy Iron	10.39
Batteries (Automotive)	Wood Waste	7.62
Automobile Scrap	Asphalt, Concrete & Masonry	43.42
Tires	Tires	.46
Stumps	Other Municipal & Vegetative	24.94
Concrete, Asphalt, Brick		
Other Material Not Listed		
Oil Contaminated Soil		
Process Residue		
Wood Scraps		

III. REVIEW OF RECYCLING TONNAGES IN WARREN COUNTY 2001 to 2004

To help identify where recycling efforts should be focused in Warren County, the County Planning Department prepared a set of spreadsheets that estimated the generation rates and recycling rates of solid waste by municipality for each waste type for the years 2001 through 2004. Summary tables of the amount generated, recycled and percent recycled for each waste type are provided in Tables 7-B(1), (2), (3), 7-C(1), (2), (3), 7-D(1), (2), (3) and 7-E(1), (2), (3). Table 7-F shows the summary of the estimated annual recycling rates for Total Waste, MSW, and other waste by municipality over the four year period.

It is emphasized that the estimate of the composition of solid waste generated is based on national studies of waste composition conducted by the EPA. The estimate of generation by municipality is based on the average solid waste generation rate per person in Warren County. The municipal totals of amount recycled and the county total of solid waste generated and recycled are actual figures provided by the NJDEP.

From the spreadsheets, it is evident that most municipalities will need to increase their recycling efforts. While the average MSW recycling rate over the 2001 through 2004 period was 20.83%, according to 2004 numbers, 6 of the county's 22 municipalities were above the county's average recycling rate. Three municipalities were above the county's annual rate for all four years. They are Belvidere, Hackettstown, and Mansfield. The municipalities that have been performing above average have reported greater tonnages for yard waste, newspaper, and corrugated. A few municipalities also reported higher tonnages for food waste than others.

It should be noted that yard waste, newspaper, corrugated and food waste comprise of almost 50% of the municipal solid waste stream. It is also noted that rural communities are at a disadvantage with the current tonnage reporting system because yard waste is included as a reportable material. As shown in Table 7-G, comparison of recycling rates 2001 through 2004 by waste type over the four years the average statewide recycling rate for yard waste was 69.5% while the Warren County average was 16.84%. The wide difference between the two are reflective of the rural nature of the county, where yard waste is not collected and is simply left on the ground to biodegrade.

TABLE 7-B (1) ESTIMATED TONS OF TOTAL SOLID WASTE GENERATED BY TYPE – 2001

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	538.23	341.35	380.65	801.35	402.62	288.23	674.32	1,262.31	206.68	377.00	261.75	783.65
Food Waste	398.29	252.60	281.68	593.00	297.94	213.29	499.00	934.11	152.95	278.98	193.69	579.90
Newspaper	226.05	143.37	159.87	336.57	169.10	121.05	283.21	530.17	86.81	158.34	109.93	329.13
Corrugated	322.94	204.81	228.39	480.81	241.57	172.94	404.59	757.38	124.01	226.20	157.05	470.19
Office Paper	123.79	78.51	87.55	184.31	92.60	66.29	155.09	290.33	47.54	86.71	60.20	180.24
Other Paper	489.79	310.63	346.39	729.23	366.38	262.29	613.63	1,148.70	188.08	343.07	238.19	713.12
Plastic Containers	48.44	30.72	34.26	72.12	36.24	25.94	60.69	113.61	18.60	33.93	23.56	70.53
Other Plastic Packaging	53.82	34.13	38.06	80.13	40.26	28.82	67.43	126.23	20.67	37.70	26.17	78.36
Other Plastic Scrap	204.53	129.71	144.65	304.51	153.00	109.53	256.24	479.68	78.54	143.26	99.46	297.79
Glass Containers	134.56	85.34	95.16	200.34	100.65	72.06	168.58	315.58	51.67	94.25	65.44	195.91
Other Glass	21.53	13.65	15.23	32.05	16.10	11.53	26.97	50.49	8.27	15.08	10.47	31.35
Aluminum Cans	16.15	10.24	11.42	24.04	12.08	8.65	20.23	37.87	6.20	11.31	7.85	23.51
Tin & BiMetal Cans	26.91	17.07	19.03	40.07	20.13	14.41	33.72	63.12	10.33	18.85	13.09	39.18
Other Municipal & Vegetative	446.73	283.32	315.94	665.12	334.17	239.23	559.68	1,047.71	171.55	312.91	217.25	650.43
TOTAL MSW	3,051.74	1,935.44	2,158.26	4,543.65	2,282.85	1,634.24	3,823.39	7,157.27	1,171.90	2,137.57	1,484.09	4,443.27
OTHER WASTE												
Foils & Closures	5.18	3.29	3.67	7.72	3.88	2.78	6.50	12.16	1.99	3.63	2.52	7.55
Other Aluminum Scrap	10.37	6.58	7.33	15.44	7.76	5.55	12.99	24.32	3.98	7.26	5.04	15.10
Vehicular Batteries	5.18	3.29	3.67	7.72	3.88	2.78	6.50	12.16	1.99	3.63	2.52	7.55
Other Non-Ferrous Scrap	46.66	29.59	33.00	69.47	34.90	24.99	58.46	109.43	17.92	32.68	22.69	67.93
White Goods & Sheet Iron	124.42	78.91	88.00	185.25	93.08	66.63	155.89	291.81	47.78	87.15	60.51	181.16
Junked Autos	103.69	65.76	73.33	154.38	77.56	55.53	129.91	243.18	39.82	72.63	50.42	150.97
Heavy Iron	233.30	147.96	164.99	347.35	174.52	124.93	292.29	547.15	89.59	163.41	113.45	339.67
Wood Waste	171.08	108.50	120.99	254.72	127.98	91.62	214.34	401.24	65.70	119.83	83.20	249.09
Asphalt, Concrete & Masonry	974.66	618.14	689.30	1,451.14	729.09	521.94	1,221.11	2,285.88	374.28	682.69	473.99	1,419.09
Tires	10.37	6.58	7.33	15.44	7.76	5.55	12.99	24.32	3.98	7.26	5.04	15.10
Other Bulky & Construct/Demo	559.91	355.10	395.98	833.64	418.84	299.84	701.49	1,313.16	215.01	392.19	272.29	815.22
TOTAL OTHER WASTE	2,244.83	1,423.69	1,587.99	3,342.26	1,679.24	1,202.13	2,812.44	5,264.81	862.04	1,572.37	1,091.68	3,268.42
TOTAL WASTE	5,296.57	3,359.12	3,746.25	7,885.92	3,962.09	2,836.37	6,635.83	12,422.08	2,033.94	3,709.94	2,575.78	7,711.70
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total	
MSW												
Yard Waste	414.31	384.00	849.48	1,150.54	336.24	2,083.79	469.11	920.12	862.67	616.59	14,404.94	
Food Waste	306.59	284.16	628.61	851.40	248.82	1,542.00	347.14	680.89	638.37	456.28	10,659.65	
Newspaper	174.01	161.28	356.78	483.23	141.22	875.19	197.02	386.45	362.32	258.97	6,050.07	
Corrugated	248.58	230.40	509.69	690.32	201.75	1,250.27	281.46	552.07	517.60	369.95	8,642.96	
Office Paper	95.29	88.32	195.38	264.62	77.34	479.27	107.89	211.63	198.41	141.82	3,313.14	
Other Paper	377.02	349.44	773.03	1,046.99	305.98	1,896.25	426.89	837.30	785.03	561.10	13,108.49	
Plastic Containers	37.29	34.56	76.45	103.55	30.26	187.54	42.22	82.81	77.64	55.49	1,296.44	
Other Plastic Packaging	41.43	38.40	84.95	115.05	33.62	208.38	46.91	92.01	86.27	61.66	1,440.49	
Other Plastic Scrap	157.44	145.92	322.80	437.20	127.77	791.84	178.26	349.64	327.81	234.30	5,473.88	
Glass Containers	103.58	96.00	212.37	287.63	84.06	520.95	117.28	230.03	215.67	154.15	3,601.23	
Other Glass	16.57	15.36	33.98	46.02	13.45	83.35	18.76	36.80	34.51	24.66	576.20	
Aluminum Cans	12.43	11.52	25.48	34.52	10.09	62.51	14.07	27.60	25.88	18.50	432.15	
Tin & BiMetal Cans	20.72	19.20	42.47	57.53	16.81	104.19	23.46	46.01	43.13	30.83	720.25	
Other Municipal & Vegetative	343.87	318.72	705.07	954.95	279.08	1,729.55	389.36	763.70	716.01	511.77	11,956.10	
TOTAL MSW	2,349.11	2,177.27	4,816.55	6,523.54	1,906.51	11,815.09	2,659.84	5,217.05	4,891.32	3,496.05	81,676.00	
OTHER WASTE												
Foils & Closures	3.99	3.70	8.18	11.08	3.24	20.07	4.52	8.86	8.31	5.94	138.75	
Other Aluminum Scrap	7.98	7.40	16.36	22.16	6.48	40.14	9.04	17.73	16.62	11.88	277.51	
Vehicular Batteries	3.99	3.70	8.18	11.08	3.24	20.07	4.52	8.86	8.31	5.94	138.75	
Other Non-Ferrous Scrap	35.92	33.29	73.64	99.74	29.15	180.65	40.67	79.77	74.79	53.45	1,248.78	
White Goods & Sheet Iron	95.78	88.77	196.38	265.98	77.73	481.72	108.45	212.71	199.43	142.54	3,330.07	
Junked Autos	79.81	73.98	163.65	221.65	64.78	401.43	90.37	177.26	166.19	118.78	2,775.06	
Heavy Iron	179.58	166.45	368.21	498.70	145.75	903.23	203.34	398.83	373.93	267.26	6,243.88	
Wood Waste	131.69	122.06	270.02	365.72	106.88	662.37	149.11	292.47	274.21	195.99	4,578.85	
Asphalt, Concrete & Masonry	750.26	695.37	1,538.30	2,083.48	608.90	3,773.48	849.49	1,666.21	1,562.18	1,116.56	26,085.54	
Tires	7.98	7.40	16.36	22.16	6.48	40.14	9.04	17.73	16.62	11.88	277.51	
Other Bulky & Construct/Demo	431.00	399.47	883.70	1,196.89	349.79	2,167.75	488.01	957.19	897.42	641.43	14,985.31	
TOTAL OTHER WASTE	1,727.98	1,601.58	3,543.00	4,798.65	1,402.40	8,691.05	1,956.55	3,837.61	3,598.00	2,571.66	60,080.00	
TOTAL WASTE	4,077.10	3,778.84	8,359.55	11,322.19	3,308.91	20,506.14	4,616.39	9,054.66	8,489.33	6,067.71	141,756.00	
¹ . As defined by U.S. Environmental Protection Agency												
² . Source: Municipal Tonnage Reports												

TABLE 7-B (2) TONS OF TOTAL SOLID WASTE RECYCLED BY TYPE – 2001

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	65.18	0.05	520.44	0.77	0.32	0.00	0.12	847.98	0.06	0.28	0.00	0.00
Food Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,647.52	0.00	0.00	52.42	0.00
Newspaper	26.77	0.73	72.74	183.45	101.92	2.93	130.43	309.44	52.60	78.86	43.93	30.06
Corrugated	4.34	0.06	111.71	92.41	11.76	3.09	525.63	1,223.57	0.82	13.34	14.00	5.81
Office Paper	0.00	0.06	5.54	1.28	3.00	0.23	1.86	158.55	0.06	0.79	0.00	0.00
Other Paper	1.34	1.28	52.77	145.00	42.95	5.12	61.98	13.27	30.53	41.86	51.70	29.02
Plastic Containers	23.79	0.21	22.92	31.06	6.00	0.85	16.34	16.47	3.50	2.98	2.41	12.75
Other Plastic Packaging												
Other Plastic Scrap	0.00	0.00	7.53	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Glass Containers	77.45	1.02	41.90	115.26	73.25	4.06	87.06	220.47	50.27	78.94	36.12	48.29
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminum Cans	8.19	16.47	4.76	225.23	4.47	0.04	21.72	14.91	3.30	0.13	2.41	2.91
Tin & BiMetal Cans	20.13	49.37	50.17	57.38	13.23	1.26	34.73	43.05	9.80	4.43	7.22	6.28
Other Municipal & Vegetative	1.73	0.36	27.53	18.03	2.46	1.02	0.07	24.44	0.25	0.96	0.98	0.00
TOTAL MSW RECYCLED	228.92	69.61	918.01	869.87	259.36	18.60	880.04	4,519.67	151.19	222.57	211.19	135.12
OTHER WASTE												
Foils & Closures												
Other Aluminum Scrap	15.92	10.51	11.38	23.59	12.86	9.65	22.89	100.01	6.01	19.81	7.76	23.00
Vehicular Batteries	0.02	0.00	12.14	0.00	0.00	1.39	0.00	0.00	0.00	0.25	0.00	0.00
Other Non-Ferrous Scrap												
White Goods & Sheet Iron	158.09	101.21	134.66	323.99	125.82	143.06	177.99	424.21	92.57	163.28	77.11	228.48
Junked Autos	159.49	102.10	113.99	236.42	113.87	85.69	186.07	427.96	60.23	112.27	77.79	230.50
Heavy Iron	274.51	169.20	188.90	391.78	260.87	142.20	383.95	1,412.08	99.80	186.04	128.91	381.60
Wood Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	167.79	0.00	0.00	0.00	0.00
Asphalt, Concrete & Masonry	234.41	68.80	125.61	168.30	76.73	57.74	121.00	1,673.29	40.58	75.65	0.00	155.31
Tires	3.54	1.39	2.24	9.56	11.72	22.58	3.45	1.57	0.05	599.94	0.00	0.00
Other Bulky & Construct/Demo	232.96	149.12	318.33	344.13	168.80	125.38	261.38	710.02	88.13	164.26	112.25	335.52
TOTAL OTHER WASTE RECYCLED	1078.94	602.33	907.25	1,497.77	770.67	587.69	1,156.73	4,916.93	387.37	1,321.50	403.82	1,354.41
TOTAL WASTE RECYCLED	1,307.86	671.94	1,825.26	2,367.64	1,030.03	606.29	2,036.77	9,436.60	538.56	1,544.07	615.01	1,489.53
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total	
MSW												
Yard Waste	0.00	0.00	0.00	200.48	0.00	94.56	80.00	8.34	105.34	0.73	1,924.65	
Food Waste	0.00	0.00	0.00	28.50	0.00	0.00	0.00	0.00	32.78	0.00	1,761.22	
Newspaper	73.85	45.07	168.83	116.23	48.62	391.79	112.52	5.25	250.62	135.05	2,381.69	
Corrugated	36.09	0.00	5.15	983.36	4.36	5.00	37.95	33.30	677.96	158.72	3,948.43	
Office Paper	0.00	0.00	0.17	7.79	0.00	0.64	0.00	0.06	63.79	14.07	257.89	
Other Paper	69.26	27.09	77.03	66.09	0.37	7.68	54.18	279.72	108.02	78.01	1,244.27	
Plastic Containers	13.71	3.91	44.35	9.56	3.54	1.28	9.00	19.51	9.09	7.93	261.16	
Other Plastic Packaging											0.00	
Other Plastic Scrap	0.00	0.10	0.94	1.28	0.00	0.90	0.84	0.00	0.38	0.00	12.07	
Glass Containers	75.66	72.55	74.89	109.78	53.10	125.27	80.00	63.53	161.08	11.17	1,661.12	
Other Glass	0.00	0.00	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.05	
Aluminum Cans	7.10	5.07	44.35	7.28	3.54	5.07	8.00	6.69	10.38	7.39	409.41	
Tin & BiMetal Cans	4.57	0.00	45.30	22.91	10.62	31.51	20.00	16.52	32.63	20.04	501.15	
Other Municipal & Vegetative	14.61	0.00	0.07	1.17	0.25	84.82	72.25	0.49	73.92	1.06	326.47	
TOTAL MSW RECYCLED	294.85	153.79	464.13	1,554.43	124.40	748.52	474.74	433.41	1,525.99	434.17	14,692.58	
OTHER WASTE											0.00	
Foils & Closures											0.00	
Other Aluminum Scrap	12.22	27.89	30.42	27.31	9.47	83.75	17.27	57.55	25.65	39.88	594.80	
Vehicular Batteries	0.00	0.00	0.84	3.79	0.00	1.00	0.50	0.98	18.75	0.19	39.85	
Other Non-Ferrous Scrap											0.00	
White Goods & Sheet Iron	121.39	112.75	244.33	312.51	94.07	624.76	139.30	273.70	305.10	223.76	4,602.14	
Junked Autos	122.47	113.75	237.16	273.69	94.91	623.90	140.53	276.12	257.03	174.63	4,220.57	
Heavy Iron	280.11	188.79	480.17	665.33	157.27	1,207.88	234.76	483.58	597.93	386.49	8,702.15	
Wood Waste	107.09	0.00	0.11	27.45	0.00	66.97	0.00	2.75	278.91	0.00	651.07	
Asphalt, Concrete & Masonry	82.52	76.64	359.23	184.42	70.45	552.64	94.69	200.70	423.06	274.66	5,116.43	
Tires	86.36	0.00	1.84	5.21	0.00	157.52	8.88	6.09	5.00	29.34	956.28	
Other Bulky & Construct/Demo	609.45	205.91	345.62	1,064.43	138.14	924.84	204.96	770.41	375.64	254.20	7,903.88	
TOTAL OTHER WASTE RECYCLED	1421.61	725.73	1,699.72	2,564.14	564.31	4,243.26	840.89	2,071.88	2,287.07	1,383.15	32,787.17	
TOTAL WASTE RECYCLED	1,716.46	879.52	2,163.85	4,118.57	688.71	4,991.78	1,315.63	2,505.29	3,813.06	1,817.32	47,479.75	
1. As defined by New Jersey Tonnage Reports												
2. Source: Municipal Tonnage Reports												

TABLE 7-B (3) ESTIMATED RECYCLING RATES BY WASTE TYPE BY MUNICIPALITY 2001

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	12.11%	0.01%	136.73%	0.10%	0.08%	0.00%	0.02%	67.18%	0.03%	0.07%	0.00%	0.00%
Food Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	176.37%	0.00%	0.00%	27.06%	0.00%
Newspaper	11.84%	0.51%	45.50%	54.51%	60.27%	2.42%	46.05%	58.37%	60.59%	49.80%	39.96%	9.13%
Corrugated	1.34%	0.03%	48.91%	19.22%	4.87%	1.79%	129.92%	161.55%	0.66%	5.90%	8.91%	1.24%
Office Paper	0.00%	0.08%	6.33%	0.69%	3.24%	0.35%	1.20%	54.61%	0.13%	0.91%	0.00%	0.00%
Other Paper	0.27%	0.41%	15.23%	19.88%	11.72%	1.95%	10.10%	1.16%	16.23%	12.20%	21.71%	4.07%
Plastic Containers	49.11%	0.68%	66.90%	43.07%	16.56%	3.28%	26.92%	14.50%	18.82%	8.78%	10.23%	18.08%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.00%	0.00%	5.21%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
Glass Containers	57.56%	1.20%	44.03%	57.53%	72.77%	5.63%	51.64%	69.86%	97.29%	83.76%	55.20%	24.65%
Other Glass	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aluminum Cans	50.72%	160.83%	41.68%	936.88%	37.01%	0.46%	107.37%	39.37%	53.22%	1.15%	30.69%	12.38%
Tin & BiMetal Cans	74.80%	289.27%	263.60%	143.21%	65.72%	8.74%	103.01%	68.21%	94.83%	23.50%	55.17%	16.03%
Other Municipal & Vegetative	0.39%	0.13%	8.71%	2.71%	0.74%	0.43%	0.01%	2.33%	0.15%	0.31%	0.45%	0.00%
TOTAL MSW	7.50%	3.60%	42.53%	19.14%	11.36%	1.14%	23.02%	63.15%	12.90%	10.41%	14.23%	3.04%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	153.54%	159.83%	155.19%	152.81%	165.80%	173.79%	176.21%	411.26%	150.94%	272.76%	153.89%	152.35%
Vehicular Batteries	0.39%	0.00%	331.11%	0.00%	0.00%	50.07%	0.00%	0.00%	0.00%	6.88%	0.00%	0.00%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
White Goods & Sheet Iron	127.06%	128.26%	153.03%	174.89%	135.18%	214.71%	114.18%	145.37%	193.74%	187.35%	127.44%	126.12%
Junked Autos	153.82%	155.26%	155.45%	153.14%	146.81%	154.32%	143.24%	175.99%	151.27%	154.58%	154.27%	152.68%
Heavy Iron	117.67%	114.36%	114.49%	112.79%	149.48%	113.82%	131.36%	258.08%	111.40%	113.85%	113.62%	112.34%
Wood Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	41.82%	0.00%	0.00%	0.00%	0.00%
Asphalt, Concrete & Masonry	24.05%	11.13%	18.22%	11.60%	10.52%	11.06%	9.91%	73.20%	10.84%	11.08%	0.00%	10.94%
Tires	34.14%	21.14%	30.55%	61.93%	151.10%	406.66%	26.56%	6.46%	1.26%	8260.58%	0.00%	0.00%
Other Bulky & Construct/Demo	41.61%	41.99%	80.39%	41.28%	40.30%	41.82%	37.26%	54.07%	40.99%	41.88%	41.22%	41.16%
TOTAL OTHER WASTE RECYCLED	48.06%	42.31%	57.15%	44.81%	45.89%	48.89%	41.13%	93.39%	44.94%	84.05%	36.99%	41.44%
TOTAL WASTE RECYCLED	24.69%	20.00%	48.73%	30.02%	26.00%	21.38%	30.69%	75.97%	26.48%	41.62%	23.88%	19.32%

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County	State
MSW												
Yard Waste	0.00%	0.00%	0.00%	17.42%	0.00%	4.54%	17.05%	0.91%	12.21%	0.12%	13.36%	75.00%
Food Waste	0.00%	0.00%	0.00%	3.35%	0.00%	0.00%	0.00%	0.00%	5.13%	0.00%	16.52%	22.00%
Newspaper	42.44%	27.95%	47.32%	24.05%	34.43%	44.77%	57.11%	1.36%	69.17%	52.15%	39.37%	50.00%
Corrugated	14.52%	0.00%	1.01%	142.45%	2.16%	0.40%	13.48%	6.03%	130.98%	42.90%	45.68%	44.00%
Office Paper	0.00%	0.00%	0.09%	2.94%	0.00%	0.13%	0.00%	0.03%	32.15%	9.92%	7.78%	43.00%
Other Paper	18.37%	7.75%	9.96%	6.31%	0.12%	0.41%	12.69%	33.41%	13.76%	13.90%	9.49%	8.00%
Plastic Containers	36.77%	11.31%	58.01%	9.23%	11.70%	0.68%	21.32%	23.56%	11.71%	14.29%	20.14%	21.00%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.00%	0.07%	0.29%	0.29%	0.00%	0.11%	0.47%	0.00%	0.12%	0.00%	0.22%	1.00%
Glass Containers	73.05%	75.57%	35.26%	38.17%	63.17%	24.05%	68.21%	27.62%	74.69%	7.25%	46.13%	53.00%
Other Glass	0.00%	0.00%	8.98%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.53%	12.00%
Aluminum Cans	57.12%	44.01%	174.03%	21.09%	35.09%	8.11%	56.85%	24.24%	40.11%	39.95%	94.74%	49.00%
Tin & BiMetal Cans	22.06%	0.00%	106.65%	39.82%	63.17%	30.24%	85.27%	35.91%	75.65%	65.00%	69.58%	55.00%
Other Municipal & Vegetative	4.25%	0.00%	0.01%	0.12%	0.09%	4.90%	18.56%	0.06%	10.32%	0.21%	2.73%	3.00%
TOTAL MSW	12.55%	7.06%	9.64%	23.83%	6.53%	6.34%	17.85%	8.31%	31.20%	12.42%	17.99%	36.00%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	153.11%	377.02%	185.89%	123.21%	146.20%	208.63%	191.10%	324.67%	154.34%	335.74%	214.34%	84.00%
Vehicular Batteries	0.00%	0.00%	10.27%	34.20%	0.00%	4.98%	11.07%	11.06%	225.65%	3.20%	28.72%	85.00%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.00%
White Goods & Sheet Iron	126.74%	127.01%	124.42%	117.50%	121.02%	129.69%	128.45%	128.67%	152.99%	156.98%	138.20%	96.00%
Junked Autos	153.44%	153.77%	144.92%	123.48%	146.52%	155.42%	155.50%	155.77%	154.66%	147.02%	152.09%	110.00%
Heavy Iron	155.98%	113.42%	130.41%	133.41%	107.91%	133.73%	115.45%	121.25%	159.91%	144.61%	139.37%	77.00%
Wood Waste	81.32%	0.00%	0.04%	7.51%	0.00%	10.11%	0.00%	0.94%	101.71%	0.00%	14.22%	17.00%
Asphalt, Concrete & Masonry	11.00%	11.02%	23.35%	8.85%	11.57%	14.65%	11.15%	12.05%	27.08%	24.60%	19.61%	96.00%
Tires	1082.01%	0.00%	11.24%	23.51%	0.00%	392.39%	98.26%	34.36%	30.09%	247.00%	344.60%	100.00%
Other Bulky & Construct/Demo	141.40%	51.55%	39.11%	88.93%	39.49%	42.66%	42.00%	80.49%	41.86%	39.63%	52.74%	84.00%
TOTAL OTHER WASTE RECYCLED	82.27%	45.31%	47.97%	53.43%	40.24%	48.82%	42.98%	53.99%	63.56%	53.78%	54.57%	72.00%
TOTAL WASTE RECYCLED	42.10%	23.27%	25.88%	36.38%	20.81%	24.34%	28.50%	27.67%	44.92%	29.95%	33.49%	54%

1. As defined by U. S. Environmental Protection Agency

TABLE 7-C (1) ESTIMATED TONS OF TOTAL SOLID WASTE GENERATED BY TYPE – 2002

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	635.90	402.00	448.53	949.68	496.80	341.93	828.96	1,481.56	250.10	446.77	313.07	928.82
Food Waste	470.57	297.48	331.91	702.77	367.63	253.03	613.43	1,096.35	185.08	330.61	231.67	687.33
Newspaper	267.08	168.84	188.38	398.87	208.66	143.61	348.16	622.26	105.04	187.64	131.49	390.11
Corrugated	381.54	241.20	269.12	569.81	298.08	205.16	497.38	888.94	150.06	268.06	187.84	557.29
Office Paper	146.26	92.46	103.16	218.43	114.26	78.64	190.66	340.76	57.52	102.76	72.01	213.63
Other Paper	578.67	365.82	408.16	864.21	452.09	311.16	754.36	1,348.22	227.59	406.56	284.90	845.23
Plastic Containers	57.23	36.18	40.37	85.47	44.71	30.77	74.61	133.34	22.51	40.21	28.18	83.59
Other Plastic Packaging	63.59	40.20	44.85	94.97	49.68	34.19	82.90	148.16	25.01	44.68	31.31	92.88
Other Plastic Scrap	241.64	152.76	170.44	360.88	188.78	129.93	315.01	562.99	95.04	169.77	118.97	352.95
Glass Containers	158.98	100.50	112.13	237.42	124.20	85.48	207.24	370.39	62.53	111.69	78.27	232.21
Other Glass	25.44	16.08	17.94	37.99	19.87	13.68	33.16	59.26	10.00	17.87	12.52	37.15
Aluminum Cans	19.08	12.06	13.46	28.49	14.90	10.26	24.87	44.45	7.50	13.40	9.39	27.86
Tin & BiMetal Cans	31.80	20.10	22.43	47.48	24.84	17.10	41.45	74.08	12.51	22.34	15.65	46.44
Other Municipal & Vegetative	527.80	333.66	372.28	788.24	412.34	283.80	688.04	1,229.69	207.58	370.82	259.85	770.92
TOTAL MSW	3,605.56	2,279.37	2,543.15	5,384.71	2,816.86	1,938.75	4,700.22	8,400.44	1,418.08	2,533.16	1,775.12	5,266.42
OTHER WASTE												
Foils & Closures	6.96	4.40	4.91	10.40	5.44	3.74	9.08	16.22	2.74	4.89	3.43	10.17
Other Aluminum Scrap	13.92	8.80	9.82	20.79	10.88	7.49	18.15	32.44	5.48	9.78	6.85	20.34
Vehicular Batteries	6.96	4.40	4.91	10.40	5.44	3.74	9.08	16.22	2.74	4.89	3.43	10.17
Other Non-Ferrous Scrap	62.65	39.61	44.19	93.57	48.95	33.69	81.68	145.98	24.64	44.02	30.85	91.51
White Goods & Sheet Iron	167.08	105.62	117.85	249.52	130.53	89.84	217.80	389.27	65.71	117.38	82.26	244.04
Junked Autos	139.23	88.02	98.21	207.93	108.78	74.87	181.50	324.39	54.76	97.82	68.55	203.37
Heavy Iron	313.27	198.04	220.96	467.85	244.74	168.45	408.38	729.88	123.21	220.10	154.23	457.57
Wood Waste	229.73	145.23	162.04	343.09	179.48	123.53	299.48	535.24	90.35	161.40	113.10	335.55
Asphalt, Concrete & Masonry	1,308.78	827.38	923.13	1,954.58	1,022.49	703.74	1,706.12	3,049.26	514.75	919.51	644.35	1,911.65
Tires	13.92	8.80	9.82	20.79	10.88	7.49	18.15	32.44	5.48	9.78	6.85	20.34
Other Bulky & Construct/Demo	751.85	475.30	530.31	1,122.85	587.39	404.28	980.11	1,751.70	295.70	528.23	370.16	1,098.18
TOTAL OTHER WASTE	3,014.36	1,905.62	2,126.15	4,501.78	2,354.98	1,620.85	3,929.53	7,023.03	1,185.56	2,117.80	1,484.06	4,402.89
TOTAL WASTE	6,619.93	4,184.99	4,669.30	9,886.49	5,171.84	3,559.60	8,629.75	15,423.47	2,603.63	4,650.97	3,259.18	9,669.31

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total
MSW											
Yard Waste	491.13	455.79	1,069.27	1,360.73	409.89	2,449.59	551.66	1,087.64	1,027.73	747.68	17,175.25
Food Waste	363.44	337.29	791.26	1,006.94	303.32	1,812.69	408.23	804.85	760.52	553.28	12,709.69
Newspaper	206.28	191.43	449.10	571.51	172.16	1,028.83	231.70	456.81	431.65	314.02	7,213.61
Corrugated	294.68	273.48	641.56	816.44	245.94	1,469.75	331.00	652.58	616.64	448.61	10,305.15
Office Paper	112.96	104.83	245.93	312.97	94.28	563.40	126.88	250.16	236.38	171.97	3,950.31
Other Paper	446.93	414.77	973.04	1,238.26	373.00	2,229.12	502.01	989.75	935.24	680.39	15,629.48
Plastic Containers	44.20	41.02	96.23	122.47	36.89	220.46	49.65	97.89	92.50	67.29	1,545.77
Other Plastic Packaging	49.11	45.58	106.93	136.07	40.99	244.96	55.17	108.76	102.77	74.77	1,717.53
Other Plastic Scrap	186.63	173.20	406.32	517.08	155.76	930.84	209.63	413.30	390.54	284.12	6,526.60
Glass Containers	122.78	113.95	267.32	340.18	102.47	612.40	137.91	271.91	256.93	186.92	4,293.81
Other Glass	19.65	18.23	42.77	54.43	16.40	97.98	22.07	43.51	41.11	29.91	687.01
Aluminum Cans	14.73	13.67	32.08	40.82	12.30	73.49	16.55	32.63	30.83	22.43	515.26
Tin & BiMetal Cans	24.56	22.79	53.46	68.04	20.49	122.48	27.58	54.38	51.39	37.38	858.76
Other Municipal & Vegetative	407.64	378.31	887.50	1,129.41	340.21	2,033.16	457.88	902.74	853.02	620.57	14,255.46
TOTAL MSW	2,784.73	2,584.35	6,062.78	7,715.34	2,324.10	13,889.16	3,127.91	6,166.90	5,827.24	4,239.33	97,383.68
OTHER WASTE											
Foils & Closures	5.38	4.99	11.71	14.90	4.49	26.82	6.04	11.91	11.25	8.19	188.03
Other Aluminum Scrap	10.75	9.98	23.41	29.79	8.97	53.63	12.08	23.81	22.50	16.37	376.05
Vehicular Batteries	5.38	4.99	11.71	14.90	4.49	26.82	6.04	11.91	11.25	8.19	188.03
Other Non-Ferrous Scrap	48.39	44.91	105.35	134.07	40.39	241.35	54.35	107.16	101.26	73.67	1,692.24
White Goods & Sheet Iron	129.04	119.76	280.94	357.52	107.70	643.61	144.94	285.77	270.03	196.45	4,512.65
Junked Autos	107.53	99.80	234.12	297.93	89.75	536.34	120.79	238.14	225.02	163.70	3,760.54
Heavy Iron	241.95	224.54	526.77	670.35	201.93	1,206.76	271.77	535.81	506.30	368.34	8,461.22
Wood Waste	177.43	164.66	386.30	491.59	148.08	884.96	199.30	392.93	371.29	270.11	6,204.89
Asphalt, Concrete & Masonry	1,010.82	938.09	2,200.72	2,800.58	843.62	5,041.60	1,135.39	2,238.51	2,115.22	1,538.83	35,349.10
Tires	10.75	9.98	23.41	29.79	8.97	53.63	12.08	23.81	22.50	16.37	376.05
Other Bulky & Construct/Demo	580.69	538.90	1,264.24	1,608.84	484.63	2,896.24	652.25	1,285.95	1,215.12	884.01	20,306.93
TOTAL OTHER WASTE	2,328.12	2,160.60	5,068.67	6,450.26	1,943.02	11,611.76	2,615.03	5,155.72	4,871.75	3,544.21	81,415.74
TOTAL WASTE	5,112.84	4,744.95	11,131.45	14,165.61	4,267.11	25,500.92	5,742.93	11,322.63	10,698.99	7,783.54	178,799.42

1. As defined by New Jersey Tonnage Reports
 2. Source: Municipal Tonnage Reports

TABLE 7-C (2) TONS OF TOTAL SOLID WASTE RECYCLED BY TYPE - 2002

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	65.05	0.00	314.74	0.23	0.08	0.04	0.03	1,187.89	0.03	0.11	0.00	8.67
Food Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00
Newspaper	170.33	33.00	90.53	193.63	80.79	53.33	165.48	277.46	37.51	78.40	1.94	72.39
Corrugated	66.87	45.68	295.80	4,031.81	3.57	16.40	1,095.77	1,324.83	0.21	4.49	1.23	52.33
Office Paper	0.00	33.00	2.84	0.00	2.17	0.23	5.43	21.54	0.55	0.53	0.11	18.88
Other Paper	0.20	0.00	60.83	116.43	32.38	31.39	63.09	10.51	20.93	22.72	3.67	12.60
Plastic Containers	8.15	6.76	387.27	23.07	5.53	8.94	10.47	16.58	5.29	6.81	0.59	4.77
Other Plastic Packaging												
Other Plastic Scrap	0.00	0.00	4.01	0.00	0.00	0.02	13.65	0.00	0.00	0.00	0.00	0.00
Glass Containers	118.42	50.00	42.72	188.09	73.54	41.52	117.93	228.90	39.32	63.78	0.74	57.25
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminum Cans	7.69	10.00	3.68	9.83	4.90	5.10	10.88	15.27	2.62	4.23	0.05	3.81
Tin & BiMetal Cans	24.09	20.00	31.96	39.14	14.73	10.38	23.46	38.48	5.23	12.93	0.18	11.47
Other Municipal & Vegetative	3.20	0.00	99.67	53.32	28.20	9.15	569.15	122.52	0.01	0.73	0.36	39.21
TOTAL MSW RECYCLED	464.00	198.44	1,334.05	4,655.55	245.89	176.50	2,075.34	4,023.98	111.70	194.73	8.87	281.38
OTHER WASTE												
Foils & Closures												
Other Aluminum Scrap	18.21	9.10	10.16	21.07	12.95	9.74	19.00	48.74	5.37	53.75	8.83	20.54
Vehicular Batteries	1.70	0.00	15.03	23.52	0.00	0.00	6.46	94.76	0.22	0.00	0.45	1.08
Other Non-Ferrous Scrap												
White Goods & Sheet Iron	118.05	75.58	125.11	453.30	97.24	63.43	149.61	316.77	60.93	228.77	57.58	170.61
Junked Autos	138.15	88.44	98.74	204.79	117.75	74.23	166.91	370.70	52.17	97.24	67.38	199.66
Heavy Iron	280.84	168.65	188.29	390.51	188.29	221.64	385.93	5,237.03	99.48	202.54	128.64	548.06
Wood Waste	29.42	14.23	38.61	32.94	17.27	11.94	25.02	78.41	8.39	15.64	11.84	40.66
Asphalt, Concrete & Masonry	792.24	199.03	233.69	581.93	288.25	176.03	350.03	1,222.91	117.40	218.84	151.64	465.95
Tires	10.49	0.00	8.91	33.78	18.58	19.71	15.87	21.86	4.14	11.27	7.92	0.00
Other Bulky & Construct/Demo	416.53	158.14	665.39	392.31	258.12	133.35	278.57	760.97	93.28	174.82	120.49	357.00
TOTAL OTHER WASTE RECYCLED	1805.63	713.17	1,383.93	2,134.15	998.45	710.07	1,397.40	8,152.15	441.38	1,002.87	554.77	1,803.56
TOTAL WASTE RECYCLED	2,269.63	911.61	2,717.98	6,789.70	1,244.34	886.57	3,472.74	12,176.13	553.08	1,197.60	563.64	2,084.94
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total	
MSW												
Yard Waste	0.00	0.14	398.00	898.82	0.00	137.27	0.00	46.63	122.99	0.00	3,180.72	
Food Waste	0.00	0.00	0.00	32.50	0.00	0.00	0.00	0.00	35.98	0.00	848.48	
Newspaper	68.19	51.37	175.51	103.52	49.38	502.84	104.85	144.89	190.83	157.25	2,803.42	
Corrugated	40.54	1.43	4.44	1,132.93	5.80	2,773.07	28.19	64.32	419.91	287.48	11,697.10	
Office Paper	0.00	0.12	0.12	0.27	0.26	0.46	0.00	96.43	0.32	14.10	197.36	
Other Paper	51.86	28.14	73.87	41.60	3.68	2.29	48.04	17.93	121.97	89.01	853.14	
Plastic Containers	1.03	4.30	9.43	7.89	5.00	2.56	6.30	15.00	9.79	14.40	559.93	
Other Plastic Packaging											0.00	
Other Plastic Scrap	0.00	0.30	1.22	4.49	0.00	0.00	0.00	0.40	1.31	0.90	26.30	
Glass Containers	76.31	55.97	167.81	98.68	56.02	113.29	88.55	136.37	124.24	84.34	2,023.79	
Other Glass	0.00	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	
Aluminum Cans	5.08	3.79	9.43	6.57	3.73	26.86	5.90	9.80	8.27	11.20	168.69	
Tin & BiMetal Cans	5.08	11.04	28.51	19.83	11.28	51.13	17.71	28.72	24.95	74.60	504.90	
Other Municipal & Vegetative	14.07	16.59	0.07	1.18	0.15	815.39	0.70	1.04	25.31	6.70	1,806.72	
TOTAL MSW RECYCLED	262.16	173.19	869.20	2,348.28	135.30	4,425.16	300.24	561.53	1,085.87	739.98	24,671.34	
OTHER WASTE												
Foils & Closures											0.00	
Other Aluminum Scrap	10.91	12.94	30.99	31.19	8.46	354.17	16.02	31.41	29.31	19.86	782.72	
Vehicular Batteries	0.00	0.00	0.88	2.05	0.35	0.00	0.00	16.07	2.68	0.00	165.25	
Other Non-Ferrous Scrap											0.00	
White Goods & Sheet Iron	90.65	84.19	175.54	253.12	70.25	1,761.80	104.02	300.30	258.76	129.26	5,144.87	
Junked Autos	106.08	98.53	205.43	237.07	82.21	540.42	121.72	239.17	222.64	151.27	3,680.70	
Heavy Iron	290.60	187.88	459.25	680.06	264.59	7,031.43	232.32	456.48	639.93	544.82	18,827.26	
Wood Waste	69.14	19.86	33.08	38.14	13.22	196.00	19.58	48.44	46.72	326.13	1,134.68	
Asphalt, Concrete & Masonry	238.72	247.06	478.82	533.50	185.00	1,377.64	273.93	616.14	921.81	2,728.03	12,398.59	
Tires	19.24	12.48	11.62	16.94	8.08	49.25	5.15	14.60	19.44	0.00	309.33	
Other Bulky & Construct/Demo	189.68	251.02	389.16	1,449.10	146.99	968.54	217.66	434.61	433.17	270.48	8,559.38	
TOTAL OTHER WASTE RECYCLED	1015.02	913.96	1,784.77	3,241.17	779.15	12,279.25	990.40	2,157.22	2,574.46	4,169.85	51,002.78	
TOTAL WASTE RECYCLED	1,277.18	1,087.15	2,653.97	5,589.45	914.45	16,704.41	1,290.64	2,718.75	3,660.33	4,909.83	75,674.12	

1. As defined by New Jersey Tonnage Reports
2. Source: Municipal Tonnage Reports

TABLE 7-C (3) ESTIMATED RECYCLING RATES BY WASTE TYPE BY MUNICIPALITY 2002

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	10.23%	0.00%	70.17%	0.02%	0.02%	0.01%	0.00%	80.18%	0.01%	0.02%	0.00%	0.93%
Food Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	71.14%	0.00%	0.00%	0.00%	0.00%
Newspaper	63.78%	19.54%	48.06%	48.54%	38.72%	37.14%	47.53%	44.59%	35.71%	41.78%	1.48%	18.56%
Corrugated	17.53%	18.94%	109.92%	707.57%	1.20%	7.99%	220.31%	149.04%	0.14%	1.67%	0.65%	9.39%
Office Paper	0.00%	35.69%	2.75%	0.00%	1.90%	0.29%	2.85%	6.32%	0.96%	0.52%	0.15%	8.84%
Other Paper	0.03%	0.00%	14.90%	13.47%	7.16%	10.09%	8.36%	0.78%	9.20%	5.59%	1.29%	1.49%
Plastic Containers	14.24%	18.68%	959.36%	26.99%	12.37%	29.05%	14.03%	12.43%	23.50%	16.94%	2.09%	5.71%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.00%	0.00%	2.35%	0.00%	0.00%	0.02%	4.33%	0.00%	0.00%	0.00%	0.00%	0.00%
Glass Containers	74.49%	49.75%	38.10%	79.22%	59.21%	48.57%	56.90%	61.80%	62.89%	57.10%	0.95%	24.65%
Other Glass	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aluminum Cans	40.31%	82.92%	27.35%	34.50%	32.88%	49.72%	43.75%	34.36%	34.92%	31.56%	0.53%	13.67%
Tin & BiMetal Cans	75.77%	99.50%	142.51%	82.43%	59.30%	60.71%	56.60%	51.95%	41.82%	57.88%	1.15%	24.70%
Other Municipal & Vegetative	0.61%	0.00%	26.77%	6.76%	6.84%	3.22%	82.72%	9.96%	0.00%	0.20%	0.14%	5.09%
TOTAL MSW RECYCLED	12.87%	8.71%	52.46%	86.46%	8.73%	9.10%	44.15%	47.90%	7.88%	7.69%	0.50%	5.34%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	130.79%	103.39%	103.46%	101.33%	119.05%	130.10%	104.68%	150.25%	98.06%	549.48%	128.82%	101.00%
Vehicular Batteries	24.42%	0.00%	306.09%	226.23%	0.00%	0.00%	71.18%	584.24%	8.04%	0.00%	13.13%	10.62%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
White Goods & Sheet Iron	70.66%	71.56%	106.16%	181.67%	74.50%	70.60%	68.69%	81.38%	92.72%	194.89%	70.00%	69.91%
Junked Autos	99.22%	100.48%	100.54%	98.49%	108.25%	99.15%	91.96%	114.28%	95.27%	99.41%	98.30%	98.18%
Heavy Iron	89.65%	85.16%	85.21%	83.47%	76.93%	131.58%	94.50%	717.52%	80.74%	92.02%	83.41%	119.77%
Wood Waste	12.81%	9.80%	23.83%	9.60%	9.62%	9.67%	8.35%	14.65%	9.29%	9.69%	10.47%	12.12%
Asphalt, Concrete & Masonry	60.53%	24.06%	25.31%	29.77%	28.19%	25.01%	20.52%	40.11%	22.81%	23.80%	23.53%	24.37%
Tires	75.34%	0.00%	90.73%	162.46%	170.81%	263.27%	87.44%	67.39%	75.60%	115.21%	115.54%	0.00%
Other Bulky & Construct/Demo	55.40%	33.27%	125.47%	34.94%	43.94%	32.98%	28.42%	43.44%	31.54%	33.10%	32.55%	32.51%
TOTAL OTHER WASTE RECYCLED	59.90%	37.42%	65.09%	47.41%	42.40%	43.81%	35.56%	116.08%	37.23%	47.35%	37.38%	40.96%
TOTAL WASTE RECYCLED	34.28%	21.78%	58.21%	68.68%	24.06%	24.91%	40.24%	78.95%	21.24%	25.75%	17.29%	21.56%

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County	State
MSW												
Yard Waste	0.00%	0.03%	37.22%	66.05%	0.00%	5.60%	0.00%	4.29%	11.97%	0.00%	18.52%	63.30%
Food Waste	0.00%	0.00%	0.00%	3.23%	0.00%	0.00%	0.00%	0.00%	4.73%	0.00%	6.68%	19.00%
Newspaper	33.06%	26.83%	39.08%	18.11%	28.68%	48.88%	45.25%	31.72%	44.21%	50.08%	38.86%	45.00%
Corrugated	13.76%	0.52%	0.69%	138.76%	2.36%	188.68%	8.52%	9.86%	68.10%	64.08%	113.51%	46.00%
Office Paper	0.00%	0.11%	0.05%	0.09%	0.28%	0.08%	0.00%	38.55%	0.14%	8.20%	5.00%	42.00%
Other Paper	11.60%	6.78%	7.59%	3.36%	0.99%	0.10%	9.57%	1.81%	13.04%	13.08%	5.46%	7.00%
Plastic Containers	2.33%	10.48%	9.80%	6.44%	13.55%	1.16%	12.69%	15.32%	10.58%	21.40%	36.22%	22.00%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.00%	0.17%	0.30%	0.87%	0.00%	0.00%	0.00%	0.10%	0.34%	0.32%	0.40%	1.40%
Glass Containers	62.15%	49.12%	62.78%	29.01%	54.67%	18.50%	64.21%	50.15%	48.36%	45.12%	47.13%	53.00%
Other Glass	0.00%	0.00%	1.85%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.11%	11.00%
Aluminum Cans	34.48%	27.72%	29.40%	16.09%	30.33%	36.55%	35.65%	30.03%	26.82%	49.93%	32.74%	49.00%
Tin & BiMetal Cans	20.69%	48.44%	53.33%	29.15%	55.04%	41.75%	64.21%	52.81%	48.55%	199.55%	58.79%	56.00%
Other Municipal & Vegetative	3.45%	4.39%	0.01%	0.10%	0.04%	40.10%	0.15%	0.12%	2.97%	1.08%	12.67%	3.00%
TOTALS MSW	9.41%	6.70%	14.34%	30.44%	5.82%	31.86%	9.60%	9.11%	18.63%	17.46%	25.33%	34.00%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	101.46%	129.66%	132.37%	104.69%	94.27%	660.35%	132.63%	131.90%	130.25%	121.32%	208.14%	85.00%
Vehicular Batteries	0.00%	0.00%	7.52%	13.76%	7.80%	0.00%	0.00%	134.96%	23.82%	0.00%	87.89%	99.00%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.00%
White Goods & Sheet Iron	70.25%	70.30%	62.48%	70.80%	65.23%	273.74%	71.77%	105.09%	95.83%	65.80%	114.01%	79.00%
Junked Autos	98.65%	98.73%	87.75%	79.57%	91.60%	100.76%	100.77%	100.43%	98.94%	92.40%	97.88%	89.00%
Heavy Iron	120.11%	83.67%	87.18%	101.45%	131.03%	582.67%	85.48%	85.19%	126.39%	147.91%	222.51%	77.00%
Wood Waste	38.97%	12.06%	8.56%	7.76%	8.93%	22.15%	9.82%	12.33%	12.58%	120.74%	18.29%	22.00%
Asphalt, Concrete & Masonry	23.62%	26.34%	21.76%	19.05%	21.93%	27.33%	24.13%	27.52%	43.58%	177.28%	35.07%	110.00%
Tires	178.92%	125.05%	49.63%	56.86%	90.03%	91.83%	42.64%	61.31%	86.39%	0.00%	82.26%	71.00%
Other Bulky & Construct/Demo	32.66%	46.58%	30.78%	90.07%	30.33%	33.44%	33.37%	33.80%	35.65%	30.60%	42.15%	74.00%
TOTAL OTHER WASTE RECYCLED	43.60%	42.30%	35.21%	50.25%	40.10%	105.75%	37.87%	41.84%	52.84%	117.65%	62.64%	72.00%
TOTAL WASTE RECYCLED	24.98%	22.91%	23.84%	39.46%	21.43%	65.51%	22.47%	24.01%	34.21%	63.08%	42.32%	54%

1. As defined by U. S. Environmental Protection Agency

TABLE 7-D (1) ESTIMATED TONS OF TOTAL SOLID WASTE GENERATED BY TYPE – 2003

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	603.70	381.13	424.87	908.99	479.72	328.75	801.94	1,410.41	239.86	426.63	298.06	883.25
Food Waste	446.74	282.04	314.40	672.66	354.99	243.27	593.44	1,043.70	177.50	315.71	220.56	653.60
Newspaper	253.56	160.07	178.44	381.78	201.48	138.07	336.81	592.37	100.74	179.19	125.19	370.96
Corrugated	362.22	228.68	254.92	545.40	287.83	197.25	481.16	846.24	143.92	255.98	178.84	529.95
Office Paper	138.85	87.66	97.72	209.07	110.34	75.61	184.45	324.39	55.17	98.13	68.55	203.15
Other Paper	549.37	346.83	386.63	827.19	436.54	299.16	729.77	1,283.47	218.27	388.23	271.23	803.75
Plastic Containers	54.33	34.30	38.24	81.81	43.17	29.59	72.17	126.94	21.59	38.40	26.83	79.49
Other Plastic Packaging	60.37	38.11	42.49	90.90	47.97	32.87	80.19	141.04	23.99	42.66	29.81	88.32
Other Plastic Scrap	229.41	144.83	161.45	345.42	182.29	124.92	304.74	535.95	91.15	162.12	113.26	335.63
Glass Containers	150.93	95.28	106.22	227.25	119.93	82.19	200.49	352.60	59.96	106.66	74.51	220.81
Other Glass	24.15	15.25	16.99	36.36	19.19	13.15	32.08	56.42	9.59	17.07	11.92	35.33
Aluminum Cans	18.11	11.43	12.75	27.27	14.39	9.86	24.06	42.31	7.20	12.80	8.94	26.50
Tin & BiMetal Cans	30.19	19.06	21.24	45.45	23.99	16.44	40.10	70.52	11.99	21.33	14.90	44.16
Other Municipal & Vegetative	501.07	316.34	352.64	754.47	398.17	272.86	665.61	1,170.64	199.08	354.10	247.39	733.09
TOTAL MSW	3,423.00	2,161.00	2,409.00	5,154.00	2,720.00	1,864.00	4,547.00	7,997.00	1,360.00	2,419.00	1,690.00	5,008.00
OTHER WASTE												
Foils & Closures	9.23	5.83	6.49	13.89	7.33	5.03	12.26	21.56	3.67	6.52	4.56	13.50
Other Aluminum Scrap	18.45	11.65	12.99	27.79	14.67	10.05	24.51	43.12	7.33	13.04	9.11	27.00
Vehicular Batteries	9.23	5.83	6.49	13.89	7.33	5.03	12.26	21.56	3.67	6.52	4.56	13.50
Other Non-Ferrous Scrap	83.04	52.44	58.45	125.04	65.99	45.23	110.31	194.03	32.99	58.70	41.01	121.51
White Goods & Sheet Iron	221.43	139.84	155.86	333.45	175.98	120.61	294.15	517.41	87.96	156.53	109.36	324.03
Junked Autos	184.53	116.54	129.88	277.88	146.65	100.51	245.13	431.18	73.30	130.44	91.13	270.02
Heavy Iron	415.18	262.21	292.24	625.22	329.97	226.14	551.54	970.15	164.93	293.49	205.05	607.55
Wood Waste	304.47	192.28	214.31	458.49	241.97	165.84	404.46	711.44	120.95	215.22	150.37	445.54
Asphalt, Concrete & Masonry	1,734.55	1,095.44	1,220.91	2,612.03	1,378.52	944.78	2,304.19	4,053.07	689.04	1,226.12	856.64	2,538.22
Tires	18.45	11.65	12.99	27.79	14.67	10.05	24.51	43.12	7.33	13.04	9.11	27.00
Other Bulky & Construct/Demo	996.44	629.29	701.38	1,500.53	791.92	542.74	1,323.69	2,328.36	395.83	704.37	492.11	1,458.12
TOTAL OTHER WASTE	3,995.00	2,523.00	2,812.00	6,016.00	3,175.00	2,176.00	5,307.00	9,335.00	1,587.00	2,824.00	1,973.00	5,846.00
TOTAL WASTE	7,418.00	4,684.00	5,221.00	11,170.00	5,895.00	4,040.00	9,854.00	17,332.00	2,947.00	5,243.00	3,663.00	10,854.00

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total
MSW											
Yard Waste	472.66	439.86	1,147.27	1,297.71	395.41	2,318.17	520.99	1,043.03	1,004.76	730.51	16,557.67
Food Waste	349.77	325.50	848.98	960.30	292.61	1,715.44	385.53	771.84	743.52	540.58	12,252.68
Newspaper	198.52	184.74	481.85	545.04	166.07	973.63	218.81	438.07	422.00	306.81	6,954.22
Corrugated	283.60	263.92	688.36	778.62	237.25	1,390.90	312.59	625.82	602.86	438.31	9,934.60
Office Paper	108.71	101.17	263.87	298.47	90.95	533.18	119.83	239.90	231.10	168.02	3,808.26
Other Paper	430.12	400.27	1,044.01	1,180.91	359.83	2,109.53	474.10	949.16	914.33	664.77	15,067.48
Plastic Containers	42.54	39.59	103.25	116.79	35.59	208.63	46.89	93.87	90.43	65.75	1,490.19
Other Plastic Packaging	47.27	43.99	114.73	129.77	39.54	231.82	52.10	104.30	100.48	73.05	1,655.77
Other Plastic Scrap	179.61	167.15	435.96	493.13	150.26	880.90	197.98	396.35	381.81	277.59	6,291.92
Glass Containers	118.17	109.96	286.82	324.43	98.85	579.54	130.25	260.76	251.19	182.63	4,139.42
Other Glass	18.91	17.59	45.89	51.91	15.82	92.73	20.84	41.72	40.19	29.22	662.31
Aluminum Cans	14.18	13.20	34.42	38.93	11.86	69.54	15.63	31.29	30.14	21.92	496.73
Tin & BiMetal Cans	23.63	21.99	57.36	64.89	19.77	115.91	26.05	52.15	50.24	36.53	827.88
Other Municipal & Vegetative	392.31	365.08	952.23	1,077.10	328.19	1,924.08	432.42	865.72	833.95	606.32	13,742.87
TOTAL MSW	2,680.00	2,494.00	6,505.00	7,358.00	2,242.00	13,144.00	2,954.00	5,914.00	5,697.00	4,142.00	93,882.00
OTHER WASTE											
Foils & Closures	7.23	6.72	17.54	19.83	6.04	35.43	7.97	15.94	15.36	11.17	253.09
Other Aluminum Scrap	14.45	13.45	35.07	39.67	12.09	70.87	15.93	31.88	30.72	22.33	506.18
Vehicular Batteries	7.23	6.72	17.54	19.83	6.04	35.43	7.97	15.94	15.36	11.17	253.09
Other Non-Ferrous Scrap	65.04	60.51	157.82	178.50	54.39	318.91	71.69	143.48	138.22	100.50	2,277.79
White Goods & Sheet Iron	173.43	161.35	420.86	476.01	145.05	850.42	191.17	382.61	368.59	267.99	6,074.11
Junked Autos	144.53	134.46	350.72	396.67	120.88	708.68	159.31	318.85	307.16	223.33	5,061.76
Heavy Iron	325.18	302.53	789.11	892.52	271.97	1,594.54	358.44	717.40	691.11	502.48	11,388.95
Wood Waste	238.47	221.85	578.68	654.51	199.45	1,169.33	262.86	526.09	506.81	368.49	8,351.90
Asphalt, Concrete & Masonry	1,358.55	1,263.90	3,296.73	3,728.74	1,136.25	6,661.63	1,497.49	2,997.15	2,887.30	2,099.26	47,580.50
Tires	14.45	13.45	35.07	39.67	12.09	70.87	15.93	31.88	30.72	22.33	506.18
Other Bulky & Construct/Demo	780.44	726.07	1,893.87	2,142.04	652.74	3,826.89	860.26	1,721.76	1,658.66	1,205.96	27,333.48
TOTAL OTHER WASTE	3,129.00	2,911.00	7,593.00	8,588.00	2,617.00	15,343.00	3,449.00	6,903.00	6,650.00	4,835.00	109,587.00
TOTAL WASTE	5,809.00	5,405.00	14,098.00	15,946.00	4,859.00	28,487.00	6,403.00	12,817.00	12,347.00	8,977.00	203,469.00

1. As defined by New Jersey Tonnage Reports

2. Source: Municipal Tonnage Reports

TABLE 7-D (2) TONS OF TOTAL SOLID WASTE RECYCLED BY TYPE - 2003

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	0.12	0.04	514.34	5.46	0.22	0.05	0.11	996.03	0.07	0.24	0.25	12.23
Food Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	607.87	0.00	0.00	0.00	0.00
Newspaper	98.66	0.16	111.73	211.00	67.66	105.85	165.48	24.54	16.45	75.94	44.33	39.74
Corrugated	33.21	0.18	285.55	53.63	3.07	28.90	11.95	331.65	0.12	5.30	11.45	56.12
Office Paper	0.02	0.01	9.05	0.01	2.18	0.25	5.33	0.30	0.10	0.37	0.07	2.34
Other Paper	0.41	0.21	59.38	173.06	20.01	60.10	8.60	12.82	9.07	41.10	55.86	15.14
Plastic Containers	24.16	0.03	26.11	49.64	13.05	23.16	8.53	11.96	2.87	13.92	9.60	7.53
Other Plastic Packaging												
Other Plastic Scrap	0.10	0.00	357.06	0.00	0.10	0.15	13.65	0.30	0.00	0.10	0.00	0.00
Glass Containers	112.81	0.17	41.97	184.43	61.06	102.98	108.88	182.53	13.40	65.53	44.87	44.30
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00
Aluminum Cans	16.08	0.01	4.84	20.56	8.54	12.01	8.54	13.84	1.91	8.51	6.24	2.91
Tin & BiMetal Cans	8.11	0.04	14.32	10.31	4.62	19.17	23.46	35.71	0.96	5.84	3.44	0.00
Other Municipal & Vegetative	0.75	0.44	7.92	53.52	2.51	27.48	540.89	184.77	0.26	19.05	0.41	0.99
TOTAL MSW RECYCLED	294.43	1.29	1,432.27	761.62	183.02	380.10	895.42	2,402.32	45.80	235.90	176.52	181.30
OTHER WASTE												
Foils & Closures												
Other Aluminum Scrap	8.25	3.56	3.97	10.03	17.60	14.98	9.25	22.20	13.86	35.07	2.71	178.82
Vehicular Batteries	0.76	0.00	14.09	23.22	2.16	1.50	6.46	68.97	0.00	0.07	0.37	2.20
Other Non-Ferrous Scrap												
White Goods & Sheet Iron	106.09	66.64	151.87	419.05	74.81	120.92	133.89	279.29	39.30	164.87	50.77	150.43
Junked Autos	136.14	87.16	136.32	201.81	97.20	148.15	153.28	365.31	51.41	95.83	66.40	196.75
Heavy Iron	267.14	232.04	185.92	385.59	185.72	362.16	382.20	1,531.47	108.48	196.07	126.88	375.93
Wood Waste	0.00	0.00	20.10	0.00	6,000.00	15.00	0.00	31.63	0.00	0.00	0.00	4.16
Asphalt, Concrete & Masonry	1,155.76	291.83	4,577.13	746.17	325.46	431.43	19,781.43	3,091.59	215.91	343.73	255.43	663.03
Tires	0.00	0.00	0.36	17.26	0.00	53.10	15.87	0.00	0.00	0.00	0.00	0.00
Other Bulky & Construct/Demo	297.25	44.22	528.00	393.69	113.86	171.38	120.00	1,265.51	93.27	161.88	35.06	97.85
TOTAL OTHER WASTE RECYCLED	1971.39	725.45	5,617.76	2,196.82	6,816.81	1,318.62	20,602.38	6,655.97	522.23	997.52	537.62	1,669.17
TOTAL WASTE RECYCLED	2,265.82	726.74	7,050.03	2,958.44	6,999.83	1,698.72	21,497.80	9,058.29	568.03	1,233.42	714.14	1,850.47

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total
MSW											
Yard Waste	0.00	0.40	198.00	1,009.71	0.00	28.28	0.00	32.00	307.15	0.53	3,105.23
Food Waste	0.00	0.00	0.00	24.30	0.00	0.00	0.00	0.00	39.09	0.00	671.26
Newspaper	82.67	61.93	187.31	121.49	46.61	504.00	106.49	0.29	191.63	137.40	2,401.36
Corrugated	36.27	4.40	58.47	1,186.81	1.10	2,782.46	22.05	18.71	579.57	288.41	5,799.38
Office Paper	0.00	0.21	0.09	0.12	0.00	17.95	0.00	0.01	0.25	15.74	54.40
Other Paper	50.01	35.02	79.86	59.74	0.00	37.47	49.60	523.60	93.51	99.12	1,483.69
Plastic Containers	10.83	12.33	10.19	20.49	23.15	1.05	6.37	36.78	34.38	36.95	383.08
Other Plastic Packaging											0.00
Other Plastic Scrap	0.18	0.00	0.38	4.37	0.00	0.00	0.00	1.19	0.20	0.00	377.78
Glass Containers	67.22	57.85	175.01	95.76	23.14	89.57	95.54	171.66	160.82	150.82	2,050.32
Other Glass	1.13	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63
Aluminum Cans	5.04	7.79	10.19	13.40	107.14	34.61	6.37	24.49	22.39	15.56	350.97
Tin & BiMetal Cans	6.54	4.78	30.99	7.22	0.00	7.48	19.11	12.31	12.27	61.79	288.47
Other Municipal & Vegetative	0.87	0.21	4.16	1.40	13.48	249.56	0.00	0.01	9.25	28.98	1,146.91
TOTAL MSW RECYCLED	260.76	184.92	756.56	2,544.81	214.62	3,752.43	305.53	821.05	1,450.51	835.30	18,116.48
OTHER WASTE											0.00
Foils & Closures											0.00
Other Aluminum Scrap	4.26	3.96	14.69	14.23	3.31	306.15	4.89	9.62	13.35	6.08	700.84
Vehicular Batteries	0.02	0.04	0.02	2.29	0.00	0.03	0.00	13.38	4.24	0.23	140.05
Other Non-Ferrous Scrap											0.00
White Goods & Sheet Iron	79.93	74.23	188.78	218.00	61.94	1,867.17	91.71	180.20	245.02	186.87	4,951.78
Junked Autos	104.54	97.09	202.44	233.62	81.01	532.56	119.95	235.70	219.40	149.07	3,711.14
Heavy Iron	273.86	281.53	468.48	675.04	154.79	6,045.25	229.19	450.34	652.92	518.92	14,089.92
Wood Waste	0.00	0.00	0.12	0.00	0.00	37.96	0.00	0.00	189.09	0.00	6,298.06
Asphalt, Concrete & Masonry	350.03	325.60	677.84	792.25	312.17	2,246.43	401.65	789.19	1,274.65	2,058.70	41,107.41
Tires	2.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.90
Other Bulky & Construct/Demo	638.50	118.52	102.30	1,255.22	40.29	264.86	59.66	118.42	310.69	78.33	6,308.76
TOTAL OTHER WASTE RECYCLED	1453.45	900.97	1,654.67	3,190.65	653.51	11,300.41	907.05	1,796.85	2,909.36	2,998.20	77,396.86
TOTAL WASTE RECYCLED	1,714.21	1,085.89	2,411.23	5,735.46	868.13	15,052.84	1,212.58	2,617.90	4,359.87	3,833.50	95,513.34

1. As defined by New Jersey Tonnage Reports

2. Source: Municipal Tonnage Reports

TABLE 7-D (3) ESTIMATED RECYCLING RATES BY WASTE TYPE BY MUNICIPALITY 2003

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	0.02%	0.01%	121.06%	0.60%	0.05%	0.02%	0.01%	70.62%	0.03%	0.06%	0.08%	1.38%
Food Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	58.24%	0.00%	0.00%	0.00%	0.00%
Newspaper	38.91%	0.10%	62.61%	55.27%	33.58%	76.66%	49.13%	4.14%	16.33%	42.38%	35.41%	10.71%
Corrugated	9.17%	0.08%	112.02%	9.83%	1.07%	14.65%	2.48%	39.19%	0.08%	2.07%	6.40%	10.59%
Office Paper	0.01%	0.01%	9.26%	0.00%	1.98%	0.33%	2.89%	0.09%	0.18%	0.38%	0.10%	1.15%
Other Paper	0.07%	0.06%	15.36%	20.92%	4.58%	20.09%	1.18%	1.00%	4.16%	10.59%	20.59%	1.88%
Plastic Containers	44.47%	0.09%	68.28%	60.68%	30.23%	78.28%	11.82%	9.42%	13.29%	36.25%	35.79%	9.47%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.04%	0.00%	221.16%	0.00%	0.05%	0.12%	4.48%	0.06%	0.00%	0.06%	0.00%	0.00%
Glass Containers	74.75%	0.18%	39.51%	81.16%	50.91%	125.30%	54.31%	51.77%	22.35%	61.44%	60.22%	20.06%
Other Glass	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.15%	0.00%	0.00%	0.00%
Aluminum Cans	88.79%	0.09%	37.97%	75.39%	59.34%	121.78%	35.50%	32.71%	26.54%	66.49%	69.78%	10.98%
Tin & BiMetal Cans	26.87%	0.21%	67.41%	22.68%	19.26%	116.62%	58.51%	50.64%	8.00%	27.38%	23.08%	0.00%
Other Municipal & Vegetative	0.15%	0.14%	2.25%	7.09%	0.63%	10.07%	81.26%	15.78%	0.13%	5.38%	0.17%	0.14%
TOTAL MSW RECYCLED	8.60%	0.06%	59.45%	14.78%	6.73%	20.39%	19.69%	30.04%	3.37%	9.75%	10.44%	3.62%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	44.71%	30.55%	30.57%	36.10%	120.01%	149.04%	37.74%	51.49%	189.08%	268.86%	29.74%	662.24%
Vehicular Batteries	8.24%	0.00%	216.96%	167.13%	29.46%	29.85%	52.71%	319.91%	0.00%	1.07%	8.12%	16.29%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
White Goods & Sheet Iron	47.91%	47.65%	97.44%	125.67%	42.51%	100.26%	45.52%	53.98%	44.68%	105.33%	46.43%	46.43%
Junked Autos	73.78%	74.79%	104.95%	72.63%	66.28%	147.40%	62.53%	84.72%	70.13%	73.47%	72.86%	72.86%
Heavy Iron	64.34%	88.50%	63.62%	61.67%	56.28%	160.15%	69.30%	157.86%	65.77%	66.81%	61.88%	61.88%
Wood Waste	0.00%	0.00%	9.38%	0.00%	2479.60%	9.04%	0.00%	4.45%	0.00%	0.00%	0.00%	0.93%
Asphalt, Concrete & Masonry	66.63%	26.64%	374.89%	28.57%	23.61%	45.66%	858.50%	76.28%	31.33%	28.03%	29.82%	26.12%
Tires	0.00%	0.00%	2.77%	62.11%	0.00%	528.32%	64.74%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Bulky & Construct/Demo	29.83%	7.03%	75.28%	26.24%	14.38%	31.58%	9.07%	54.35%	23.56%	22.98%	7.12%	6.71%
TOTAL OTHER RECYCLED	49.35%	28.75%	199.78%	36.52%	214.70%	60.60%	388.21%	71.30%	32.91%	35.32%	27.25%	28.55%
TOTAL WASTE RECYCLED	30.54%	15.52%	135.03%	26.49%	118.74%	42.05%	218.16%	52.26%	19.27%	23.53%	19.50%	17.05%
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County	Slate
MSW												
Yard Waste	0.00%	0.09%	17.26%	77.81%	0.00%	1.22%	0.00%	3.07%	30.57%	0.07%	18.75%	67.80%
Food Waste	0.00%	0.00%	0.00%	2.53%	0.00%	0.00%	0.00%	0.00%	5.26%	0.00%	5.48%	15.00%
Newspaper	41.64%	33.52%	38.87%	22.29%	28.07%	51.77%	48.67%	0.07%	45.41%	44.78%	34.53%	43.00%
Corrugated	12.79%	1.67%	8.49%	152.42%	0.46%	200.05%	7.05%	2.99%	96.14%	65.80%	58.38%	45.00%
Office Paper	0.00%	0.21%	0.03%	0.04%	0.00%	3.37%	0.00%	0.00%	0.11%	9.37%	1.43%	33.00%
Other Paper	11.63%	8.75%	7.65%	5.06%	0.00%	1.78%	10.46%	55.16%	10.23%	14.91%	9.85%	8.00%
Plastic Containers	25.46%	31.15%	9.87%	17.54%	65.05%	0.50%	13.59%	39.18%	38.02%	56.20%	25.71%	30.00%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.10%	0.00%	0.09%	0.89%	0.00%	0.00%	0.00%	0.30%	0.05%	0.00%	6.00%	2.00%
Glass Containers	56.89%	52.61%	61.02%	29.52%	23.41%	15.46%	73.35%	65.83%	64.02%	82.58%	49.53%	51.00%
Other Glass	5.98%	0.00%	4.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.55%	16.00%
Aluminum Cans	35.54%	59.03%	29.61%	34.42%	903.19%	49.77%	40.76%	78.27%	74.28%	71.00%	70.66%	52.00%
Tin & BiMetal Cans	27.67%	21.73%	54.02%	11.13%	0.00%	6.45%	73.36%	23.60%	24.42%	169.17%	34.84%	39.00%
Other Municipal & Vegetative	0.22%	0.06%	0.44%	0.13%	4.11%	12.97%	0.00%	0.00%	1.11%	4.78%	8.35%	3.00%
TOTAL MSW	9.73%	7.41%	11.63%	34.59%	9.57%	28.55%	10.34%	13.88%	25.46%	20.17%	19.30%	33.00%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	29.48%	29.45%	41.89%	35.87%	27.38%	432.00%	30.70%	30.17%	43.46%	27.22%	138.46%	97.00%
Vehicular Batteries	0.28%	0.59%	0.11%	11.55%	0.00%	0.08%	0.00%	83.93%	27.61%	2.06%	55.34%	74.00%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.00%
White Goods & Sheet Iron	46.09%	46.01%	44.86%	45.80%	42.70%	219.56%	47.97%	47.10%	66.47%	69.73%	81.52%	71.00%
Junked Autos	72.33%	72.21%	57.72%	58.89%	67.02%	75.15%	75.29%	73.92%	71.43%	66.75%	73.32%	89.00%
Heavy Iron	84.22%	93.06%	59.37%	75.63%	56.91%	379.12%	63.94%	62.77%	94.47%	103.27%	123.72%	76.00%
Wood Waste	0.00%	0.00%	0.02%	0.00%	0.00%	3.25%	0.00%	0.00%	37.31%	0.00%	75.41%	14.00%
Asphalt, Concrete & Masonry	25.76%	25.76%	20.56%	21.25%	27.47%	33.72%	26.82%	26.33%	44.15%	98.07%	86.40%	119.00%
Tires	15.98%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	17.56%	76.00%
Other Bulky & Construct/Demo	81.81%	16.32%	5.40%	58.60%	6.17%	6.92%	6.94%	6.88%	18.73%	6.50%	23.08%	50.00%
TOTAL OTHER RECYCLED	46.45%	30.95%	21.79%	37.15%	24.97%	73.65%	26.30%	26.03%	43.75%	62.01%	70.63%	70.31%
TOTAL WASTE RECYCLED	29.51%	20.09%	17.10%	35.97%	17.87%	52.84%	18.94%	20.43%	35.31%	42.70%	46.94%	52%

1. As defined by U. S. Environmental Protection Agency

TABLE 7-E (1) ESTIMATED TONS OF TOTAL SOLID WASTE GENERATED BY TYPE – 2004

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	620.14	386.46	429.50	924.33	489.93	337.08	816.33	1,429.22	248.02	434.82	303.04	896.08
Food Waste	458.90	285.98	317.83	684.01	362.55	249.44	604.08	1,057.62	183.54	321.76	224.25	663.10
Newspaper	260.46	162.31	180.39	388.22	205.77	141.57	342.86	600.27	104.17	182.62	127.28	376.35
Corrugated	372.08	231.88	257.70	554.60	293.96	202.25	489.80	857.53	148.81	260.89	181.83	537.65
Office Paper	142.63	88.89	98.78	212.60	112.68	77.53	187.76	328.72	57.04	100.01	69.70	206.10
Other Paper	564.32	351.68	390.84	841.14	445.84	306.74	742.86	1,300.59	225.70	395.68	275.77	815.43
Plastic Containers	55.81	34.78	38.65	83.19	44.09	30.34	73.47	128.63	22.32	39.13	27.27	80.65
Other Plastic Packaging	62.01	38.65	42.95	92.43	48.99	33.71	81.63	142.92	24.80	43.48	30.30	89.61
Other Plastic Scrap	235.65	146.86	163.21	351.25	186.17	128.09	310.20	543.10	94.25	165.23	115.16	340.51
Glass Containers	155.03	96.62	107.37	231.08	122.48	84.27	204.08	357.30	62.01	108.70	75.76	224.02
Other Glass	24.81	15.46	17.18	36.97	19.60	13.48	32.65	57.17	9.92	17.39	12.12	35.84
Aluminum Cans	18.60	11.59	12.88	27.73	14.70	10.11	24.49	42.88	7.44	13.04	9.09	26.88
Tin & BiMetal Cans	31.01	19.32	21.47	46.22	24.50	16.85	40.82	71.46	12.40	21.74	15.15	44.80
Other Municipal & Vegetative	514.71	320.77	356.48	767.20	406.64	279.78	677.55	1,186.25	205.86	360.90	251.52	743.75
TOTAL MSW	3,516.17	2,191.25	2,435.26	5,240.97	2,777.90	1,911.24	4,628.57	8,103.67	1,406.28	2,465.41	1,718.25	5,080.77
OTHER WASTE												
Foils & Closures	8.31	5.18	5.76	12.39	6.57	4.52	10.94	19.16	3.33	5.83	4.06	12.01
Other Aluminum Scrap	16.63	10.36	11.52	24.79	13.14	9.04	21.89	38.32	6.65	11.66	8.13	24.03
Vehicular Batteries	8.31	5.18	5.76	12.39	6.57	4.52	10.94	19.16	3.33	5.83	4.06	12.01
Other Non-Ferrous Scrap	74.83	46.63	51.83	111.54	59.12	40.67	98.50	172.46	29.93	52.47	36.57	108.13
White Goods & Sheet Iron	199.55	124.36	138.20	297.43	157.65	108.47	262.68	459.89	79.81	139.92	97.51	288.34
Junked Autos	166.29	103.63	115.17	247.86	131.37	90.39	218.90	383.25	66.51	116.60	81.26	240.28
Heavy Iron	374.15	233.17	259.13	557.68	295.59	203.37	492.52	862.30	149.64	262.34	182.84	540.64
Wood Waste	274.38	170.99	190.03	408.97	216.77	149.14	361.18	632.35	109.74	192.38	134.08	396.47
Asphalt, Concrete & Masonry	1,563.12	974.12	1,082.60	2,329.88	1,234.92	849.65	2,057.64	3,602.50	625.16	1,096.00	763.85	2,258.67
Tires	16.63	10.36	11.52	24.79	13.14	9.04	21.89	38.32	6.65	11.66	8.13	24.03
Other Bulky & Construct/Demo	897.96	559.60	621.92	1,338.44	709.42	488.09	1,182.05	2,069.52	359.14	629.62	438.81	1,297.53
TOTAL OTHER WASTE	3,600.17	2,243.60	2,493.44	5,366.17	2,844.26	1,956.90	4,739.14	8,297.26	1,439.87	2,524.30	1,759.30	5,202.15
TOTAL WASTE	7,116.34	4,434.85	4,928.70	10,607.13	5,622.17	3,868.14	9,367.72	16,400.92	2,846.15	4,989.71	3,477.54	10,282.92

WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total
MSW											
Yard Waste	485.92	449.26	1,196.30	1,320.33	404.66	2,340.53	528.18	1,068.97	1,031.15	759.80	16,900.05
Food Waste	359.58	332.45	885.27	977.04	299.45	1,731.99	390.85	791.03	763.05	562.25	12,506.04
Newspaper	204.09	188.69	502.45	554.54	169.96	983.02	221.83	448.97	433.08	319.12	7,098.02
Corrugated	291.55	269.55	717.78	792.20	242.80	1,404.32	316.91	641.38	618.69	455.88	10,140.03
Office Paper	111.76	103.33	275.15	303.68	93.07	538.32	121.48	245.86	237.17	174.75	3,887.01
Other Paper	442.19	408.82	1,088.64	1,201.50	368.24	2,129.88	480.64	972.76	938.35	691.42	15,379.04
Plastic Containers	43.73	40.43	107.67	118.83	36.42	210.65	47.54	96.21	92.80	68.38	1,521.00
Other Plastic Packaging	48.59	44.93	119.63	132.03	40.47	234.05	52.82	106.90	103.12	75.98	1,690.00
Other Plastic Scrap	184.65	170.72	454.60	501.72	153.77	889.40	200.71	406.21	391.84	288.72	6,422.02
Glass Containers	121.48	112.31	299.08	330.08	101.17	585.13	132.04	267.24	257.79	189.95	4,225.01
Other Glass	19.44	17.97	47.85	52.81	16.19	93.62	21.13	42.76	41.25	30.39	676.00
Aluminum Cans	14.58	13.48	35.89	39.61	12.14	70.22	15.85	32.07	30.93	22.79	507.00
Tin & BiMetal Cans	24.30	22.46	59.82	66.02	20.23	117.03	26.41	53.45	51.56	37.99	845.00
Other Municipal & Vegetative	403.32	372.88	992.93	1,095.87	335.87	1,942.64	438.39	887.24	855.86	630.64	14,027.04
TOTAL MSW	2,755.18	2,547.28	6,783.05	7,486.25	2,294.44	13,270.82	2,994.77	6,061.04	5,846.64	4,308.08	95,823.27
OTHER WASTE											
Foils & Closures	6.52	6.02	16.04	17.70	5.43	31.38	7.08	14.33	13.83	10.19	226.59
Other Aluminum Scrap	13.03	12.05	32.08	35.40	10.85	62.76	14.16	28.66	27.65	20.37	453.17
Vehicular Batteries	6.52	6.02	16.04	17.70	5.43	31.38	7.08	14.33	13.83	10.19	226.59
Other Non-Ferrous Scrap	58.64	54.21	144.36	159.32	48.83	282.43	63.73	128.99	124.43	91.68	2,039.29
White Goods & Sheet Iron	156.36	144.56	384.95	424.85	130.21	753.14	169.96	343.97	331.80	244.49	5,438.10
Junked Autos	130.30	120.47	320.79	354.05	108.51	627.61	141.63	286.64	276.50	203.74	4,531.75
Heavy Iron	293.18	271.05	721.78	796.60	244.15	1,412.13	318.67	644.95	622.13	458.42	10,196.44
Wood Waste	215.00	198.77	529.30	584.18	179.04	1,035.56	233.69	472.96	456.23	336.17	7,477.39
Asphalt, Concrete & Masonry	1,224.82	1,132.40	3,015.42	3,328.03	1,020.00	5,899.57	1,331.33	2,694.45	2,599.13	1,915.16	42,598.44
Tires	13.03	12.05	32.08	35.40	10.85	62.76	14.16	28.66	27.65	20.37	453.17
Other Bulky & Construct/Demo	703.62	650.53	1,732.26	1,911.85	585.96	3,389.11	764.81	1,547.87	1,493.12	1,100.20	24,471.45
TOTAL OTHER WASTE	2,821.00	2,608.13	6,945.09	7,665.09	2,349.25	13,587.84	3,066.31	6,205.83	5,986.30	4,410.99	98,112.37
TOTAL WASTE	5,576.18	5,155.40	13,728.13	15,151.34	4,643.69	26,858.66	6,061.08	12,266.86	11,832.94	8,719.07	193,935.64

1. As defined by New Jersey Tonnage Reports

2. Source: Municipal Tonnage Reports

TABLE 7-E (2) TONS OF TOTAL SOLID WASTE RECYCLED BY TYPE – 2004

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	0.05	0.05	919.68	0.21	0.07	0.00	0.08	264.75	360.02	0.06	0.09	0.12
Food Waste	0.00	0.00	2.48	0.00	0.00	0.00	0.00	2,044.90	0.00	0.00	0.00	0.00
Newspaper	116.22	111.33	99.26	115.89	73.65	55.25	241.62	33.79	0.01	72.05	43.44	80.30
Corrugated	64.04	0.18	106.50	45.75	11.76	18.90	60.03	1,204.90	0.13	18.85	16.82	29.93
Office Paper	0.00	0.00	82.14	0.00	2.00	0.55	0.13	0.31	0.02	0.00	0.00	1.62
Other Paper	0.17	0.12	15.60	127.37	40.06	24.00	124.46	15.81	10.32	42.18	67.80	19.66
Plastic Containers	26.56	9.85	18.55	59.72	14.58	4.72	23.06	9.67	2.67	6.87	10.50	4.10
Other Plastic Packaging												
Other Plastic Scrap	0.00	0.00	784.06	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Glass Containers	123.76	45.98	47.01	203.94	68.05	75.86	107.87	142.92	19.89	68.71	49.25	34.62
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Aluminum Cans	8.85	3.28	3.14	14.11	4.89	1.42	7.73	9.55	1.33	2.49	3.56	2.48
Tin & BiMetal Cans	17.69	10.18	42.21	28.24	9.89	6.49	14.89	30.86	2.67	5.50	7.23	21.39
Other Municipal & Vegetative	0.97	0.60	21.29	29.31	11.96	2.65	20.71	22.15	0.35	13.33	0.53	1.41
TOTAL MSW RECYCLED	358.31	181.57	2,141.92	624.54	236.91	189.84	600.69	3,779.48	397.41	230.04	199.22	195.63
OTHER WASTE												
Foils & Closures												
Other Aluminum Scrap	43.52	26.89	30.02	62.25	43.61	22.56	51.18	112.69	15.86	60.58	20.48	235.12
Vehicular Batteries	1.15	0.00	15.77	25.82	9.72	0.86	0.12	80.10	0.00	0.07	0.40	0.00
Other Non-Ferrous Scrap												
White Goods & Sheet Iron	242.51	155.25	195.77	648.58	187.15	131.79	273.16	724.07	94.56	237.58	118.28	350.48
Junked Autos	195.56	125.20	139.77	296.31	139.62	105.07	220.98	524.75	73.85	137.66	95.39	282.63
Heavy Iron	410.90	318.46	285.65	585.58	280.88	269.97	442.09	1,888.65	159.34	287.82	259.27	567.47
Wood Waste	2.25	0.00	26.00	0.00	63.87	0.00	0.00	21.65	0.00	0.00	0.00	0.00
Asphalt, Concrete & Masonry	809.22	117.12	191.08	271.18	244.70	98.29	19,473.97	2,510.87	173.44	441.72	113.83	264.39
Tires	0.00	0.00	0.00	17.28	0.00	2.60	0.05	0.00	0.00	0.00	0.00	0.00
Other Bulky & Construct/Demo	243.80	0.63	401.90	182.37	50.37	0.54	43.70	441.78	0.40	374.61	1.79	1.33
TOTAL OTHER WASTE RECYCLED	1948.91	743.55	1,285.96	2,089.37	1,019.92	631.68	20,505.25	6,304.56	517.45	1,540.04	609.44	1,701.42
TOTAL WASTE RECYCLED	2,307.22	925.12	3,427.88	2,713.91	1,256.83	821.52	21,105.94	10,084.04	914.86	1,770.08	808.66	1,897.05
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County Total	
MSW												
Yard Waste	0.00	0.00	283.00	0.21	0.00	435.10	0.00	0.26	565.43	0.17	2,829.35	
Food Waste	0.00	0.00	0.00	18.70	0.00	0.00	0.00	0.00	38.18	0.00	2,104.26	
Newspaper	51.62	53.13	268.48	106.56	47.60	626.11	106.49	0.27	180.58	146.12	2,629.77	
Corrugated	20.78	0.00	158.11	1,294.94	0.00	3,123.79	22.05	1.89	518.01	263.24	6,980.60	
Office Paper	0.00	0.00	63.00	0.00	0.00	4.69	0.00	0.37	0.00	42.04	196.87	
Other Paper	29.68	26.79	83.62	57.76	2.31	0.00	49.60	0.00	88.27	80.67	906.25	
Plastic Containers	12.15	12.31	21.12	19.88	10.47	9.56	6.37	0.00	33.60	23.53	339.84	
Other Plastic Packaging											0.00	
Other Plastic Scrap	0.15	0.03	0.07	5.08	0.00	0.00	0.00	0.00	0.07	0.00	789.57	
Glass Containers	81.25	57.41	237.85	93.07	48.85	147.13	95.54	0.00	157.35	93.47	1,999.78	
Other Glass	1.71	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	
Aluminum Cans	7.60	4.10	23.13	6.70	3.49	31.21	6.37	0.00	11.33	11.45	168.21	
Tin & BiMetal Cans	7.60	8.22	45.18	13.60	6.98	10.05	19.11	0.00	23.00	58.23	389.01	
Other Municipal & Vegetative	14.55	0.00	12.94	1.77	0.55	308.51	0.00	1.60	1.76	37.10	504.04	
TOTAL MSW RECYCLED	227.09	161.99	1,197.08	1,618.27	120.25	4,696.15	305.53	4.39	1,617.58	756.02	19,839.91	
OTHER WASTE												
Foils & Closures											0.00	
Other Aluminum Scrap	32.25	31.03	68.93	74.67	24.99	318.58	37.00	116.85	70.12	177.67	1,676.85	
Vehicular Batteries	3.20	0.00	0.02	1.16	0.02	0.03	0.00	12.67	4.24	0.71	156.06	
Other Non-Ferrous Scrap											0.00	
White Goods & Sheet Iron	186.22	172.95	360.61	459.64	184.70	2,738.66	213.68	419.85	481.04	307.00	8,883.53	
Junked Autos	150.17	139.47	290.80	335.59	116.37	765.00	172.31	338.57	315.16	214.13	5,174.36	
Heavy Iron	386.94	280.58	706.50	925.05	344.88	6,939.35	345.97	960.73	979.25	720.46	18,345.79	
Wood Waste	86.11	0.00	0.04	5.93	0.00	20.54	0.00	0.00	31.82	209.00	467.21	
Asphalt, Concrete & Masonry	140.48	130.47	304.37	469.23	108.86	759.86	161.19	316.72	767.39	718.08	28,586.46	
Tires	20.10	0.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	
Other Bulky & Construct/Demo	388.50	0.00	1.86	57.04	2.00	55.72	0.00	1.13	242.35	3.20	2,495.02	
TOTAL OTHER WASTE RECYCLED	1393.97	754.50	1,738.93	2,328.31	781.82	11,597.74	930.15	2,166.52	2,891.37	2,350.25	65,831.11	
TOTAL WASTE RECYCLED	1,621.06	916.49	2,936.01	3,946.58	902.07	16,293.89	1,235.68	2,170.91	4,508.95	3,106.27	85,671.02	

1. As defined by New Jersey Tonnage Reports

2. Source: Municipal Tonnage Reports

TABLE 7-E (3) ESTIMATED RECYCLING RATES BY WASTE TYPE BY MUNICIPALITY 2004

WASTE TYPE ¹	Allamuchy	Alpha	Belvidere	Blairstown	Franklin	Frelinghuysen	Greenwich	Hackettstown	Hardwick	Harmony	Hope	Independence
MSW												
Yard Waste	0.01%	0.01%	214.13%	0.02%	0.01%	0.00%	0.00%	18.52%	145.16%	0.01%	0.03%	0.01%
Food Waste	0.00%	0.00%	0.78%	0.00%	0.00%	0.00%	0.00%	193.35%	0.00%	0.00%	0.00%	0.00%
Newspaper	44.62%	68.59%	55.03%	29.85%	35.79%	39.03%	39.03%	5.63%	0.01%	39.45%	34.13%	21.34%
Corrugated	17.21%	0.08%	41.33%	8.25%	4.00%	9.34%	9.34%	140.51%	0.09%	7.23%	9.25%	5.57%
Office Paper	0.00%	0.00%	83.15%	0.00%	1.77%	0.71%	0.71%	0.09%	0.04%	0.00%	0.00%	0.79%
Other Paper	0.03%	0.03%	3.99%	15.14%	8.99%	7.82%	7.82%	1.22%	4.57%	10.66%	24.59%	2.41%
Plastic Containers	47.59%	28.32%	47.99%	71.79%	33.07%	15.56%	15.56%	7.52%	11.96%	17.56%	38.50%	5.08%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.00%	0.00%	480.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Glass Containers	79.83%	47.59%	43.78%	88.25%	55.56%	90.02%	90.02%	40.00%	32.08%	63.21%	65.01%	15.45%
Other Glass	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.00%	0.00%	0.00%	0.00%
Aluminum Cans	47.57%	28.29%	24.37%	50.88%	33.27%	14.04%	14.04%	22.27%	17.87%	19.09%	39.16%	9.23%
Tin & BiMetal Cans	57.05%	52.68%	196.55%	61.10%	40.37%	38.51%	38.51%	42.90%	21.53%	25.30%	47.72%	47.74%
Other Municipal & Vegetative	0.19%	0.19%	5.97%	3.82%	2.94%	0.95%	0.95%	1.87%	0.17%	3.69%	0.21%	0.19%
TOTAL MSW RECYCLED	10.19%	8.29%	87.95%	11.92%	8.53%	9.93%	9.93%	46.64%	28.26%	9.33%	11.59%	3.85%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	261.71%	259.48%	260.66%	251.15%	331.95%	249.59%	249.59%	294.04%	238.47%	519.57%	252.03%	978.51%
Vehicular Batteries	13.83%	0.00%	273.86%	208.34%	147.97%	19.03%	19.03%	418.01%	0.00%	1.20%	9.84%	0.00%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
White Goods & Sheet Iron	121.53%	124.84%	141.65%	218.06%	118.71%	121.50%	121.50%	157.44%	118.48%	169.80%	121.30%	121.55%
Junked Autos	117.60%	120.81%	121.36%	119.55%	106.28%	116.24%	116.24%	136.92%	111.04%	118.07%	117.39%	117.62%
Heavy Iron	109.82%	136.58%	110.23%	105.00%	95.02%	132.75%	132.75%	219.02%	106.48%	109.71%	141.80%	104.96%
Wood Waste	0.82%	0.00%	13.68%	0.00%	29.46%	0.00%	0.00%	3.42%	0.00%	0.00%	0.00%	0.00%
Asphalt, Concrete & Masonry	51.77%	12.02%	17.65%	11.64%	19.82%	11.57%	11.57%	69.70%	27.74%	40.30%	14.90%	11.71%
Tires	0.00%	0.00%	0.00%	69.72%	0.00%	28.76%	28.76%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Bulky & Construct/Demo	27.15%	0.11%	64.62%	13.63%	7.10%	0.11%	0.11%	21.35%	0.11%	59.50%	0.41%	0.10%
TOTAL OTHER WASTE RECYCLED	54.13%	33.14%	51.57%	38.94%	35.86%	32.28%	32.28%	75.98%	35.94%	61.01%	34.64%	32.71%
TOTAL WASTE RECYCLED	32.42%	20.86%	69.55%	25.59%	22.35%	21.24%	21.24%	61.48%	32.14%	35.47%	23.25%	18.45%
WASTE TYPE ¹	Knowlton	Liberty	Lopatcong	Mansfield	Oxford	Phillipsburg	Pohatcong	Washington Borough	Washington Township	White	Warren County	State
MSW												
Yard Waste	0.00%	0.00%	23.66%	0.02%	0.00%	18.59%	0.00%	0.02%	54.83%	0.02%	16.74%	72.23%
Food Waste	0.00%	0.00%	0.00%	1.91%	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%	16.83%	13.80%
Newspaper	25.29%	28.16%	53.43%	19.22%	28.01%	63.69%	48.00%	0.06%	41.70%	45.79%	37.05%	38.81%
Corrugated	7.13%	0.00%	22.03%	163.46%	0.00%	222.44%	6.96%	0.29%	83.73%	57.74%	68.84%	41.45%
Office Paper	0.00%	0.00%	22.90%	0.00%	0.00%	0.87%	0.00%	0.15%	0.00%	24.06%	5.06%	28.88%
Other Paper	6.71%	6.55%	7.68%	4.81%	0.63%	0.00%	10.32%	0.00%	9.41%	11.67%	5.89%	8.59%
Plastic Containers	27.78%	30.45%	19.62%	16.73%	28.75%	4.54%	13.40%	0.00%	36.21%	34.41%	22.34%	29.36%
Other Plastic Packaging	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	0.08%	0.02%	0.02%	1.01%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	12.29%	0.86%
Glass Containers	66.88%	51.12%	79.53%	28.20%	48.29%	25.14%	72.35%	0.00%	61.04%	49.21%	47.33%	48.53%
Other Glass	8.80%	0.00%	1.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	28.62%
Aluminum Cans	52.13%	30.42%	64.45%	16.92%	28.75%	44.45%	40.20%	0.00%	36.63%	50.23%	33.18%	50.15%
Tin & BiMetal Cans	31.28%	36.59%	75.53%	20.60%	34.50%	8.59%	72.36%	0.00%	44.61%	153.28%	46.04%	39.28%
Other Municipal & Vegetative	3.61%	0.00%	1.30%	0.16%	0.16%	15.88%	0.00%	0.18%	0.21%	5.88%	3.59%	3.34%
TOTAL MSW RECYCLED	8.24%	6.36%	17.65%	21.62%	5.24%	35.39%	10.20%	0.07%	27.67%	17.55%	20.70%	34.32%
OTHER WASTE												
Foils & Closures	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Aluminum Scrap	247.51%	257.58%	214.88%	210.90%	230.30%	507.61%	261.24%	407.65%	253.60%	872.04%	370.02%	152.64%
Vehicular Batteries	49.12%	0.00%	0.12%	6.55%	0.37%	0.10%	0.00%	88.40%	30.67%	6.97%	68.87%	102.08%
Other Non-Ferrous Scrap	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.92%
White Goods & Sheet Iron	119.10%	119.64%	93.68%	108.19%	141.85%	363.63%	125.73%	122.06%	144.98%	125.57%	163.36%	119.82%
Junked Autos	115.25%	115.77%	90.65%	94.79%	107.24%	121.89%	121.66%	118.12%	113.98%	105.10%	114.18%	111.21%
Heavy Iron	131.98%	103.52%	97.88%	116.12%	141.26%	491.41%	108.57%	148.96%	157.40%	157.16%	179.92%	98.14%
Wood Waste	40.05%	0.00%	0.01%	1.02%	0.00%	1.98%	0.00%	0.00%	6.97%	62.17%	6.25%	21.08%
Asphalt, Concrete & Masonry	11.47%	11.52%	10.09%	14.10%	10.67%	12.88%	12.11%	11.75%	29.52%	37.49%	67.11%	113.72%
Tires	154.26%	0.00%	18.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.11%	86.79%
Other Bulky & Construct/Demo	55.21%	0.00%	0.11%	2.98%	0.34%	1.64%	0.00%	0.07%	16.23%	0.29%	10.20%	60.93%
TOTAL OTHER WASTE RECYCLED	49.41%	28.93%	25.04%	30.38%	33.28%	85.35%	30.33%	34.91%	48.30%	53.28%	67.10%	74.00%
TOTAL WASTE RECYCLED	29.07%	17.78%	21.39%	26.05%	19.43%	60.67%	20.39%	17.70%	38.11%	35.63%	44.17%	55%

1. As defined by U. S. Environmental Protection Agency

TABLE 7-F

Total and Municipal Solid Waste Recycling Rates in Warren County 2001 to 2004 by Municipality												
MUNICIPALITY	2001			2002			2003			2004		
	Total Waste Recycled	MSW Recycled	Other Waste Recycled	Total Waste Recycled	MSW Recycled	Other Waste Recycled	Total Waste Recycled	MSW Recycled	Other Waste Recycled	Total Waste Recycled	MSW Recycled	Other Waste Recycled
Allamuchy	24.69%	7.50%	48.06%	34.28%	12.87%	59.90%	30.54%	8.60%	49.35%	32.42%	10.19%	54.13%
Alpha	20.00%	3.60%	42.31%	21.78%	8.71%	37.42%	15.52%	0.06%	28.75%	20.86%	8.29%	33.14%
Belvidere	48.73%	42.53%	57.15%	58.21%	52.46%	65.09%	135.03%	59.45%	199.78%	69.55%	87.95%	51.57%
Blairstown	30.02%	19.14%	44.81%	68.68%	86.46%	47.41%	26.49%	14.78%	36.52%	25.59%	11.92%	38.94%
Franklin	26.00%	11.36%	45.89%	24.06%	8.73%	42.40%	118.74%	6.73%	214.70%	22.35%	8.53%	35.86%
Frelinghuysen	21.38%	1.14%	48.89%	24.91%	9.10%	43.81%	42.05%	20.39%	60.60%	21.24%	9.93%	32.28%
Greenwich	30.69%	23.02%	41.13%	40.24%	44.15%	35.56%	218.16%	19.69%	388.21%	225.31%	12.98%	432.68%
Hackettstown	75.97%	63.15%	93.39%	78.95%	47.90%	116.08%	52.26%	30.04%	71.30%	61.48%	46.64%	75.98%
Hardwick	26.48%	12.90%	44.94%	21.24%	7.88%	37.23%	19.27%	3.37%	32.91%	32.14%	28.26%	35.94%
Harmony	41.62%	10.41%	84.05%	25.75%	7.69%	47.35%	23.53%	9.75%	35.32%	35.47%	9.33%	61.01%
Hope	23.88%	14.23%	36.99%	17.29%	0.50%	37.38%	19.50%	10.44%	27.25%	23.25%	11.59%	34.64%
Independence	19.32%	3.04%	41.44%	21.56%	5.34%	40.96%	17.05%	3.62%	28.55%	18.45%	3.85%	32.71%
Knowlton	42.10%	12.55%	82.27%	24.98%	9.41%	43.60%	29.51%	9.73%	46.45%	29.07%	8.24%	49.41%
Liberty	23.27%	7.06%	45.31%	22.91%	6.70%	42.30%	20.09%	7.41%	30.95%	17.78%	6.36%	6.36%
Lopatcong	25.88%	9.64%	47.97%	23.84%	14.34%	35.21%	17.10%	11.63%	21.79%	21.39%	17.65%	25.04%
Mansfield	36.38%	23.83%	53.43%	39.46%	30.44%	50.25%	35.97%	34.59%	37.15%	26.05%	21.62%	30.38%
Oxford	20.81%	6.53%	40.24%	21.43%	5.82%	40.10%	17.87%	9.57%	24.97%	19.43%	5.24%	33.28%
Phillipsburg	24.34%	6.34%	48.82%	65.51%	31.86%	105.75%	52.84%	28.55%	73.65%	60.67%	35.39%	85.35%
Pohatcong	28.50%	17.85%	42.98%	22.47%	9.60%	37.87%	18.94%	10.34%	26.30%	20.39%	10.20%	30.33%
Washington B.	27.67%	8.31%	53.99%	24.01%	9.11%	41.84%	20.43%	13.88%	26.03%	17.70%	0.07%	34.91%
Washington T.	44.92%	31.20%	63.56%	34.21%	18.63%	52.84%	35.31%	25.46%	43.75%	38.11%	27.67%	48.30%
White	29.95%	12.42%	53.78%	63.08%	17.46%	117.65%	42.70%	20.17%	62.01%	35.63%	17.55%	53.28%
TOTAL WARREN COUNTY	33.49%	17.99%	54.57%	42.32%	25.33%	62.64%	46.94%	19.30%	70.63%	44.17%	20.70%	67.10%
STATE	54%	36%	72%	54%	34%	72%	52%	33%	70%	55%	34%	74%

TABLE 7-G COMPARISON OF RECYCLING RATES 2001 BY WASTE TYPE

WASTE TYPE ¹	2001				2002				2003				2004				Warren County Average Recycling Rate	State Average Recycling Rate
	TOTAL 2001 GENERATION	TOTAL 2001 RECYCLED	PERCENT WARREN	PERCENT STATE	TOTAL 2002 GENERATION	TOTAL 2002 RECYCLED	PERCENT WARREN	PERCENT STATE	TOTAL 2003 GENERATION	TOTAL 2003 RECYCLED	PERCENT WARREN	PERCENT STATE	TOTAL 2004 GENERATION	TOTAL 2004 RECYCLED	PERCENT WARREN*	PERCENT STATE		
MSW																		
Yard Waste	14,404.94	1,924.65	13.36%	75.00%	17,175.31	3,180.72	18.52%	63.30%	16,557.67	3,105.23	18.75%	67.80%	16,900.00	2,829.44	16.74%	72.23%	16.84%	69.58%
Food Waste	10,659.65	1,761.22	16.52%	22.00%	12,709.73	848.48	6.68%	19.00%	12,252.68	671.26	5.48%	15.00%	12,506.00	2,104.26	16.83%	13.80%	11.38%	17.45%
Newspaper	6,050.07	2,381.69	39.37%	50.00%	7,213.63	2,803.42	38.86%	45.00%	6,954.22	2,401.36	34.53%	43.00%	7,098.00	2,629.77	37.05%	38.81%	37.45%	44.20%
Corrugated	8,642.96	3,948.43	45.68%	44.00%	10,305.19	11,697.10	113.51%	46.00%	9,934.60	5,799.38	58.38%	45.00%	10,140.00	6,980.60	68.84%	41.45%	71.60%	44.11%
Office Paper	3,313.14	257.89	7.78%	43.00%	3,950.32	197.36	5.00%	42.00%	3,808.26	54.40	1.43%	33.00%	3,887.00	196.87	5.06%	28.88%	4.82%	36.72%
Other Paper	13,108.49	1,244.27	9.49%	8.00%	15,629.53	853.14	5.46%	7.00%	15,067.48	1,483.69	9.85%	8.00%	15,379.00	906.25	5.89%	8.59%	7.67%	7.90%
Plastic Containers	1,296.44	261.16	20.14%	21.00%	1,545.78	559.93	36.22%	22.00%	1,490.19	383.08	25.71%	30.00%	1,521.00	339.84	22.34%	29.36%	26.10%	25.59%
Other Plastic Packaging	1,440.49	0.00	0.00%	0.00%	1,717.53	0.00	0.00%	0.00%	1,655.77	0.00	0.00%	0.00%	1,690.00	0.00	0.00%	0.00%	0.00%	0.00%
Other Plastic Scrap	5,473.88	12.07	0.22%	1.00%	6,526.62	26.30	0.40%	1.40%	6,291.92	377.78	6.00%	2.00%	6,422.00	789.57	12.29%	0.86%	4.73%	1.32%
Glass Containers	3,601.23	1,661.12	46.13%	53.00%	4,293.83	2,023.79	47.13%	53.00%	4,139.42	2,050.32	49.53%	51.00%	4,225.00	1,999.78	47.33%	48.53%	47.53%	51.38%
Other Glass	576.20	3.05	0.53%	12.00%	687.01	0.79	0.11%	11.00%	662.31	3.63	0.55%	16.00%	676.00	2.36	0.35%	28.62%	0.39%	16.91%
Aluminum Cans	432.15	409.41	94.74%	49.00%	515.26	168.69	32.74%	49.00%	496.73	350.97	70.66%	52.00%	507.00	168.21	33.18%	50.15%	57.83%	50.04%
Tin & BiMetal Cans	720.25	501.15	69.58%	55.00%	858.77	504.90	58.79%	56.00%	827.88	288.47	34.84%	39.00%	845.00	389.01	46.04%	39.28%	52.31%	47.32%
Other Municipal & Vegetative	11,956.10	326.47	2.73%	3.00%	14,255.51	1,806.72	12.67%	3.00%	13,742.87	1,146.91	8.35%	3.00%	14,027.00	504.04	3.59%	3.34%	6.84%	3.09%
TOTALS MSW	81,676.00	14,692.58	17.99%	36.00%	97,384.00	24,671.34	25.33%	34.00%	93,882.00	18,116.48	19.30%	33.00%	95,823.00	19,840.00	20.70%	34.30%	20.83%	34.33%
OTHER WASTE																		
Foils & Closures	138.75	0.00	0.00%	0.00%	188.03	0.00	0.00%	0.00%	253.08	0.00	0.00%	0.00%	226.59	0.00	0.00%	0.00%		
Other Aluminum Scrap	277.51	594.80	214.34%	84.00%	376.06	782.72	208.14%	85.00%	506.17	700.84	138.46%	97.00%	453.18	567.24	125.17%	152.64%		
Vehicular Batteries	138.75	39.85	28.72%	85.00%	188.03	165.25	87.89%	99.00%	253.08	140.05	55.34%	74.00%	226.59	156.06	68.87%	102.08%		
Other Non-Ferrous Scrap	1,248.78	0.00	0.00%	19.00%	1,692.25	0.00	0.00%	19.00%	2,277.75	0.00	0.00%	22.00%	2,039.30	0.00	0.00%	33.92%		
White Goods & Sheet Iron	3,330.07	4,602.14	138.20%	96.00%	4,512.67	5,144.87	114.01%	79.00%	6,074.00	4,951.78	81.52%	71.00%	5,438.13	2,475.95	45.53%	119.82%		
Junked Autos	2,775.06	4,220.57	152.09%	110.00%	3,760.55	3,680.70	97.88%	89.00%	5,061.66	3,711.14	73.32%	89.00%	4,531.78	7.22	0.16%	111.21%		
Heavy Iron	6,243.88	8,702.15	139.37%	77.00%	8,461.25	18,827.26	222.51%	77.00%	11,388.74	14,089.92	123.72%	76.00%	10,196.50	7,970.96	78.17%	98.14%		
Wood Waste	4,578.85	651.07	14.22%	17.00%	6,204.91	1,134.68	18.29%	22.00%	8,351.74	6,298.06	75.41%	14.00%	7,477.43	467.21	6.25%	21.08%		
Asphalt, Concrete & Masonry	26,085.54	5,116.43	19.61%	96.00%	35,349.21	12,398.59	35.07%	110.00%	47,579.63	41,107.41	86.40%	119.00%	42,598.72	23,728.66	55.70%	113.72%		
Tires	277.51	956.28	344.60%	100.00%	376.06	309.33	82.26%	71.00%	506.17	88.90	17.56%	76.00%	453.18	45.83	10.11%	86.79%		
Other Bulky & Construct/Demo	14,985.31	7,903.88	52.74%	84.00%	20,306.99	8,559.38	42.15%	74.00%	27,332.98	6,308.76	23.08%	50.00%	24,471.60	2,493.23	10.19%	60.93%		
TOTALS OTHER	60,080.00	32,787.17	54.57%	72%	81,416.00	51,002.78	62.64%	72.00%	109,585.00	77,396.86	70.63%	70.31%	98,113.00	65,831.00	67.10%	73.50%	63.74%	71.95%
TOTAL WASTE	141,756.00	47,479.75	33.49%	54%	178,800.00	75,674.12	42.32%	54.00%	203,467.00	95,513.34	46.94%	52.00%	193,936.00	85,671.00	44.17%	55.15%	41.73%	53.79%

1. As defined by U. S. Environmental Protection Agency

* OTHER WASTE TYPES REPORTED
DO NOT INCLUDE ADD ONS.
THEREFORE TOTALS WILL NOT ADD

"Other Municipal and Vegetative" contains anti freeze, motor oil, household batteries and textiles.

THE TOTAL INCLUDES ADD ONS

"Other Bulky&Const/Demo" contains stumps, oil contaminated soil, process residue and material not listed.

In the county's urbanized areas, the leaves are raked and collected curbside by the towns, enabling the towns to document the amount of leaves collected. While most municipalities report a tonnage for yard waste, only five of the county's 22 municipalities are reporting yard waste tonnages recycled in excess of 10% of their estimated total amount. Of major concern is whether the reports are capturing all of the yard waste collected. In reality, most of Warren County's yard waste does not find its way into the waste stream and is therefore recycled on site through natural decomposition, composting, and mulch. Table 7-H shows Warren County's recycling rates if yard waste is excluded from the calculation.

Over the past four years Warren County's highest recycled commodities with over 50% average rates are corrugated, aluminum cans, tin and bi-metal cans. The recycling rate for glass containers was just under 50%.

In comparison to the Statewide average from 2001 through 2004 Warren County's recycling rates are at least eight percentage points lower for yard waste, newspaper, office paper, and other glass. Conversely Warren County seems to be doing well with corrugated recycling compared to the state average.

By weight, plastic containers, packaging, and scrap account for 10% of the waste stream, Recycling these materials should not be ignored for economic and environmental reasons.

By weight, aluminum cans, and tin and bi-metal cans combined make up less than 1.5% of the municipal waste stream. Recycling these metals are also important for environmental and economic reasons. Currently, the market pays very well for aluminum.

Food waste accounts for 13% of the municipal solid waste stream. The State is exploring ways to develop a food waste recycling program through Rutgers University. Food waste can be used for alternative fuels and for organic fertilizer production. Recently the only permitted facility to compost food waste in the state was closed. A lot of work still needs to be done to develop the technology, and overcome regulatory and financial hurdles that private companies face to locate in the state.

To reach the 50% recycling goal, Warren County should target the traditional materials that make up most of the municipal solid waste stream. They are newspaper, corrugated, office and glossy paper, glass containers, and other municipal and vegetative materials which include anti-freeze, used motor oil, dry cell batteries, and textiles. Together they make up almost 58% of the municipal waste stream. If yard waste is added then the materials make up almost 75% of the MSW. The need to recycle and document these materials should be reinforced to attain the 50% goal and to collect the financial reward in the tonnage grants.

This Recycling Plan recognizes that recycling percentages for some wastes can not be increased significantly because of the market, difficulty in collection, and difficulty in reporting. Those wastes include yard wastes, for reasons discussed above, food waste,

TABLE 7-H COMPARISON OF RECYCLING RATES 2001 THROUGH 2004 BY WASTE TYPE WITHOUT YARD WASTE

WASTE TYPE ¹	2001 PERCENT			2002 PERCENT			2003 PERCENT			2004 PERCENT		
	TOTAL 2001 GENERATION	TOTAL 2001 RECYCLED	WARREN	TOTAL 2002 GENERATION	TOTAL 2002 RECYCLED	WARREN	TOTAL 2003 GENERATION	TOTAL 2003 RECYCLED	WARREN	TOTAL 2004 GENERATION	TOTAL 2004 RECYCLED	WARREN*
MSW												
Food Waste	10,659.65	1,761.22	16.52%	12,709.73	848.48	6.68%	12,252.68	671.26	5.48%	12,506.00	2,104.26	16.83%
Newspaper	6,050.07	2,381.69	39.37%	7,213.63	2,803.42	38.86%	6,954.22	2,401.36	34.53%	7,098.00	2,629.77	37.05%
Corrugated	8,642.96	3,948.43	45.68%	10,305.19	11,697.10	113.51%	9,934.60	5,799.38	58.38%	10,140.00	6,980.60	68.84%
Office Paper	3,313.14	257.89	7.78%	3,950.32	197.36	5.00%	3,808.26	54.40	1.43%	3,887.00	196.87	5.06%
Other Paper	13,108.49	1,244.27	9.49%	15,629.53	853.14	5.46%	15,067.48	1,483.69	9.85%	15,379.00	906.25	5.89%
Plastic Containers	1,296.44	261.16	20.14%	1,545.78	559.93	36.22%	1,490.19	383.08	25.71%	1,521.00	339.84	22.34%
Other Plastic Packaging	1,440.49	0.00	0.00%	1,717.53	0.00	0.00%	1,655.77	0.00	0.00%	1,690.00	0.00	0.00%
Other Plastic Scrap	5,473.88	12.07	0.22%	6,526.62	26.30	0.40%	6,291.92	377.78	6.00%	6,422.00	789.57	12.29%
Glass Containers	3,601.23	1,661.12	46.13%	4,293.83	2,023.79	47.13%	4,139.42	2,050.32	49.53%	4,225.00	1,999.78	47.33%
Other Glass	576.20	3.05	0.53%	687.01	0.79	0.11%	662.31	3.63	0.55%	676.00	2.36	0.35%
Aluminum Cans	432.15	409.41	94.74%	515.26	168.69	32.74%	496.73	350.97	70.66%	507.00	168.21	33.18%
Tin & BiMetal Cans	720.25	501.15	69.58%	858.77	504.90	58.79%	827.88	288.47	34.84%	845.00	389.01	46.04%
Other Municipal & Vegetative	11,956.10	326.47	2.73%	14,255.51	1,806.72	12.67%	13,742.87	1,146.91	8.35%	14,027.00	504.04	3.59%
TOTALS MSW	67,271.06	12,767.93	18.98%	80,208.69	21,490.62	26.79%	77,324.33	15,011.25	19.41%	78,923.00	17,010.56	21.55%
OTHER WASTE												
Foils & Closures	138.75	0.00	0.00%	188.03	0.00	0.00%	253.08	0.00	0.00%	226.59	0.00	0.00%
Other Aluminum Scrap	277.51	594.80	214.34%	376.06	782.72	208.14%	506.17	700.84	138.46%	453.18	567.24	125.17%
Vehicular Batteries	138.75	39.85	28.72%	188.03	165.25	87.89%	253.08	140.05	55.34%	226.59	156.06	68.87%
Other Non-Ferrous Scrap	1,248.78	0.00	0.00%	1,692.25	0.00	0.00%	2,277.75	0.00	0.00%	2,039.30	0.00	0.00%
White Goods & Sheet Iron	3,330.07	4,602.14	138.20%	4,512.67	5,144.87	114.01%	6,074.00	4,951.78	81.52%	5,438.13	2,475.95	45.53%
Junked Autos	2,775.06	4,220.57	152.09%	3,760.55	3,680.70	97.88%	5,061.66	3,711.14	73.32%	4,531.78	7.22	0.16%
Heavy Iron	6,243.88	8,702.15	139.37%	8,461.25	18,827.26	222.51%	11,388.74	14,089.92	123.72%	10,196.50	7,970.96	78.17%
Wood Waste	4,578.85	651.07	14.22%	6,204.91	1,134.68	18.29%	8,351.74	6,298.06	75.41%	7,477.43	467.21	6.25%
Ashpalt, Concrete & Masonry	26,085.54	5,116.43	19.61%	35,349.21	12,398.59	35.07%	47,579.63	41,107.41	86.40%	42,598.72	23,728.66	55.70%
Tires	277.51	956.28	344.60%	376.06	309.33	82.26%	506.17	88.90	17.56%	453.18	45.83	10.11%
Other Bulky & Construct/Demo	14,985.31	7,903.88	52.74%	20,306.99	8,559.38	42.15%	27,332.98	6,308.76	23.08%	24,471.60	2,493.23	10.19%
TOTALS OTHER	60,080.00	32,787.17	54.57%	81,416.00	51,002.78	62.64%	109,585.00	77,396.86	70.63%	98,113.00	37,912.36	38.64%
TOTAL WASTE	127,351.06	45,555.10	35.77%	161,624.69	72,493.40	44.85%	186,909.33	92,408.11	49.44%	177,036.00	54,922.92	31.02%

1. As defined by U. S. Environmental Protection Agency

* OTHER WASTE TYPES REPORTED DO NOT INCLUDE ADD ONS. THEREFORE TOTALS WILL NOT ADD

"Other Municipal and Vegetative" contains anti freeze, motor oil, household batteries and textiles.

THE TOTAL INCLUDES ADD ONS

"Other Bulky&Const/Demo" contains stumps, oil contaminated soil, process residue and material not listed.

and other plastic packaging. In order to approach the 50% recycling goal for MSW recycling rates for other materials will have to be at least 65%. Table 7-I titled Comparison of Recycling Rates 2001 through 2004 by Waste Type Excluding Yard Waste and Assuming 65% of Targeted Waste is Recycled demonstrates that Warren County could almost reach 50% if the recycling rate for targeted waste types is increased to 65% if yard waste is completely eliminated from the calculation.

According to Table 7-J titled Trend in Solid Waste Generation and Recycling in Warren County and State, 2000 to 2004, Warren County is generating less MSW and total waste per person than the state average. It appears that Warren County residents may be reducing the waste stream through source reduction and reuse. While Warren's recycling rate may be lower than the state average and should be improved, the Warren County Solid Waste Management Plan contends that Warren is creating less need for disposal and recycling services than the rest of the state. Consequently, it is Warren County's position that a financial bonus be given to Warren County through the tonnage grant program and to any other county that generates less waste than the state average.

IV. RECYCLING COLLECTION, PROCESSING AND MARKETING

Six municipalities maintain drop-off depots for recyclables, of which only Washington Township utilizes compartmentalized trailers provided by the Pollution Control Financing Authority (PCFA) on rotating weekends. Materials collected in the trailers are brought to the Warren County Recycling Center, located at the Landfill, for processing and marketing.

Three municipalities, including Belvidere, Oxford, and Phillipsburg, conduct curbside collection of recyclables as a municipal service. Belvidere brings most of its recyclables to the county center for processing.

Households in the remaining 19 municipalities pay for curb side recycling as a subscription service with their solid waste collection. Table 7-K summarizes the collection and processing methods of Class A material in each municipality and provides the location of each Class A, B, and C recycling center located in Warren County currently.

TABLE 7-I COMPARISON OF RECYCLING RATES 2001 THROUGH 2004 BY WASTE TYPE EXCLUDING YARD WASTE AND ASSUMING THAT 65% OF TARGETTED WASTE TYPES ARE RECYCLED

WASTE TYPE ¹	2001				2002				2003				2004			
	TOTAL 2001 GENERATION	TOTAL 2001 RECYCLED	PERCENT RECYCLED WARREN	PERCENT RECYCLED STATE	TOTAL 2002 GENERATION	TOTAL 2002 RECYCLED	PERCENT RECYCLED WARREN	PERCENT RECYCLED STATE	TOTAL 2003 GENERATION	TOTAL 2003 RECYCLED	PERCENT RECYCLED WARREN	PERCENT RECYCLED STATE	TOTAL 2004 GENERATION	TOTAL 2004 RECYCLED	PERCENT RECYCLED WARREN*	PERCENT RECYCLED STATE
MSW																
Yard Waste	0.00	0.00	0.00%	75.00%	0.00	0.00	0.00%	63.30%	0.00	0.00	0.00%	67.80%	0.00	0.00	0.00%	72.23%
Food Waste	10,659.65	1,761.22	16.52%	22.00%	12,709.73	848.48	6.68%	19.00%	12,252.68	671.26	5.48%	15.00%	12,506.00	2,104.26	16.83%	13.80%
Newspaper	6,050.07	3,932.55	65.00%	50.00%	7,213.63	4,688.86	65.00%	45.00%	6,954.22	4,520.24	65.00%	43.00%	7,098.00	4,613.70	65.00%	38.81%
Corrugated	8,642.96	5,617.93	65.00%	44.00%	10,305.19	6,698.37	65.00%	46.00%	9,934.60	6,457.49	65.00%	45.00%	10,140.00	6,591.00	65.00%	41.45%
Office Paper	3,313.14	2,153.54	65.00%	43.00%	3,950.32	2,567.71	65.00%	42.00%	3,808.26	2,475.37	65.00%	33.00%	3,887.00	2,526.55	65.00%	28.88%
Other Paper	13,108.49	8,520.52	65.00%	8.00%	15,629.53	10,159.20	65.00%	7.00%	15,067.48	9,793.86	65.00%	8.00%	15,379.00	9,996.35	65.00%	8.59%
Plastic Containers	1,296.44	261.16	20.14%	21.00%	1,545.78	559.93	36.22%	22.00%	1,490.19	383.08	25.71%	30.00%	1,521.00	339.84	22.34%	29.36%
Other Plastic Packaging	1,440.49	0.00	0.00%	0.00%	1,717.53	0.00	0.00%	0.00%	1,655.77	0.00	0.00%	0.00%	1,690.00	0.00	0.00%	0.00%
Other Plastic Scrap	5,473.88	12.07	0.22%	1.00%	6,526.62	26.30	0.40%	1.40%	6,291.92	377.78	6.00%	2.00%	6,422.00	789.57	12.29%	0.86%
Glass Containers	3,601.23	2,340.80	65.00%	53.00%	4,293.83	2,790.99	65.00%	53.00%	4,139.42	2,690.62	65.00%	51.00%	4,225.00	2,746.25	65.00%	48.53%
Other Glass	576.20	3.05	0.53%	12.00%	687.01	0.79	0.11%	11.00%	662.31	3.63	0.55%	16.00%	676.00	2.36	0.35%	28.62%
Aluminum Cans	432.15	409.41	94.74%	49.00%	515.26	168.69	32.74%	49.00%	496.73	350.97	70.66%	52.00%	507.00	168.21	33.18%	50.15%
Tin & BiMetal Cans	720.25	501.15	69.58%	55.00%	858.77	504.90	58.79%	56.00%	827.88	288.47	34.84%	39.00%	845.00	389.01	46.04%	39.28%
Other Municipal & Vegetative	11,956.10	7,771.46	65.00%	3.00%	14,255.51	9,266.08	65.00%	3.00%	13,742.87	8,932.86	65.00%	3.00%	14,027.00	9,117.55	65.00%	3.34%
TOTALS MSW	67,271.06	33,284.86	49.48%	36.00%	80,208.69	38,280.29	47.73%	34.00%	77,324.33	36,945.65	47.78%	33.00%	78,923.00	39,384.65	49.90%	34.30%
OTHER WASTE																
Foils & Closures	138.75	0.00	0.00%	0.00%	188.03	0.00	0.00%	0.00%	253.08	0.00	0.00%	0.00%	226.59	0.00	0.00%	0.00%
Other Aluminum Scrap	277.51	594.80	214.34%	84.00%	376.06	782.72	208.14%	85.00%	506.17	700.84	138.46%	97.00%	453.18	567.24	125.17%	152.64%
Vehicular Batteries	138.75	39.85	28.72%	85.00%	188.03	165.25	87.89%	99.00%	253.08	140.05	55.34%	74.00%	226.59	156.06	68.87%	102.08%
Other Non-Ferrous Scrap	1,248.78	0.00	0.00%	19.00%	1,692.25	0.00	0.00%	19.00%	2,277.75	0.00	0.00%	22.00%	2,039.30	0.00	0.00%	33.92%
White Goods & Sheet Iron	3,330.07	4,602.14	138.20%	96.00%	4,512.67	5,144.87	114.01%	79.00%	6,074.00	4,951.78	81.52%	71.00%	5,438.13	2,475.95	45.53%	119.82%
Junked Autos	2,775.06	4,220.57	152.09%	110.00%	3,760.55	3,680.70	97.88%	89.00%	5,061.66	3,711.14	73.32%	89.00%	4,531.78	7.22	0.16%	111.21%
Heavy Iron	6,243.88	8,702.15	139.37%	77.00%	8,461.25	18,827.26	222.51%	77.00%	11,388.74	14,089.92	123.72%	76.00%	10,196.50	7,970.96	78.17%	98.14%
Wood Waste	4,578.85	651.07	14.22%	17.00%	6,204.91	1,134.68	18.29%	22.00%	8,351.74	6,298.06	75.41%	14.00%	7,477.43	467.21	6.25%	21.08%
Asphalt, Concrete & masonry	26,085.54	5,116.43	19.61%	96.00%	35,349.21	12,398.59	35.07%	110.00%	47,579.63	41,107.41	86.40%	119.00%	42,598.72	23,728.66	55.70%	113.72%
Tires	277.51	956.28	344.60%	100.00%	376.06	309.33	82.26%	71.00%	506.17	88.90	17.56%	76.00%	453.18	45.83	10.11%	86.79%
Other Bulky & Construct/Demo	14,985.31	7,903.88	52.74%	84.00%	20,306.99	8,559.38	42.15%	74.00%	27,332.98	6,308.76	23.08%	50.00%	24,471.60	2,493.23	10.19%	60.93%
				0.00%												
TOTALS OTHER	60,080.00	32,787.17	54.57%	72%	81,416.00	51,002.78	62.64%	72.00%	109,585.00	77,396.86	70.63%	70.31%	98,113.00	65,831.00	67.10%	73.50%
TOTAL WASTE	127,351.06	66,072.03	51.88%	54%	161,624.69	89,283.07	55.24%	54.00%	186,909.33	114,342.51	61.18%	52.00%	177,036.00	99,404.00	56.15%	55.15%

1. As defined by U. S. Environmental Protection Agency

* OTHER WASTE TYPES REPORTED
DO NOT INCLUDE ADD ONS.
THEREFORE TOTALS WILL NOT ADD

"Other Municipal and Vegetative" contains anti freeze, motor oil, household batteries and textiles.

THE TOTAL INCLUDES ADD ONS

"Other Bulky&Const/Demo" contains stumps, oil contaminated soil, process residue and material not listed.

TABLE 7-J

TREND IN SOLID WASTE GENERATION AND RECYCLING IN WARREN COUNTY

	2000	2001	2002	2003	2004
Population	102,437	105,044	106,654	108,549	109,687
MSW Generated	89,320	81,676	97,384	93,882	95,823
tons/person/year	0.87	0.78	0.91	0.86	0.87
MSW Recycled	16,834	14,692.58	24,671.34	18,116.48	19,840.00
% MSW Recycled	18.80%	17.99%	25.33%	19.30%	20.70%
Other Waste Generated	56,233	60,080	81,416	109,585	98,113
tons/person/year	0.54	0.57	0.76	1.01	0.89
Other Waste Recycled	30,213	32,787	51,003	77,397	65,831
% Other Recycled	53.70%	54.57%	62.64%	70.63%	67.10%
Total Waste Generated	145,553	141,756	178,799.42	203,466.83	193,936.00
tons/person/year	1.42	1.35	1.68	1.87	1.76
Total Waste Recycled	30,213	47,480	75,674	95,513	85,671
% Total Recycled	32.30%	33.49%	42.32%	46.94%	44.17%

TREND IN SOLID WASTE GENERATION AND RECYCLING IN NEW JERSEY

	2000	2001	2002	2003	2004
Population	8,414,350	8,504,864	8,576,089	8,640,028	8,685,166
MSW Generated	9,181,578	9,334,914	9,347,268	9,741,117	10,185,352
tons/person/year	1.09	1.1	1.09	1.13	1.17
MSW Recycled	3,449,076.00	3,363,385.00	3,137,185.70	3,188,842.00	3,495,661.00
% MSW Recycled	37.60%	36.00%	34.00%	33.00%	34.30%
Other Waste Generated	8,470,581	9,530,475	9,961,319	10,064,255	11,585,796
tons/person/year	1.01	1.12	1.16	1.16	1.33
Other Waste Recycled	5,901,788	6,859,604	7,185,291	7,076,941	8,511,434
% Other Recycled	69.67%	72.00%	72.00%	70.31%	73.50%
Total Waste Generated	17,652,159	18,865,389	19,308,586.90	19,805,372.00	21,771,148.00
tons/person/year	2.10	2.22	2.25	2.29	2.50
Total Waste Recycled	9,350,864	10,222,989	10,322,476.90	10,265,783.00	12,007,095
% Total Recycled	53.00%	54.00%	54.00%	52.00%	55.20%

TABLE 7-K COLLECTION AND PROCESSING OF CLASS A,B, AND C RECYCLING MATERIAL (2007)

Municipality	Type of Recycling	Materials Collected	Days Open & Times	Address of Drop-off Center	Block and Lot of Center
Allamuchy	Private Curb Side				
Alpha	Private Curb Side				
Belvidere	Municipal Curb Side				
Blairstown	Municipal Drop-Off Private Curb Side	Plastic, Glass, Alum, Steel Cans, Newspapers, Junk Mail, Bulk Metal	Wednesdays & Saturdays 8AM-1PM	Lambert Road	Block 14.02 Lot 24
Franklin	Municipal Drop-Off Private Curb Side	Tin, Plastic, Cardboard, Magazines, Alum, Glass	Saturday 9AM-12 Noon	Next to Twp. Garage	Block 45 Lot 15
Frelinghuysen	Municipal Drop-Off Private Curb Side	Cardboard, Newspaper, Magazine, Class, Alum., Tin, Plastic	All Times	217 Rt. 661	Block 1001 Lot 15
Greenwich	Municipal Drop-Off Private Curb Side	Alum., Metal, Glass, Plastic, Newspaper, Magazines	3 rd Saturday of Month 9AM-12 Noon	Old Stewartsville School N. Main St.	Block 23 Lot 31.01
Hackettstown	Private Curb Side	Newspaper, Plastic, Alum., Metal, Tires, Cardboard, Grass			
Hardwick	Private Curb Side				
Harmony	Private Curb Side				
Hope	Private Curb Side				
Independence	Private Curb Side				
Knowlton	Private Curb Side				
Liberty	Private Curb Side				
Lopatcong	Private Curb Side				
Mansfield	Private Curb Side				
Oxford	Municipal Curb Side				
Phillipsburg	Municipal Curb Side				
Pohatcong	Private Curb Side				
Washington Bo.	Private Curb Side				
Washington Twp	Municipal Drop-Off Private Curb Side	Tin, Plastic, Alum., Metal, Newspaper, Cardboard		22 E. Front St.	Block 43 Lot 10.01
White	Private Curb Side				
Warren County Recycling Center & Convenience Center (White)	Processing Center	Cardboard, newspaper, magazine, glass, alum. scrapmetal, clothing, empty aerosol cans, office paper, computer paper, plastic containers, steel cans	7 am -4 pm Monday-Friday 7am-11am Saturday	500 Mt. Pisgah Ave	Block 34, Lots 14, 18, 18.01, 18.02
Second Chance (Harmony)	Processing Center	Tin, Plastic, Alum, Glass, Newspaper, Cardboard	Monday-Saturday 5am to 5pm,	5 Hutchinson River Road	Block 8, Lot 15
Natures Choice (White)	Processing Class C	Leaves, Grass Clipping, Brush, Woodchips	Monday-Saturday 6AM-8PM	40 Foul Rift Road	Block 21 Lot 11
S. Rotondi & Sons (Harmony)	Processing Class C	Leaves, Grass, Woodchips, Brush	Monday-Saturday 6AM-8PM	129 Reeder Road	Block 7 Lots 12, 14.02
Tilcon Quarry (Oxford)	Processing Class B	Asphalt, Concrete, Concrete Paving Material	Monday-Friday 7:30AM-4:30PM	Mt. Pisgah Ave.	Block 25 Lot 3
Sanico (Knowlton)	Processing Class A	Tin, Plastic, Alum., Glass, Newspaper, Cardboard	Monday - Friday 8am to 4 pm	77 Route 46	Block 55, Lots 17, 18

Below is the list of entities that processed and marketed recyclables for Warren County municipalities. The information was garnered by reviewing the tonnage reports submitted by the Warren County municipalities from 2003 through 2005.

2003-2005 Recycling Markets Used By Warren County Municipalities

Corrugated----Ahart Market, Cascades Corp., Colgate Paperstock, Computerized Waste, Diamond K (Scranton, PA), End Market, Freehold Cartage, Garden State Waste, Gary Gray, Giordano Paper Recycling, Harmon Assoc., Importico Falgi Industries, Marcal Paper Mills, Inc., Mid-County Paper Stock, M.S. Reilly, P-burg-Easton Honda, Raritan Valley Disposal, Raimo of Stanhope, Inc., Ray Craft (NJ), Recycled Fibers, Sanico, Smith Sanitation, Trinity Recycling of NJ, Turnpike Recycling Center, Verizon, Wakefern Food (NJ), WCPCFA, Warren County Recycle Center, Waste Mgt (NJ)

Mixed Office Paper----End Market, Giordano Paper Recycling, Hygrade Insulators, Joseph Damato Recycling, (Clifton, NJ), Marcal Paper Mills Inc., Mid-County Paper Stock, M.S. Reilly, Shred-It, Turnpike Recycling Center, WCPCFA

Newspaper----All American, End Market, Galaxy Recycling, Garden State Paper, GSP, Mid-County Paper Stock, Midtown Carting/Hauling (Netcong, NJ), Paterson Recycling, Raritan Valley Disposal, Trinity Recycling of NJ, Turnpike Recycling Center, WCPCFA, Warren County Recycle Center, Zozzaro Brothers, Inc (Clifton)

Other Paper, Mags, Junk Mail----Galaxy Recycling, Joseph Damato Recycling (Clifton, NJ), Marcal Paper Mills, Inc., Mid-County Paper Stock, Midtown Carting/Hauling (Netcong, NJ), M.S. Reilly, Trinity Recycling of NJ, WCPCFA, Warren County Recycle Center, Waste Mgt (NJ)

Glass Containers----CRA (NJ) FCR Morris, Inc., Importico Falgi Industries, Raritan Valley Disposal, Todd Heller, Inc, (PA), WCPCFA, Warren County Recycle Center, Waste Mgt. (NJ), WHR Trucking (Bath, PA), Zozzaro Brothers, Inc (Clifton)

Aluminum Containers----Einfalt, End Market, FCR Morris, Inc., Importico Falgi Industries, P-burg-Easton Honda, Raritan Valley Disposal, Ray Craft (NJ), Todd Heller, Inc. (PA), WCPCFA, Waste Mgt., NJ, Zozzaro Brothers, Inc (Clifton)

Steel Containers----End Market, FCR Morris, Inc., Importico Falgi Industries, JFR Salvage, Inc (PA), P. Fericola (NJ), Raritan Valley Disposal, Todd Heller, Inc (PA), Trinity Recycling of NJ, WCPCFA, Warren County Recycle Center, Waste Mgt. (NJ), Zozzaro Brothers, Inc (Clifton)

Plastic Containers----CVM (NJ), End Market, Importico Falgi Industries, Leh Ta Enterprises (NJ), P. Fericola (NJ), Raritan Valley Disposal, Todd Heller, Inc (PA), Trinity Recycling of NJ, WCPCFA, Waste Mgt (NJ), Zozzaro Brothers Inc (Clifton)

Heavy Iron----American Carting, End Market, Fortune Metals (NJ), JFR Salvage Inc (PA), J. Goldberg (NJ), Private Scrap Hauler, S&L, Todd Heller Inc (PA), WCPCFA,

NonFerrous Aluminum Scrap----Einfait, End Market, Fortune Metals (NJ), Freehold Cartage, Hygrade Insulators, Private Scrap Hauler, S&L, Sanico, WCPCFA

White Goods and Light Iron----End Market, JFR Salvage Inc (PA), Kucharski Salvage (NJ), P-burg-Easton Honda, Private Scrap Hauler, Ray Craft (NJ), S&L, WCPCFA

Anti Freeze----End Market, IPC Bill Crank, IRI State Fluids, Lorco Petroleum Service, Plant Earth Recycling, Recycle Oil Co (PA), Safety Kleen (NY), Tri County Fluids

Batteries (Automotive)----East Penn Mfg., End Market, Exide Tech., Interstate Battery (NJ), Radiac Research, S&L, Sandon Tire, WCPCFA

Automobile Scrap----End Market,

Tires----Bill Moore (Belvidere), Coffe Brothers, LLC, End Market, Gary Follweiller (PA), Kester's Recycling (Easton, PA), Richies Tires, Trinity Tire, WCPCFA

Used Motor Oil----End Market, International Petroleum, IPC US fulered, Lorco Petroleum Service, Monarch Environmental, Onyx Environmental, Recycle Oil Co (PA), S&M Management, Safety Kleen (NY), US Filter (NJ), WCPCFA

Brush/Tree Parts----End Market, Grinnell Recycling, Morris County Municipal, Nature's Choice, Pedestal Pallet (NJ), Sjap Naturalink, Twp. Conv. Center (Washington Twp), Town of Hackettstown, Vollers Inc (NJ)

Grass Clipping----End Market, Morris County Municipal, S. Rotondi (NJ), Natures Choice

Leaves----End Market, Menegus Farm, Morris County Municipal, Richard Gardner Farm, S. Rotondi (NJ), Township Farm (Washington), Natures Choice

Stumps----End Market, Grinnell Recycling, Sjap Naturalink,

Batteries (Dry Cell)----AERC Recycling Solutions (PA), End Market, Radiac Research, WCPCFA, Warren County Recycle Center

Concrete, Asphalt, Brick----Bayshore Reconciliation, Bedrock Stone (NJ), End Market, Garden State Waste, Grinnell Recycling, Lehigh Valley Site Contracting Inc., Tilcon Quarry, Redrock Land Development, South Brunswick Recycling (NJ), T. Fiore Recycling Corp, Tilcon, Vollers Inc (NJ), Warren Material (PA), Waste Mgt (NJ), Weldon Asphalt Co., Weldon Quarry Co

Food Waste----Darling (NJ), End Market, International Bakerage, Mopac (Souderton PA),

Other Material Not Listed----Advanced Recovery, Bedrock Stone (NJ), Colgon Carbon (PA & KY), Carpet Cycle (NJ), Cycle Chem (PA), End Market, Fortune Metals (NJ), Leh Ta Enterprises (NJ), P. Femicola (NJ), Recycle Metals Corp, Supreme Computers, Todd Heller, Inc (PA), Verizon, WCPCFA, Warren County Recycle Center, Global Computer Pro

Other Glass----End Market

Other Plastic----Bergen Polymers (PA), End Market, Leh Ta Enterprises (NJ), National Plastic (PA), Raritan Valley Disposal, Riggins Mill Recycle (GA), Smart International (Cypress, TX), Trex (VA), Verizon

Oil Contaminated Soil----Clean Earth of Carteret, End Market, Soil Safe Inc., South State

Process Residue----End Market, Vollers Inc (NJ)

Textiles----AMVETS, DARE, End Market,

Wood Scraps----A.B. Dauman Industries, End Market, Freehold Cartage, Grinnell Recycling, Keifer Pallet, Koppers Industries, Pedestal Pallet (NJ), Sanico, T&M Pallet, Verizon, Vollers Inc (NJ), Warren Pallet Inc.

V. STRATEGY TO ACHIEVE RECYCLING GOALS

1. Source Reduction

Source reduction of waste or waste avoidance must occur even before recycling activities are undertaken. Source reduction, is the generation of less waste and the reduction of toxicity of waste. Reducing waste will necessitate an educational campaign to demonstrate to Warren County residents how to produce less waste. This will be achieved by means discussed in the following sections including distributing mailings to the municipal recycling coordinators, press releases, and the website. Also source reduction strategies can be delivered in the recycling and solid waste management seminars, workshops, and presentations given to schools, businesses, civic groups and local governments. State and national legislation to limit excess packaging and to discourage the utilization of toxic substances in the manufacturing of products, including packaging, which ultimately become part of the solid waste stream is needed.

As shown in Table VII, Warren County has produced less waste than the state average, suggesting that residents and businesses are indeed using source reduction and reuse strategies. While Warren's recycling rate may be lower than the state average and should be improved, the Warren County Solid Waste Management Plan contends that Warren is creating less need for disposal and recycling services than the rest of the state. Consequently, it is Warren County's position that a financial bonus through the tonnage grant program be given to Warren County and to any other county that generates less waste than the state average.

A. Per Container Fees

Where appropriate waste haulers are encouraged to consider a per container garbage fee as an impetus to greater recycling and waste avoidance. Under such a fee system, the solid waste collector charges a fee based on the volume of each container of solid waste set out by the generator for collection rather than a flat fee for the collection of multiple containers. The PCFA and County will continue to promote the concept because it acts as an incentive to recycle.

B. Waste Audits (Recycling Surveys)

A waste audit is a study of quantity and composition of solid waste generated in a building. Waste is classified into reducible, recyclable and disposable components. They provide information that is useful in decision making related to the development of source reduction opportunities and the selection of the proper materials to target for recycling collection strategies and public information.

The purpose of waste audits is to alert waste generators to the opportunities for waste reduction through procurement, waste minimization, recycling, other appropriate solid waste management procedures, and to the opportunities to reduce or stabilize the costs of waste disposal. It identifies what kinds of materials are available for recycling and how much is being generated by the day-to-day operations of a business or school. Reviewing the audit provides an immediate focus for recycling efforts. Office buildings will see the need to recycle paper products. Retail stores will find that corrugated cardboard is a prime recycling candidate. Food services will look at opportunities to recycle corrugated, glass and metal containers. The waste audit identifies the potential volume of recyclable materials and provides an estimate of how much material you can reuse from trash, thus cutting trash removal costs. Therefore, recycling can add profit to the bottom line in the form of cost savings by removing these recyclables from the waste stream generated each month.

Waste audits were performed at all municipal and county facilities in Warren County in the 1990's. They should be performed again in municipal and county facilities and in all institutions, businesses and industries with 100 or more employees. The audits can be performed in coordination with the one on one meetings as discussed under the Better Public Education and Communication section of this plan. As new facilities and businesses meet the criteria, audits should be performed.

The PCFA no longer performs spot audits to verify the accuracy of the audits prepared by each entity. However audit procedures and guidance documents are available from the NJDEP and the Waste Wise Business Network.

Waste audits also have an effect of removing undesirable waste from reaching the RRF. When combusted some waste types produce toxic emissions. A Fuel Quality Assurance Policy was developed to help prevent undesirable wastes from entering the waste stream. Section 15, the Fuel Quality Assurance Policy also discusses waste audits.

C. Recycled Procurement

Currently, Warren County and many municipalities purchase products off of the NJ State contract. Warren County recommends that the State purchasing agent implement purchasing practices to favor recycled products where possible. It is recommended that schools, institutions, and private business also purchase products made from recycled material.

D. Cut it and Leave it

The practice of leaving grass clippings and leaves on lawns as mulch will continue to be promoted to reduce the amount of yard waste entering the waste stream.

2. Reuse

Some household waste that is put into the waste stream contains old furniture, lumber, toys, etc. that can be brought to a centralized reuse center. For a nominal fee, residents could purchase used unwanted furniture or lumber; thereby keeping it out of the landfill. The center or centers could be run out of a church, non-profit agency or other group.

Garage and yard sales are ideal ways for residents to rid themselves of items that might otherwise be disposed at the landfill or Resource Recovery Facility .

3. Source Separation Strategies

The purposes of source separation recycling programs are: 1) to recover or reuse materials, such as glass, aluminum, paper, used motor oil and 2) to improve the quality of fuel (waste) entering the Resource Recovery Facility. Recycling programs, while mandated, rely on the cooperation and good will of the individual residents and commercial and industrial establishments to separate the recyclable materials from the materials in the waste stream which are not recyclable. In some cases, source separation programs will be used primarily to achieve fuel quality improvements rather than for its recycling value. For example, some household batteries collected through source separation programs are not recyclable but are to be removed from the waste stream to minimize environmental impacts and improve the quality of the Resource Recovery Facility's waste stream.

Due to the rural and small town nature of Warren County, the onus to improve recycling must take a cooperative approach with the County taking the lead on many of the programs discussed below. However, the roles of the municipalities are just as important inasmuch as the recycling statute requires every municipality to implement a recycling program. N.J.S.A. 13:1E-99.16 concerns the municipal recycling program and requires the following:

A. Municipal Statutory Responsibilities and General Strategies

a. Each municipality shall provide for a collection system for the recycling of the recyclable materials designated in the district recycling plan as may be necessary to achieve the designated recovery targets set forth in the plan in those instances where a recycling collection system is not otherwise provided for by the generator or by the county, interlocal service agreement or joint service program, or other private or public recycling program operator.

This plan provides for the curbside collection of traditional materials by private haulers and/or municipal public works supplemented by municipal and PCFA operated drop-off depots in order to collect all designated traditional materials. Private haulers and/or municipalities will provide for the curbside collection of recyclables. Municipalities may also choose to continue or begin their own drop-off centers. The PCFA's recycling center will accept (commingled plastic bottles, tin cans, aluminum cans, glass containers, and separated newspaper, mixed and white paper) from municipalities, business and industries, private haulers and individual residents. Thus, in order to maximize the opportunity to recycle in Warren County, traditional materials will be collected curbside by either private haulers or municipal public works, and they will also be accepted at drop-off depots operated by municipalities and the PCFA.

Municipalities may elect to provide their own curbside collection of recyclables or contract with private collectors for this service. In these cases, co-mingled collection is encouraged to ensure the greatest participation and movement towards achieving the 50 percent goal of recycling municipal solid waste.

b. The governing body of each municipality shall adopt an ordinance which requires persons generating municipal solid waste within its municipal boundaries to source separate from the municipal solid waste stream, in addition to leaves, the specified recyclable materials for which markets have been secured and, unless recycling is otherwise provided for by the generator, place these specified recyclable materials for collection in the manner provided by the ordinance.

The governing body of a municipality that adopts a recycling ordinance pursuant to subsection b. of this section may limit the collection of designated recyclable materials to specified operating hours in order to preserve the peace and quiet in neighborhoods during the hours when most residents are asleep.

The model ordinance as prepared by the NJDEP was modified by the Warren County Solid Waste Advisory Council to make it more appropriate for Warren County municipalities and is included in the Appendix.

c. The governing body of each municipality shall, at least once every 36 months, conduct a review and make necessary revisions to the master plan and development regulations adopted pursuant to P.L.1975, c.291 (C.40:55D-1 et seq.), which revisions shall reflect changes in federal, State, county and municipal laws, policies and objectives concerning the collection, disposition and recycling of designated recyclable materials.

The revised master plan shall include provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance adopted pursuant to subsection b. of this section, and for the collection, disposition and recycling of designated recyclable materials within any development proposal for the construction of 50 or more units of single-family residential housing or 25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land.

To assist municipalities in this review, during its biennial review of the County Solid Waste Plan, the Solid Waste Coordinator will review municipal zoning ordinances and master plans for consistency with the county solid waste plan and other changes in law and regulation stated above.

d. The governing body of a municipality may exempt persons occupying commercial and institutional premises within its municipal boundaries from the source separation requirements of the ordinance adopted pursuant to subsection b. of this section if those persons have otherwise provided for the recycling of the recyclable materials designated in the district recycling plan from solid waste generated at those premises. To be eligible for an exemption pursuant to this subsection, a commercial or institutional solid waste generator annually shall provide written documentation to the municipality of the total number of tons recycled.

A master list of those obtaining the exemption should be maintained by the municipal recycling coordinator. Using the list, the coordinator should inform the exemptee of the requirement for the generator to provide the municipality the total numbers of tons recycled by type of material.

e. The governing body of each municipality shall, on or before April 30 of each year, submit a recycling tonnage report to the New Jersey Office of Recycling in accordance with rules and regulations adopted by the department therefore.

The county will provide seminars and workshops to inform municipal coordinators their roles and responsibilities in obtaining and filing tonnage reports.

f. The governing body of each municipality shall, at least once every six months, notify all persons occupying residential, commercial, and institutional premises within its municipal boundaries of local recycling opportunities, and the source separation requirements of the ordinance. In order to fulfill the notification requirements of this subsection, the governing body of a municipality may, in its discretion, place an advertisement in a newspaper circulating in the municipality, post a notice in public places where public notices are customarily posted, include a notice with other official notifications periodically mailed to residential taxpayers, or any combination thereof, as the municipality deems necessary and appropriate.

The County Recycling Plan recognizes that municipalities may not have the resources to notify all persons within their respective communities of their recycling responsibilities every six months. It is recommended that a model information newsletter/notice be created by the County for distribution to the municipal recycling coordinators. The coordinators could use a portion of their tonnage grant

money to publish and distribute the newsletter to all the households, businesses and institutions with in their municipalities.

A cost effective way distributing the notices can be to enclose the notices in the tax bills, sewer bills, and any other official communication that the municipality has with its residents and/or property owners.

B. Public Education and Communication

Clearly the best way to increase recycling rates is to target the points of generation at the residential, commercial, office, and institutional level. A better education and communication strategy is needed to inform these generators of the requirements for recycling, the environmental benefits, and the financial benefits.

The public education and communication program should reinforce the need to recycle and document in the tonnage reports the amount of yard waste, newspaper, corrugated, office and glossy paper, glass containers, and other municipal and vegetative materials which include anti-freeze, used motor oil, dry cell batteries, and textiles to attain the 50% goal and to receive the financial reward provided by the tonnage grants. By weight, they make up almost 58% of the municipal waste stream. If yard waste is included almost 75% of the MSW is accounted. In 2005 the state was paying \$1.00 per ton for MSW recycled and \$.14 per ton for other waste recycled. Using these payout rates, had the 50% recycling goal been attained, \$47,912 could have been granted countywide instead of \$19,865 that was actually distributed. Furthermore, assuming that the recyclable waste went to the RRF for disposal at \$65 per ton, not recycling actually cost taxpayers \$1,823,055 in tipping fees. To help inform residents and business of the importance of recycling the following methods will be used.

Newsletters and Notices

The County Recycling Coordinator has published bi-annual recycling newsletters using grant funding provided from the NJDEP. These newsletters have been provided as inserts in the Express-Times which are circulated countywide, and were available for pickup in all county buildings, municipal buildings, libraries, and schools. To complement the requirements of the recycling statute, the newsletter will include contact information of all municipal recycling coordinators, and general recycling information that the public would need to know to meet the 50% goal. The newsletter will include the list of designated recyclable materials, method of collection in each municipality, a list of recycling centers for each material. Additionally, the newsletter will include material on why recycling makes environmental and financial sense.

It is believed that the commercial and institutional sector in Warren County do not recycle or report its recycling activities as much as they should. A concerted effort to promote recycling in these sectors is needed. Newsletters and notices will be developed and sent to the following in Warren

County:

- A. Employers with 100 or more employees.
- B. Public and private schools, elementary, middle and high.
- C. Colleges
- D. Religious Institutions
- E. Government Buildings
- F. Libraries
- G. Shopping Centers and Malls
- H. Multi Family and Apartment Complexes
- I. Athletic Associations
- J. Major Event Coordinators for fairs, carnivals, and other public events
- K. Collector/haulers

Website

The Pollution Control Financing Authority and the County of Warren have websites that contain information on recycling. These websites should include up to date recycling information that residents would need to know to recycle properly. This includes the name of the recycling coordinator, materials to recycle, where to recycle the material and why. The websites are www.co.warren.nj.us and www.pcfawc.org

Promotional Materials

As reminders and to promote recycling, the County has posted signs reading Our School Recycles, Warren County Recycles, Our Library Recycles, and “Municipality” Recycles. In addition, bumper stickers, and window stickers, and posters have been printed and given to various governmental and private businesses to display. Businesses were given the stickers after “passing” a random inspection conducted by the County Health officer and the County Recycling Coordinator.

One on One Meetings

Warren County is lagging in recycling office paper and mixed paper with average rates of 5 to 8 %. The larger generators of office and mixed paper including the major private and governmental office buildings and institutions, schools, hospitals will be contacted. The county recycling coordinator, municipal recycling coordinator, and county health officer will meet with their authorized representatives to discuss how to improve recycling activities in those facilities. These meetings can also be the vehicle for performing waste audits as discussed in the source reduction section.

Seminars and Educational Programs

With the assistance of various local groups, seminars should be held to discuss recycling matters. These matters would include information on the recycling statutes, source reduction, how to implement a recycling program, marketing, procurement, and other technical and educational assistance. The seminars target audience will use the employer listing provided by the Warren County Chamber of Commerce, the local chamber's of commerce, business associations and school and municipal officials and coordinators.

An educational program can be developed with the cooperation of the PCFA and Covanta Energy to alert solid waste generators (residential, institutional, commercial and industrial) and haulers as to what materials should and should not be included in solid waste delivered and processed at the Resource Recovery Facility and the Landfill. The education program will:

1. stress the importance of and methods of waste reduction and recycling.
2. stress the need to keep hazardous wastes and other unacceptable materials out of the Facility and the Landfill.
3. discuss alternative means: such as household hazardous waste collection days, battery recovery programs, tire collection programs for managing these unacceptable waste materials,
4. provide information concerning the Fuel Quality Assurance Program inspection and enforcement program
5. provide tours of the Resource Recovery Facility, Recycling Center and Landfill for school administrators, students, mayors, and others to stress the importance of minimizing the waste stream

Media Releases and Coverage

The media will be contacted for coverage of recycling events held at schools, non-profit and government events, and private events and businesses and for print releases of the events or other topics.

Containers

It is recommended that containers containing logos stating Warren County Recycles or some equivalent should be provided to the following:

1. Along the streets of the county's central business districts to complement the receptacles provided for garbage. These containers could be purchased with a variety of funding sources, and should be coordinated with the haulers responsible picking up the garbage containers.
2. Public events such as fairs, athletic events, community days, etc. Because the coordinator of these events would not need containers throughout the entire year, the containers would need to be warehoused and made available during the year as the events are scheduled.
3. To supplement private recycling efforts, containers for recycling should be provided to the county's households. They could be paid for by the haulers, or through grants, or other funding.

C. Tonnage Reporting by Collectors/Haulers, Recyclers, and Municipal Recycling Coordinators

Municipal Recycling Coordinator

Pursuant to N.J.S.A. 13:1E-99.16 every municipality must designate on one or more persons as the municipal recycling coordinator. Presently, all of the county's twenty-two municipalities have a municipal recycling coordinator. The County Planning Department maintains a current list of municipal recycling coordinators. Municipal recycling coordinators hold the primary responsibility for implementing the Warren County Recycling Plan and municipal recycling ordinance. A description of the Municipal Recycling Coordinator's responsibilities are shown on the following page.

Model Job Description

MUNICIPAL RECYCLING COORDINATOR

Overview

Under direction of the governing body, recycling coordinator is responsible for developing and implementing methods and programs to achieve optimum recycling in the municipality, in compliance with State requirements and goals and in conformance with the Warren County Solid Waste Management Plan – Recycling Element.

Duties

- Actively encourage source reduction and recycling in the municipality by example and education.
- Acts as a resource to municipal residents and answers questions related to recycling and solid waste management.
- Prepares correspondence as necessary to properly and efficiently perform the job, including regular reports to the governing body.
- Maintains accurate and complete records of recycling tonnage in the municipality.
- Correctly completes the Annual Recycling Tonnage Report and Grant Application required by NJDEP, and submits on time to NJDEP and the Warren County Recycling Coordinator.
- Publicizes at least once every six months, the provisions of the municipal recycling program.
- Enforces the municipal ordinance requiring recycling, using warnings and summonses, and works cooperatively with the Department of Health and the Police Department.
- Keeps current with recycling issues and technology.
- Attends county meetings of municipal recycling coordinators as necessary.
- Takes advantage of opportunities to continue personal education related to recycling and waste management.

Requirements

Residency in the municipality is preferred, but not required.

Possession of a high school diploma or equivalent, plus good communication skills.

Individual must be actively recycling in home according to municipal ordinance.

Possession of working knowledge of recycling methods.

Training

Municipal recycling coordinators should be trained on how to do their job as effectively as possible.

Recognizing that completing tonnage reports is critical, municipal coordinators need to know what is expected of them. The training should include topics such as dealing with businesses and householders, how to obtain the tonnage reports from the haulers and generators, completing the reports completely and accurately, and knowing what the recycling laws and regulations are. Realizing that municipal budgets and the current stipend for recycling coordinators are nominal, sending every coordinator to certification classes is infeasible. However, two options are available to give municipal coordinators the training he or she needs.

1. Send the County Recycling Coordinator to the Rutgers courses or other equivalent and have the county coordinator provide summary training to the municipal coordinators.

2. Invite professionals from the NJDEP, other counties, private recyclers, other municipalities and tailor workshops using available personnel for the municipal coordinators.

Hauler and Recycling Center Operator Workshops

Workshops with haulers and recycling center operators should be held. These workshops should reinforce the county recycling plan, pertinent recycling statutes and regulations and provide guidance on completing the annual tonnage reports that must be provided to the municipal coordinators.

Awards

The county recycling coordinator began a program to recognize local recycling coordinators with an award for their efforts. The award is presented at the breakfast seminar conducted in the spring of each year. The county should consider expanding the number of awards to recognize efforts of the private sector, and institutions. Public recognition of individuals, institutions, and private business, will help propel the importance of recycling into the public eye.

D Currently Designated Recyclable Materials and Designation of Additional Materials to be Source Separated

Recyclable materials to be source separated and collected for recycling throughout Warren County by all residential, commercial, institutional and industrial waste generators are classified into traditional and non-traditional materials. Specifications for designated recyclable materials will be developed by the PCFA of Warren County in consultation with the Warren County municipal recycling coordinators and other parties, including collector/haulers which collect the materials in Warren County. The collection of materials will take place for which markets have been secured.

Designated Traditional Materials

Aluminum cans
Computer paper
Glass bottles & jars – three colors
(clear, green & brown)
Corrugated cardboard
High grade office paper – white
Magazines & mixed paper
Newsprint
Plastic bottles
1. PETE-clear & green (type #1)
2. HDPE-clear & colored (type #2)
Steel cans/tin cans

Designated Non-traditional Materials

Antifreeze
Asphalt & concrete pavement, concrete bricks
Automotive batteries (lead acid)

Carpet
Computers

Florescent tubes
Household batteries

Laser & inkjet cartridges
Latex paint – if the PCFA begins collection again
Leaves & yard waste (brush, tree parts)
Non-treated wood
Oil Filters

Propane Tanks
Scrap metals (including junked autos)
Source separated metal
Stumps
Textiles/Clothing
Tires
Used motor oil
White goods (large appliances)

To increase Warren County's recycling rate, it is necessary to fully understand the definition of the recyclable materials that are eligible under the NJDEP tonnage grant program. Accurately accounting for the recycling of these materials is important because they become part of the official numbers that the state rewards and potentially penalizes for failing to demonstrate positive progress. The definitions that follow are taken directly from the 2005 tonnage grant program guide

The definitions are not meant to be all-inclusive, but rather they attempt to identify the majority of materials reported in previous tonnage reports.

The Plan indicates which of the material listed in the definitions are designated as part of the Warren County Recycling Plan.

TRADITIONAL MATERIALS

Paper

- 01 - **Corrugated** - *Containers and similar paper items usually used to transport supplies, equipment parts or other merchandise.*

Currently designated in the Warren County Plan.

- 02 - **Mixed Office and Computer Paper** - *Any and all types of "office-type" paper including, but not limited to: computer paper, hi-grade white paper, typing paper, copier paper, onion-skin, tissue paper, notepad, envelopes, manila folders and colored paper, or any mix thereof.*

Currently, high grade office paper and computer paper is designated in the Warren County Plan.

- 03 - **Newspaper** - *All paper marketed as newsprint or newspaper and containing at least 70% newsprint or newspaper (American Forest and Paper Association grades #6, #7 and #8 news).*

Currently, newsprint is designated in the Warren County Plan.

- 04 - **Other Paper/Magazines/Junk Mail** - *All paper, which is not defined, as corrugated, mixed office paper, computer paper or newspaper. Examples are as follows: magazine stock, telephone directories, wrapping paper, chip board, books and grocery bags. [papers coated with plastic, film or foil and paper contaminated with food should not be included]*

Currently, magazines and mixed paper designated in the Warren County Plan.

It should be noted that telephone books may be recycled in two ways. Sprint Telephone sponsors a drive every year at schools located within Sprint's service area. Residents and businesses are encouraged to dispose of their old telephone books from any service area or company, at the designated locations. The school district receives a \$100 check from Sprint for participating.

The second way is to tear off the cardboard cover, and cut the glued binding off. The binding is disposed in the garbage. The pages are considered newspaper and the cardboard can be recycled.

To recycle books, the covers and bindings must be removed.

Chip board markets need to be found.

Containers

- 05 - **Glass Containers** - *All glass containers used for packaging food or beverages.*

Currently, bottles and jars (clear, green and brown) is designated in the Warren County Plan.

- 06 - **Aluminum Cans** - *Food and beverage containers made entirely of aluminum.*

Currently, aluminum cans are designated in the Warren County Plan.

- 07 - **Steel Cans** - *Rigid containers made exclusively or primarily of steel or tin-plated steel and steel and aluminum cans used to store food, beverages, paint and a variety of other household and consumer products including motor oil filters.*

Currently, steel cans, tin cans and bi-metal cans are designated in the Warren County Plan. Oil filters and propane tanks are now designated.

- 08 - **Plastic Containers** - *Containers such as polyethylene terephthalate (PETE - #1) soda bottles, high density poly ethylene (HDPE - #2) milk, water or detergent bottles, vinyl (V - #3), low density polyethylene (LDPE - #4) containers, or polyvinyl chloride (PVC - #5) bottles and rigid and foam polystyrene (PS - #6).*

Currently, polyethylene terephthalate - clear and green (Type #1) and high density polyethylene - clear and colored (Type #2) are designated in the Warren County Plan.

NON- TRADITIONAL MATERIALS

Metal

- 09 - **Heavy Iron** - *All ferrous scrap, structural steel or cast iron components.*

Currently, source separated metal and scrap metal is designated in the Warren County Plan.

- 10 - **Non-ferrous and Other Aluminum Scrap** - *All non-container aluminum, stainless steel, copper, zinc, brass and other metals, which generally do not rust.*

Currently, designated in the Warren County Plan. as source separated metal, and scrap metal.

Private scrap yards will accept scrap metal from individuals. Municipalities should collect these separately during cleanup days and recycling them. The WCDL accepts scrap metals for a fee.

- 11 - **White Goods and Light Iron** - *All appliances such as washers, dryers, refrigerators, etc. as well as products made from sheet iron, such as shelving, file cabinets, metal desks, recycled or reconditioned steel drums and other non-structural ferrous scrap.*

Currently, white goods (large appliances) are designated in the Warren County Plan.

Private scrap yards will accept the above listed materials (9,10,11) from individuals and provide documentation of the weight to the municipality where the material was generated. They are also collected at the WCDL for a fee. In addition, when a municipality sponsors a cleanup day, white goods and other scrap metals shall be collected separately and recycled through the WCDL or private scrap yards. Appliance dealers' who collect old appliances should be instructed by the municipal recycling coordinator to file a tonnage report the generating municipalities so that they given credit for the material recycled.

Commonly used refrigerants— chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)—must be recovered, as required by law, from appliances received at the WCDL for recycling. Most other places will also require the refrigerant to be

evacuated legally before accepting them. An additional charge may be imposed for evacuation.

Auto

- 12 - **Anti-freeze** - *All automotive engine coolant consisting of a mixture of ethylene glycol and water or propylene glycol and water.*

Now designated in County Plan.

- 13 - **Batteries, Lead-Acid** - *Batteries from automobiles, trucks, other vehicles and machinery and equipment. THIS DOES NOT INCLUDE CONSUMER BATTERIES .(see#21).*

Currently, automotive batteries (lead acid) is designated in the Warren County Plan. In general private gas stations that sell batteries will accept used automotive batteries as a trade in.

- 14 - **Scrap Autos** - *Crushed or shredded automobile or truck bodies excluding auto shredder residue or "fluff".*

Currently scrap metals including junked autos are designated in County Plan.

- 15 - **Tires** - *Rubber-based scrap automotive, truck or specialty (e.g. forklift) tires. NOTE: This material must be recycled at a registered, exempted or pending "Class B" recycling facility.*

Currently, tires are designated in the Warren County Plan.

Private scrap yards will accept tires at a charge. The WCDL accepts tires on a limited basis. Municipalities should also consider sponsoring tire collections and charging a nominal fee per tire. The PCFA will provide assistance in marketing these materials.

Funding for scrap tire collections has been available in the past through the NJDEP. It is recommended that the funding for the program be made available again. In addition to providing a solid waste benefit, it helps in reducing the number of mosquito breeding sites.

- 16 - **Used Motor Oil** - *A petroleum-based or synthetic oil which, through use, storage or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties. Used motor oil filters shall be reported as item 7, steel containers.*

Currently, waste oil is designated in the Warren County Plan.

A number of service stations in Warren County accept used motor oil, sometimes at a fee, from residents. Periodically, the County Recycling Coordinator, and the PCFA will release a list of stations and other locations that accept used motor through press releases, mailings, and the internet website. Anyone seeking to dispose of waste oil may contact the municipal recycling coordinator, the county recycling coordinator or the PCFA for the list of locations. The station may be contacted directly as well.

Yard Material

- 17 - **Brush/Tree Parts** - Branches and woodchips generated from residential and institutional sources (e.g. storm damage and pruning activities). 18 -**Grass Clippings** - *Grass clippings derived from the mowing of lawns or other grassy areas.* And 19 - **Leaves** - *Leaves and other yard debris excluding grass and brush, from residential, institutional, commercial or industrial sources.*

Brush/tree parts, grass clippings and leaves are designated in the Warren County Plan.

The County Recycling Plan encourages residents and business owners to use mulching mowers and leave grass and leaf clippings on the ground. Or it may be collected and used for individual household compost. Doing this enhances the soil, provides fertilizer, and reduces the need for town wide collection of leaves and/or grass. Leaves and grass are not to be disposed of in the garbage.

The need for composting of leaves and other vegetative matter is most acute in the built-up portions of Warren County. The lack of suitable, available sites in the built-up areas has led many communities to seek composting sites elsewhere.

Since Warren County has not been requested by the municipalities to provide a countywide yard waste composting service and because municipalities bear the primary responsibility for leaf disposal, steps have not been taken to execute a county contract or develop a county site. Thus, municipalities are responsible either for contracting with privately owned compost facilities or developing their own facilities.

The Town of Hackettstown has contracted with the Morris County Municipal Utilities Authority (MCMUA) to permit the leaves and other vegetative matter collected in Hackettstown to be taken to the MCMUA site in Mount Olive Township,

Morris County. This designation of the MCMUA composting site has been agreed upon by the Board of Chosen Freeholders in both Warren and Morris Counties and included in appropriate plan amendments.

Other sites designated for composting leaves and other acceptable vegetative waste include a portion of the WCDL site, which is designated as Block 34, Lot 17, and Block 32, Lots 12 and 22, in White Township. This is not a permitted, operating site.

Leaves and other acceptable vegetative waste that are collected and delivered to a composting facility must be composted in accordance with the requirements established by the NJDEP as part of the permit for the facility. There are two commercial Class C Recycling Centers operating in Warren County. They are:

S. Rotondi and Sons – Harmony Township, Block 7, Lots 12 and 14.02, 129 Reeder Road

This regional recycling center receives leaves, grass, wood chips brush in separated and mixed form from Harmony Township, other municipalities, and landscapers. It also receives and processes brush and tree parts up to four inches in diameter pursuant to the Administrative Code exemption. The exemption grant to S. Rotondi and Sons limits the processing of brush to a maximum of 7,500 cubic yards four times per year, for a maximum of 30,000 cubic yards per year.

Its hours of operation are Monday through Saturday 6:00 AM to 8:00 PM

It may receive no more than 66 trucks per day. No more than 2,000 cubic yards of grass clippings mixed with brush and/or tree parts shall be accepted per day.

The total length of all windrows at the site at any given time shall not exceed approximately 80,000 cubic yards.

An administrative action to allow S. Rotondi and Sons to blend finished compost with soil was approved by the Board of Freeholders in a resolution dated July 28, 2004.

Natures Choice - White Township, Block 21, Lot 11, 40 Foul Rift Road

This regional recycling center receives leaves, grass, wood chips, brush and tree branches from municipalities, transfer stations, garbage haulers and landscapers. Brush and tree branches of less than 4 inches in diameter may be received and processed to produce wood chips to be used in combination with or in lieu of leaves in the compost process.

The hours of operation are Monday through Saturday 6:00 AM to 8:00 PM, subject to the conditions imposed in the Board of Freeholder resolution dated October 25, 2005.

Material deliveries to the recycling center shall be scheduled in such a manner as to minimize truck queuing on the recycling center property. Under no circumstances shall delivery trucks be allowed to back-up or queue onto public roads.

It may receive no more than 70 trucks per day. No more than 5,000 cubic yards of yard trimmings shall be accepted per day. Of the 5,000 cubic yards of yard trimmings, not more than 3,000 cubic yards of commingled loads containing grass clippings may be received.

The total length of all windrows at the site at any given time shall not exceed 25,000 feet (approximately 125,000 cubic yards)

Exempt Facilities

There are a number of facilities that are exempt from obtaining county solid waste inclusion and from obtaining a NJDEP approval to operate. The Administrative Code found at N.J.A.C. 7:26A-1.4 allows for a variety of recycling activities ranging from smaller composting facilities to leaf mulching on farm fields.

Farm operators are encouraged to accept leaves as mulch on their farm fields with the requirement that the leaves be delivered unbagged, must be spread within seven days of their receipt to a thickness not to exceed six inches and the leaves must be tilled into the soil the next tillage season. Mulching arrangements on farm fields are exempt from NJDEP permitting and the requirement for inclusion in the WCSWMP. However, operators of exempt activities must notify and certify to the NJDEP that they will abide by the rules or risk penalties and termination. The county and host municipality are copied on the notification.

A list of exempt facilities is available from the County Solid Waste Coordinator. Leaves and vegetative waste will not be accepted for processing at the RRF.

An educational program aimed at leaving grass clippings on the lawn will be developed by the County Recycling Coordinator and used in recycling presentations. Grass, leaves, and kitchen waste may be composted and used as a soil enhancer.

Christmas trees are accepted at the Warren County district landfill in January each year and chipped for mulch. The mulch may be picked up by individual residents or in bulk loads, free of charge.

20 - **Stumps** - *Unfinished wood from commercial land clearing activities. NOTE: This*

material must be recycled at a registered, exempted or pending "Class B" recycling facility.

Currently, designated in the Warren County Plan.

Other

- 21 - **Batteries, Household** - *Any type of button, coin, cylindrical rectangular or other shaped enclosed device or sealed container which was utilized as an energy source for commercial, industrial, medical, institutional or household use. THIS DOES NOT INCLUDE LEAD ACID BATTERIES FROM VEHICLES.*

Currently household batteries are designated in the Warren County Plan.

A collection system of some 70 drop-off sites, as well as curbside collection with recyclables, has been established throughout Warren County by the PCFA. The batteries are no longer segregated. But, mercuric oxide, nickel-cadmium and lithium batteries are sent to a market and all other dry cells are collected at a household hazardous waste day and disposed of elsewhere.

In addition to the PCFA battery collection, the Portable Rechargeable Battery Associates (PRBA) has developed a collection system in New Jersey for nickel-cadmium and small sealed lead-acid batteries. Retailers who sell these types of batteries can collect them separately from other types, and utilize the PRBA system to recycle them.

- 22 - **Concrete/Asphalt and Masonry/Paving Materials** - *Asphalt or asphalt-based roofing shingles, concrete, brick, cinder block, ceramic materials stones, other masonry materials and paving materials. NOTE: This material must be recycled at a registered, exempted or pending "Class B" recycling facility.*

Currently, asphalt and concrete pavement and concrete bricks are designated in the Warren County Plan.

Tilcon Quarry, Inc., accepts asphalt and concrete paving materials as part of the asphalt and concrete recycling operation.

The process generates crushed asphalt and concrete aggregates which are then supplied to the Asphalt Plant located on Block 25, Lot 3, in Oxford Township for recycling. The end product is then used as road base material.

Tilcon is permitted to receive no more than 2,400 tons per day of concrete and asphalt or no more than 12,000 tons per week. The hours of operation for receiving,

storing, processing, or transferring source separated material is 7:30 am to 4:30 pm Monday through Friday. The maximum amount of unprocessed material that may be stored on site is 59,723 cubic yards. No more than 1,017 cubic yards of processed material

This Plan recommends that a drop off center for homeowners and small contractors to bring their materials for no or a nominal fee.

- 23 - **Food Waste** - *Food plate wastes and food processing wastes. Food processing wastes include food processing waste, food processing residuals and animal processing wastes. If the material is transported and processed as animal feed, it should be identified as such. Materials generated in trimming and reject sorting operations from the processing of fruits and vegetables in canneries and similar industries, e.g. tomato skins, pepper cores, bean snips cranberry hulls, etc., should be classified as (28) process residue. (Note: This definition is used for Tonnage Grant purposes only, and does not reflect the definition as per the to-be-proposed solid waste and recycling regulations.)*

Currently, not designated in the Warren County Plan. However, the Plan recommends that restaurants and homeowners compost as much food waste as possible to keep it out of the waste stream.

- 24 - **Miscellaneous Recyclable Materials** - *Includes any other non-hazardous materials which would otherwise be classified as solid waste and is not otherwise defined in this section and documented as being recycled. Examples include, but are not limited to: furniture, wallboard, carpeting, padding and insulation. **Construction and Demolition debris must be separated into its various materials.** Any material labeled as C&D will be disallowed in the Tonnage Report.*

The model Municipal Recycling Ordinance contained in Appendix contains a requirement for a debris recovery plan for new construction, renovation, and demolition projects. If adopted in total or in part by the municipality, the municipal coordinator will need to obtain the amount of material recycled from the projects and report the amount in the tonnage grant forms.

Currently, carpet, computers, laser and inkjet cartridges, and florescent tubes are designated in the Warren County Plan.

Latex paint use to be collected at the Warren County recycling center. The PCFA has discontinued the collection of used latex paint in its household hazardous waste collection day because of the lack demand for the “recycled beige”. Alternatives need to be explored to provide for the collection and possible transfer to an approved paint recycler in or out of state.

- 25 - **Other Glass** - *All non-container glass such as plate glass, drinking glasses and automotive glass.*

Currently, not designated in the Warren County Plan.

- 26 - **Other Plastic** - *Low-density polyethylene (LDPE) film or bags, other film, plastic closures, durable goods and plastic pallets (provided they are recycled and not simply reused).*

Currently, not designated in the Warren County Plan. The County Plan encourages supermarkets collect bags for recycling. Although not designated, the weight of the material should be reported to the municipal recycling coordinator.

- 27 - **Petroleum Contaminated Soil** - *Non-hazardous soils containing petroleum hydrocarbons resulting from spills, leaks or leaking underground storage tanks used for gasoline or any other commercial fuel and which are recycled in accordance with the requirements of N.J.A.C. 7:26A-1.1 et seq. NOTE: This material can be recycled at "Class B" facilities (for example, authorized asphalt manufacturers).*

Currently not designated in the Warren County Plan, although the soil has been transported to centers for recycling. See Section IV of this plan for location of centers

- 28 - **Process Residue** - *Includes ferrous metals and ash recovered from any form of incinerator power plant and any other process residue (i.e. manufacturing scrap) which is non-hazardous and meets the definition of an ID-27 industrial waste. NOTE: Sludge is not included in this or any other definition.*

Currently not designated in the Warren County Plan.

- 29 - **Textiles** - *Cloth materials such as wool, cotton, linen, nylon or polyester derived from clothing, linens or cloth diapers.*

Currently, textiles and clothing is designated in the Warren County Plan.

The use of church and shopping mall drop-off sites is encouraged. Municipal coordinators need to track the drop off sites and contact the bin owners in order to file an accurate tonnage report for their community.

- 30 - **Wood Scraps** - *Unfinished lumber. Included in this definition are wooden pallets. Utility Poles are **not** recyclable. NOTE: This material must be recycled at a registered, exempted or pending "Class B" recycling facility.*

Currently, non-treated wood is designated in the Warren County Plan.

OTHER MATERIALS

Household Hazardous Waste

This program provides for the proper disposal of hazardous waste materials generated by Warren County households, agricultural establishments, small businesses and local governmental agencies (e.g. school chemistry labs) at licensed hazardous waste disposal facilities. The PCFA sponsors two household hazardous waste collection days each year at the Warren County District Landfill. Among materials collected are commonly used items such as pesticides and herbicides, anti-freeze, caustic cleaners (ovens), oxidizers (pool chlorine), oil-based paint, paint thinners and solvents.

The feasibility of establishing a permanent household hazardous waste collection facility to be available to the public one or two days a week and have the waste removed periodically should be explored. The most likely site for such a facility is at the WCDL.

Burnt Metals

Ferrous metals, which are not recovered by source separation programs, are recovered after the combustion process at the Facility and recycled. This process is part of a recycling program rather than a fuel quality program. Therefore, in order to improve fuel quality and the BTU content of the fuel, the goal is to recover as much metal as possible in source separation programs, thus keeping the metal out of the Facility's waste stream.

Metals extracted from Warren County RRF ash are recycled under the auspices of the PCFA by marketing them to scrap metals processors. The NJDEP has determined that these metals are eligible for tonnage grant credit for the generating municipalities and the tonnage is reported by the PCFA to sending municipalities each year. This program will continue.

Junked Automobiles/Trucks

Junked automobiles/trucks will be included as part of the 60 percent recovery goal. They will be recycled by private scrap metal dealers in Warren County

VI. Enforcement

Municipal Enforcement

A review of the recycling ordinances on file with the planning department indicate that most if not all municipalities adopted their ordinances in the late 1980's and early 1990's. They are reflective of the model ordinance that was available at the time.

In general municipalities did not update the ordinances by identifying the designated materials that were added over the years to the Warren County Recycling Plan. In addition, the responsibility for ordinance enforcement designated a number of responsible persons including the Police Department, Recycling Coordinator, Public Works Department, Health Officer (county or local), Code Enforcement Officer, or other special officer appointed by the governing body. Penalties ranged from unknown to \$25 to \$1,000 and/or community service or jail time. In some cases, the ordinance instructs residents to remove metal rings or other fasteners from the material set out for pick up. This is no longer necessary due to advancements in the recycling industry.

In accordance with the 2006 State Solid Waste Plan and recycling statutes, municipalities are required to adopt an updated recycling ordinance. The ordinance should be similar to the model ordinance provided by the NJDEP. One of the key components of the ordinance is that municipalities need to designate the appropriate personnel to enforce the recycling ordinance in their community. The NJDEP model recycling ordinance as modified by the SWAC is included in the appendix.

The responsibility of enforcement at the municipal level should concentrate on ensuring that the residents, commercial establishments, office buildings, and other governmental and school buildings are indeed recycling. Municipal recycling enforcement should focus its attention on residential and smaller commercial and institutional buildings.

County Enforcement

The County Health Department's role in recycling enforcement will be limited to the recycling activities assigned to the department on a yearly basis by the DEP and will include the enforcement of recycling centers and recycling generators as specified in the yearly solid waste fee activity work plan.

In 2006, the County Health Department provided for 75 recycling inspections and inspections of recycling centers. In 2008 the County Health Department anticipates conducting 100 inspections. They are random inspections of governmental, school, the larger multi-family developments, and commercial facilities. The number of future inspections will be determined by the CEHA annual contract with the State. County enforcement would supplement municipal efforts by focusing on the larger establishments and employers, larger multifamily developments, and recycling centers located within the county.

The work program for enforcement is governed in part by the amount collected through the solid enforcement fee that the Board of Chosen Freeholders imposes on a ton of waste delivered to the landfill. As deliveries to the landfill decline, the fee per ton to maintain existing levels of enforcement would have to increase. If the County Health Department does not received solid waste fees the department's role in recycling and solid waste activities will be significantly reduced from the current work plan.

All Warren County solid waste enforcement including transportation and recycling enforcement activities will be exercised under the powers delegated to the County Health Department in the County Environmental Health Act (N.J.S.A. 26:3A2-21 et seq.) to enforce provisions of the Solid Waste Management Act, (N.J.S.A 13:1E-1 et seq.) and rules at N.J.A.C 7:26-1 et seq., N.J.A.C. 7:26A-1 et seq.

Penalty assessments for violations will be issued in the form of a Violation/Penalty Assessment in accordance with the Grace Period Law, N.J.S.A. 13:1D-125 et seq., under the Solid Waste Rules N.J.A.C. 7:26 and Recycling Rules 7:26A. These powers are delegated to the County Health Department through the County Environmental Health Act. In the event the party does not comply, the County Health Department will sign a complaint in municipal court for compliance with these regulations and penalties.

As noted in the Public Education and Communication section, one on one meeting with larger generators of office paper, seminars with large employers concerning the importance of recycling and workshops with haulers and recycling center operators are envisioned. The purpose of the meetings and workshops are to stress the importance of recycling and stress compliance with the solid waste plan.

PCFA and Covanta Enforcement

An inspection procedure consisting of a visual inspection of incoming waste loads needs to continue. In the event that recyclable material is detected in a delivery, the hauler delivering such waste should be asked to remove the material. A written record should be made of the detection, including the name of the hauler, vehicle registration number, and municipality of origin. A copy of these records should be provided to the County Recycling Coordinator and the appropriate municipal recycling coordinator for appropriate action as specified in the municipal recycling ordinance.

In addition, waste deliveries to the Resource Recovery Facility will be subject to the Fuel Quality Assurance Program found in Section of this Solid Management Plan.

Hauler Enforcement

It is noted that the Solid Waste Utility Regulations at N.J.A.C. 7:26H-1 et seq. prohibit haulers/collectors of solid waste from collecting commingled loads of solid waste and designated source separated materials. N.J.A.C. 7:26H-4.4(a)6 states “Collectors are prohibited from collecting commingled loads of solid waste and designated source separated recyclable materials, except in those instances where a specific municipal exemption has been granted to the generator of those materials as provided by N.J.S.A. 13:1E-99.16(d). Each solid waste management district plan contains a definition of the district's designated recyclable materials. Collectors are prohibited from disposing of leaves in any manner that differs from that outlined in N.J.S.A. 13:1E-99.21.”

Haulers/collectors are expected to do their share in enforcement. If the driver of the truck sees that a load contains designated recyclables, the driver should not pick up the load. Instead, he should place a notice on the offending load stating that it contains recyclable material and must be separated from the load of solid waste. The repackaged load of solid waste will then be collected on the next scheduled collection day or a special run will have to be made. The recyclables will be collected on the next scheduled recycling pick up.

Section 12 of the Solid Waste Utility Regulation states “The collector shall have the right to refuse pick-up of waste for any of the following reasons: (*see x. below*)

- i. Waste is not placed in proper containers;
- ii. Waste is not placed at designated pick-up location;
- iii. Waste contains hazardous material (as defined in N.J.A.C. 7:26), or other matter that is likely to cause injury to the public or the collector's personnel;
- iv. Waste is not placed out for collection on the scheduled day;
- v. Passage on the street or into the property is obstructed in any way by the operations to pave the street, by the digging of water or sewer lines or other type of construction. Pick up will be provided on the next regularly scheduled collection day;
- vi. The collector is asked to move the collection vehicle by an authorized government official or a member of the local police or fire department because the customer, either residential, commercial or industrial, has not provided either adequate or legal parking for the collection of garbage, refuse or solid waste. Under these circumstances, the collector may leave and not be obligated to return until the next regularly scheduled collection day;
- vii. Containers exceed prescribed weight limits as prescribed in the collector's tariff;
- viii. Containers are over filled or overflowing;
- ix. The particular service and/or waste type is not included in the collector's tariff; or
x. Solid waste is commingled with designated source separated recyclable material. “

Section 13 then reads “ Collection services may be restored upon proper application when the conditions under which such service were discontinued are corrected, and upon the payment of all proper charges due from the customer as provided in the collector's tariff. “

If necessary this Recycling Plan suggests that in order to cover costs associated with an additional collection run made by the hauler, the hauler documents the additional charge in the tariff that is filed with the State. The additional charge can then be assessed to the customer.

VII Funding

The county health department has a limited amount of funding and personnel through its CEHA program to conduct facility inspections and then follow up on them. For enforcement to be most effective it should be carried out as locally as possible. However, in Warren County most municipalities do not have the funding to pay for an additional person part time to inspect residential, commercial, and institutions in their communities. It is recommended that grants offered by the State, County, PCFA, or other sources be targeted for enforcement of the local recycling ordinance and County Solid Waste Plan.

As introduced in the 2006 session, Assembly Bill A-1886 will allow a fee of \$3.00 per ton to be charged on all solid waste originating in state or being brought in from out of state and imposed on landfills and resource recovery facilities to help fund recycling activities. Statewide, the fee could raise \$17.4 million for distribution to municipalities and \$8.7 million for distribution to counties. Through a funding formula to be determined, Warren County could receive a substantial amount of funding to assist in local recycling efforts.

Funding could be provided by instituting an additional fee called a Solid Waste Management Service Fee, onto the tipping fee at the landfill and/or the Resource Recovery Facility. A goal of this plan is to award every municipality sufficient funding to pay for part-time recycling enforcement. The formula to allocate the funding should be done in an equitable manner where population and geographic size could be taken into account.

It is preferred that the fee per assessed against the total waste stream thereby accounting for deliveries to the landfill and the RRF.

Section 8: District Solid Waste Disposal Strategy

Implementation

The County of Warren is designated as the implementing agency of the Warren County Solid Waste Management Plan in cooperation with the Pollution Control Financing Authority (PCFA) of Warren County

In coordination with the Solid Waste Advisory Council the Solid Waste Coordinator is responsible for reviewing and processing amendments to the Solid Waste Plan including facility inclusion and policy changes to the plan. The county recycling coordinator is responsible for

promoting the recycling strategies contained in the Plan.

Background

The objectives of the Warren County Solid Waste Management Plan (WCSWMP) remained the same despite the invalidation of New Jersey's waste flow system on November 10, 1997 in the US Supreme Court decision *Atlantic Coast Demolition and Recycling v. Board of Chosen Freeholders of Atlantic County*. These objectives address the waste management needs of the people of the county, minimize adverse environmental impacts, accord appropriate weight to economic viability and social acceptability. Although the objectives remain unchanged, the methods were modified to achieve them.

It is noted that Warren County devised its first SWMP to build the RRF and the landfill based the legislative authority of the State of New Jersey that created waste flow. When waste flow was deemed invalid in the Atlantic Coast decision, the legislature should have provided a statewide solution. In lieu of statewide solution, the Board of Chosen Freeholders and the PCFA, with the advice of the Warren County SWAC, sought out waste management strategies that reflected the most current and appropriate practices within the constraints of what the people of Warren County could afford. The Warren County Landfill is owned and operated by the Pollution Control Financing Authority of Warren County but the land it occupies is owned by the County of Warren. Similarly the Resource Recovery Facility is owned and operated by Covanta Energy but land it occupies is owned by the County of Warren.

On April 30, 2007 in the U.S. Supreme Court Decision of *United Haulers Association, Inc et al v. Oneida-Herkimer Solid Waste Management Authority et. al.* the Court held that counties flow control ordinances that direct waste to government owned facilities do not discriminate against interstate commerce. The court said that the commerce clause is not intended to control public efforts to enact flow control ordinances because waste disposal is typically and traditionally a function of local government exercising its police powers. The higher tipping fees that normally accompany waste flow will fall onto the citizens of the jurisdiction of the publicly owned facility it serves.

Given the facts of the United Haulers decision the County of Warren and the PCFA are reviewing the viability of imposing waste flow requirements of ID 13 and incinerator ash to the landfill. The decision to require waste flow will be made in a future plan amendment.

The Strategy

Recycling

The highest priority in Warren County's strategy for managing its solid waste stream is through source reduction, reuse, and recycling. As discussed in the County's Recycling Plan , Section 7, reduction of waste through less packaging, longer product life, and reuse will continue to be encouraged. The expansion of recycling efforts will continue to be considered in both the number

of materials that will be recycled and in the ability to reach and service household, commercial and industrial generators of recyclable materials. Warren County and the PCFA will continue to implement programs, such as the recycling center, scrap tire collection subject to available funding, household battery recovery, household hazardous waste and computer and electronic parts collection. The County and PCFA will continue to explore implementing programs for carpet and foam padding recycling, construction and demolition materials, and other programs designed to enhance fuel quality at the RRF. This, in turn, will maximize recycling, reduce landfill needs, enhance environmental quality as well as ensure the long-term economic viability of the Warren County solid waste facilities.

Expanding public education and market development will play a key role in the expansion of recycling opportunities in Warren County. In addition, to more fully address enforcement at the local level, a model recycling ordinance is provided as part of this plan and is intended to be used as guide for Warren County municipalities to update their existing recycling ordinances and to add requirements for debris recycling for construction, renovation, and demolition projects. The model ordinances were provided by the NJDEP and modified by SWAC.

Solid Waste Disposal

The Warren County Resource Recovery Facility is available to haulers servicing Warren County for the disposal of Type 10, Type 23 and processible portions of Type 27 wastes

The Warren County District Landfill is available to residents and haulers servicing Warren County for the disposal of ID 13, 13C, 23, 25, 27, and 27I wastes. ID 10 waste may be disposed of in the Landfill as bypass waste from the RRF.

At the present time, all waste generated within Warren County may be transported to other permitted disposal sites in New Jersey or out of state.

Resource Recovery Facility

The RRF is permitted to process up to 548 tons of ID 10, 23, and processible 27 wastes per day. It began operations in July 1988, and provides solid waste disposal services as a merchant facility based on a service agreement between the PCFA and Covanta Energy, the current owner of the Resource Recovery Facility. It is located in Oxford Township at 218 Mt. Pisgah Ave. on Block 26 Lots 88, 88.01, 89, 87.02, and 84.03. The Access Road, also known as Jensen Drive, from Rt. 31 to the RRF and the landfill is located on Lots 87.02 and 84.03. In accordance with the Service Agreement between the PCFA and Covanta Energy, the ash is disposed of at the Warren County District Landfill.

In accordance with the Service Agreement, Covanta Energy is to offer haulers serving Warren County an “In-County Rate” for haulers with disposal contracts of 9 to 24 months. The accepted “in-county rate” would be dependent upon a number of factors to include volume discounts etc. The current agreement with Covanta states that if the PCFA believes that less than 50% of the

waste generated within Warren County is being delivered to the RRF, a study may be undertaken to determine if the in county rates should be adjusted. The WC SWMP supports giving Warren County haulers preferential rates regardless of volume delivered to the RRF.

Warren County District Landfill

Ash from the RRF and material that must bypass the RRF are deposited into the WCDL. The WCDL which was designed to serve the county's needs for at least twenty years is located in White Township, on Block 32 Lots 12, 13, 14, 12.01, 17, 18, 22, and Block 34 Lots 17, 18, 18.01, 18.02 and Block 42 Lot 7, approximately one half mile from the Resource Recovery Facility. The landfill is permitted by NJDEP to accept waste types ID 10, 13, 23, 25, 27. In 1997, the NJDEP permitted ash to be commingled with other waste.

In December 2002, the Board of Chosen Freeholders requested the PCFA provide a plan to ensure the proper closure of the landfill at the end of 2006. After a careful review of the ongoing financial obligations of the landfill, including debt service and closure funding, the PCFA proposed an alternative landfill design in January 2003. The alternative landfill design will not expand the 45 acre footprint, but only increases the landfill side-slopes from 4:1 to 3:1 over the 45 acre footprint. The result is an increase in the landfill's design capacity from 3.0 million cubic yards to 4.5 million cubic yards.

In accordance with N.J.S.A. 13:1E-20, the Board of Chosen Freeholders approved this capacity increase. Based on the proforma, the landfill was expected to reach capacity and cease waste acceptance at the end of 2006 with the goal of accruing sufficient funds to pay for landfill closure and a 30 year post closure maintenance period. This closure plan goal was not achieved. On September 13, 2006, the Board of Chosen Freeholders adopted a resolution to delay closing the landfill until the end of 2007.

After further financial analysis and to ensure that Warren County residents and businesses will have a long term disposal site available locally, the current Solid Waste Plan provides for the continuing operation of the landfill beyond the previous closure date of 2007. The construction of cell #5 will be completed and the expansion of the landfill vertically will be permitted. It is estimated that the expansion would increase the height of landfill by 50 feet and increase its disposal capacity by 85% to a total volume of approximately 5.5 million cubic yards. Based on a average disposal rate of approximately 100,000 tons per year beginning in 2009, which is equivalent to the quantity of waste generated in Warren County, it is projected that, the life of the landfill will last until 2020.

It is the intention of the County of Warren to discourage the disposal of waste originating from outside of Warren County into the landfill except for bypass waste from the RRF and the ash. One way to to accomplish this goal and in light of the recent U.S. Supreme Court Decision from April 30, 2007 is to reinstate flow control, where all or a portion of currently permitted solid waste generated within Warren County would be delivered to the Warren County

District Landfill for disposal. Enactment of flow control will have to take place in a future plan amendment. This option is being considered by the County and the PCFA at the present time.

In the event that the PCFA encounters financial shortfalls, it may enter into agreements to receive waste from outside of Warren County. The Warren County Board of Chosen Freeholders shall be notified at least six months in advance of the projected shortfall and be notified of the proposed course of action.

Regulated Medical Waste

In 1995, under State mandate, the SWAC examined the needs and methods for disposal of Regulated Medical Waste (RMW) generated within the County in order to develop a plan for the management of the County's RMW as required by the New Jersey Comprehensive Regulated Medical Waste Act of March 1989.

The Comprehensive Regulated Medical Waste Management Plan established a long term program for the regulation of medical waste under the control of the NJDEP and the New Jersey Department of Health (NJDOH). The Comprehensive Act mandated a regulatory program that would guide the management of all RMW in the state and established a planning process for RMW management similar to the planning process for solid waste management. In both processes, counties have a central role in the development of waste management plans in accordance with state guidelines. To meet its responsibility, the Warren County Board of Chosen Freeholders retained the services of William C. Finn Associates, Inc. to develop alternatives and a plan for the management of RMW disposal. In April 1995, a public hearing on this plan was held by the Board of Chosen Freeholders and was rejected unanimously.

The plan addressed the following six issues: 1) Self-Sufficiency Analysis, 2) General Strategy, 3) Regional Management of RMW, 4) RMW Disposal at Existing Facilities, 5) Sharp Disposal, and 6) Municipal Solid Waste (MSW) Source Reduction and Recycling.

Now that the uncertainties regarding control of waste flows that were prevalent when the RMW amendment was presented in 1995 have been resolved in the United States Supreme Court decision, *Atlantic Coast Recycling and Demolition v. Board of Freeholders of Atlantic County* on November 10, 1997, decision makers can intelligently review proposals for regulated medical waste disposal.

The strategy for the disposal of RMW is that all RMW generators shall dispose of their RMW outside of Warren County.

Sludge and Septage

To assist the county in dealing with sludge management issues, the Warren County Board of Chosen Freeholders created a task force in 1997 and it released a report of its findings in

September 1999. On November 10, 1999, the Warren County Board of Chosen Freeholders accepted and adopted the report entitled “Review of Sludge Issues, Warren County, New Jersey”.

Section 9 thru Section 16: NO CHANGE

APPENDIX