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# AN AMENDMENT TO UPDATE THE COUNTY RECYCLING AND SOLID WASTE MANAGEMENT STRATEGY FOR THE TEN YEAR PLANNING PERIOD (2007 – 2016)

#### PREPARED FOR:

THE CAPE MAY COUNTY BOARD OF CHOSEN FREEHOLDERS

PREPARED BY:

THE CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY

**DECEMBER 2006** 

**AS ADOPTED ON FEBRUARY 13, 2007** 

#### AMENDMENT TO THE CAPE MAY COUNTY SOLID WASTE MANAGEMENT PLAN

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#### **NOTICE OF PUBLIC HEARING**

### PROPOSED AMENDMENT TO THE CAPE MAY COUNTY SOLID WASTE MANAGEMENT PLAN

The Cape May County Board of Chosen Freeholders will conduct a Public Hearing on Tuesday, January 23, 2007 at 4:00 pm in the Freeholder Meeting Room, County Administration Building, 4 Moore Road, Cape May Court House, New Jersey, for the purpose of soliciting public comment regarding a proposed Amendment to the adopted and approved Cape May County Solid Waste Management Plan. The purpose of the proposed Amendment is to revise the Cape May County Solid Waste Management Plan to be consistent with the Updated Statewide Solid Waste Management Plan as adopted by the Commissioner of the New Jersey Department of Environmental Protection (the "NJDEP") on January 3, 2006. Specifically, the NJDEP has required that the Amendment to the Cape May County Solid Waste Management Plan update all district plan requirements mandated by statute including, but not limited to, the following components:

- 1. Designation of the governmental agency to supervise the implementation of the Cape May County Solid Waste Management Plan (the "County Plan");
- 2. An estimate of the quantity of solid waste to be generated within Cape May County (the "County") for the ten-year planning period;
- 3. An inventory of all existing solid waste and recycling facilities within the County;
- 4. An outline of the solid waste disposal strategy to be utilized by the County for the ten-year planning period;
- 5. Where applicable, a procedure for the processing of applications for the inclusion of solid waste and recycling facilities within the County Plan; and
- 6. Where applicable, the County's strategy for the attainment of the recycling goals contained in the Updated Statewide Solid Waste Management Plan.

This proposed Amendment to the County Plan also includes the proposed expansion of the Cape May County Municipal Utilities Authority's (the "CMCMUA") Sanitary Landfill to provide long-term disposal capacity for all solid waste generated within the County that is not otherwise recycled. The non-hazardous solid waste types permitted to be received at the Sanitary Landfill for disposal include Types 10, 13, 13C, 25, 27, 27A and 27I as classified by the NJDEP. The expansion of the Sanitary Landfill, which is located at 2050 Dennisville-Petersburg Road (Route 610), Woodbine/Upper Township, New Jersey, is expected to provide for the landfilling of approximately sixteen (16) million additional tons of solid waste generated in the County over a forty-two (42) year period. Including the currently permitted capacity, the Sanitary Landfill is projected to provide disposal services for Cape May County until the year 2067. This expansion is planned for completion within the existing Sanitary Landfill property owned by the CMCMUA including the following block and lot numbers: Block 247, Lots 1-3, 5-7, Block 248, Lot 9 located in the Township of Upper; Block 123, Lots 1-3, Block 124, Lot 1, Block 128, Lots 1, 3-4, Block 128.02, Lots 1-3, Block 131, Lots 1, 4-5, Block 131.02, Lots 1-29, Block 137.02, Lots 1-9 located in the Borough of Woodbine. This Amendment also provides for the deletion of previously adopted amendments which are inconsistent with the long-term solid waste management strategy set forth in the proposed Amendment to the County Plan.

Beginning on January 3, 2007, the proposed Amendment to the County Plan consisting of the document entitled "CAPE MAY COUNTY SOLID WASTE MANAGEMENT PLAN: AN AMENDMENT TO UPDATE THE COUNTY RECYCLING AND SOLID WASTE MANAGEMENT STRATEGY FOR THE TEN YEAR PLANNING PERIOD (2007-2016)" dated December 2006, will be available for public review during normal business hours at the Municipal Clerk's office in each of the municipalities in Cape May

County, the office of the Clerk of the Board of Chosen Freeholders, the County Library in Cape May Court House and the office of the Cape May County Municipal Utilities Authority located at 1523 U.S. Route 9, Swainton, New Jersey. The proposed Amendment may also be accessed at *www.cmcmua.com*.

Written comments concerning this proposed Amendment should be submitted to both the:

Cape May County Municipal Utilities Authority

Cape May County Board of Chosen Freeholders

P.O. Box 610 DN 101 Crest Haven Complex

Cape May Court House, NJ 08210 4 Moore Road

Attn: Mr. John Baron, Solid Waste Program Mgr. Cape May Court House, NJ 08210

Verbal comments presented at the Public Hearing and all written comments received at or prior to the January 23, 2007 Public Hearing will be included in the Cape May County Freeholder Board's consideration of, and subsequent action on, this proposed Amendment to the County Plan. The public comment period shall close upon the conclusion of the Public Hearing on January 23, 2007.

First Publication Date: January 3, 2007 Mr. Stephen O'Connor

Second Publication Date: January 10, 2007 Clerk of the Freeholder Board

#### SECTION I

#### BACKGROUND RELATED TO AND PURPOSE OF THE PLAN AMENDMENT

#### A. Background

For more than three decades, the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. (the "Act") has provided the framework for the collection, transportation and disposal of solid waste management in the State of New Jersey (the "State"). Through this Act, the State developed one of the most comprehensive solid waste management systems in the nation. The Act designated each of the twenty-one (21) counties in New Jersey, as well as the Hackensack Meadowlands Commission, as solid waste management districts. Each of these districts was given the authority and responsibility to develop and implement comprehensive solid waste management plans to serve the municipalities within their respective jurisdictions. The Act also delineated the responsibility for the collection and disposal of solid waste to municipalities in accordance with the solid waste management plans developed by each county. In 1987, an amendment to the Act established Statewide mandatory recycling goals and assigned municipalities the responsibility for implementing recycling programs for residential, commercial and institutional waste generators.

In 1978, the Cape May County Board of Chosen Freeholders (the "Freeholder Board") authorized the development of a solid waste management plan which would establish an overall strategy for the disposal of all solid waste generated within the County of Cape May (the "County"). In 1979, the Freeholder Board adopted the Cape May County Solid Waste Management Plan (the "County Plan") and formally designated the Cape May County Municipal Utilities Authority (the "Authority" or "CMCMUA") as the implementing agency for the County Plan. Since that time, the County Plan has been periodically amended to incorporate various facilities, programs and policies. During the past three decades, the County has developed and the Authority has implemented a comprehensive solid waste management system which includes extensive initiatives to recycle and reclaim numerous categories of waste materials and provide for the availability of a reliable and environmentally responsible disposal method for the County's remaining solid waste stream.

On January 3, 2006, the Commissioner of the New Jersey Department of Environmental Protection (the "NJDEP" or "Department") formally adopted an Updated Statewide Solid Waste Management Plan (the "State Plan") which provides the framework for all levels of government in the State to manage solid waste and fulfill their responsibilities under the Act. The State Plan requires that each county or district adopt and submit an updated district solid waste management plan to the Department on or before January 3, 2007.

#### B. Purpose

The purpose of this document, entitled "Cape May County Solid Waste Management Plan: An Amendment to Update the County Recycling and Solid Waste Management Strategy for the Ten Year Planning Period (2007-2016)", hereafter referred to as the "Plan Amendment", is to revise the County Plan to be consistent with the updated State Plan. The NJDEP has also directed Cape May County and all other districts to update each district plan to reiterate the statutory district plan requirements contained in N.J.S.A. 13:1E-

- 21. The proposed modifications to the County Plan include components that have been specifically required by the NJDEP in addition to other elements identified by the Authority. These modifications include, but are not limited to, the following components:
  - 1. Reaffirm the designation of the CMCMUA as the County agency to supervise the implementation of the County Plan;
  - 2. Provide projections for the quantity of solid waste generated within the County for the ten-year planning period;
  - 3. Update the inventory of all existing solid waste and recycling facilities within the County;
  - 4. Delineate the solid waste management and disposal strategy to be utilized by the County for the ten-year planning period;
  - 5. Update the procedure for the processing of applications for inclusion of solid waste and recycling facilities within the County Plan;
  - 6. Update the County's strategy for the attainment of the recycling goals contained in the updated Statewide Solid Waste Management Plan;
  - 7. Provide for the expansion of the Authority's Sanitary Landfill to provide long-term disposal capacity for all solid waste generated within the County that is not otherwise recycled; and
  - 8. Provide for the deletion of previously adopted amendments which are inconsistent with the long-term solid waste management strategy set forth herein.

This Plan Amendment amends and supersedes the County Plan, and all previous amendments, to the extent this Plan Amendment is inconsistent therewith.

To ensure the broadest possible participation by the general public in this Plan Amendment process, the Cape May County Board of Chosen Freeholders will conduct a Public Hearing on Tuesday, January 23, 2007 at 4:00 p.m. in the Freeholder Meeting Room, County Administrative Building (located at the Crest Haven Complex), 4 Moore Road, in Cape May Court House, New Jersey. All interested County residents, public officials or other interested parties or organizations are encouraged to review this proposed Plan Amendment and place their comments on the public record during the public comment period. The Freeholder Board will consider all written comments received from the public and all verbal comments presented at the Public Hearing prior to taking any formal action on the proposed Plan Amendment. Reference copies of this Plan Amendment shall be made available for review during normal business hours at every Municipal Clerk's office in Cape May County, the office of the Clerk of the Board of Chosen Freeholders, the County Library in Cape May Court House, as well as the Swainton office of the Cape May County Municipal Utilities Authority, the implementing agency for the County's solid waste management program. The Plan Amendment can also be accessed at www.cmcmua.com.

Written comments concerning this proposed Plan Amendment should be submitted to both the:

Cape May County Municipal Utilities Authority

P.O. Box 610

Cape May Court House, NJ 08210

Attn: Mr. John Baron, Solid Waste Program Mgr.

Cape May County Board of Chosen Freeholders

DN 101 Crest Haven Complex

4 Moore Road

Cape May Court House, NJ 08210

#### **SECTION II**

#### SOLID WASTE PLANNING AND MANAGEMENT STRATEGY

#### A. CMCMUA Designated Implementation Agency

The New Jersey Solid Waste Management Act provided each solid waste management district with the authority and responsibility to develop and implement comprehensive solid waste management plans to serve the municipalities within their respective jurisdictions. In 1979, the Freeholder Board adopted the County Plan and formally designated the Cape May County Municipal Utilities Authority as the implementing agency for the County Plan. The Authority was authorized by the Freeholder Board to develop and provide a comprehensive solid waste management system that includes a wide range of recycling and solid waste disposal facilities and services.

In 1980, the Authority and the County entered into an agreement (the "County Solid Waste Agreement") relating to the disposal of solid waste generated within the County. The Authority and the County of Cape May are bound by the terms of the County Solid Waste Agreement originally signed in July 1980 and revised in December 1991. Consistent with the County Solid Waste Agreement, the Authority has designed, financed, acquired, constructed, expanded and currently operates a solid waste management system to serve the County of Cape May.

This Plan Amendment reaffirms the designation of the Cape May County Municipal Utilities Authority as the County agency to supervise the implementation of the County Plan.

#### B. Legal Justification for the County Solid Waste Management Strategy

The State of New Jersey has developed one of the most comprehensive solid waste management systems in the nation, a system which was founded on a district planning process that assigned primary solid waste planning responsibility to each county in the State pursuant to the New Jersey Solid Waste Management Act. One of the principal elements of the State's solid waste management planning strategy was the ability to direct solid waste to designated facilities for disposal otherwise known as solid waste flow control. Flow control originally withstood legal challenge, based on a finding that the local benefits outweighed the incidental burden on interstate commerce, <u>J. Filiberto Bros. Sanitation v. NJDEP</u>, 857 F.2d 913 (3<sup>rd</sup> Cir. 1988). However, almost two (2) decades after the development and implementation of the original County Solid Waste Management Plan, the United States Court of Appeals for the Third Circuit reversed its prior ruling based upon the U.S. Supreme Court's decision in <u>Carbone v. Town of Clarkstown</u>, 511 U.S. 383 (1994) and found solid waste flow control, under certain circumstances, to violate the Commerce Clause of the United States Constitution.

On May 1, 1997, the United States Court of Appeals for the Third Circuit<sup>1</sup> affirmed a District Court Ruling<sup>2</sup> which found that New Jersey's waste flow control regulations unconstitutional insofar as they discriminate

<sup>&</sup>lt;sup>1</sup> The Third Circuit hears appeals from district courts in New Jersey and Pennsylvania.

<sup>&</sup>lt;sup>2</sup> Atlantic Coast Demolition & Recycling, Inc. v. Board of Chosen Freeholders of Atlantic County, et als.

against out-of-State operators of waste disposal facilities. The Third Circuit Court directed that the State's twenty-two (22) solid waste management districts modify their waste management plans so as to choose disposal facilities to service their needs in a manner which does not discriminate against interstate commerce.

The Third Circuit relied on Carbone v. Town of Clarkstown in the case of Atlantic Coast Demolition and Recycling, Inc. v Board of Chosen Freeholders of Atlantic County, et al., 112 F. 3d 652, 663 (3d Cir. 1997), however, Carbone involved a private facility which relied upon solid waste flow control. Other Circuit Court of Appeals subsequent to Atlantic Coast have not interpreted Carbone to apply to public facilities that use flow control, thus the application of Carbone in the Federal Courts has resulted in inconsistent rulings. Specifically, it is currently unclear whether the Commerce Clause is infringed upon when local government, using public money to construct solid waste disposal facilities, controls the flow of waste to those facilities. The Second Circuit<sup>3</sup>, in United Haulers Association v. Oneida-Herkimer Solid Waste Management Authority, 261 F.3d 245 (2d Cir. 2001), 438 F.3rd 150 (2d Cir. 2006), recognized that waste management is a traditional local government function and found that because the local laws of Oneida and Herkimer counties directed local waste to public and not private facilities, the laws did not discriminate against interstate commerce (Id. At 51a) even though such laws prevented trash from being processed at non-local facilities. In Oneida-Herkimer (2d Cir. 2006), the Second Circuit noted "... that the Counties could create a public monopoly encompassing the entire waste management process, thereby displacing private firms altogether, without violating the Commerce Clause." See e.g., USA Recycling, Inc. v. Town of Babylon, 66 F.3rd 1272-94 (2d Cir. 1995). It is expected that the U.S. Supreme Court will address the inconsistent legal application of Carbone by the Federal Circuit Courts and specifically rule on the constitutionality of the use of flow control by public facilities as the Supreme Court has granted a petition to hear the Oneida-Herkimer case.

Furthermore, aside from the <u>Oneida-Herkimer ruling</u>, the U.S. Court of Appeals for the Third Circuit has noted, "a law that directs waste to a particular facility will not necessarily violate the dormant Commerce Clause as long as out-of-state operators are given an even chance to compete for the opportunity to dispose of the state or district's waste." <u>Atlantic Coast</u>, 112 F. 3d 652, 663; <u>Harvey & Harvey</u>. <u>Inc. v. County of Chester</u>, 68 F. 3d 788, 802 (3d Cir. 1995). The Third Circuit has specifically stated that "[a]lthough the state of New Jersey may no longer preclude the designation of out-of-state waste disposal facilities or operators, the state and the county Authorities remain free to regulate the flow of waste within New Jersey so long as the state's laws and regulations treat in-state and out-of-state facilities equally." <u>Atlantic Coast</u>, 112 F. 3d at 668, <u>Harvey</u>, 68 F. 3d at 801.

In addition, in 1997 the Superior Court of New Jersey, Appellate Division, decided a case involving the solid waste disposal industry wherein it distinguished between out-of-state disposal of solid waste and waste that remained in-state for disposal. <u>In the Matter of Allegations of Violations of Law by A. Fiore & Sons. Inc. et al.</u>, 305 N.J. Super. 192, 701 A. 2d. 1303, (1997), the Appellate Division reviewed and analyzed the <u>Carbone</u> decision and the <u>Atlantic Coast</u> decision in conjunction with New Jersey's waste flow control

<sup>&</sup>lt;sup>3</sup> The Second Circuit hears appeals from district courts in New York, Vermont and Connecticut.

regulations and concluded that <u>Atlantic Coast</u> did not vacate or void the New Jersey intra-state system of solid waste disposition and clearly reemphasized the Third Circuit's Ruling in <u>Atlantic Coast</u> stating that the State and counties remain free to regulate the flow of waste within New Jersey so long as the State's laws and regulations treat in-state and out-of-state facilities equally.

As long as waste can flow freely out of the New Jersey, a county within the State may restrict waste which stays in-state and not violate the Commerce Clause of the Constitution. Cape May County has historically utilized intrastate restrictions regarding flow control, consistent with these past federal court rulings. In accordance with the adopted Cape May County Solid Waste Management Plan, this Plan Amendment reaffirms the use of this fundamental strategy which requires all waste generated in Cape May County to be disposed at one of the CMCMUA's solid waste facilities or shipped out-of-state. The continued use of intrastate flow control restrictions supports the utilization and expansion of the comprehensive solid waste management facilities constructed and operating in the District.

#### C. Current and Long-Term County Solid Waste Management Strategy and Associated Benefits

The County of Cape May has developed and implemented a comprehensive solid waste management system which encourages recycling in order to minimize the quantity of solid waste ultimately requiring disposal. This system also assures the availability of reliable long-term solid waste disposal capacity to enable the proper disposal of all non-recycled solid waste generated within the County. Given the unique and highly sensitive environmental areas that exist within Cape May County, including salt and fresh water wetlands and federally protected Pinelands areas, the CMCMUA seeks to ensure that all solid waste handled, processed and/or disposed of in Cape May County will not pose a threat to the health and safety of the public or to the environment. This Plan Amendment proposes to continue and further expand the County's comprehensive solid waste management system which provides a wide variety of recycling and solid waste disposal services for more than 106,000 Cape May County year-round residents and serves a peak summer population of more than 634,000.<sup>4</sup>

The cornerstone of the County's comprehensive solid waste management system is the CMCMUA's Sanitary Landfill. Disposal capacity within the Sanitary Landfill is finite and, therefore, represents a limited and progressively diminishing resource available to the County of Cape May. Furthermore, the siting of a new solid waste landfill within Cape May County is virtually precluded by the environmentally sensitive geography of the County as well as restrictions of the Pinelands Comprehensive Management Plan (the "Pinelands Plan"). The Pinelands Plan also includes limitations on the operation of the Authority's Sanitary Landfill, the only landfill permitted to operate in the Pinelands area. Specifically, the Pinelands Plan limits the CMCMUA's Sanitary Landfill to only accept for disposal waste which originates from one or more Pinelands municipalities or from one or more non-Pinelands municipalities located within Atlantic, Burlington, Cape May or Ocean Counties. As a result, the acceptance and disposal of solid waste from all out-of-state and most in-state sources is prohibited at the CMCMUA Sanitary Landfill.

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<sup>&</sup>lt;sup>4</sup> Source: Cape May County Planning Board January 2003 – Cape May County Data Book (population projections based on 2000 U.S. Census Data).

Recognizing these facts, the County of Cape May has previously stated its desire to preserve, to the maximum extent practical, and without impermissibly interfering with Interstate Commerce, the remaining disposal capacity within the CMCMUA's Sanitary Landfill for use by Cape May County residents, vacationers and businesses. Preservation of disposal capacity for the County's long-term needs and continuing to provide support for local recycling programs throughout the County in order to extend the useful life of the CMCMUA's Sanitary Landfill represents sound public policy which is consistent with State and Federal law. Furthermore, this policy is considered appropriate since Cape May County has financed and its residents, businesses and municipalities will continue to repay, through the disposal tipping fee, the solid waste debt associated with the development of the County's solid waste and recycling facilities. Therefore, the County will not accept waste generated outside of Cape May County for disposal and will continue its intrastate flow control strategy which mandates that all non-recycled solid waste generated within Cape May County, which is not transported out of state for disposal, shall be disposed of at the CMCMUA's Sanitary Landfill or Transfer Station.

By continuing to provide solid waste generators and haulers with the option of disposing of Cape May County generated solid waste at any properly permitted out-of-State solid waste disposal facility, the market for the disposal of all Cape May County generated solid waste will remain open to out-of-State operators of such facilities. Accordingly, the continuation of this strategy is consistent with Federal and State Court Rulings regarding the designation of solid waste facilities for disposal, provided such designation does not impermissibly interfere with Interstate Commerce.

The County recognizes that retaining the non-recycled solid waste generated within Cape May County for disposal at the CMCMUA's Sanitary Landfill, in a manner consistent with all legal requirements, provides several significant environmental and economic benefits. The CMCMUA's Sanitary Landfill is the only remaining landfill in the County and represents a relatively convenient disposal option for the solid waste which is generated within the peninsula which forms the County of Cape May. The CMCMUA's Solid Waste Transfer Station further facilitates the disposal of a significant portion of the solid waste generated within the County and affords a more convenient/accessible option for the delivery of source-separated recyclables which originate in the southern portion of the County. The operation of the CMCMUA's Solid Waste Transfer Station minimizes the number of vehicles that would otherwise be required to travel from the southern portion of the County to the CMCMUA's Sanitary Landfill, thereby minimizing traffic impacts (particularly during the summer months), and enhancing air quality within the region by reducing vehicular air emissions.

The ability to provide convenient local solid waste disposal capacity within Cape May County, particularly for smaller solid waste generators/haulers, reduces the likelihood of illegal dumping of solid waste within the County, particularly in the more rural areas which encompass a significant portion of the wetlands and/or Pinelands Preservation areas of the County. By utilizing a portion of tipping fees generated from the disposal of solid waste at the Authority's Sanitary Landfill and Transfer Station, the CMCMUA is able to provide a Litter Abatement Partnership Program which enables the County and local municipalities to remove roadside litter, undertake special cleanup projects in areas where illegal dumping has occurred and

periodically provide municipalities participating in this program with an opportunity to disposed of unwanted materials discarded by residents, all without charge.

The solid waste management strategy utilized in Cape May County also enhances the ability to maximize and sustain the benefits of existing recycling programs and services on both a local and County level by providing financial subsidies for such activities. The free and reduced fee recycling options, which are offered by the CMCMUA to encourage recycling, promote reuse of materials and minimize disposal, are all financially subsidized by the tipping fee which is charged for the disposal of solid waste at the CMCMUA's Sanitary Landfill. These source separation and recycling activities help to conserve natural resources, save energy, reduce the emission of greenhouse gases and water pollutants, reduce reliance on waste disposal and create jobs.

The many programs, services and facilities which comprise the comprehensive solid waste management system for Cape May County are described more fully in the following Sections of this Plan Amendment.

#### D. Solid Waste System Financial Status

The CMCMUA has continued to successfully fulfill its financial obligations with respect to the annual repayment of its solid waste debt. The remaining long-term debt of the Authority's solid waste program totals \$15,090,000 as of December 31, 2006. The CMCMUA has continued to maintain and appropriately fund all required reserves to repay outstanding bonds, to fund solid waste system renewal and replacement costs and to provide financing for the proper closure and long-term care of the Sanitary Landfill.

All current operating costs and future capital improvements have been, and will continued to be, financed through the tipping fee which is charged for solid waste disposal at the CMCMUA's Sanitary Landfill. As a result, the revenue derived from the tipping fee for disposal at the CMCMUA's Sanitary Landfill must be financially sufficient to cover these costs in order for the Authority to be able to sustain the County's existing comprehensive solid waste management system. Nonetheless, the Authority has continued to reduce the disposal fee for solid waste each year since 1995. The 2006 tipping fee charged to system users by the CMCMUA was set at \$60.00 per ton, down significantly from the peak disposal rate charged in 1994 of \$95.40.

At the same time, the CMCMUA has been able to satisfy its planning responsibilities with respect to solid waste disposal by providing adequate and reliable long-term disposal capacity at the CMCMUA Sanitary Landfill as well as support for local recycling programs by accepting source separated recyclables at no or low cost. Historically, the aggregate revenue derived from the sale of recyclables has not proven to be sufficient to pay for all the services provided by the extensive County-wide recycling program. Therefore, Cape May County has developed a solid waste management strategy that, in part, encourages recycling by financing any revenue shortfall for such activities through the tipping fee derived from the disposal of solid waste at the CMCMUA's Sanitary Landfill.

## E. Solid Waste Generation, Disposal and Recycling Data and Identification of Programmatic Areas in Need of Improvement

The Solid Waste Management Act has delegated significant solid waste planning responsibilities to each of New Jersey's solid waste management districts. These responsibilities include the obligation to project the solid waste needs of the district and the requirement to assure the availability of reliable long-term solid waste disposal capacity for all solid waste generated. In addition, each county is required to designate within its County Plan specific categories of recyclables which are required to be separated at the source, prior to disposal, to enable the achievement of State mandated recycling goals. To fulfill this obligation, current and historical solid waste generation, disposal and recycling trends for Cape May County must be evaluated to identify any specific programmatic areas in need of modification or improvement during the ten-year planning period beginning in 2007 and continuing through 2016. Historical, current and projected solid waste generation, disposal and recycling data is presented in Exhibits II-1, II-2 and II-3.

	A	ctual and	Projected	Cape Ma	Exhibit II-1 y County Sol	l id Waste and	Recycling '	Tonnages	
			Tor	ns of Solid Wa	ste For Disposal				
Year	Municipal Waste * (Type 10)	Dry Sewage Sludge (Type 12)	Bulky Waste (Type 13)	Vegetative Waste (Type 23)	Animal & Food Process Waste (Type 25)	Non-Chemical Industrial Waste (Type 27)	Total Waste For Disposal	Total Recyclables	Total Solid Waste Generation
1985	96,980	3,950	36,774	815	943	650	140,112	7,850	147,962
1986	106,208	1,748	53,164	2,107	740	1,344	165,311	16,654	181,965
1987	108,031	0	69,033	1,354	670	2,308	181,396	10,444	191,840
1988	102,237	0	65,297	535	807	6,733	175,609	34,506	210,115
1989	91,567	0	56,329	236	1,254	6,334	155,720	56,483	212,203
1990	80,749	0	33,468	1,351	1,492	2,076	119,136	95,934	215,070
1991	76,048	0	17,740	1,228	2,338	4,300	101,655	107,878	209,533
1992	77,773	0	27,702	1,325	1,765	4,169	112,735	116,549	229,284
1993	80,672	0	20,752	597	897	5,283	108,201	244,710	352,911
1994	81,662	0	30,535	643	1,113	4,521	118,473	225,225	343,698
1995	80,023	0	32,797	564	561	4,817	118,763	263,452	382,215
1996	84,621	0	31,650	1,140	552	4,785	122,748	333,917	456,665
1997	84,825	0	40,592	1,096	414	5,264	132,192	283,916	416,108
1998	90,258	0	57,747	735	488	4,673	153,901	277,091	430,992
1999	92,467	Ö	63,565	524	628	3,529	160,714	238,295	399,009
2000	94,988	0	75,344	769	582	4,371	176,053	295,217	471,270
2001	92,967	0	81,798	283	597	5,024	180,670	274,812	455,482
2002	96,482	0	93,472	246	718	4,407	195,326	311,481	506,807
2002	101,703	0	115,730	201	800	4,844	223,278	223,756	447,034
2003	104,836	0	136,007	116	599	4,119	245,677	334,845	580,522
2004	105,323	0	140,450	186	923	4,616	251,498	354,925	606,423
2005	106,376	0	126,407	176	1,229	4,880	239,068	349,000	588,068
2007	107,440	0	113,766	167	1,168	4,638	227,179	356,853	584,032
2007	107,440	0	102,390	159	1,113	4,421	216,598	364,989	581,587
2008	109,600	0	92,151	153	1,065	4,421	207,197		580,544
		0	92,131 82,936	133		4,229		373,347	
2010	110,696	U	82,930	140	1,022	4,039	198,859	381,785	580,644
2011	111,802	0	77,950	143	1,002	3,978	194,876	390,146	585,021
2012	112,921	0	78,730	145	1,012	4,018	196,825	398,300	595,125
2013	114,050	0	79,517	146	1,022	4,058	198,793	406,266	605,059
2014	115,190	0	80,312	148	1,032	4,099	200,781	413,579	614,360
2015	116,342	0	81,115	149	1,043	4,140	202,789	420,196	622,985
2016	117,506	0	81,926	151	1,053	4,180	204,816	427,003	631,819

Since 1991, the quantity of solid waste generated in Cape May County for disposal has been trending upward. Beginning at the end of the last decade and continuing through 2005, the County experienced a demolition and reconstruction boom resulting in a large part from escalating property values. This demolition and reconstruction boom resulted in a dramatic increase in the quantity of bulky waste requiring disposal. The tonnage of bulky waste generated by this redevelopment trend appears to have peaked in 2005 when a record 140,450 tons of bulky waste originating in Cape May County was disposed. The tons of bulky waste received during 2006 have noticeably decreased compared to 2005 figures.

During the ten-year period from 1996 through 2005, the total tonnage of waste requiring disposal increased from approximately 123,000 tons per year in 1996 to more than 251,000 tons per year in 2005. Unfortunately, this doubling in the quantity of waste requiring disposal during the past ten years has resulted in the use of significantly more landfill space than previously planned for by the Authority. Utilizing landfill capacity at this rapid rate has required the construction of the last currently permitted landfill cell several years earlier than originally anticipated by the CMCMUA. To address this need, this Plan Amendment provides for a planned expansion of the Authority's Sanitary Landfill to provide long-term disposal capacity for solid waste not otherwise recycled.

In accordance with the requirements of the New Jersey Mandatory Source Separation and Recycling Act, Cape May County established an aggressive source separation and recycling program designed to achieve the goals of recycling 50% of the municipal solid waste and 60% of the total solid waste stream as mandated by the State. The County Plan previously "designated" twenty (20) materials for source separation and recycling which specifically prohibits them from being landfilled. An additional sixteen (16) materials were previously "recommended" for recycling meaning that Cape May County municipalities, residents and businesses were encouraged to support recycling efforts by also source separating these materials. The County Plan also provided for the development of the Cape May County Intermediate Processing Facility (the "IPF") to receive, sort, upgrade and market many of these "designated" recyclables. As a result of the mandatory recycling requirements established by the County of Cape May, the cooperative programs and services provided by the CMCMUA and local municipalities, and the recycling facilities provided by the private sector, the County has been able to achieve a solid waste stream diversion rate of approximately 60% of all waste generated within the County. However, the goal of recycling 50% of the municipal solid waste stream has not been achieved.

Actual recycling and solid waste data through 2005 demonstrates a trend of ever-increasing tonnages of solid waste requiring disposal without a significant and corresponding increase in the quantity of recyclable materials recovered. By the end of 2005, approximately 355,000 tons of materials were source separated for recycling representing a total solid waste stream diversion rate of 58.5% as shown in Exhibit II-2.

Exhibit II-2 Actual and Projected Recycling Waste Stream Diversion Rates on a County-wide Basis											
A	Actual and I	rojected I	Recycling Wa	aste Stream	Diversion F	Rates on a C	Jounty-wide				
			Total	% Total				% Total			
	MSW	MSW	MSW	MSW	Total SW	Total SW	Total SW	sw			
Year*	Recycling	Disposal	Generation	Diversion	Recycling	Disposal	Generation	Diversion			
1990	44,762	80,749	125,511	35.7%	95,934	119,136	215,070	44.6%			
1991	50,388	76,048	126,436	39.9%	107,878	101,655	209,533	51.5%			
1992	33,545	77,773	111,318	30.1%	116,549	112,735	229,284	50.8%			
1993	40,428	80,672	121,100	33.4%	244,710	108,201	352,911	69.3%			
1994	46,146	81,662	127,808	36.1%	225,225	118,473	343,698	65.5%			
1995	39,630	80,023	119,653	33.1%	263,452	118,763	382,215	68.9%			
1996	41,903	84,621	126,524	33.1%	333,917	122,748	456,665	73.1%			
1997	43,306	84,825	128,131	33.8%	283,916	132,192	416,108	68.2%			
1998 47,844 90,258 138,102 34.6% 277,091 153,901 430,992 64.3%											
1999	45,878	92,467	138,345	33.2%	238,295	160,714	399,009	59.7%			
2000	53,451	94,988	148,439	36.0%	295,217	176,053	471,270	62.6%			
2001	46,001	92,967	138,968	33.1%	274,812	180,670	455,482	60.3%			
2002	46,537	96,482	143,019	32.5%	311,481	195,326	506,807	61.5%			
2003	51,591	101,703	153,294	33.7%	223,756	223,278	447,034	50.1%			
2004	54,134	104,836	158,970	34.1%	334,845	245,677	580,522	57.7%			
2005	51,119	105,323	156,442	32.7%	354,925	251,498	606,423	58.5%			
2006	52,000	106,376	158,376	32.8%	349,000	239,068	588,068	59.3%			
2007	58,760	107,440	166,200	35.4%	356,853	227,179	584,032	61.1%			
2008	65,811	108,514	174,325	37.8%	364,989	216,598	581,587	62.8%			
2009	73,050	109,600	182,650	40.0%	373,347	207,197	580,544	64.3%			
2010	80,355	110,696	191,051	42.1%	381,785	198,859	580,644	65.8%			
2011	87,587	111,802	199,389	43.9%	390,146	194,876	585,021	66.7%			
2012	94,594	112,921	207,515	45.6%	398,300	196,825	595,125	66.9%			
2013	101,216	114,050	215,266	47.0%	406,266	198,793	605,059	67.1%			
2014	107,289	115,190	222,479	48.2%	413,579	200,781	614,360	67.3%			
2015	112,653	116,342	228,995	49.2%	420,196	202,789	622,985	67.4%			
2016	118,286	117,506	235,792	50.2%	427,003	204,816	631,819	67.6%			
* 1990 t	1990 through 2005 actual tonnages for Cape May County origins.										

While Cape May County has consistently been able to approach and/or achieve the State mandated 60% total solid waste ("SW") stream diversion rate, the County-wide solid waste recycling rate has declined from its peak of 73% in 1996. However, a more significant planning concern is that the mandatory recycling goal of 50% of the municipal solid waste ("MSW") stream has historically only been attained by a few of the County's sixteen (16) municipalities. While certain municipalities within Cape May County have been able to approach and even achieve the 50% MSW recycling target, other communities have fallen significantly short of that goal as demonstrated by the data set forth in Exhibit II-3.

			Exhibit II-	-			
50% Municipal	Solid Wast	e Recycling	Rates Achi	eved by Ca	pe May Cou	ınty Munici	palities
			(	Calendar Yea	ar		
Municipality	2000	2001	2002	2003	2004	2005	$2006^{5}$
Avalon	37.4%	37.3%	38.9%	37.9%	39.5%	39.9%	38.5%
Cape May City	37.5%	39.0%	40.8%	31.4%	33.0%	33.5%	31.6%
Cape May Point	28.6%	29.2%	25.2%	25.0%	34.1%	25.5%	27.7%
Dennis Township	40.6%	44.8%	40.5%	38.1%	45.1%	44.3%	36.3%
Lower Township	38.2%	22.5%	25.5%	30.2%	30.1%	25.5%	23.7%
Middle Township	44.1%	35.9%	36.8%	47.3%	43.8%	39.8%	33.0%
North Wildwood	27.6%	26.6%	24.7%	23.8%	25.6%	25.2%	24.5%
Ocean City	25.5%	29.0%	26.9%	24.8%	23.9%	24.5%	25.0%
Sea Isle City	29.3%	30.0%	29.8%	30.6%	31.2%	33.9%	34.4%
Stone Harbor	33.4%	32.4%	33.1%	33.9%	33.8%	34.2%	34.8%
Upper Township	50.9%	55.3%	53.1%	46.3%	48.1%	49.2%	46.0%
West Cape May*	32.7%	44.6%	38.3%	50.2%	55.3%	47.5%	25.7%
West Wildwood	23.6%	22.4%	23.3%	24.8%	29.2%	24.8%	30.4%
Wildwood	28.3%	24.7%	24.2%	23.9%	24.2%	25.7%	23.0%
Wildwood Crest	21.7%	20.7%	20.1%	20.3%	21.6%	22.2%	20.6%
Woodbine**	43.6%	52.6%	38.4%	36.9%	42.1%	41.1%	38.5%

<sup>\*</sup> Reporting errors for solid waste actually disposed occurred prior to the establishment of curbside waste collection in January 2006.

32.5%

33.7%

34.1%

32.7%

30.0%

36.0%

33.1%

County-wide Rate

Two significant impediments currently exist which impact the attainment of the State mandated goal of recycling 50% of the MSW by Cape May County's municipalities, seasonality and municipal solid waste stream composition. Cape May County experiences a tremendous influx of summer visitors which varies from week to week but the summer population can exceed 634,000 compared to the winter population of 106,000. As a result, marginal decreases in recycling rates could be the result of population fluctuations rather than being directly reflective of municipal recycling efforts. Given Cape May County's large transient population, it is more difficult to educate and enforce recycling requirements with vacationers that are in the County for only a short stay.

Cape May County generates less vegetative waste and office paper than most other solid waste management districts in New Jersey. Individual properties in Cape May County's barrier island communities often contain stones rather than lawns and trees which tend to minimize the amount of grass clippings and leaves generated. These materials are more readily recycled in the County's mainland communities than in the barrier island municipalities that extend along the Atlantic coast. This lack of availability of yard waste for recovery as part of the MSW waste stream makes it difficult for some municipalities to achieve the State mandated 50% MSW recycling goal. While attainment of the 50% MSW recycling goal should be

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<sup>\*\* 2001</sup> data includes a high tonnage of brush recycled.

<sup>&</sup>lt;sup>5</sup> Year-to-date data through November 2006.

achievable for year round residents, getting visitors to Cape May County to recycle half of the waste they generate while they are here is a formidable task. Additionally, the County does not contain large commercial generators of office paper. The limited quantities of office paper generated are collected for recycling but the relatively small quantity of this easily recyclable material in the County's MSW stream further contributes to the challenge of attaining the State mandated 50% recycling goal.

To address the need to achieve the State mandated recycling goals and to provide additional support for recycling, this Plan Amendment significantly expands the lists of "designated" and "recommended" recyclables included in the Plan and modifies the recycling enforcement program previously established. Projected solid waste generation, disposal and recycling data take into account existing solid waste generation trends, baseline and seasonal population growth as well as the anticipated impact of expanded source reduction, reuse, recycling and other recovery initiatives as set forth in this Plan Amendment. The actual and projected data presented in this Section demonstrates that with the expansion of the list of "designated" and "recommended" recyclables, as further detailed in Section IV, combined with expanded municipal enforcement of these recycling requirements, as further described in Section VIII, significant recycling diversion rate improvement is attainable in each of Cape May County's sixteen (16) communities.

Given the impact seasonal population fluctuations have on the tonnage of waste generated and the attainment of 50% MSW recycling goal, the specific tonnage recovery targets included in this Section of the Plan Amendment have not been specified by municipality. To better achieve the requirements of the Mandatory Recycling Act, the CMCMUA will annually calculate the municipal waste stream quantities disposed and recyclables recovered in each of Cape May County's municipalities and subsequently establish a specific tonnage recovery target for each municipality to achieve the 50% recycling goal based on actual prior year municipal waste generation data.

This Plan Amendment encourages the recycling of the vast majority of material categories identified in the State Plan as being recoverable thereby making the 50% municipal solid waste stream goal achievable for most municipalities within Cape May County that commit to reinvigorate recycling through the expansion of their local recycling program. It should be noted that the recycling data contained in the exhibits incorporated in this Section do not include diversion rates achieved through source reduction, reuse, beneficial use or other recovery projects. Although some of these projects, such as biosolids composting, clearly meets the regulatory definition of recycling, the NJDEP has elected to exclude them from the calculation of diversion rates.

It should also be noted that historical and projected solid waste generation and disposal data tends to somewhat overstate the true quantity of MSW disposed in Cape May County since loads classified as Type 10-Municipal Solid Waste often include unknown quantities of Type 13-Bulky Waste. Several municipalities collect bulky waste every week along with regular household trash. By providing this service, these municipalities have been able to significantly reduce the amount of illegal dumping that was previously occurring. However, when bulky items and household waste are collected and disposed of in the same compactor vehicle, these truckloads are typically classified as Type 10-Municipal Solid Waste

when disposed at CMCMUA facilities even though they contain a significant amount of bulky waste. Based upon the written guidance provided by the NJDEP, transporters which collect bulky items along with household waste should designate on the NJDEP Origin and Destination Form utilized for disposal that the load contains both Type 10-Municipal Solid Waste and Type 13-Bulky Waste and indicate the relative percentage of each waste type. All transporters of waste should carefully and accurately complete the Origin and Destination Form since proper reporting of waste types will correct reporting errors.

#### F. Solid Waste Management Hierarchy

In accordance with the updated Statewide Solid Waste Management Plan, this Plan Amendment reaffirms the use and expands the scope of the solid waste management hierarchy utilized for all waste generated in Cape May County. The primary elements of this hierarchy include:

- Source reduction including activities that decrease the quantity and/or toxicity of waste entering the solid waste stream and actions that promote continued product use/reuse;
- Recycling including any process by which materials which would otherwise become solid waste are collected, separated or processed and returned to the economic mainstream in the form of raw materials or products;
- Other specific recovery or reclamation projects that use or reuse a material that would otherwise become waste including projects such as beneficial use, landfill gas recovery and household hazardous waste collection; and
- Sustainable landfilling including the employment of innovative technologies to extend the useful life of the existing Sanitary Landfill.

The specific programs, facilities and services established to implement this hierarchical management approach for waste generated in Cape May County are detailed in the Sections III through VI of this Plan Amendment.

#### **SECTION III**

#### SOURCE REDUCTION AND REUSE

#### A. Goals, Objectives and Strategies

The County's comprehensive solid waste management system includes source reduction, the goal of which is to decrease the amount of waste generated, reduce the toxicity of waste entering the solid waste stream and encourage activities that increase utilization of recycled and recyclable materials. Objectives employed to work toward achievement of this source reduction goal include:

- Increased education regarding all aspects of waste reduction;
- Involvement of waste generators in the development of and planning for source reduction programs and educational outreach; and
- Collaborating with public and private entities to develop programs that will reduce the toxicity of the waste stream.

The CMCMUA in partnership with local municipalities shall pursue, to the maximum extent practical, the strategies set forth herein to successfully expand source reduction throughout Cape May County.

#### B. Waste Audits and Best Practices for Waste Reduction

Identification of the types and quantities of waste generated is essential if effective waste reduction efforts are to be implemented. The CMCMUA will seek the help of the Cape May County Chamber of Commerce and other local business organizations to find willing business partners to assist in the development of a waste reduction program for the County's commercial sector. Business groups, civic and service organizations as well as public and private environmental organizations will be invited to participate in a study group or task force to analyze the composition of waste generated by business type and create model waste audits. The information gathered will be used to develop educational/promotional tools for source reduction that will be distributed to the business community. An example of one such tool to be developed is a user friendly waste audit brochure customized for various businesses, such as, retail stores, motels, restaurants.

As a logical next step, best practices recommendations for waste reduction will be developed, customized for various types of businesses and the information made available through promotional tools to be developed by the Authority. Cape May County businesses will be requested to perform waste audits and implement best practices to reduce the quantity of waste generated. The businesses and organizations involved in the development of this program will be enlisted in an effort to persuade additional businesses to "sign on" to participate in the waste reduction program for the County's commercial sector. An incentive program will be devised to strengthen local business commitment to the program. This incentive program may include featuring in publicity efforts business participants that have successfully reduced waste.

Similar waste reduction projects for households, schools, non-profits organizations and government agencies will be developed by gathering small groups of willing "waste watchers" to model source reduction programs and create education/promotional tools for implementation throughout the community.

#### C. Reducing Toxicity

#### 1. Best Practices for Landscaping

The CMCMUA plans to collaborate with the Cape May County Master Gardeners, other non-profit environmental organizations and watershed management educators to inform public agencies, businesses and citizens about best practices for landscaping that include the use of:

- Native plants and water conservation gardens that limit or completely eliminate the need for toxic pesticides;
- On site waste management techniques for grass and leaves;
- Mulch to limit watering;
- Compost to improve soils; and
- Locally produced recycled landscape products.

Unfortunately, many managed outdoor spaces and gardens often have a negative impact on local habitats. Runoff of fertilizers, excess use of pesticides and soil erosion can be damaging to the environment whether they occur in backyards, public parks or on farmland. The CMCMUA will request the support of the County Agricultural Agent to assist in gathering a small group of experienced "environment friendly" landscapers, organic farmers and gardeners to identify model source reduction landscaping practices and develop informative, engaging promotional tools to educate the landscaping and gardening community. The CMCMUA will also seek out partners in the business community, such as garden centers including Lowes and Home Depot, to convey information regarding these model practices to customers through their "Do It Yourself" workshops. Rutgers Cooperative Research and Extension and Atlantic Cape Community College will also be requested to incorporate toxic reduction techniques into any landscaping and gardening educational materials they distribute. By working with agencies, groups and businesses that share similar goals, the CMCMUA can leverage its educational outreach and maximize its impact to achieve reductions in the use of toxic pesticides and fertilizers.

#### 2. Best Practices for Building and Grounds Maintenance

The County of Cape May has implemented a model building and grounds maintenance program for toxicity reduction. The Cape May County Department of Facilities and Services ("Facilities and Services") has developed and implemented an Integrated Pest Management ("IPM") program that is both effective and environmentally friendly. Rather than routinely applying large amounts of insecticides to keep buildings pest free or routinely spraying herbicides to maintain lawns and gardens, the Department of Facilities and Services utilizes a strategy that employs all appropriate control methods (both chemical and non-chemical) to keep pest populations below damaging levels while

minimizing detrimental impacts to the environment. Over the course of a few years, Facilities and Services has substantially reduced the amount of pesticides applied to County buildings and grounds yet has successfully controlled the pest population.

The CMCMUA will encourage toxicity reduction throughout Cape May County by using the IPM program implemented by the Department of Facilities and Services as a model. Information, advice and assistance from Facilities and Services will be used to develop an education program for Integrated Pest Management in schools, municipal buildings and grounds and other government offices throughout Cape May County with a goal of reducing the use of toxic pesticides and herbicides. Building on the success of the program developed for local governmental facilities, an IPM public education project for businesses and residents will also be developed.

#### D. Reuse

Reuse activities result in extending the life of some materials and reducing the quantity of materials landfilled. The CMCMUA will facilitate local reuse efforts to reduce the quantity of waste disposed through use of the World Wide Web. As part of the Authority's ongoing education program, websites that promote environmental responsibility, provide sound educational information regarding recycling and waste reduction and present useful opportunities for action will be recommended to the general public and the local business community for use. Websites such as "Earth 911" for example, welcome information submitted to the website by local recycling coordinators on reuse opportunities that are available through environmental projects that have been established in their community. A website called "FREECYCLE" offers services that include a used material and equipment exchange program that is available to serve both the local and global communities. "FREECYCLE" seeks individuals that are willing to serve as coordinators to keep local information updated on the website regarding the availability of used materials under the equipment exchange program. The Authority's recycling staff will serve in the capacity of local coordinator to facilitate the accurate reporting of specific local recycling information to "Earth 911", "FREECYCLE" and other established web sites that provide reuse and other environmental information.

The CMCMUA will encourage non-profit organizations to establish or expand shops, stores and projects for the sale of reusable goods. Examples of such reuse projects include thrift shops for clothing or household items and facilities operated by non-profit agencies. The marketing of lumber, hardware and other materials recovered from construction and demolition sites will also be targeted.

#### E. Buying Recycled

Believing that leading by example is an effective strategy, the Authority has implemented a successful "Buy Recycled" program for its own facilities. The CMCMUA's Purchasing Department orders recycled paper for use in computer printers and copiers, procures writing tablets manufactured with recycled paper and specifies the use of recycled paper for printed materials such as business cards and brochures. The CMCMUA also requires the use of recycled paper and other materials for production of promotional items and educational materials whenever practicable. As a first step toward expansion in the use of recycled

content products and materials, the Authority will encourage municipalities, other government agencies and environmental organizations to adopt similar purchasing practices.

In order to increase the effectiveness of the "Buy Recycled" promotional efforts already implemented by the CMCMUA, the Authority plans to expand the scope of these promotional and educational projects to include the purchase of environmentally preferable products ("EPP"). In addition to recycled products, EPP includes products that are less toxic, more energy efficient or have other product characteristics that make them environmentally preferable. The program to promote the purchase of environmentally preferable products, not just products manufactured with recycled materials, will streamline the education process and provide an opportunity to expand the source reduction message contained in environmental education programs currently in use locally by public and private environmental educators. Recognizing that schools, businesses and residents can be overwhelmed by information in print and available on the internet, the Authority will begin by working with interested parties to develop a "Shop for the Environment" program offering sound and comprehensive advice presented in a concise manner.

Over packaging of many products is one of the causes for the increase in solid waste generation in New Jersey. While manufacturers should be held accountable for such over packaging through government imposed product and packaging stewardship initiatives, consumers must also be educated to choose products that minimize packaging waste, utilize higher levels of post consumer material and/or improve packaging recyclability. The "Shop for the Environment" program will encourage consumers to employ their purchasing power to buy products that promote the goals of waste reduction.

#### SECTION IV

#### RECYCLING STRATEGIES AND PROGRAMS

#### A. Statutory Mandate and Overview of County-wide Source Separation and Recycling Program

In accordance with the requirements of the New Jersey Mandatory Source Separation and Recycling Act (hereinafter referred to as the "Mandatory Recycling Act"), as enacted by the State Legislature (Public Law 1987, Chapter 102), Cape May County adopted the Cape May County Recycling Plan as an Amendment to the County Solid Waste Management Plan. The County Recycling Plan, which was adopted by the Cape May County Board of Chosen Freeholders in December of 1987, and approved by the State on May 25, 1988, set forth an aggressive source separation and recycling program designed to achieve the original recycling targets mandated by the State and established an implementation strategy to facilitate the programs' success. The Mandatory Recycling Act was amended in 1992 (Public Law 1992, Chapter 167), to revise the recycling recovery targets to achieve the maximum feasible recovery of recyclable materials from the municipal solid waste stream to include, at a minimum, the recycling of at least 50% of the municipal solid waste stream by December 31, 1995. This 1992 statutory amendment also required that county-wide recovery targets be established "to achieve the maximum feasible recovery of recyclable materials from the total solid waste stream which shall include at a minimum, the recycling of at least 60% of the total solid waste stream by December 31, 1995". The Mandatory Recycling Act further requires that each district recycling plan include the designation of specific recovery targets in each municipality to achieve the 50% municipal solid waste recycling goal.

The 1987 Cape May County Recycling Plan initially "designated" for recycling those materials which were proven to be easily and successfully recycled. The materials "designated" for recycling were specifically prohibited from being disposed of with other solid waste and were mandated for source separation by the waste generator for subsequent collection and recycling. The 1987 County Recycling Plan also established a list of County "recommended recyclables", meaning that Cape May County municipalities, residents and businesses were encouraged to support the County's recycling efforts by also source separating and recycling these additional materials. The 1987 County Recycling Plan provided for the development by the CMCMUA of the Cape May County Intermediate Processing Facility (the "IPF") to receive, sort and upgrade most of these "designated" recyclables. Subsequent amendments to the County Solid Waste Management Plan were adopted to significantly expand the lists of designated and recommended recyclables included in the County Recycling Plan to respond to the 1992 mandate of the New Jersey Legislature to further increase recycling goals.

The County's sixteen (16) municipalities complied with the requirements of the Mandatory Recycling Act by designating a strategy for the collection and marketing of source separated recyclable materials in each community. Consistent with the requirements of the Cape May County Recycling Plan, municipalities implemented local recycling programs to collect "IPF recyclables" (designated mixed paper and commingled cans and bottles) and deliver them to the CMCMUA in accordance with the regional recycling program and interlocal service agreements established with all sixteen (16) municipalities. In addition to the IPF, the CMCMUA and the County's municipalities established a variety of recycling facilities,

programs and services to facilitate the source separation, collection and recovery of designated and recommended materials. The specific recycling programs and services that continue to be provided as part of this County's comprehensive solid waste management system are detailed later in this Section.

The New Jersey Mandatory Source Separation and Recycling Act, as well as the adopted Cape May County Recycling Plan, require the designation of a full-time County Recycling Coordinator which must be employed by the implementing agency. Since 1981, the CMCMUA has employed a County Recycling Coordinator to provide regional and municipal level support in a wide range of areas such as technical assistance, education, promotional program support and new program development. The CMCMUA's Recycling Coordinator also provides assistance to municipal recycling coordinators to expand recycling programs and to implement recycling education and enforcement initiatives to increase the rate of recycling in Cape May County. The specific educational and promotional programs offered, technical assistance provided and new program development support initiated by the Authority are described subsection I.

Most of Cape May County's municipalities have complied with the Mandatory Recycling Act requirements to designate and maintain the position of Municipal Recycling Coordinator. In some cases, the position is filled by a department of public works employee who has other responsibilities and works only part time as the recycling coordinator. Some communities divide the work tasks associated with the position of recycling coordinator by having a code enforcement officer perform recycling inspections and a grants coordinator or municipal clerk prepare and submit required recycling reports. A list of current Municipal Recycling Coordinators is provided in Appendix I.

#### B. Environmental and Economic Benefits of Recycling

The New Jersey Legislature, when enacting the Mandatory Recycling Act, recognized that recycling would "decrease the flow of solid waste to sanitary landfill facilities, aid in the conservation and recovery of valuable resources, conserve energy in the manufacturing process and increase the supply of reusable raw materials for the State's industries." Recycling efforts in Cape May County and throughout the State have resulted in the realization of these significant environmental and economic benefits. When recyclables are substituted for virgin materials in the manufacturing process, natural resources such as, bauxite, iron, trees and oil are conserved. Use of recycled materials to make new products reduces the need for energy and water, thereby preserving those resources. Utilization of recycled materials instead of virgin materials also reduces air and water pollution caused by the manufacturing process. Additionally, when the demand for mining and harvesting of natural resources is reduced or delayed, there is a reduction in the adverse impacts on the natural habitat from which virgin materials are extracted.

Significant economic benefits are also accrued from recycling. Communities realize substantial cost avoidance by collecting source separated recyclables and diverting those materials from landfill disposal. In Cape May County, most recyclables are accepted free or at a reduced fee, compared to solid waste which in 2006 is currently charged at a rate of \$60.00 per ton. Given that more than four (4) million tons of materials have been recycled by waste generators in Cape May County since the passage of the New Jersey Mandatory Source Separation and Recycling Act, tens of millions of dollars in disposal fees have been avoided by recycling. The CMCMUA's regional recycling program was also designed to encourage

municipal recycling programs by returning the net profit resulting from the operation of the Cape May County Intermediate Processing Facility back to participating municipalities to financially support their local recycling programs. Since the IPF began operating in 1990, the CMCMUA has been able to provide recycling rebates totaling almost \$3,000,000 to all sixteen (16) Cape May County municipalities as calculated through the end of calendar year 2006.

One of the most significant economic and environmental benefits of recycling in Cape May County is the conservation of our finite landfill space. New landfills would be difficult to site and, given their necessary environmental safeguards, expensive to construct and operate. Disposal capacity within the CMCMUA Sanitary Landfill is a limited and progressively diminishing resource available to the County of Cape May. The siting of a new solid waste landfill within Cape May County is virtually precluded by the environmentally sensitive geography of the County; therefore, once the disposal capacity of the Authority's Sanitary Landfill is consumed, Cape May County's options for waste disposal will become more uncertain and more costly. Recognizing these facts, recycling programs that divert materials from disposal now will help to preserve the existing Sanitary Landfill's valuable disposal capacity for future generations.

#### C. Goals, Objectives and Strategies for Attainment

As a result of the mandatory recycling requirements established by Cape May County in its Solid Waste Management Plan, the supportive programs and services provided by the CMCMUA and local municipalities and the recycling facilities provided by the private sector, the County has been able to achieve a diversion rate of approximately 60% of the total solid waste stream generated within the County. However, as detailed previously in Exhibit II-2 found in Section II, the mandatory recycling goal of 50% of the municipal solid waste (MSW) stream has historically been attained by only three (3) of the County's sixteen (16) municipalities. While this Plan Amendment seeks to significantly expand recycling efforts throughout Cape May County in order to achieve both the 50% and 60% State mandated recycling goals, the primary recycling focus of the County's comprehensive solid waste system is for each Cape May County municipality to achieve the 50% recycling goal.

This Plan Amendment sets forth a multifaceted strategy for attainment of the 50% MSW recycling goal by each municipality as well as expansion of County-wide recycling efforts including:

- Significant expansion in the lists of "designated" and "recommended" materials to be recycled;
- Expansion of municipal collection systems to include additional "designated" materials and provide more opportunities for year-round residents, seasonal visitors, commercial and institutional establishments to recycle;
- Improved recycling record keeping and reporting by commercial establishments and municipalities;
- Improved recycling educational outreach, at the municipal and County level, to residents, vacationers, businesses, schools and other institutions to maximize participation and diversion rates and the efficiency of recycling programs; and
- Significant expansion of recycling enforcement activities, particularly at the municipal level, to ensure that year-round residents, seasonal visitors, commercial and institutional waste generators

are source separating and recycling all materials mandated by this Plan Amendment. (See Section VIII Recycling and Solid Waste Enforcement for more details.)

#### D. Expansion of the List of "Designated" Recyclables

Aggressive source separation and recycling programs that achieve significant waste stream reductions must be simple for waste generators to understand, convenient to use and be supported by adequate resources to attain active public commitment. In accordance with the strategy originally established in the 1987 Cape May County Recycling Plan, only those materials that are proven to be easily and successfully recycled should be "designated" or mandated for recovery. The technology to recycle and the markets for recycling such materials must be available. Furthermore, these designated recyclables must comprise a sufficiently large percentage of the waste stream to enable municipalities to achieve their municipal recycling goals. The establishment of new recycling initiatives should only be considered for materials that have sustainable and reliable end markets, proven processing technology to meet market specifications, are easy to collect and that do not require a significant capital investment to start up and operate on a long-term basis.

Using these criteria as the basis for review and expansion, the updated list of "designated" recyclables which all generators must source separate and recycle in Cape May County is set forth in Exhibit IV-1. This list is being expanded by adding twenty-one (21) additional materials to the "designated" list, including telephone books, paperback books, grass clippings, brush, tree branches, tree stumps, Christmas trees, wood pallets, asphalt, concrete, auto and truck bodies, tires, contaminated soil, propane tanks, cooking grease (from commercial sources only), consumer electronics including computers, kerosene, #2 home heating oil, used oil filters, anti-freeze and small sealed lead acid batteries. With the addition of these recyclables to the "designated" list, a total of forty-one (41) categories of materials shall be mandated for recycling by all generators in Cape May County, upon adoption and approval of this Plan Amendment.

#### E. Modification of the List of "Recommended" Recyclables

Consistent with the strategy originally established in the 1987 Cape May County Recycling Plan, and reaffirmed in this Plan Amendment, other materials which do not yet meet all of the criteria for "designated" recyclables should be listed as "recommended". "Recommended" materials typically have limited markets and can be expensive to collect or process. Many of the materials added to the list of "designated" recyclables in this Plan Amendment were previously included in the County Plan on the "recommended" list but are now being mandated since technological, marketing or other recycling obstacles have been overcome. As a result, the list of "recommended" recyclables is updated and set forth in Exhibit IV-2.

## Exhibit IV-1 Cape May County Recycling Program List of "Designated" Recyclables

#### **Source Separated Material**

#### Disposition

#### "DESIGNATED"

Paper Products including newspaper (with inserts), magazines, office paper, junk mail, telephone\*\* and paperback books\*\*, corrugated and Kraft grocery bags.<sup>1</sup> (Shredded junk mail & office paper acceptable.) Curbside collection provided by municipality. Delivered to the CMCMUA Intermediate Processing Facility at no charge for participating municipalities.<sup>3</sup>

° Food & Beverage Container Glass including clear, green and brown food, beverage bottles.<sup>2</sup> Curbside collection provided by municipality. Delivered to the CMCMUA Intermediate Processing Facility at no charge for participating municipalities.<sup>3</sup>

° Food & Beverage Metal Containers including aluminum, bi-metal and steel food, beverage and aerosol cans.<sup>2</sup> Curbside collection provided by municipality. Delivered to the CMCMUA Intermediate Processing Facility at no charge for participating municipalities.<sup>3</sup>

Plastic Bottles and Jugs imprinted with a (PETE) or (PETE) on the bottom including food, beverage, health, beauty and cleaning products, bottles 2½ gallons or less in size. Automotive fluid containers and other bottles which contained hazardous products are not included.

Curbside collection provided by municipality. Delivered to the CMCMUA Intermediate Processing Facility at no charge for participating municipalities.<sup>3</sup>

° Leaves

Delivered to leaf compost staging area at the CMCMUA Landfill at nominal fee to offset operating costs. Alternately, delivered to approved municipal or multi-municipal compost facilities or approved agricultural applications. Some municipalities provide curbside collection.

Grass Clippings\*

"Cut It & Leave It" or backyard composting are the preferred disposition method. Alternatively, delivered to leaf composting facility at the CMCMUA Landfill at nominal fee to offset operating expenses. Alternatively, approved municipal or multi-municipal compost facilities. Some municipalities provide curbside collection.

Brush\*, Tree Branches\*, Tree Stumps\*, and Christmas Trees\* including all sizes of vegetative or land clearing wastes. Delivered to CMCMUA "Class B" Recycling Center located at the Landfill. Fee charged to offset operating expenses. Each municipality may choose an alternate method of disposition, such as chipping or use of Christmas Trees for dune stabilization; however, any alternative must produce a material which is recycled. Some municipalities provide curbside collection.

"White Goods", Ferrous Scrap and Non-ferrous Scrap includes refrigerators, air conditioners and other "CFC" appliances, and washers, dryers, ovens, water heaters, steel metal and piping.

Delivered to the CMCMUA at no charge, or at a reduced rate depending on market conditions. Some municipalities provide curbside collection.

<sup>&</sup>lt;sup>1</sup>All of the listed paper products can be mixed together.

<sup>&</sup>lt;sup>2</sup>All of these materials can be commingled together.

<sup>&</sup>lt;sup>3</sup>Participating municipalities have executed a Joint Agreement on Source Separation and Recycling with the CMCMUA.

<sup>\*</sup> Previously "recommended" material.

<sup>\*\*</sup> New to list.

#### Exhibit IV-1 List of "Designated" Recyclables - Cont'd.

#### **Source Separated Material**

#### Disposition

0	Wood Pallets* including clean untreated, unpainted pallets and crates only.	Delivered to CMCMUA "Class B" Recycling Center located at the Landfill at a nominal charge.
0	Asphalt* and Concrete*	Delivered to approved NJDEP Recycling Centers as "Class B" recyclable materials. Fee charged.
0	Contaminated Soil** including fuel contaminated soil, dewatered soil and stone subject to NJDEP regulatory standards.	Deliver to the CMCMUA Landfill at a reduced rate when in compliance with the CMCMUA's acceptance criteria.
0	Propane Tanks** (must be empty 20 to 30 lb. tanks.)	Delivered to the CMCMUA's Transfer Station or Landfill at a charge to offset operating costs.
0	Cooking Grease** (from commercial sources only.)	Private Recyclers.
0	Consumer Electronics** including CPU's, monitors, TV's, VCR's, radios and telephones.	Delivered to the CMCMUA's Transfer Station or Landfill at a charge to offset operating costs.
0	Auto and Truck Bodies*	Private sector markets/junk yards.
0	Tires* including worn truck and passenger car tires.	Delivered to CMCMUA "Class B" Recycling Center located at the Landfill. Fee charged to cover operating costs.
0	Used Motor Oil, Kerosene** and #2 Home Heating Oil** including crankcase oil and other oils which meet market specifications.	Delivered to CMCMUA's Transfer Station or Sanitary Landfill at no charge, or nominal fee depending on market conditions. Some municipalities have established drop-off points for used oil at no cost or at a nominal charge. The CMCMUA will assist municipalities in securing market agreements. Large commercial generators should utilize private recycling markets. Retail drop-off sites can be located on the web at <a href="http://newjersey.earth911.org/master.asp">http://newjersey.earth911.org/master.asp</a>
0	Used Oil Filters**	Delivered to CMCMUA's Transfer Station or Landfill at no charge or nominal fee depending on market conditions. Commercial generators should utilize private recycling markets.
0	Anti-freeze**	Delivered to CMCMUA's Transfer Station or Landfill at no charge, or nominal charge to cover operating costs if necessary. Private Recyclers for large commercial generators.
0	Lead Acid Batteries including motor vehicle, aviation, marine and SLA (sealed lead acid) batteries.	Delivered to CMCMUA Transfer Station or Sanitary Landfill at no charge. Can also be delivered to lead acid battery manufacturers, distributors, retailers and scrap processing facilities.
0	Consumer Rechargeable NiCad (Nickel-Cadmium) and Small Sealed Lead Acid Batteries**.	Delivered by individual consumers to RBRC (Rechargeable Battery Recycling Corp.) retail drop-off sites which can be located through their website at <a href="https://www.rbrc.org">www.rbrc.org</a> . Commercially generated NiCad's should be recycled through RBRC commercial/institutional return shipping program.

<sup>\*</sup> Previously "recommended" material.
\*\* New to list.

## Exhibit IV-2 Cape May County Recycling Program List of "Recommended" Recyclables

#### **Source Separated Material**

#### **Disposition**

	"RECOMMENDED"	
0	Chipboard including dry food boxes with liners removed and powdered detergent boxes.	If source separated, may be delivered to private sector recycling facilities.
0	Hardback Books	Delivered to participating schools or non-profit organizations, collected for recycling by private sector vendor.
0	Food Waste from commercial and institutional sources <u>only</u> .	CMCMUA assists and encourages source separation, collection and processing arrangements between commercial/institutional food waste generators and swine farmers.
0	Non-chemically Treated Construction Wood	Delivered to approved NJDEP Recycling Centers as "Class B" recyclable materials. Fee charged.
0	Textiles	Private sector non-profit recycler.
0	Paint** including oil based or water based paint, stain, varnish, shellac, polyurethane, wood and masonry sealer and wood preservative.	Delivered to the CMCMUA's Universal Waste Facility located at the Transfer Station. Nominal fee charged to cover operating costs.
0	Street Sweepings and Catch Basin Cleanout** (from municipal cleaning operations, must be dewatered and oversized litter removed.)	Delivered to the CMCMUA Landfill.

Note: Private sector markets are available for the disposition of some of the above listed "recommended" materials.

\*\* New to list.

#### F. Calculation of Municipal Recycling Targets

As previously detailed in Section II of this Plan Amendment, seasonal population fluctuations and the relative scarcity of trees and grass in the barrier island communities have a significant impact on the tonnage of waste generated and the attainment of the State-mandated goal of recycling 50% of the MSW generated by Cape May County's municipalities. As a result, tonnage recovery targets included in Section II of this Plan Amendment have been presented as an aggregate total rather than by municipality. To better achieve the requirements of the Mandatory Recycling Act, the CMCMUA will annually calculate the municipal waste stream quantities disposed and recyclables recovered in each of Cape May County's municipalities during the prior year and subsequently establish a specific tonnage recovery target for each municipality to achieve the 50% recycling goal. Each municipality will be notified, in writing, of the MSW recycling rate actually attained in their community during the prior year and of the specific tonnage recovery target established for their community in the current year based on actual municipal waste generation data.

The NJDEP's list of recyclable materials eligible toward the 50% MSW goal and 60% total solid waste goal are set forth in Exhibit IV-3. This Plan Amendment recommends that the NJDEP expand the list of recyclable materials eligible toward the 50% MSW goal to specifically include TVs, computers and other consumer electronics as well as white goods and other large household appliances. TVs, computers and

other consumer electronics are part of the municipal waste stream and until recent efforts to source separate these materials for recycling, they were typically placed at the curb for pick-up with other municipal trash. Likewise, white goods and large household appliances including washers, dryers, air conditioners and refrigerators that are generated by residents and commercial establishments are also part of the municipal waste stream. Prior to mandatory recycling, white goods were typically collected along with other municipal trash by the public works department or private hauler. Therefore, consumer electronics and "white goods" should be counted toward the 50% MSW goal when recycled.

Exhibit IV-3
New Jersey Department of Environmental Protection Recycled Materials Tonnage Credit Matrix

Materials	Credit Toward 50% Goal*	Credit Toward 60% Goal*
Aluminum Cans	X	X
Antifreeze	X	X
Computer Paper	X	X
Concrete/Asphalt		X
Consumer Batteries	X	X
Corrugated	X	X
Food Scraps	x**	X
Glass Containers	X	X
Grass Clippings	X	X
Heavy Iron		X
Lead - Acid Batteries		X
Leaves and Brush	X	X
Magazines/Junk Mail	X	X
Misc. Recycled Material	X***	X
Mixed Office Paper	X	X
Newspaper	X	X
Other Aluminum Scrap		X
Other Bulky Materials		X
Other Glass	X	X
Other Paper	X	X
Other Plastic	X	X
Petroleum Contaminated Soil		X
Plastic Containers	X	X
Plastic Scrap		X
Process Residue		X
Scrap Autos		X
Steel Cans	X	X
Stumps/Tree Parts		X
Textiles	X	X
Tires		X
Used Motor Oil	X	X
White Goods		X
Wood Scrap		X

<sup>\*</sup> If recycled, documented and reported in accordance with applicable statutes, rules and polices of the NJDEP.

<sup>\*\*</sup> Those food scraps identified as originating at a commercial food or animal processor will <u>not</u> count towards the 50% recycling goal.

<sup>\*\*\*</sup> Those miscellaneous recyclable materials not originating from homes or retail establishments, and that would otherwise be identified as Type 13, Bulky Waste, will not count towards the 50% recycling goal.

#### G. Collection of "Designated" and "Recommended" Recyclables

#### 1. Current Municipal Recycling Collection Systems

The County's sixteen (16) municipalities have complied with the Mandatory Recycling Act and the 1987 Cape May County Recycling Plan by implementing recycling programs in conjunction with the CMCMUA regional recycling program. Under this program, municipalities are responsible to collect IPF recyclables in two (2) streams which include designated mixed paper and commingled cans and bottles, and deliver them to the CMCMUA IPF for processing and marketing. All municipalities provide curbside or rear door<sup>6</sup> collection of IPF recyclables to residents, fifteen (15) communities offer collection service to businesses with ten (10) municipalities extending service to institutions, which typically includes schools, government buildings, beach and recreation areas and shopping districts. IPF Recyclables are generally collected at a frequency of once per week year round, however, a few barrier island municipalities increase collection to twice per week in the summer season. Two (2) municipalities reduce the collection frequency for IPF recyclables to every other week during the nonsummer months.

Fifteen (15) municipalities have implemented curbside collection programs for additional recyclables. Twelve (12) municipalities provide for the routine collection of leaves and/or grass with thirteen (13) communities collecting brush. Scrap metal and white goods are collected in fourteen (14) municipalities with two (2) communities collecting used motor oil at curbside. While all recycling collection services are provided to residents, the majority of municipalities also extend collection service to commercial and institutional generators. The collection frequency for leaves, grass, brush, used motor oil and scrap metal/white goods varies dramatically from community to community with only a few municipalities providing weekly collection service. Many municipalities require the scheduling of an appointment for curbside collection of scrap metal and white goods. For other recyclables, such as leaves and grass, many communities provide seasonal service. An overview of the curbside recycling collection services offered by each municipality is summarized in Exhibit IV-4.

Fourteen (14) municipalities also maintain drop-off depots for collection of supplemental quantities of IPF recyclables and other types of materials. In some municipalities, businesses that generate a large quantity of materials for recycling may be directed to utilize the recycling facilities located at the CMCMUA's Sanitary or Transfer Station as a regional drop-off depot. For recycling of non-traditional materials, such as concrete, asphalt and batteries, many municipalities encourage customers to utilize private sector recycling facilities. Recycling drop-off depot services offered by each municipality are summarized in Exhibit IV-5.

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<sup>&</sup>lt;sup>6</sup> The Borough of Stone Harbor provides back yard collection.

### Exhibit IV-4 Recycling Collection Practices for Cape May County Municipalities

Recyclables Materials Collected At Curbside

Information Includes Frequency\* And Generators Provided With Service - Residential (R), Commercial (C) and/or Institutional (I)

Municipality	IPF Materials	Leaves and Grass	Brush	Motor Oil	Scrap Metal/ White Goods			
Avalon	Once/Wk to R, C & I	Grass Only Once/Wk to R, C & I	Once/Wk to R, C & I	No	Once/Wk to R, C & I			
Cape May City	Once/Wk to R, C, I	Once/Wk Seasonal to R & C (Apr 15th- Dec 15th)	No	No	By Appt. Only to R			
Cape May Point	Winter: Every Other Wk Summer: Once/Wk to R, C & I	By Appt. Only to R	By Appt. Only to R	No	Twice/Yr to R, C & I			
Dennis Township	Once/Wk to R, C, I (small businesses only)	Leaves Only, Once /Residence Each Spring & Fall	Once/Wk Seasonal to R (March, April, May, Sept & Oct)	No	Once/Month to R			
Lower Township	Winter: Every Other Wk Summer: Once/Wk to R & C	Leaves Only. Periodic to R & C	Periodic to R & C	No	By Appt. Only to R & C (Once/Wk)			
Middle Township	Once/Wk to R & C (small businesses only)	Once/Wk to R (Bagged with Sticker) Loose Leaves Seasonal	Once/Wk to R	Once/Wk to R	Once/Wk to R			
North Wildwood	Once/Wk to R & C	No	By Appt. Only to R & C	No	By Appt. Only to R & C (fee charged for white goods)			
Ocean City	Winter: Once/Wk Summer: Twice/Wk Service to R, C & I	Once/Wk to R, C & I	Winter: Once/Wk Summer: Twice/Wk to R, C & I (same day as municipal trash)	No	White Goods By Appt. Only to R, C & I (residential sized "white goods" only, no commercial sized appliances, no scrap metal)			
Sea Isle City	Winter: Once/Wk Summer: Twice/Wk to R, C & I	No	Once/Month Seasonal to R, C & I (Oct - May)	No	Once/Month Seasonal to R, C & I (no summer service)			
Stone Harbor	Once/Wk to R, C & I at Rear Door	By Appt. Only to R, C & I at Rear Door	By Appt. Only to R, C & I at Rear Door (Once/Wk)	No	Four Times/Yr to R, C, & I (at Curb)			
Upper Township	Once/Wk to R, C & I	Once/Wk to R (Must be bagged) Loose Leaves (Apr. & mid-Nov - Dec.)	Once/Month to R as scheduled (Jan – Oct)	Once/Wk to R	By Appt. Only to R (Every Other Wk)			
West Cape May	Once/Wk to R & C (C limited to bottles/cans)	No	No	No	No			
West Wildwood	Once/Wk to R & C	Once/Wk to R & C	Once/Wk to R & C	No	No			
Wildwood	Once/Wk to R, C & I	Leaves Only Once/Wk Seasonal to R, C & I (No Summer Service)	By Appt. Only to R, C & I (Winter-Once/Wk, Summer-Twice/Wk)	No	By Appt. Only to R, C & I (fee charged for white goods)			
Wildwood Crest	Once/Wk to R, C & I (Twice/Wk Service to C & I in Summer)	No	No	No By Appt Only to R, C & I (Winter: Once/Wk, Summer: Once/Month)				
Woodbine	Once/Wk to R	Once/Wk Seasonal to R (spring & fall)	Once/Wk to R	No	By Appt Only to R (Once/Wk)			
	*Note: "Winter" schedule varies by municipality but typically includes the fall, winter and spring seasons.							

Exhibit IV-5 Recycling Drop-Off Depots Provided by Cape May County Municipalities								
Municipality	Drop-Off Depot Location	Hours of Operation	Recyclable Materials Accepted	Generators Serviced	Vehicle Sticker Required			
Avalon	30th & Dune Drive Behind Police Station	MonFri. 7am-3pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic)	Residents	No			
Cape May City	830 Canning House Lane	MonFri. 7:30am-3:30pm. Sat. 8am-12pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Leaves, Grass, Brush, White Goods, Scrap Metal	Residents & Businesses	Yes			
Cape May Point	No Drop-Off Depot							
Dennis Township	571 Petersburg Rd., Dennisville, Public Works Building	MonFri. 7am-3pm	White Goods, Scrap Metal, Auto Batteries, Motor Oil, Used Clothing	Residents	No			
Lower Township	771 Seashore Rd., Cold Spring	ThursMon. 7am-2:45pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Leaves, Brush, White Goods, Scrap Metal	Residents & Businesses excluding Landscapers	Yes			
Middle Township	400 W. Mechanic St., C.M.C.H.	Everyday 24 hours	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), White Goods, Scrap Metal, Auto Batteries, Motor Oil	Residents & Businesses	No			
North Wildwood	511 West Oak Ave.	Winter: MonFri. 7am-2:30pm, Sat. & Sun. 8:30am-4:00pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Scrap Metal, Auto Batteries, Motor Oil, Cooking Oil	Residents	Yes			
Ocean City	2 Shelter Rd.	Winter: Mon., Wed., Fri. & Sat. 9am-3pm. Summer: MonSat. 8am-3pm	Mixed Paper*, Commingled Bottles and Cans (glass, metal and plastic)*, Leaves, Grass, Brush, Scrap Metal (excluding White Goods)*, Concrete, Tires	Residents, Businesses & Institutions (businesses limited to * materials)	No			
Sea Isle City	JFK Blvd. & Kneass St.	MonWed. 8am-3pm. SatSun. 10am-5pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Small Scrap Metal Items (beach chairs, etc.)	Residents	No			
Stone Harbor	8018 3 <sup>rd</sup> Ave.	MonFri. 7am-3pm	Auto Batteries and Motor Oil	Residents	No			
Upper Township	1691 Mt. Pleasant Rd., Tuckahoe	MonFri. 7am-3pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Used Clothing	Residents & Businesses	No			
West Cape May	732 Broadway (Municipal Shed)	MonFri. 7am-3pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Leaves, Grass, Brush	Residents & Businesses	No			
West Wildwood	No Drop-Off Depot							
Wildwood	500 Garfield Avenue	Everyday 24 hours	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), Used Clothing	Residents & Businesses	No			
Wildwood Crest	120 W. Newark Ave. (DPW site)	MonFri. 7am-2pm	Mixed Paper, Commingled Bottles and Cans (glass, metal and plastic), White Goods, Scrap Metal, Auto Batteries, Motor Oil	Residents & Businesses	No			
Woodbine	Madison & Longfellow Sts.	MonFri. 7:30am-3pm	Motor Oil	Residents	No			
			-					

A comprehensive description of each municipality's current recycling collection system is presented in Appendix II.

#### 2. Expansion of Municipal Recycling Collection Systems and Five Year Goals

Each of Cape May County's sixteen (16) municipalities must expand their municipal collection systems to include a strategy for collection of all recyclables "designated" in this Plan Amendment and provide more opportunities for year-round residents, seasonal visitors, commercial and institutional establishments to recycle. Communities cannot achieve the goal of recycling at least half of the municipal waste stream produced unless all generators are provided with local access to recycling services via curbside, rear yard and/or drop-off depot collection.

Given the requirement to recycle at least 50% of the municipal waste stream and the relatively large percentage that IPF recyclables comprise within the municipal waste stream<sup>7</sup>, this Plan Amendment requires that every municipality provide curbside, rear yard or alleyway collection for IPF recyclables (designated mixed paper and commingled cans and bottles) and requires that these materials be delivered to the CMCMUA in conjunction with the CMCMUA regional recycling program and interlocal service agreements established by the Authority with all sixteen (16) municipalities. It is strongly recommended that curbside or rear yard collection of IPF recyclables be provided at a frequency of at least once per week by each municipality to all residential, commercial and institutional generators within their community. Municipalities should also collect IPF recyclables from public use areas and at "special events" to further increase the quantity of mixed paper and commingled bottles and cans recovered.

This update of the Cape May County Solid Waste Management Plan also substantially expands the list of designated recyclables. Consequently, municipalities must designate a strategy for the collection of all forty-one (41) recyclables designated by this Plan Amendment. To comply with the requirements of the Mandatory Recycling Act, each municipality must review its current recycling collection system and implement an expansion to accommodate the collection of all "designated" materials not currently recycled by the municipality. Such municipal collection strategy may utilize a variety of collection options including, but not limited to, curbside, rear door or alleyway collection, providing generators with local access to a municipal recycling drop-off depot and directing individual generators to utilize other regionally available public sector and private sector recycling services. Municipalities may choose to supplement the services it provides by directing generators to utilize the recycling facilities and services provided by the CMCMUA at the Sanitary Landfill and Transfer Station as well as private sector Class B recycling facilities and other recycling markets.

For those designated recyclables which are routinely found in the municipal solid waste stream but not yet collected at curbside, municipalities are urged to add such designated recyclable materials to their

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<sup>&</sup>lt;sup>7</sup> Based upon the detailed municipal waste generation data presented by the United States Department of Environmental Protection in its report entitled "Municipal Solid Waste In The United States: 2005 Facts and Figures", the CMCMUA's staff estimates that more than one third (1/3) of MSW generated consists of "IPF recyclables".

existing curbside or rear door collection system. While significant variations exist in the composition of municipal solid waste generated in each municipality, such expansion means that all communities are strongly encouraged to evaluate and consider adding materials such as yard waste (including leaves, grass clippings, brush, tree branches and Christmas trees), scrap metal (including white goods, ferrous and non-ferrous scrap) and computer and consumer electronics (including CPU's, monitors, TV's, VCR's radios and telephones) to their curbside collection system, if these materials are not currently included. For other designated materials, which comprise a smaller fraction of the waste generated in the community or are generated on an infrequent basis, such as propane tanks, lead acid batteries, antifreeze, used motor oil and used oil filters, the municipality may elect to provide local generators with access to a municipal drop-off depot where such items can be delivered for recycling. Municipalities may also expand their collection system to include "recommended" recyclable materials set forth in this Plan Amendment as well as any other source separated materials the community may wish to recycle. Municipalities can identify the use of the recycling collection services provided by the CMCMUA at the Sanitary Landfill and Transfer Station, as specified in Exhibits IV-1 and IV-2 under "Disposition", for materials that are not routinely generated in the municipality. Municipalities also have the option of requiring specific classes of large volume generators to use Authority recycling facilities or private sector "Class B" facilities for recycling of vegetative materials, wood pallets, asphalt, concrete, used tires or contaminated soil. Municipalities are encouraged to evaluate and consider the use of shared recycling curbside and/or depot collection services to reduce the anticipated expenses associated with such collection program expansions.

While the designation of a specific strategy for the collection of all forty-one (41) recyclables designated in this Plan Amendment is a decision which must be made by each municipality based upon its waste composition and the economic resources of the community, each municipality should designate a collection strategy that will ultimately enable it to achieve a 50% MSW recycling rate. As a result, the following MSW recycling goals are set forth in this Plan Amendment to ensure that each municipality establishes a collection strategy that is ultimately capable of achieving the State mandated recycling goals in compliance with the requirements of the Mandatory Recycling Act:

- Each Cape May County municipality must individually achieve a municipal waste stream
  diversion rate of 30% or more for the recycling of all designated materials accepted at the
  CMCIPF. Any municipality that fails to achieve this target by the end of calendar year 2011 shall
  be required by this Plan to provide curbside, rear door or alleyway collection of IPF recyclables at
  a frequency of at least once per week from all residential, commercial and institutional generators
  within their community.
- Each Cape May County municipality that fails to individually achieve a municipal waste stream diversion rate of 50% or more by the end of calendar year 2011 shall be required to prepare a plan to expand its source separation and recycling program and/or collection system to further increase recycling efforts. Each municipality shall have six (6) months to prepare such plan which shall include a general overview of the municipality's current recycling program, the identification of any program deficiencies and plans for program expansion to increase the municipality's MSW recycling rate. Such plan shall be submitted to the Cape May County Solid Waste Advisory

Council (SWAC) for its review and consideration. However, the municipality shall make the final determination regarding the elements of the plan to be implemented. The municipality shall implement its plan to increase recycling efforts within twelve (12) months of consultation with the SWAC.

With municipal commitment, many Cape May County communities will be able to approach or achieve the 50% MSW recycling goal over time. By expanding municipal recycling collection systems to provide a method of collection for all forty-one (41) designated recyclables and by enacting and enforcing new ordinances for the mandatory source separation and recycling of all designated materials, significant increases in municipal and total waste stream diversion rates will be realized. Details for enacting and enforcing new model ordinances and implementing other recycling enforcement strategies and programs at the municipal and County level are detailed in Section VIII of this Plan Amendment.

## H. Processing and Marketing of "Designated" and "Recommended" Recyclables

## 1. CMCMUA Facilities, Programs and Services

To facilitate the processing and marketing of "designated" and "recommended" recyclables for which a municipal collection system has been established, the following facilities, programs and services shall be provided by the CMCMUA. The CMCMUA shall routinely review and evaluate the processing and marketing services it provides and will modify and expand such systems as necessary to support all Cape May County municipalities in the achievement of the State mandated recycling goals.

## **IPF Recycling**

All sixteen (16) Cape May County municipalities and the Authority jointly participate in a regional source separation and recycling program to minimize capital and operating costs while maximizing recycling participation rates and market revenues. For the convenience of residents and visitors and to encourage greater participation, municipalities provide curbside collection of source separated IPF recyclables in two (2) streams: Mixed Paper, which includes newspaper, corrugated, kraft grocery bags, magazines, office paper, telephone books, paperback books and junk mail; and Commingled Bottles and Cans, including clear, green and brown glass, aluminum, bi-metal, steel and aerosol cans, and PET and HDPE plastic containers. These source separated materials are collected from residents, businesses and institutions that are all required to recycle. Source separated recyclables are received, at no charge, six (6) days per week from Cape May County municipalities, private haulers, institutions, businesses and residents who utilize the Authority's solid waste disposal facilities. These materials can either be dropped off at the Authority's Transfer Station, or they can be delivered directly to the CMCMUA's Intermediate Processing Facility located adjacent to the Sanitary Landfill. The IPF sorts, processes and upgrades accepted materials to improve marketability. All recyclable materials processed through the IPF are aggressively marketed to receive the highest prices available from stable, long-term markets.

The IPF also receives commingled cans and bottles, under contract, from selected out-of-county sources to generate additional recycling revenues to help reduce any annual operating losses incurred by this facility. In April 2003, the CMCMUA entered an interlocal services agreement under which the Cumberland County Improvement Authority (the "CCIA") delivers all commingled cans and bottles it receives to the IPF for processing and marketing. This contract, which was amended in March 2005 to extend the term of the agreement until December 31, 2009, provides for a cooperative, regional approach to recycling that is mutually beneficial for both the CCIA and the Authority.

The IPF is owned by the CMCMUA and is currently operated by FCR Camden, Inc. under a contract which extends until December 31, 2009. FCR Camden, Inc. is responsible for all aspects of operating and maintaining the facility from the inspection and acceptance of source separated materials to the transport and marketing of processed commodities to mills or other end markets for recycling into new products.

The Cape May County Intermediate Processing Facility is the cornerstone of the County-wide recycling program and an integral part of the County's comprehensive solid waste management system. The IPF, which began commercial operations in April 1990, emphasizes mechanical sorting and processing of the mixed recyclables received at the facility. It was modified in 2002 to renovate the commingled bottle and can equipment and most recently in 2005 to renovate the mixed paper processing line. These modifications to replace worn out equipment have increased processing throughput to 25 tons per hour, improved efficiency and reduced operating and maintenance costs. This facility, which can process 375 tons per day, has ample capacity to meet the processing and marketing needs for all IPF recyclables generated on both a short-term and long-term basis.

#### **Grass Clippings and Leaf Composting**

Source separated, uncontaminated leaves and grass clippings are accepted from all Cape May County generators and composted at the Authority's Leaf Compost Area located at the Environmental Complex. A variable seasonal per ton charge has been established for source separated leaves and grass clippings when delivered by private customers to help offset the operating expenses associated with this recycling project. Delivery of source separated leaves and grass clippings are accepted at no charge from Cape May County municipalities pursuant to the provisions of the interlocal services agreement. The leaves and grass clippings that are composted by the Authority are screened and then sold directly or are added to a mixture of topsoil and biosolids compost to create a product which is sold locally under the name of "Terragro".

## Recycling of Branches, Tree Limbs, Stumps and Christmas Trees

Commingled source separated branches, tree limbs and stumps are accepted from all Cape May County generators at the Authority's Class B Recycling Facility located at the Environmental Complex<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> The Environmental Complex is a 457-acre site located on the Borough of Woodbine/ Township of Upper border that includes the CMCMUA Sanitary Landfill, IPF, Class B Recycling Facility and other Authority facilities.

Branches, tree limbs and stumps are accepted at a reduced cost by the CMCMUA for chipping and screening into marketable wood chips and root mulch and sold to private landscapers and the general public. Natural, decoration-free Christmas trees are also accepted seasonally from all Cape May County generators at no cost. Christmas trees are chipped and the resulting mulch is distributed seasonally to the general public at no charge. Private sector Class B facilities are also available to receive these source separated materials for recycling.

## **Wood Pallet/Crate Recycling**

Source separated wood pallets and crates are accepted by the Authority from all Cape May County generators at the Environmental Complex. Beginning January 2007, this material will also be accepted at the CMCMUA's Transfer Station. A modest charge has been established for acceptance of wood pallets when delivered by private customers to help offset the operating expenses associated with this recycling project. Cape May County municipalities can deliver these materials at no charge pursuant to the provisions of the interlocal services agreement. Clean, untreated and unpainted wood pallets and crates are processed through a horizontal wood grinder. The resulting woodchips are used either as a bulking agent in the CMCMUA Wastewater Program's Sludge Composting Facility or are colored to produce a marketable landscaping material.

#### "White Goods", CFC Recovery and Recycling of Ferrous and Non-Ferrous Scrap

Bulky household metals, including aluminum, copper, iron, sheet metal and other ferrous and non-ferrous scrap, are accepted at no charge by the Authority from all Cape May County generators at the Environmental Complex and the Transfer Station. White goods or appliances that contain CFC or freon are also accepted by the Authority at both the Environmental Complex and Transfer Station. In accordance with Federal and State air quality regulations, CFC refrigerants must be recovered from refrigerators, air conditioners and similar units prior to their being recycled. Due to the high cost of removing these refrigerants, the Authority charges a nominal per unit fee for each scrap metal item that contains refrigerants when delivered by private customers. Pursuant to the provisions of the interlocal services agreement, Cape May County municipalities can deliver these CFC containing appliances to the Authority's solid waste facilities without a fee.

## **Contaminated Soil Reuse**

Contaminated soil that is waste classified as Type 27, Dry Industrial Waste and approved for "Beneficial Use" as daily landfill cover, is accepted at the Authority's Environmental Complex from in-county and out-of-county sources on a case-by-case basis. Customers are required to submit results of standard testing for contaminated soils to enable the Authority to make a determination of whether the material is acceptable for reuse as landfill cover. If the test results comply with the parameters

established by the Authority in the approved Operating Plan for the Sanitary Landfill, the material is accepted with a fee charged upon delivery.<sup>9</sup>

## Propane Tanks

Empty 20 and 30 pound propane tanks are accepted from all Cape May County generators for a fee at the Environmental Complex and Transfer Station. Tanks are marketed by the Authority to vendors that evacuate any residual gas and then refurbish and refill tanks or salvage the empty tanks for recycling as scrap metal. Private sector markets are also available to receive these source separated materials for recycling.

# **Cooking Grease**

Cooking Grease is collected for recycling by private sector rendering companies from the many restaurants located in Cape May County. The Authority's staff has identified several private companies that provide such recycling services and routinely updates this information to provide marketing assistance to all Cape May County commercial generators as needed. The CMCMUA is currently evaluating the need for and costs associated with the establishment of a recycling drop-off service at one of the Authority's solid waste facilities for the increasing numbers of residents who generate significant amounts of cooking grease.

# **Computer and Consumer Electronics Recycling**

The CMCMUA initiated a computer and consumer electronics recycling program to service all Cape May County generators. Under this program, computer monitors, televisions and other electronic components that contain lead, mercury, cadmium and other potentially hazardous materials are recycled rather than disposed thus preventing the introduction of these materials into the environment. Two (2) collection events are conducted in the spring and fall of each year in conjunction with the CMCMUA's household hazardous waste collection days at which time free recycling of consumer electronics is offered to the public. The Authority also accepts source separated electronics at the Authority's Environmental Complex and Transfer Station from Cape May County municipalities, schools, residents and businesses throughout the year at a nominal fee. Electronic components accepted at collection events and those received during normal operating hours at Authority solid waste facilities are shipped to a demanufacturing facility for recycling.

# **Tire Recycling**

To provide an outlet for the proper handling of used tires, source separated loads of car and truck tires, as well as segregated loads of oversized tires, are accepted by the CMCMUA from all Cape May County generators. All tires, including oversized farm equipment tires, are accepted at the Authority's

<sup>&</sup>lt;sup>9</sup> See Sections V, subsection B.2. and Section VI, subsection D.2. for additional information regarding the Authority's program for beneficial reuse of contaminated soil.

Environmental Complex at a per ton charge that varies depending upon the size and type of tire being accepted for recycling. The CMCMUA ships these tires to an out-of-county facility for processing and recycling rather than landfilling these materials. Whenever grant monies are available through the NJDEP, the CMCMUA offers various "amnesty" programs for tire recycling under which residents, businesses and government entities are provided with an opportunity to recycle worn tires at no charge.

# <u>Used Motor Oil, Used Motor Oil Filters, #2 Home Heating Oil, Kerosene, and Antifreeze Recycling</u>

In an effort to discourage improper disposal, the Authority accepts from all residential Cape May County generators used motor oil, used motor oil filters, #2 home heating oil, kerosene and antifreeze at the Environmental Complex and the Transfer Station without charge. Most Cape May County municipalities have also established collection points to receive used motor oil within their communities. At Authority facilities, used motor oil, #2 home heating oil and kerosene are stored in "igloos" that are routinely emptied by private sector reprocessors and re-refiners for purification and resale. Used motor oil filters are also stored at CMCMUA solid waste facilities in special containers that are routinely picked up by private sector reprocessors who recycle the used motor oil filters after any remaining motor oil has been recovered. Antifreeze is also stored by the Authority in a similar manner for reprocessor collection and refining for resale.

#### **Automotive and Marine Batteries Reclamation**

Automotive and marine batteries are accepted from all Cape May County generators at the Authority's solid waste facilities, at no charge, for subsequent recycling. Once sufficient quantities are accumulated, these spent batteries are delivered to or picked up by private processors for reclamation. Private sector markets are also available to receive these source separated materials for recycling.

# **Rechargeable Batteries**

The CMCMUA supports the industry's Rechargeable Battery Recycling Corporation (RBRC) program for recycling rechargeable batteries. Residents and businesses are referred by the Authority's staff to the RBRC web site or local retail stores that maintain collection boxes for rechargeable batteries. Businesses and institutions that generate significant numbers of spent batteries are encouraged to join the RBRC's program for collecting and recycling self generated batteries. In addition, the CMCMUA's Transfer Station serves as a RBRC collection point for accepting rechargeable Sealed Lead Acid (SLA) and Nickel-Cadmium (NiCad) batteries from residential, business and institutional customers at no charge.

## **Street Sweepings and Catch Basin Cleanout Reuse**

The Authority accepts street sweepings and dewatered catch basin cleanout materials that are suitable for reuse as landfill cover from municipally sponsored cleaning operations. In accordance with the

interlocal services agreement established between the Authority and all sixteen (16) municipalities, street sweepings and dewatered catch basin clean out materials are accepted at the Sanitary Landfill at no charge when such materials meet the requirements established by the NJDEP for reuse. This reuse program was established by the CMCMUA to encourage and promote pollution prevention activities in support of local and County initiatives directed toward improving water quality.

# Paints and Finishes Recovery/Disposal

The Authority accepts water based and oil based paints and finishes as "Universal Wastes" on a routine basis from Cape May County generators for recycling/disposal at the Transfer Station. Under this program, latex paint, oil based paint and stain, boat bottom paint, enamel, varnish, shellac, lacquer, polyurethane, wood and masonry sealer, wood preservative and aerosol paint cans are received from residents, schools, public and non-profit agencies and businesses for recycling/disposal to prevent the uncontrolled introduction of these materials into the environment and divert these potentially dangerous materials from the regular solid waste disposal system. These materials are accepted for drop off at the Transfer Station at a nominal charge for containers one gallon or larger in size. In addition, oil-based paints and finishes are accepted from all Cape May County generators without charge (for quantities up to 12 gallons or 25 pounds) during the periodic Household Hazardous Waste ("HHW") collection events held by the Authority<sup>10</sup>.

# 2. <u>CMCMUA Pilot Programs for the Collection, Processing and Marketing of "New" Recyclables</u>

In a continuing effort to expand recycling, the CMCMUA periodically develops pilot programs to determine the recycling potential of new materials that could eventually be added to the recommended or designated recyclables list contained in the County Plan. Such small-scale pilot programs enable the Authority to identify potential collection and processing obstacles, evaluate the reliability of end markets and estimate the expenses and revenues that would be associated with establishment of a permanent program. The following pilot programs are currently being conducted and evaluated by the Authority to determine the potential for these source separated materials to be recycled on a routine basis throughout the County.

# **Mixed Rigid Plastics Pilot Program**

Beginning in September 2006, the CMCMUA began a pilot program for the recycling of mixed rigid plastics ("MRP"). Specific plastic materials accepted under this MRP pilot program include; laundry baskets, buckets with metal handles, lawn furniture, flowerpots, closet organizers, dish drying racks, traffic signs, garbage cans, VHS tapes, blister packing material, car bumpers, milk and soda crates and plastic drums, up to 55 gallon capacity, which contained food or other non-hazardous materials. MRP is currently collected by the Authority at the Transfer Station using two different methods. All

<sup>10</sup> See Section V, subsection D. for more information regarding the HHW collection events sponsored by the Authority.

customers delivering solid waste to the convenience area at the Transfer Station are asked by the Authority's operating staff to remove rigid plastics from their waste and place the MRP into a separate container for recycling prior to disposal of the remainder of their load. Public and private customers, including businesses that generate significant volumes of MRP waste, have also been requested to deliver source separated loads of mixed rigid plastics to the Transfer Station for recycling under this pilot program.

When a container load of MRP is accumulated, the plastics are shipped to a private vendor for recycling. The Authority's staff tracks the tons recycled, the direct costs incurred, revenues received and other pertinent data. It is currently anticipated that this MRP pilot program will continue for at least a one year period during which the Authority expects to determine whether a significant amount of MRP is available in the waste stream for recovery and whether stable markets exist for MRP which would be needed to support the recycling of this material on a long-term basis.

Based upon the initial success of this MRP pilot program, the Authority staff expects that MRP recycling has the potential to remove a significant volume of material from the municipal waste stream thereby increasing the tonnage of material eligible toward the State mandated 50% recycling goal. If this pilot program to recycle MRP continues to be successful, the Authority may expand this program to include recycling of plastic film, such as boat shrink wrap and agricultural film. A pilot program to collect and evaluate the recycling of plastic film would likely be operated on a seasonal basis when larger volumes of boat shrink wrap and agricultural film are generated.

## Paper Shredding and Recycling Pilot Program

The total tonnage of mixed paper being received at the Cape May County Intermediate Processing Facility has not significantly increased in recent years even though considerable effort has been made by the Authority during calendar years 2005 and 2006 to increase corrugated cardboard recycling particularly from businesses. A visual inspection of the incoming paper mix reveals a noticeable increase in oversized corrugated cardboard packaging material being recycled from construction sites. Also evident is an increase in the quantity of office paper that is shredded prior to receipt at the CMCIPF. However, the volume of junk and regular mail in the incoming IPF paper stream is on the decline. While source reduction could play a role in this decline, anecdotal evidence assembled by both the Authority's staff and municipal recycling coordinators suggests that the decline in the recycling of regular and junk mail may be residents' fear of "identify theft". Generators appear to be disposing of regular and junk mail in the trash because they believe it provides a better level of protection from identify theft when compared to the process of recycling these materials.

To address this issue, the CMCMUA implemented a pilot program in 2006 to offer shredding services to residents and small businesses to reclaim regular and junk mail and other personal and business documents for recycling. Beginning in the spring of 2006, the CMCMUA sponsored community-wide paper shredding day events in various locations throughout the County. On five (5) separate days in ten (10) different locations, residents and businesses were encouraged to bring up to six (6) banker

sized boxes or up to six (6) grocery sized bags of paper to these events for shredding. A total of 22.16 tons of paper was collected, shredded and recycled on these five (5) days. Customers were asked to complete a brief survey regarding their usual practices for shredding, recycling and/or disposing of mail and other documents and their interest in participating in community shredding events in the future. In general, the response to "Community Shred Days" was overwhelmingly positive.

Of the customers utilizing shred day services, 69% brought personal papers, 16% delivered business generated papers and 15% reported a mix of business and personal papers. All participants were pleased to have the service available despite the fact that 79% of respondents reported having a shredder at their home or office. Forty-three percent (43%) of customers who shred their documents at home or work reported placing shredded paper in the trash rather than the recycling bin. Some individuals were of the opinion that even shredded papers represented a potential security risk while others did not realize that shredded paper was accepted for recycling. A few customers also expressed concern that they could create a litter problem by placing shredded paper in a bag or bin for recycling. To alleviate some of these concerns, the Authority's staff advised all customers to place paper that they shred at home or in the office in a see-through plastic bag and add the bag to the curbside set out of recyclable mixed paper. Based upon the survey results, the most requested frequency for community shredding events was monthly while a few customers ask for semiannual or annual events.

In addition to the shredding events held in the spring, the Authority conducted a series of community-wide shred days during the fall of 2006. On six (6) separate days in six (6) different locations, residents and businesses had the opportunity to bring junk mail, regular mail and other documents for shredding. The Authority contracted with a private vendor to provide a large capacity mobile shredder and, in partnership with several municipalities, conducted more regionalized events in an effort to serve even more waste paper generators. During the first four (4) fall events, both the number of customers and the tons of paper received per event declined by comparison to the events conducted in the spring of 2006. However, the last two (2) fall events were characterized by heavy participation with a significant tonnage of paper delivered for shredding. Based upon the experience gained by conducting these shred day events, the Authority will further assess a variety of methods to best determine how to maximize the recycling rate for junk and regular mail and other documents generated by the residential and small business communities.

The CMCMUA may elect to host a "Community Paper Shredding Month" which would include providing shredding services to residents and small businesses during a month-long event rather than the use of individual shred days. If such an option were selected for implementation, the CMCMUA would utilize a single, centralized location for provision of shredding services. It is anticipated that this pilot program will continue offering shredding service in a variety of formats until it is determined which method is most productive and cost effective in increasing the quantity of paper recovered thereby increasing the tonnage of material eligible toward the State mandated 50% MSW recycling goal.

## 3. Private Sector Recycling Facilities and Markets

Recycling facilities and services provided by the private sector have assisted in facilitating the achievement of a County-wide diversion rate of approximately 60% of the total solid waste generated. To recycle materials not processed or marketed by the CMCMUA, residents, businesses, institutions and municipalities are encouraged to utilize private sector processors and markets. Presently, the County has four (4) private "Class B" recycling facilities that accept concrete, asphalt, block, stumps and logs as further described in Section VII. In addition to these Class B facilities, there are three (3) recycling markets in the region which accept a variety of paper, metal and plastic for recycling: Raff's Scrap Iron and Metal of Cape May Court House, Giordano's Scrap of Vineland and Cumberland Recycling of Vineland. East Coast Recycling of Vineland also accepts source separated film plastic and PVC siding for recycling. The State of New Jersey also provides recycling market and other information on its website at http://www.state.nj.us/dep/dshw/recycling/index.html.

#### I. Strategies to Improve Recycling Reporting and Recordkeeping

One of the strategies that this Plan Amendment seeks to achieve is improved record keeping and reporting by commercial establishments and the municipalities. Recommendations for improved solid waste and recycling reporting and recordkeeping are presented below.

## 1. Solid Waste Tonnage Reporting

Four (4) of Cape May County's sixteen (16) municipalities, including Middle Township, North Wildwood, Ocean City and Woodbine, collect one item of bulky waste along with their regular municipal trash collection on a routine basis. By providing this service, some municipalities have been able to significantly reduce the amount of illegal dumping that had previously occurred within the communities while at the same time providing a routine level of service that waste generators have come to expect. In Middle Township, for example, many residents set out one or even more bulky waste items on a weekly basis in addition to their regular municipal trash. The bulky items and municipal waste are collected for disposal in the same compactor vehicle. These truckloads of waste have historically been classified as Type 10-Municipal Waste when disposed at CMCMUA facilities even though the load may contain a significant amount of bulky waste.

In an attempt to remedy this reporting problem, the Authority has requested and received approval from the NJDEP to modify the Solid Waste Origin and Disposal Form to enable affected municipalities to indicate the presence of both Type 10-Municipal Waste and Type 13-Bulky Waste in such loads and apportion a percent of the load to each waste type. The Authority has modified its Solid Waste Origin and Disposal ("O&D") Form accordingly and is working with these impacted communities to assist them in the proper identification and reporting of such mixed waste type loads prior to their disposal at the CMCMUA's solid waste facilities.

The Authority has reviewed its historical data for the tonnage of Type 10-Municipal Waste and Type 13-Bulky Waste delivered for disposal by those municipalities that collect bulky waste in a separate collection compared to those communities that collect one or more items of bulky waste along with their regular municipal trash collection. As expected, the tonnage reports generated from activity on each municipality's waste disposal account demonstrate that a higher percent of waste classified as Type 13-Bulky Waste is delivered for disposal by those communities that collect bulky waste in a separate collection. Therefore, the Authority anticipates that the use of this more detailed O&D Form will result in more accurate waste type reporting for those municipalities that collect municipal trash and bulky waste items in the same vehicle.

To ensure that the data being recorded on this revised O&D form is as accurate as possible, municipalities that collect municipal and bulky waste in the same collection vehicle are being requested to implement the following procedure. It is recommended that each affected municipality assign an experienced member of its staff to follow each municipal waste collection vehicle along its route in all neighborhoods and on several different days to observe and record the relative amount of bulky waste set out for collection compared to municipal type trash. The data collected by visual inspection should be compiled in a report that details the total number of households, businesses and institutions provided with service, the number of each that set out bulky items and the approximate percentage, by weight, of those bulky items to the total waste set out for collection and disposal. The data collected in the field should be carefully analyzed by the municipality along with its historical solid waste tonnage disposal data by waste type to formulate an accurate percentage for Type 10-Municipal Waste and Type 13-Bulky Waste by route for use in reporting on the O&D Form. Affected municipalities should periodically repeat this data collection and evaluation procedure, especially during different seasons of the year, to ensure that the most accurate data available is being used when completing the O&D Forms required to be submitted when disposing of loads at the CMCMUA's solid waste disposal facilities.

## 2. Recycling Tonnage Reporting

Many of the materials source separated for recycling in Cape May County are collected by municipalities, through their department of public works or under contract with a private hauler, or are delivered directly to the recycling facilities provided by the CMCMUA. There is, however, a significant quantity of source separated recyclables that are collected and marketed independently of these government sponsored recycling programs. For example, many large retail stores and supermarkets source separate, bale and transport corrugated material back to regional warehouses for marketing. Some banks, financial and legal service providers and health care institutions recycle documents that contain confidential or other sensitive information through private sector shredding companies. All businesses and institutions that manage the collection and/or marketing of their own source separated recyclables should be reporting the tonnage of material that they recycle on a calendar year basis to the municipality in which they are located.

While the collection of such recycling tonnage information can be challenging, municipalities are strongly encouraged to include language in their mandatory recycling ordinance that requires businesses and institutions to annually report such independent recycling activity to their municipality. Each generator that recycles material through methods other than the use of the municipal recycling collection system or the delivery of materials to the recycling facilities provided by the CMCMUA should be required by municipal ordinance to report the categories of materials recycled during the previous calendar year, by tonnage amount and market name and location. Each such generator should be required by the municipal ordinance to submit all required information in a timely manner to enable the municipality to include this independent recycling data in its tonnage grant application to the NJDEP. In addition, municipalities should assign the task of informing businesses and institutions of such reporting requirements and ensuring their compliance with the ordinance to the municipal recycling enforcement officer and/or the municipal recycling coordinator.

## J. Technical Support, Education and Promotion

Improved educational outreach, at both the municipal and County level, to residents, vacationers, businesses, schools and other institutions regarding recycling must be successfully performed if the recycling goals set forth in this Plan Amendment are to be achieved. Emphasis must be placed on maximizing the participation rate and efficiency of existing programs through the use of education and promotion tools and through the creation of companion programs to expand existing recycling activities.

## 1. Municipal Recycling Education and Promotion Program

To meet the requirements of the Mandatory Recycling Act, which requires that municipalities publicize the provision of the local recycling program at least once every six (6) months, Cape May County municipalities typically inform residents, businesses and institutions regarding mandatory recycling requirements through brochures that are direct mailed or made available for pick-up at public locations. Newspaper and radio advertisements are also utilized by municipalities to educate the public and to meet this statutory requirement. Since Cape May County is a tourist destination, seasonally impacted communities distribute promotional materials created by the CMCMUA as well as municipally designed and produced flyers and brochures to inform visitors of mandatory recycling requirements in a clear and concise manner. Most communities also include recycling set out requirements and recycling collection schedules on their municipal websites.

To ensure that the statutory notification requirements are met and to better coordinate educational and promotional efforts on a County-wide basis, each municipality shall be required by this Plan Amendment to submit to the Authority, at the end of each calendar year, a sample of each communication tool utilized to inform waste generators in their community regarding municipal recycling requirements. Information regarding the frequency and method of distribution for such communication tools should also be submitted.

## 2. CMCMUA Recycling Education and Promotion Program

The Authority provides technical and educational assistance to municipalities, businesses, institutions, residents and visitors to expand source reduction, reuse and recycling activities. Promotional and technical assistance is provided to private businesses that face unique recycling challenges due to the large influx of summer vacationers. A comprehensive recycling education program provided by the Authority includes an advertising/promotional program along with tours of CMCMUA facilities which are offered to local schools and the general public.

The CMCMUA's recycling promotion program seeks to coordinate the use of various promotional tools to educate the general public, businesses and Cape May County's seasonal tourist population. Mass media advertising, press releases, special events and programs, brochures and flyers use a compatible message to work collaboratively to achieve a high level of recycling awareness and keep generators informed regarding the details of local recycling programs. On a periodic basis, the CMCMUA places advertising in newspapers in the form of display ads, special full-page messages and inserts. The Authority has produced television commercials and purchased airtime on the local NBC affiliate and cable TV, specifically to educated summer tourists. More detailed information regarding how to participate in curbside recycling programs is delivered through guides, brochures, "refrigerator" magnets and informational stickers. The "how to" information is distributed via mail, the internet, in "welcome bags" for rental and new property owners and is available for pick-up at locations such as municipal halls, beach tag sales offices and vendor racks on tourist trolleys.

The CMCMUA's recycling education program includes developing, sponsoring and participating in special events. For example, the Authority's recycling staff plays a significant role in the County's Earth Day Fair held each spring, and conducts school and library activities for America Recycles Day every fall. Unique projects such as the "Recycling Challenge" and "Invest in Futures...BUY RECYCLED" help to increase the presence of recycling in everyday life. The Authority's staff also provides a "Recycling Road Show" that is used to promote recycling through interaction with residents and visitors at the County's numerous craft shows, fairs, specialty markets and celebrations. The staffed "Recycling Road Show" display is in a different location nearly every week during the peak season of May through October.

The Authority also promotes and participates in school based recycling education programs. Curriculum that can be used in schools is made available to local school districts as well as teacher's kits, which contain hands on materials for classroom activities and background information for teachers. The Authority's recycling staff is available for in-school presentations and provides tours of the CMCMUA Environmental Complex. These field trips include visiting the Intermediate Processing Facility where the County's paper, bottles and cans are processed and touring the "Garbology Technology Center" at the IPF which demonstrates how recyclables are converted to marketable secondary raw materials. Students can also take a guided bus tour around the Sanitary Landfill site and the "Class B" recycling center.

The Authority uses its promotional programs to help reposition recycling as a high environmental priority in the view of year round residents and seasonal visitors. To maximize the effect of this educational campaign, the Authority collaborates with municipalities, businesses and citizens groups as appropriate for the development and implementation of various communication tools. Education projects that target a specific audience should involve representatives of that audience in the planning and development of the recycling education program to make it more successful. This approach should not only result in the development of more effective promotion tools, the distribution network for the specific brochure or recycling guide produced should be increased through the involvement of the target audience.

To leverage educational tools and more widely deliver the recycling message, the Authority will seek partners who are also trying to promote a message that is beneficial to the community and requires individuals to take specific action or change behaviors. For instance, recycling information could be added to a flyer on water conservation tips distributed by a local water utility or environmental conservation group and information regarding battery recycling might be included on a reminder about checking the batteries in smoke alarms distributed to school children by fire safety officials.

Finally, the reinvigorated recycling education program will work in concert with municipal and county enforcement programs. Close communication between the enforcement staff and the education staff should enhance both programs. Educational materials can be developed and delivered to areas where enforcement personnel perceive a need. Enforcement staff can be directed to businesses or residential areas where distribution of educational/promotional materials have not resulted in increases in recycling program participation rates.

#### 3. Purchase of "Special Event" Recycling Containers

The Authority has evaluated the effectiveness of some public and private sector recycling efforts in Cape May County and has found that while many residents, visitors and businesses are effectively source separating materials for recycling, some are not. The CMCMUA has targeted public use areas for improvement of recycling levels at "special events" held primarily in the peak and "shoulder" seasons. Attractive, lightweight containers that are easy to clean and transport have recently been purchased and subsequently loaned to special event organizers to encourage recycling of designated materials.

The Authority has purchased one hundred (100) recycling containers designed for collection of recyclables at such special events. The containers consist of a lightweight steel frame, a rigid plastic lid having holes in the center and a clear plastic bag. Both the lid and the plastic bag are unmistakably labeled for the recycling of cans and bottles. The containers are easy to store, service, clean and transport. These event containers are available free on loan to event organizers of public or private celebrations, fairs and festivals.

During the summer of 2006, the CMCMUA recycling staff facilitated the use of these containers at various events throughout Cape May County and the public response to and use of these containers has been very positive. Interest in the use of these containers is continuing to grow as several organizations planning events have contacted the CMCMUA to schedule the loan of these containers.

## 4. "Reinvigorating Recycling" Municipal Mini-Grant Program

To assist municipalities in achievement of the State's goal of recycling 50% of the MSW stream, Cape May County and its sixteen (16) municipalities will need to reinvigorate recycling efforts. As a result, the CMCMUA has utilized Solid Waste Services Entitlement Funds to provide mini-grants to local communities to encourage them to expand their source separation and recycling activities. Each year, municipalities are asked to identify those recycling program areas in need of improvement and request funds to purchase equipment and/or provide services that will increase the tonnage of designated recyclables recovered.

The first mini-grant program offered by the Authority in 2005 focused on improving or expanding recycling in public areas such as beaches and parks. The Authority distributed approximately \$30,000 to the thirteen (13) municipalities that submitted applications. Most communities focused on improving public area recycling by purchasing outdoor recycling containers. In 2006, the Authority offered each community up to \$2,000 in mini-grants to continue the work begun with the public areas recycling grants provided by the CMCMUA in 2005 or focus on other municipally identified needs. During the 2006 application process, the Authority identified other eligible projects such as: development of communication tools to increase the public's awareness of recycling; assistance to businesses in expanding the quantity of corrugated cardboard and other mandated recyclables that are source separated for recovery; improvements to reduce the volume of trash placed in public area recycling containers in beach/boardwalk areas; and expansion of school and other institutional recycling activities to target increased recovery of office paper, corrugated cardboard, hardback books, computers and other electronics.

The CMCMUA will attempt to continue the mini-grant program for as long as Solid Waste Services Tax Entitlement Funds are available to the Authority. It is expected that the amount of funding offered to municipalities will increase in 2007. The Authority will encourage those municipalities that do not have a comprehensive public area recycling collection program to utilize funds to purchase necessary equipment to make recycling easy and convenient in all public areas or to utilize the funds for other recycling priorities as identified in this Plan Amendment.

#### **SECTION V**

#### OTHER RECOVERY POLICIES

## A. Goals, Objectives And Strategies

In addition to source reduction and recycling, the County's comprehensive solid waste management system provides recovery and reclamation projects that use or reuse materials that would otherwise become waste. These projects include beneficial use of biosolids, reuse of contaminated soil, landfill gas recovery and household hazardous waste collection. These recovery programs reduce the amount of waste disposed, decrease "greenhouse gas" air emissions and diminish the toxicity of waste entering the County's solid waste stream for disposal. Through this Plan Amendment, the County encourages activities that increase utilization of potential waste materials by providing opportunities for processing, marketing, reuse and educational outreach. The CMCMUA in partnership with private and public entities shall pursue, to the maximum extent practical, the strategies set forth in this Section to achieve these recovery objectives.

# B. Beneficial Use

# 1. Sludge/Biosolids Management - "CapeOrganic"

The Authority's four (4) regional wastewater treatment systems generate sewage sludge that is processed into reclaimed biosolids at the CMCMUA's sewage sludge composting facility. These biosolids are marketed as a specialty fertilizer under the name "CapeOrganic". This product is registered annually with the Department of Agriculture as a specialty fertilizer and the composting process is permitted and regularly monitored by the New Jersey Department of Environmental Protection. The absence of industry in Cape May County results in a biosolids product where heavy metals and other contaminants are not a concern. Cape May County's biosolids meet the USEPA's designation of "Class A - Exceptional Quality". CapeOrganic is a NJDOT approved additive for increasing the organic content of top soil to be utilized on NJDOT projects.

This product, which is intended for uses such as lawns, shrubbery, flowers, golf courses, landscaping, sod crops and agronomic crops, is an economical substitute for products such as peat moss, chemical fertilizer and commercial mulches. CapeOrganic contains fully processed biosolids which have been blended with hogged wood chips then thermophilically (110°F to 165°F) composted a minimum of 44 days. This process produces a clean, safe and nearly odorless product suitable for soil conditioning and as a nutrient rich additive in self-formulated top soil and growing medium blends. It is also an excellent material for seasonal top dressing of athletic fields, parks and other turf areas. More than one hundred local contractors, landscapers and government agencies are regular customers for CapeOrganic. The Authority, in accordance with the State Plan, seeks to support and encourage the expanded beneficial use of CapeOrganic in environmentally sound applications.

To promote the effective distribution and expanded use of this reclaimed material, this Plan Amendment encourages the use of Cape Organic in public works, agricultural and horticultural applications and supports all approved Class B recycling facilities and other private sector operations which utilize CapeOrganic in their "Topsoil Blending Facilities", consistent with the end use requirements for other recyclable materials derived from composting organics.

## 2. Contaminated Soil

Use of contaminated soils that are waste classified as Type 27, Dry Industrial Waste, is a recognized "beneficial use" in limited applications and when such materials meet minimum regulatory standards established by the NJDEP for decontamination. Contaminated soils typically contain compounds such as diesel fuel, gasoline and other petroleum products which can be generated as a result of leaking storage tanks, traffic accidents of similar occurrences. The NJDEP allows such contaminated soils to be utilized as landfill cover when the contamination level of such soils is characterized as non-hazardous or when soil remediation has occurred to the satisfaction of the Department. When such contaminated soils meet the regulatory requirements to be classified as beneficial use, this Plan Amendment encourages their reuse as daily landfill cover.

To facilitate the beneficial use of contaminated soils, the Authority accepts such soils for use as daily cover, with priority consideration given to soils generated in Cape May County. Use of contaminated soils in this manner serves to fulfill a regulatory need to cover the working face of the CMCMUA's Sanitary Landfill at the conclusion of each operating day while at the same time providing an environmentally safe repository for non-hazardous soils that can only be reused in a limited number of applications.

#### C. Landfill Gas Recovery/Greenhouse Gas Emissions Reduction

Sanitary landfills produce and emit methane and other gases as a result of the decomposition of organic materials disposed therein. The methane component of the landfill gas, which constitutes approximately 50% by volume produced, is recognized as a "greenhouse gas" which, if released to the atmosphere, would contribute to the problem of global warming. Accordingly, the NJDEP has developed rules and regulations to control these gases and minimize landfill gas emissions.

As part of an emissions control program to improve air quality, wells have been installed at the CMCMUA's Sanitary Landfill to recover the landfill gas and refine it into a marketable product that serves as a substitute source of energy for #4 fuel oil while being combusted in the boilers at the Woodbine Developmental Center. The emissions resulting from the combustion of landfill gas have been demonstrated to be significantly cleaner than the traditional use of fuel oil. Landfill gas can also be used as an alternative fuel for generating electricity.

This Plan Amendment supports and encourages the recovery of landfill gas and promotes its use as a marketable product to serve as a substitute fuel for use in combustion engines to produce electricity. In Cape May County, such uses shall be implemented as a higher priority alternate to flaring off landfill gas to reduce air pollutants whenever such innovative uses are economically viable. A more detailed

description of the landfill gas recovery projects that have been implemented by the Authority as well as those that are under development can be found in Section VI of this Plan Amendment.

#### D. Household Hazardous Waste

Pesticides, cleaners, paints, stains, varnishes and other household products often contain hazardous components. The unused portions of these products that require disposal are referred to as "household hazardous waste". A wide range of materials actually constitute household hazardous waste ("HHW") including obvious products such as bleach, paint thinner, pool chemicals and mercury containing devices (such as thermostats), and other lesser recognized items such as air fresheners and hair coloring products. According to the State Plan, an average home can accumulate as much as 100 pounds of household hazardous waste in basements and garages. While such HHW has been excluded from hazardous waste regulations by both the NJDEP and the United States Environmental Projection Agency, disposal of such potentially dangerous materials in a municipal solid waste landfill is not the most environmentally acceptable disposal option.

The most environmentally acceptable method of dealing with the issue of household hazardous waste is through the use of source reduction techniques. Consumers should purchase substitute products that are less toxic to minimize the generation of HHW. When products that contain hazardous components are needed, the smallest quantity necessary should be purchased to prevent generation of HHW. When household hazardous waste is generated, it should be recycled or reused to the maximum extent practical or disposed of through a HHW collection and disposal program.

Since 1988, the Cape May County Municipal Utilities Authority has been conducting bi-annual HHW collection days to divert potentially dangerous materials from the municipal solid waste stream. Under this program, household hazardous wastes and other unregulated hazardous wastes are received from residents, schools, public agencies, and other unregulated generators. With the exception of large volume generators, who are charged accordingly, these materials are accepted without charge when delivered in quantities up to 12 gallons or 25 pounds. During eighteen (18) years of program operation, 6,534 residents and other unregulated generators have disposed of approximately 387 tons of potentially hazardous materials such as paints and paint related products, thinners, solvents, cleaners, gasoline, mercury, pesticides and herbicides, including 320 gallons of banned pesticides such as DDT, Chlordane and Lindane. The CMCMUA will continue to offer two (2) HHW disposal days each year as well as operating as a small quantity handler of "Universal Waste" at the Authority's Transfer Station to accept paint and other finishes between HHW collection days.

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<sup>&</sup>lt;sup>11</sup> Section B.6. of the Updated Statewide Solid Waste Management Plan as approved January 3, 2006.

#### **SECTION VI**

## SOLID WASTE DISPOSAL STRATEGIES AND PROGRAMS

## A. Goals, Objectives and Strategies

The solid waste management system utilized in Cape May County seeks to reduce, reuse and recycle waste generated to avoid waste disposal. However, even when the goal of recycling 60% of the solid waste stream is achieved, a significant quantity of waste remains. As a result, landfilling plays a necessary role even in a well integrated waste management system by providing a proper disposal option for the remaining waste stream. While disposal ranks lowest on the management hierarchy, it serves an essential function. The solid waste disposal goal that this Plan Amendment seeks to achieve is to provide a sufficient volume of disposal capacity to meet the long-term needs of the County and to do so in a manner that is environmentally secure, technically sound, economically responsible and relatively convenient for its users. The objectives to be utilized to achieve this solid waste disposal goal include:

- The continued and expanded partnership between the County's sixteen (16) municipalities and the CMCMUA to provide for the proper collection and disposal of waste and to prevent illegal dumping;
- The use of sustainable landfilling techniques to extend the life of the landfill and reduce costs;
- The recovery and refining of landfill gas to produce methane for direct use as a fuel and for the generation of electricity. These uses take advantage of a renewable energy source, produce some income and reduce the emission of greenhouse gases;
- The expansion of the existing Sanitary Landfill using state-of-the-art design, engineering and construction techniques to prevent groundwater pollution and maximize usable disposal capacity; and
- The continued use of the CMCMUA Transfer Station to provide convenient disposal and recycling services for the southern portion of Cape May County.

## **B.** Solid Waste Collection

The New Jersey Solid Waste Management Act assigned responsibility for solid waste collection services to municipalities. The Act also requires that every solid waste management plan be based upon and accompanied by a report that contains an analysis of these existing solid waste collection systems. To meet this statutory requirement, this Plan Amendment contains both an overview of solid waste collection practices for Cape May County municipalities, as well as detailed collection system information for each of Cape May County's sixteen (16) municipalities which is presented in Appendix II.

Fifteen (15) of Cape May County's sixteen (16) municipalities provide routine curbside<sup>12</sup> collection of municipal waste generated by residents and visitors. The only municipality in Cape May County that does

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<sup>&</sup>lt;sup>12</sup> The Borough of Stone Harbor provides back yard collection.

not provide routine collection service to residents is the City of Cape May. In that community each residential generator is responsible for arranging for a licensed private solid waste hauler to collect waste or the residential generator must directly deliver their trash to the CMCMUA Transfer Station for disposal. The City of Cape May does provide municipal solid waste collection services to institutional generators. Of those fifteen (15) municipalities that have established municipal waste collection services for residential generators, twelve (12) also extend the provision of these services to businesses and/or institutions within their community. Most municipalities also collect municipal waste from receptacles in public areas such as beaches, recreation areas and business districts.

Nine (9) of the municipal waste collection systems are currently operated by municipal public works departments<sup>13</sup> with the remaining seven (7) municipal waste collection systems provided by A-901 licensed private solid waste haulers under municipal contract. The Borough of West Wildwood has established a shared services agreement with the City of Wildwood under which the City's Department of Public Works provides all municipal waste collection services to residents and businesses located within the Borough of West Wildwood. Cape May County communities provide municipal waste collection service at a frequency of at least once per week, with half of the communities providing collection twice per week during the summer season to accommodate the needs of seasonal visitors.

Container requirements for set out of municipal waste vary greatly from community to community. Some municipalities require that municipal waste be placed for collection in covered containers and have established size and weight limitations while other municipalities permit the use and placement of plastic trash bags at curbside.

Collection of bulky waste also varies significantly among Cape May County's communities. Five (5) municipalities only pick up bulky waste materials upon the request of the generator who is required to contact the municipality to arrange for an appointment. Four (4) municipalities provide for the removal of one oversized item in conjunction with routine curbside collection of municipal waste. One (1) municipality provides for the collection of bulky waste every other week, while another provides such service once per month. Other municipalities provide periodic community-wide bulky waste collection typically in the spring and fall of each year. In addition to providing some level of bulky waste collection to residents, nine (9) municipalities extend such services to commercial establishments and six (6) communities provide collection service to institutional bulky waste generators.

An overview of the solid waste collection practices for Cape May County's municipalities is set forth in Exhibit VI-1 below.

<sup>&</sup>lt;sup>13</sup> The Road Department provides these services in the Township of Upper.

Exhibit VI-1 Solid Waste Collection Practices for Cape May County Municipalities									
	Municipal Waste Collection			Bulky Waste Collection					
Municipality	Public Works, Private Hauler or None	Frequency	Residential (R), Commercial (C) and/or Institutional (I)	Public Works, Private Hauler or None	Frequency	Residential (R), Commercial (C) and/or Institutional (I)			
Avalon	Private Hauler	Summer-Twice/Week Winter-Weekly	R ,C, I	Public Works	Twice/Year Two Week Period Each Collection	R ,C, I			
Cape May City	Public Works	None for Residential/ Commercial. Multiple Collections/Wk for Institutional	I	None	None	None			
Cape May Point	Private Hauler	Summer-Twice/Week Winter-Weekly	R	Private Hauler	Twice/Year	R			
Dennis Township	Public Works	Weekly	R, I	Public Works	Once/Month By appt only	R			
Lower Township	Public Works	Weekly	R, C	Public Works	Weekly By appt only	R, C			
Middle Township	Private Hauler	Weekly	R & C (small businesses and campgrounds only)	Private Hauler	Weekly One Item with Municipal Waste Collection	R			
North Wildwood	Private Hauler	Summer-Twice/Week Winter-Weekly	R, C	Private Hauler	Summer-Twice/Week Winter-Weekly One Item with Municipal Waste Collection	R, C			
Ocean City	Private Hauler	Summer-Twice/Week Winter-Weekly	R, C, I	Private Hauler	Summer-Twice/Week Winter-Weekly One Item with Municipal Waste Collection	R, C, I			
Sea Isle City	Public Works	Summer-Twice/Week Winter-Weekly	R, C, I	Public Works	Summer-None Winter-Once/Month	R, C, I			
Stone Harbor	Public Works	Summer-Twice/Week Winter-Weekly	R, C, I	Public Works	Four Collections/Year	R, C, I			
Upper Township	Road Dept	Weekly	R, C, I (Commercial 4 can limit, other restrictions apply)	Road Dept	Twice/Month	R			
West Cape May	Private Hauler	Weekly	R	Private Hauler	Twice/Year	R			
West Wildwood	Wildwood Public Works	Weekly	R, C	West Wildwood Public Works	Once/Month By appt only with fee paid	R, C			
Wildwood	Public Works	Summer-Twice/Week Winter-Weekly	R, C, I	Public Works	By appt only with permit and fee paid.	R, C, I			
Wildwood Crest	Public Works	Twice/Week	R, C, I	Public Works	Summer-Monthly Winter-Weekly By appt only with fee paid	R, C, I			
Woodbine	Private Hauler	Weekly	R	Private Hauler	Weekly One Item with Municipal Waste Collection	R			

#### C. Secure Sanitary Landfill Background, Current Status and Expansion Plan

The cornerstone of the County's comprehensive solid waste management system is the CMCMUA's Sanitary Landfill (the "Sanitary Landfill"). The CMCMUA's Sanitary Landfill is the only remaining operating landfill in the County and provides a relatively convenient option for the disposal of solid waste which is generated within the County of Cape May. To serve the visitors, residents and businesses of Cape May County, the CMCMUA developed an Environmental Complex, which is situated on a 457 acre site located on the Borough of Woodbine – Upper Township border. The Environmental Complex, which was dedicated to former Authority Chairman Daniel Riley on October 15, 1999, is comprised of a wide variety of recycling and solid waste facilities. These facilities and services include the Sanitary Landfill, the Intermediate Processing Facility, a Class B Recycling Facility, an exempt Class C leaf and grass composting area and the Landfill Gas Recovery Facilities, all of which are owned by the Authority.

The CMCMUA's Sanitary Landfill, which was the first publicly owned, double-lined landfill in New Jersey, is a state-of-the-art facility sited within the above noted Environmental Complex located in the northern section of the County. The Sanitary Landfill, which began operations in May 1984 on an initial 51 acre area (Phase I, Cells 1A, 1B and 1C) is constructed in sections or cells which include a bottom liner system and leachate collection system to protect groundwater. The initial 51 acre area of the Sanitary Landfill has been filled to an interim design height and capped with an impermeable synthetic liner. This capping process prevents rainwater from entering the closed sections of the Landfill thereby minimizing the generation of leachate. The second stage of the Sanitary Landfill, which includes a 42 acre area consisting of three additional cells (1D, 1E and 1F), is currently being used to meet the disposal needs of the County including the disposal of more than 200,000 tons of solid waste in 2006.

The Authority is currently landfilling in Cell 1E which is the second of three (3) new landfill cells located on 42 adjacent acres within the existing site. Construction of Cell 1E was completed in late 2003 and landfilling began in November 2003. Cell 1D, the first of these newer cells, reached its interim design height at the end of 2003 as a direct result of higher than anticipated incoming tonnage for disposal. A trend of higher volumes of construction and demolition waste delivered for disposal has significantly reduced the anticipated remaining life of Cell 1E. As a result, the construction phase for Cell 1F, which includes installation of liner and leachate collection systems, was completed in November 2006.

The County has a statutory responsibility under the New Jersey Solid Waste Management Act to properly plan for the needs of the County to ensure that reliable long-term solid waste disposal capacity is available for solid waste not otherwise recycled or reclaimed. The dramatic increase in the quantity of waste requiring disposal during the past ten (10) years has resulted in the use of significantly more landfill space than previously planned for by the Authority. Utilizing landfill capacity at this rapid rate has required the construction of the last currently permitted landfill cell several years earlier than originally anticipated by the CMCMUA. To address this County's long-term solid waste disposal needs, this Plan Amendment

provides for the expansion of the existing Sanitary Landfill using state-of-the-art design, engineering and construction techniques to prevent groundwater pollution and maximize usable disposal capacity.

Recognizing the need for additional, long-term disposal capacity, the CMCMUA applied to the Pinelands Commission in January 2004 for authorization to expand the 93 acre area previously approved for landfilling at the Authority's Environmental Complex. During 2004 and 2005, the CMCMUA staff met with representatives of the New Jersey Pinelands Commission to develop a plan that would allow for the expansion of the Sanitary Landfill in a manner which addressed the issues raised by the Commission. As a result of those meetings, an amendment to the Pinelands Comprehensive Management Plan was proposed in November 2005 to provide for landfilling on an additional 74 acres of land. This amendment, which was adopted by the Pinelands Commission on May 1, 2006, provides for the development of five (5) additional landfill cells on property already owned by the Authority and included as part of the Environmental Complex. A total of 167 acres will now be available for landfilling, which should result in extension of the life of the Sanitary Landfill by as many as forty-two (42) years.

In exchange for its agreement to provide for expansion of the existing CMCMUA Sanitary Landfill, the Pinelands Commission required that a deed restriction be imposed to prohibit any landfilling activities on all lands owned by the Authority at the 457 acre Environmental Complex with the exception of the 167 acres of land specifically authorized for landfilling. Land use on the remaining portions of the Environmental Complex are limited to solid waste and recycling activities, specifically excluding landfilling. Furthermore, a permanent deed restriction was placed on 91.56 acres of environmentally sensitive portions of the 457 acre site to provide for a permanently protected conservation area.

The Pinelands Commission also required that a mitigation payment be made by the CMCMUA to provide monies that the Commission may elect to use for the purchase of conservation and recreation lands within the Pinelands National Reserve or for other pinelands management purposes. In April 2006, a payment of \$4,807,732 was made to the Pinelands Commission to reflect the terms of the environmental offset required pursuant to the adopted Pinelands Comprehensive Management Plan amendments.

Disposal capacity within the CMCMUA Sanitary Landfill is finite and, therefore, represents a limited and progressively diminishing resource available to the County of Cape May. Furthermore, the siting of a new solid waste landfill within Cape May County is virtually precluded by the environmentally sensitive geography of the County and the restrictions of the Pinelands Comprehensive Management Plan. Recognizing these facts, the County of Cape May has previously stated its desire to preserve the remaining disposal capacity within the CMCMUA's Sanitary Landfill for use by Cape May County residents, vacationers and businesses. Therefore, the County will not accept waste generated outside of Cape May County for disposal at the CMCMUA's Sanitary Landfill. Preservation of disposal capacity for the County's long-term needs and continuing to provide support for local recycling programs throughout the County in order to extend the useful life of the CMCMUA's Sanitary Landfill represents sound public policy which is consistent with State and Federal law. Furthermore, this policy is considered appropriate, since

Cape May County residents and businesses have financed, and will continue to repay, the solid waste debt associated with the development of County-provided solid waste and recycling facilities. Adoption of this Plan Amendment will provide greater assurance that the County will be able to continue to fulfill its planning responsibilities under the Act including, but not limited to, assuring that the County will have reliable long-term solid waste disposal capacity available for use.

## D. Sustainable Landfilling

In addition to promoting waste reduction, reuse and recycling to preserve the remaining disposal capacity of the Sanitary Landfill, the CMCMUA also employs an operating strategy known as "sustainable landfilling". Sustainable landfilling utilizes innovative technologies to extend the useful life of landfill. These technologies, which are further described below, include leachate recirculation, temporary caps, alternate daily and intermediate cover, geosynthetic clay liners, active gas extraction, landfill mining and the deterrence of bulky waste. Given the significant investment of money and resources that has already been expended in the siting and construction of landfills in Cape May County and throughout New Jersey, the use of efforts to extend the useful life of existing landfills utilizing sustainable landfilling techniques in not only environmentally and technically sound, it is economically responsible.

## 1. Leachate Recirculation/Bioreactor

The Authority is currently operating Cells 1A, 1C, 1D and 1E as a bioreactor landfill in accordance with the Landfill's current operating permit. The operation of the Authority's Secure Sanitary Landfill as an anaerobic bioreactor landfill includes a piping system to reinject and recirculate leachate back through the landfill cells that have been filled to interim capacity. This process accelerates the rate of degradation for waste in place in the landfill and provides for the recovery of airspace for reuse thereby effectively extending the useful life of the Landfill by increasing the landfilling capacity. This leachate recirculation process, which began in November 2001, also increases the stabilization rate of the remaining waste in the Landfill and enhances the generation of methane gas for recovery and sale as alternate fuel.

## 2. Temporary Caps and Alternate Cover Material Management

The Authority utilizes the placement of a synthetic membrane over the top of each filled landfill cell as a temporary cap. The synthetic membrane or temporary cap is weighed down with reused tires that can be removed if needed in conjunction with leachate recirculation or active landfill gas extraction. The primary benefit in using a temporary cap is the reduction in the quantity of leachate that will require off-site treatment.

The CMCMUA's also uses a "Tarp-O-Matic" retractable tarp system to meet the daily cover needs of the Sanitary Landfill. The "Tarp-O-Matic" system includes tarp covers which are applied at the end of the operating day and removed prior to the beginning operations the next business day. The tarps, which are approved for use by the NJDEP as "alternate cover", are used to eliminate airspace or volume typically lost when six inches (6") of soil is used as cover. Use of such tarp systems extends the life of the Sanitary Landfill by preserving the remaining capacity for waste disposal.

The Authority also uses contaminated soils that are waste classified as Type 27, Dry Industrial Waste and approved for "beneficial use" as daily landfill cover. Contaminated soils typically contain compounds such as diesel fuel, gasoline and other petroleum products which can be generated as a result of leaking storage tanks, traffic accidents or similar occurrences. Such contaminated soils can only be used as daily landfill cover when the contamination level is characterized as non-hazardous and/or when soil remediation has occurred to the satisfaction of the Department. To facilitate the beneficial use of contaminated soils, the Authority accepts such soils for use as daily cover at its Landfill, with priority consideration given to soils generated in Cape May County.

When used as daily cover, ID-27 soils are properly applied and exclusively used on the interior landfill cells and slopes to prevent the potential release of any remaining contaminates into the environment. Use of contaminated soils in this manner serves to fulfill a regulatory need to cover the working face of the CMCMUA's Sanitary Landfill at the conclusion of each operating day while at the same time providing an environmentally safe repository for non-hazardous soils that can only be reused in a limited number of applications. Beneficial use of these soils has the potential to save landfill space by reusing these materials as landfill cover in a controlled manner rather than depositing large volumes directly into the landfill working face for disposal. The use of such alternate cover also avoids the purchase of clean soil for use as daily cover.

## 3. Use of Geosynthetic Clay Liner

Geosynthetic clay liners ("GCL's") have been used by the Authority in the construction of landfill cells 1D, 1E and 1F to replace the compacted clay bottom liners previously used in landfill cell construction. GCL's are less than one inch thick yet provide the equivalent performance standard of compacted clay liners of several feet in thickness. Using GCL's extends the useful life of the Landfill by using significantly less space for bottom liner system installation thus increasing the actual disposal capacity of the Landfill.

## 4. Active Gas Extraction /Landfill Gas (Methane) Recovery Facilities

As part of an emissions control program to improve air quality, landfill gas extraction wells have been installed in the Landfill to enable the recovery of gas which is generated by the decomposition of solid waste within the CMCMUA's Sanitary Landfill. Since the primary constituent in landfill gas is methane, the CMCMUA developed a unique gas recovery system in 1998 which collects and refines the landfill gas into a marketable product that now fuels the boilers at the Woodbine Developmental

Center, a State institution which services handicapped residents. The methane component of the landfill gas (approximately 50%) is recognized as a "greenhouse gas" which, if released to the atmosphere, would add to the problem of global warming.

To implement this project, the Authority entered into a long-term contract with Zahren Alternative Power Corporation, now U.S. Energy Biogas Corporation, to construct, own and operate a landfill gas collection system with a flare facility and the energy recovery system utilized at the Woodbine Developmental Center. The flare and blower facility are sited on a .103 acre parcel located in the southwestern portion the Environmental Complex. U.S. Energy began operating the flare facility in October of 1996 and initiated beneficial use of this landfill gas on May 12, 1998 via an underground pipeline which conveys the gas approximately 1½ miles to the Woodbine Developmental Center. The Center burns the landfill gas in the boilers of the State-owned facility for heating during cold weather and to drive the chillers for the cooling system during warm weather. Landfill gas is also used by the Woodbine Developmental Center to provide for its hot water needs during the entire year. Up to 750 cubic feet per minute of landfill gas is available for use by the Woodbine Developmental Center to drastically reduce its use of and dependence on fuel oil. In fact, the Center utilizes enough landfill gas per year to replace the need to burn over 1,000,000 gallons of No. 4 fuel oil.

Utilization of the CMCMUA's landfill gas at the Woodbine Developmental Center represents the first project of its kind in the State of New Jersey. The emissions resulting from the combustion of landfill gas at the Woodbine Developmental Center have been demonstrated to be significantly cleaner than the traditional use of fuel oil to fire the facility's boilers. Additionally, the process has been demonstrated as economically viable as it generates ample revenues from the sale of the landfill gas to cover the capital cost for the construction of the landfill gas recovery system and all expenses associated with the operation and maintenance of the recovery system. Furthermore, the surplus revenues generated by the landfill gas recovery system assist in subsidizing costs associated with various other environmental programs provided by the Authority.

The operation of the Sanitary Landfill using bioreactor techniques has resulted in a significant increase in the quality and quantity of methane generated from the Landfill. As a result, the Authority's landfill gas recovery system is being expanded to recover increased quantities of methane from landfill gas. This expansion will not only sustain a supply of clean burning fuel for use at the Woodbine Developmental Center for many more years, it will also enable additional landfill gas to be made available as an alternative fuel for generating electricity and has the potential to be utilized as an alternative fuel by other users in the vicinity of the CMCMUA Sanitary Landfill.

Construction of a facility at the Environmental Complex to produce electricity from landfill gas is almost complete and the facility is anticipated to begin operating in mid-January 2007. The facility, which is owned and will be operated by the CMCMUA, incorporates a process for scrubbing the gas to remove particulate matter, moisture, sulfur and siloxanes prior to burning the landfill gas as fuel in

combustion engines to produce electricity. One 150-kilowatt combustion engine will run continuously in order to produce enough electricity for use at the Environmental Complex to make it self-sufficient. Electricity will be delivered through the existing power distribution system to the various facilities located in the Environmental Complex. A net metering agreement with Atlantic City Electric will allow the Authority to take full financial advantage of the total yearly electrical needs at the site while recognizing the diurnal and seasonal variations in the site power usage. A second combustion engine was also procured to initially serve as a backup system. However, it is projected that in the future up to a total of 1,200 standard cubic feet per minute of gas may be available from the Sanitary Landfill for use to produce up to 900 kilowatts of electric power while still continuing to supply most of the Woodbine Developmental Center's energy needs. As a result, it is anticipated that the second combustion engine will eventually be used to generate additional electricity on a routine basis for sale to and distribution by Atlantic City Electric.

## 5. Landfill Mining

Landfill mining involves the excavating of old landfilled areas to recover recyclable items, cover soils and the landfill capacity itself. While the recovery and sale of recyclables from old landfills may not be viable on a large scale basis due to contamination and the inferior quality of such materials, the recovery of cover soils, tree stumps and landfill airspace itself make this excavation technique potentially feasible.

The Authority has evaluated the use of landfill mining and has concluded that this technique could provide for the recovery of substantial landfill capacity from Cell 1B, the area where landfill operations were initiated in 1984. As a result, the CMCMUA is applying to the NJDEP for approval to permit the mining of the existing 16 acre cell area known as 1B. Sometime after all required approvals are received, the Authority will mechanically recover scrap metal recyclables and screen the remainder of the decomposed waste to recover dirt which can be reused as landfill cover. It is anticipated that this mechanical recovery and screening process will reclaim approximately 50% of the cell's original airspace for reuse.

Once excavation is completed and prior to initiating any new landfilling activities in this cell, the existing bottom liner system in Cell 1B will be replaced with a double composite base liner and a new leachate collection system installed as required by current Federal Environmental Protection Agency Subtitle D regulations. Once cell reconstruction is completed, this area, which will be redesignated as Cell 2H, will be available for solid waste disposal.

## 6. Deterrence of Bulky Waste

Bulky wastes, including construction and demolition debris, are inert and will not decompose in a landfill. Bulky wastes can also cause sizeable voids in the space surrounding them once they are

buried in a landfill. As a result, the landfilling of bulky wastes can cause the inefficient and costly use of landfill space. To reflect this inefficient use of landfill space, promote the recycling of construction and demolition debris and to respond to the request of the Pinelands Commission to take measures to ensure that additional disposal capacity resulting from the Sanitary Landfill expansion does not provide an economic incentive to further the rate of development in non-Pinelands communities in Cape May County, the Authority employs the use of higher tipping fee charges for the disposal of construction and demolition waste.

To further deter the disposal of bulky waste, the CMCMUA promotes the source separation and recycling of scrap metal, which is accepted without fee at Authority solid waste facilities, and encourages the reclamation of wood pallets which are accepted for recycling at the CMCMUA's Environmental Complex at a reduced charge. The source separation and recycling of asphalt, concrete, non-chemically treated construction wood and auto and truck bodies at NJDEP approved "Class B" recycling centers, private sector junk yards and other markets is also promoted to prevent the landfilling of bulky waste.

## E. Landfill Expansion Permitting, Site Requirements and Disposal Capacity

As noted above, the Pinelands Comprehensive Management Plan has been amended to provide for landfilling to occur on an additional 74 acres of property already owned by the Authority as part of the Environmental Complex. This Sanitary Landfill expansion provides for the development of five (5) landfill cells, including the reclamation of existing Cell 1B, to address this County's long-term solid waste disposal needs. This expansion of the existing Sanitary Landfill will utilize state-of-the-art design, engineering and construction techniques to prevent groundwater pollution and maximize usable disposal capacity which is expected to last until the year 2067.

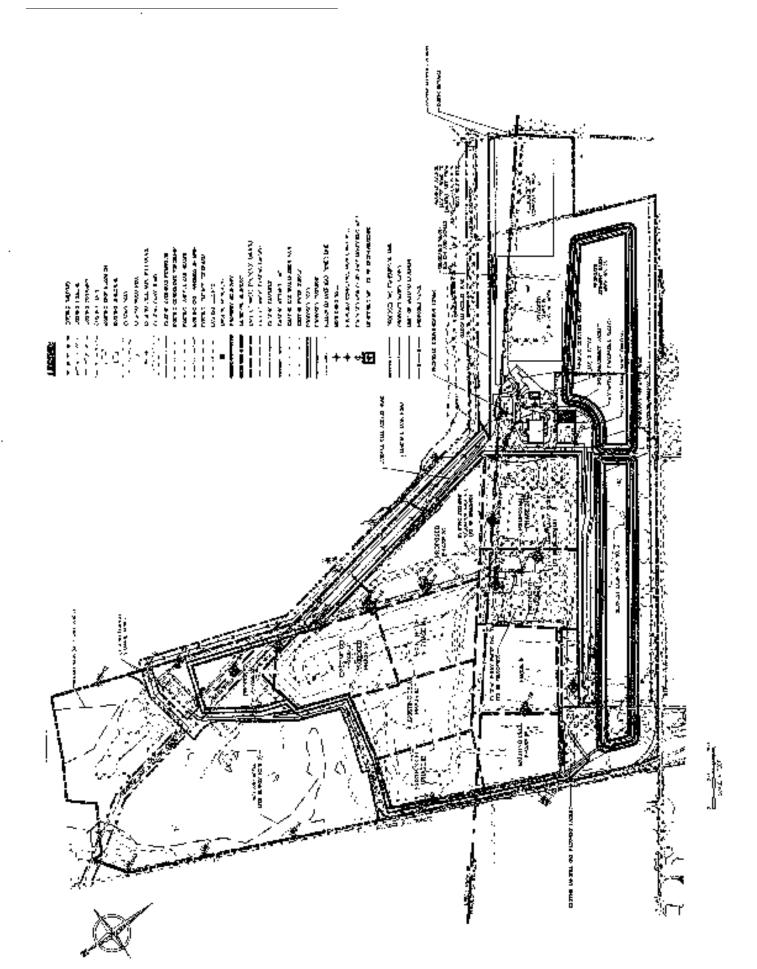
The Authority is in the process of seeking permits from the New Jersey Department of Environmental Protection for this landfill expansion and the future construction of cells 2G, 2H (reclaimed 1B), 2I, 2J, and 2K. The expansion permit application includes an extended perimeter landfill berm, for both existing cell areas and those proposed for future construction. The perimeter berm will utilize mechanically stabilized walls to construct near-vertical embankments to maximize the landfill capacity available for solid waste disposal. The overall height of the Sanitary Landfill will not be increased above the currently permitted elevations as approved by the NJDEP. Finally, the landfill expansion permit will also seek approval to provide for the mining of Cell 1B, an existing 16 acre cell that will be reclaimed and refilled as Cell 2H.

The 74 acre area designated for landfill expansion is contiguous with and generally located to the east of the 93 acre area (1A, 1B, 1C, 1D, 1E and 1F) currently approved by the NJDEP and the New Jersey Pinelands Commission for landfilling activities. The expansion area is located in a portion of the CMCMUA Environmental Complex designated as a "Pinelands Town" and includes areas located in the Borough of Woodbine and the Township of Upper.

The landfill expansion will require most of the facilities currently situated at the CMCMUA Environmental Complex to be relocated. The maintenance building, "Class B" processing area and associated buildings, the exempt "Class C" leaf composting area and the customer convenience area are all located in the portions of the site to be developed as Cells 2I and 2J. These facilities and areas will be reconstructed in the southeast section of the Environmental Complex located in the Borough of Woodbine. One (1) existing sedimentation basin will also be filled with soil to facilitate the development of Cell 2G. An existing sedimentation basin located in the southern portion of the Environmental Complex will be expanded incrementally as sedimentation capacity is needed. The existing scales and scale house may also be relocated close to the northern boundary of the property. The CMCIPF and the leachate storage tanks will remain in their current locations with an additional leachate storage tank to be added in the future.

To better facilitate the relocation of these recycling and ancillary facilities, a 30 acre parcel within the Authority-owned Environmental Complex, consisting of Lots 1 and 2, Block 130, located in the Borough of Woodbine, was exchanged for a contiguous 30 acre parcel that is located closer to the access road for the Environmental Complex, consisting of Lots 4 and 5, Block 131, located in the Borough of Woodbine. Exhibit VI-2 presents a "Site Utilization Plan for Existing and Future Landfilling Activities", which presents the complete plan for facility relocations and landfill expansion.

Approximately 16 million tons of additional landfilling capacity will result from the expansion of the facility which is expected to extend of the life of the Sanitary Landfill by as many as forty-two (42) years beyond the currently permitted capacity. It is estimated that the capacity of future Cells 2G, 2H, 2I, 2J and 2K along with the remaining available volume of the existing cells will provide a total of approximately 20 million tons of disposal capacity for Cape May County's non-recycled solid waste. A more exact calculation of available landfill disposal capacity will be determined once the final engineering design and analysis is completed for the 74 acre expansion of the Sanitary Landfill. Assuming that Cape May County's current recycling diversion rate of approximately 60% of the total solid waste stream is maintained, it is currently projected that sixty (60) years of landfill capacity will remain at the CMCMUA Sanitary Landfill as a result of this expansion.



## F. Landfill Closure Planning and Financing

In accordance with "Sanitary Landfill Facility Closure and Contingency Fund Act", N.J.S.A.13:1E-100, all landfills operating in New Jersey after January 1, 1982 are subject to comprehensive regulatory controls to provide for the proper closure of such disposal facilities. All such landfills are required to accrue in escrow accounts specifically dedicated to landfill closure a minimum of \$1.00 per ton of waste accepted for disposal. Such accounts must provide for the availability of sufficient funding to pay for all closure and post closure costs associated with detailed closure plans that are submitted to the NJDEP for review and approval. In accordance with NJDEP regulations, all landfills operating in New Jersey are required to submit updated closure plans every two (2) years for Department approval. Closure plans typically include such activities as grading, landscaping, revegetation, site security, drainage controls, installation of an impermeable cap and groundwater monitoring.

A closure plan for the CMCMUA Sanitary Landfill was previously developed by the Authority, approved by the NJDEP and incorporated into the existing operating permit for the Sanitary Landfill. This closure plan must be updated to reflect the planned expansion of the Sanitary Landfill and incorporated into the modified operating permit anticipated to be issued to the Authority by the NJDEP. While the closure of the CMCMUA Sanitary Landfill is not expected for approximately sixty (60) years, the CMCMUA must provide such plans for the review and approval of the NJDEP to ensure that ample funding will be available to pay for all Sanitary Landfill closure and post closure capital and operating expenses for a thirty (30) year period after closure in compliance with all statutory and regulatory provisions established by the State of New Jersey. While the specific details of the plan to implement the proper closure of the Sanitary Landfill will be modified periodically over the decades to come, the CMCMUA will utilize the best available engineering and environmental protection techniques and practices to protect the surrounding environment. The Authority shall also pay particular attention to using species indigenous to the Pinelands, such as native Pinelands grasses, for landscaping and revegetation of closed landfill areas to ultimately provide a reclaimed habitat for Pinelands flora and fauna.

## G. Transfer Station

The CMCMUA owns and operates a Transfer Station to facilitate the disposal of a significant portion of the solid waste generated within the County and afford a more convenient option for the delivery of source separated recyclables which originate in the southern portion of the County. The Transfer Station, which is located in the Burleigh section of Middle Township, transfers waste from smaller municipal and commercial vehicles to larger open-top trailers, which are then hauled by Authority personnel to the CMCMUA's Sanitary Landfill. Each year, the Transfer Station handles more than 80,000 tons of solid waste and recyclables, from eleven of the County's sixteen (16) municipalities. The Transfer Station, which began operations in July of 1984, minimizes the number of vehicles that would otherwise be required to travel from the southern portion of the County to the CMCMUA's Sanitary Landfill, thereby reducing traffic impacts (particularly during the summer months), and enhancing air quality within the region by reducing vehicular air emissions.

The Transfer Station operation utilizes an enclosed tipping floor where Municipal Waste-Type 10 is dumped by collection vehicles and then reloaded by wheel loader into 110 cubic yard walking floor semi-trailers which are capable of self unloading at the Sanitary Landfill. In addition, the tipping floor also maintains two (2) areas for the receipt and transfer of IPF recyclables. Other facilities and services provided at the Transfer Station include the operation of a customer convenience area where small loads of bulky waste are accepted as well as recyclable scrap metal, white goods, freon containing appliances, consumer electronics, batteries, used motor oil and filters, antifreeze and paint and related finishes.

# H. Other Solid Waste Disposal Strategies

## 1. <u>Litter Abatement Partnership Program</u>

As part of the comprehensive solid waste management system, the CMCMUA has established a litter abatement partnership program that enables the County and local municipalities to remove roadside litter and provides residents of the County with an opportunity to discard unwanted materials at no charge to participants. Under a partnership agreement with participating Cape May County municipalities, the Authority accepts without charge, during any four (4) days within a calendar year, any bulky wastes and recyclable brush, branches and tree limbs that are collected as part of a scheduled residential bulky waste collection service. To encourage the clean-up of litter and illegal dumping, the CMCMUA also accepts without charge roadside litter and other debris collected by the County Road Department along County roads and by participating municipal public works or road departments along local roadways.

To qualify for this program, fifteen (15) of Cape May County's sixteen (16) municipalities have adopted resolutions authorizing participation in this litter abatement partnership program and committing to provide, at no cost to individual homeowners, a minimum of four (4) days of bulky waste collection from residential sources within the municipality. Participating communities are required to notify the Authority of their schedule for community-wide bulk trash collection and select four (4) "free" bulky waste disposal days. Municipalities must also adopt and enforce anti-littering and anti-dumping ordinances that include a minimum penalty of \$500 for violators. Participants in this program are urged to provide drop-off areas for household bulky wastes, conduct special clean-up projects of local areas where illegal dumping has occurred, and develop an anti-litter education program within their community.

# 2. Abandoned/Fire Damaged Building Disposal Program

Under the same partnership agreement referred to above, participating Cape May County municipalities are eligible to receive an allowance for free disposal of bulky waste generated as a result of the demolition of abandoned or fire damaged buildings within their community. In accordance with this program, each participating Cape May County municipality is entitled to receive free disposal of Type

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<sup>&</sup>lt;sup>14</sup> "Joint Inter-Governmental Agreement for Solid Waste Disposal" is presented in Appendix IV.

13C, Construction & Demolition Waste, up to a maximum amount equal to 1% of the billable tons for Types 10, 13 and 13C delivered by or on behalf of the municipality during the preceding calendar year. This abandoned/fire damaged building disposal program, which was initiated by the Authority in January 2001, has been utilized by municipalities to provide a cost effective method to dispose of unsightly and potentially dangerous abandoned or fire damaged buildings in their communities.

# 3. Tire Amnesty Program

Tires, which are source separated from other materials for recycling, qualify for acceptance by the CMCMUA at no charge under the partnership agreement referred to above. The Authority has also periodically conducted tire amnesty days to collect and recycle worn tires, particularly those that have been illegally dumped.

#### **SECTION VII**

# INVENTORY OF EXISTING RECYCLING AND SOLID WASTE DISPOSAL FACILITIES AND POLICIES AND PROCEDURES FOR NEW/EXPANDED FACILITIES

#### A. Inventory of Existing Recycling Facilities

The State Plan requires that each updated district solid waste plan specifically include an inventory of all recycling facilities that provide, at a minimum, the lot, block and street address of such facilities, the approved recycling types and amounts for such approved facilities and the hours of operation. This information is presented below for recycling facilities which have previously been incorporated into the County Plan.

# 1. Preexisting Recycling Markets - Raff's Recycling

In accordance with the provisions of the Mandatory Recycling Act, businesses engaged in recycling as of January 1, 1986 were to be incorporated into each district plan. Accordingly, Raff's Recycling located on Goshen Road in Cape May Court House, New Jersey was incorporated into the original Cape May County Recycling Plan as a "grandfathered" recycling business providing hauling, processing and marketing services. Raff's continues to operate and provides baling and marketing services for newspaper, corrugated and other "Class A" materials.

# 2. Class A Facilities - Cape May County Intermediate Processing Facility

The CMCMUA owns and, under contract with FCR Inc, operates an Intermediate Processing Facility (IPF) which receives and processes source separated recyclables. Source separated recyclables are received, at no charge, six days per week from Cape May County municipalities, private haulers, institutions, businesses and residents who utilize the Authority's solid waste disposal facilities. The IPF also receives commingled cans and bottles, under contract, from selected out-of-county sources to generate additional recycling revenues to help reduce any annual operating losses incurred by this facility. The IPF, which began commercial operations in April 1990, emphasizes mechanical sorting and processing of the mixed recyclables received at the facility. It was modified in 2002 to renovate the commingled bottle and can equipment and most recently in 2005 to renovate the mixed paper processing line. These modifications to replace worn out equipment have increased processing throughput to 25 tons per hour, improved efficiency and reduced operating and maintenance costs.

Lot, Block and Street Address: Lots 2, 3, 6 and portion of Lots 4, 5, 7 & 8, Block 131.02, Borough of Woodbine, New Jersey. Kearney Avenue (off Route 610), Woodbine, New Jersey

Approved Recycling Types and Amounts: Commingled mixed paper including newspaper with inserts, corrugated, kraft grocery bags, magazines, office paper, junk mail, telephone and paperback books. Commingled bottles and cans, including clear, green and brown glass, aluminum, steel and aerosol cans, and PET and HDPE plastic containers. This facility does not have a daily or annual limit on the

quantity of incoming material. The processing capacity of the facility is ten (10) tons per hour for commingled bottles and cans and fifteen (15) tons per hour for commingled mixed paper.

Hours of Operation: Acceptance of recyclable material occurs in accordance with the schedule set forth below.

	Summer Schedule (End of May to mid-September)	Winter Schedule (Remainder of year)	
Monday through Friday:	7:00 a.m 4:00 p.m.	7:30 a.m 4:00 p.m.	
Saturdays & Holidays:	7:00 a.m 1:00 p.m.	8:00 a.m 12:00 noon	
Sunday:	Closed	Closed	
	Holidays Open	Holidays Closed	
	Good Friday	New Year's Day	
	Memorial Day	Martin Luther King Day	
	Independence Day	President's Day	
	Labor Day	Veterans Day	
	Columbus Day	Thanksgiving Day	
	Day after Thanksgiving	Christmas Day	

#### 3. Class B Facilities

# **Action Supply, Inc.**

Action Supply, Inc. currently operates a "Class B" Recycling Facility in Upper Township, New Jersey under NJDEP Permit Number 0511001199, Facility ID Number 132071. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility is detailed below.

Lot, Block and Street Address: Lot 54, Block 565, Township of Upper, New Jersey. 1413 Old Stagecoach Road, Seaville, New Jersey.

Approved Recycling Types and Amounts: Concrete. Receipt of concrete is limited to 350 tons per day, 2,100 tons per week, 109,200 tons per year. Total amount of unprocessed materials stored on-site is limited to 13,050 cubic yards. Processed Class B materials stored on-site is limited to 21,640 cubic yards.

*Hours of Operation:* Acceptance, processing and transfer of concrete occurs Monday through Saturday from 7:00 a.m. - 7:00 p.m.

# **Cape May County Municipal Utilities Authority**

CMCMUA currently operates a "Class B" Recycling Facility at the Authority's Environmental Complex in Woodbine, New Jersey under NJDEP Permit Number CBG020003, Facility ID Number

133646. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility is detailed below.

Lot, Block and Street Address: Lot 1, Block 128.02, Borough of Woodbine, New Jersey. 2050 Dennisville-Petersburg Road (Route 610), Woodbine, New Jersey

Approved Recycling Types and Amounts: Approved for asphalt, brick, block, concrete, tires, tree stumps, tree parts, brush, wood pallets, unpainted and non-chemically treated wood and painted and chemically treated wood. Currently, the facility only accepts tires, tree stumps, tree parts, brush and wood pallets. Receipt of materials at this facility is limited to a total capacity of 570 tons per day of recyclable materials consisting of 200 tons per day of asphalt, brick, block and concrete, 50 tons per day for tires, 80 tons per day for wood, tree stumps, tree parts and brush, 165 tons per day for wood pallets and 75 tons per day for painted and chemically treated wood. Total amount of unprocessed materials stored on-site is limited to 126,720 cubic yards. Processed Class B materials stored on-site is limited to 124,227 cubic yards.

Hours of Operation: Acceptance of recyclable material occurs in accordance with the schedule set forth below.

	Summer Schedule (End of May to mid-September)	Winter Schedule (Remainder of year)	
Monday through	7:00 a.m 4:00 p.m.	7:30 a.m 4:00 p.m.	
Saturdays & Holidays:	7:00 a.m 1:00 p.m.	8:00 a.m 12:00 noon	
Sunday:	Closed	Closed	
	Holidays Open	<b>Holidays Closed</b>	
	Good Friday	New Year's Day	
	Memorial Day Martin Luther		
	Independence Day	President's Day	
	Labor Day	Veterans Day	
	Columbus Day	Thanksgiving Day	
	Day after Thanksgiving	Christmas Day	

# **Daley's Pit**

Daley's Pit currently operates a "Class B" Recycling Facility in Upper Township, New Jersey under NJDEP Permit Number 0511001279, Facility ID Number 132072. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility is detailed below.

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<sup>&</sup>lt;sup>15</sup> NJDEP approval provides for operations to continue until 4:30 p.m.

Lot, Block and Street Address: Lot 3, Block 453, Township of Upper, New Jersey. Dennisville-Petersburg Road, Upper Township, New Jersey.

Approved Recycling Types and Amounts: Asphalt and concrete. Receipt of asphalt and concrete is limited to 300 tons per day, 1,500 tons per week, 78,000 tons per year. Total amount of unprocessed materials stored on-site is limited to 40,700 cubic yards. Processed Class B materials stored on-site is limited to 33,000 cubic yards.

Hours of Operation: Acceptance, processing and transfer of asphalt and concrete occurs Monday through Friday from 8:00 a.m. - 5:00 p.m.

#### Future Mining & Recycling, Inc.

Future Mining & Recycling, Inc. currently operates a "Class B" Recycling Facility in Middle Township, New Jersey under NJDEP Facility Registration 050601168. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility is detailed below.

Lot, Block and Street Address: Lot 7, Block 94, Township of Middle, New Jersey. 560 Goshen Road, Cape May Court House, New Jersey.

Approved Recycling Types and Amounts: Asphalt, brick, block, concrete, tree stumps, tree parts and non-chemically treated and unpainted wood from municipalities, commercial operators and residents. Receipt of materials at this facility is limited to a total capacity of 800 tons per day with 700 tons per day for asphalt, brick, block and concrete and 100 tons per day for wood materials. Maximum weekly capacity is limited to 4,000 ton per week with 3,500 tons per week for asphalt, brick, block and concrete and 500 tons per week for stumps, tree parts and wood materials. Total amount of unprocessed materials stored on-site is limited to 10,800 cubic yards including 3,489 cubic yards for asphalt, 4,349 cubic yards for and concrete, 1,832 cubic yards for stumps and 1,046 cubic yards for trees and tree parts. Processed Class B materials stored on-site is limited to 19,000 cubic yards including 6,981 cubic yards of concrete, 7,636 cubic yards of asphalt and 4,362 cubic yards of wood chips.

*Hours of Operation:* Acceptance, processing and transfer of source separated, recyclables material occurs Monday through Friday from 8:00 a.m. - 4:00 p.m. in accordance with the Recycling Center General Approval issued by the Department on December 23, 2002.

#### **Garden State Dredging**

As of December 2006, Garden State Dredging operates a "Class B" Recycling Facility in Lower Township, New Jersey under a "limited approval" granted by the NJDEP pursuant to the regulations set forth in N.J.A.C. 7:26A. On July 11, 2006, Garden State Dredging Inc.'s proposed permanent Class B Recycling Facility was incorporated into the County Plan by the Cape May County Board of Chosen Freeholders. The Plan Amendment incorporating Garden State Dredging was certified by the NJDEP

on November 2, 2006, but formal notification that the Department has issued a Class B approval for this facility has not yet been received. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility as contained in an amendment to the County Plan as adopted by the Cape May County Board of Chosen Freeholders on July 11, 2006, is detailed below.

Lot, Block and Street Address: Lots 99.01 and 99.02, Block 410.01, Township of Lower, New Jersey. Shunpike Road, Rio Grande, New Jersey.

Approved Recycling Types and Amounts: Asphalt and concrete. Receipt of asphalt and concrete is limited to 600 tons per day, 3,000 tons per week, 100,000 tons per year. 62,500 cubic yards of aggregate material is projected to be produced annually. The maximum amount of material to be located in unprocessed and processed stockpiles on site is estimated at 93,650 cubic yards.

Hours of Operation: Acceptance, processing and transfer of asphalt and concrete occurs Monday through Friday from 7:00 a.m. - 5:00 p.m. and Saturdays from 8:00 a.m. to 12:00 noon.

# **Lower Township Municipal Utilities Authority**

Lower Township Municipal Utilities Authority (LTMUA) currently operates a "Class B" Recycling Facility in Lower Township, New Jersey under NJDEP Facility Registration Number 0505001443. Information regarding the specific location, approved recycling types and amounts and the hours of operation for this facility is detailed below.

Lot, Block and Street Address: Lot 46.02, Block 410.01, Township of Lower, New Jersey. 2900 Bayshore Road, Villas, New Jersey.

Approved Recycling Types and Amounts: Asphalt. Receipt of asphalt is limited to 20 tons per day, 100 tons per week, 5,200 tons per year. The facility may process up to 55 tons per day and 275 tons per week. Total amount of unprocessed materials stored on-site is limited to 5,231 cubic yards. Processed Class B materials stored on-site is limited to 6,539 cubic yards.

Hours of Operation: Acceptance, processing and transfer of asphalt occurs Monday through Friday from 9:00 a.m. - 3:00 p.m.

#### 4. Class C Facilities

No Class C facilities that require approval by the NJDEP current operate in Cape May County. While four (4) exempt Class C facilities currently operate in the County to accept source separated compostable materials, (including a facility operated by the CMCMUA) they have not been included in this inventory as they are exempted by NJDEP regulations. N.J.A.C. 7:26A-1.4. includes an exemption from the requirement to obtain a general or limited approval from the Department pursuant

to N.J.A.C. 7:26A-3 and, unless otherwise specified, an exemption from the planning requirements at N.J.A.C. 7:26-6.10-11.

#### 5. Class D Facilities

No Class D facilities that require NJDEP approval current operate in Cape May County. Class D facilities receive process or transfer waste oils, antifreeze, latex paints, oil based finishes, thermostats, lamps (light bulbs), batteries, consumer electronics and mercury containing devices. However, the CMCMUA currently serves as a small quantity handler of several categories of "Universal Waste" and operates in accordance with the standards set forth at N.J.A.C. 7:26A-7.1(a) and 7.4. This program to collect and transfer Universal Waste for recycling and disposal operates subject to an exemption and therefore, has not been included in this inventory. N.J.A.C. 7:26A-1.4 provides this exemption from the requirement to obtain a general or limited approval from the Department pursuant to N.J.A.C. 7:26A-3 and, unless otherwise specified, an exemption from the planning requirements at N.J.A.C. 7:26-6.10-11. The Authority also conducts periodic household hazardous waste collection and disposal days which are exempt from Class D facility approval.

# **B.** Inventory of Existing Solid Waste Facilities

The State Plan also requires that each updated district solid waste plan specifically include an inventory of all solid waste facilities including, but not limited to, the lot, block and street address of such facilities, the approved solid waste types and amounts for such approved facilities, the hours of operation and the approved truck routes. This information is presented below for solid waste facilities which have been incorporated into the County Plan.

#### 1. CMCMUA Secure Sanitary Landfill

The CMCMUA currently owns and operates a Class I Sanitary Landfill pursuant to a solid waste facility permit issued by the NJDEP for Facility ID Number 0511000270. This Sanitary Landfill, which serves all of Cape May County, is located on the border of Upper Township and Woodbine Borough. The Sanitary Landfill is situated within an approximate 457 acre Solid Waste Management Complex (the "Complex) which houses an administrative building, scales, scale house, the IPF, a maintenance building, a Class B Recycling Facility, an exempt Class C leaf and grass composting areas, gas flare and landfill gas recovery system, leachate storage tanks, stormwater retention basins and a fire pond. Information regarding the specific location, approved solid waste types and amounts, the hours of operation and approved truck routes for this facility is detailed below.

Lot, Block and Street Address: The street address for this Complex is 2050 Dennisville-Petersburg Road (Route 610), Woodbine, New Jersey. The Complex includes the following lot and block numbers:

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<sup>&</sup>lt;sup>16</sup> Universal waste includes batteries, pesticides, thermostats, lamps, mercury-containing devices, oil based finishes and consumer electronics.

Townsh	ip of Upper	Borough of '	Woodbine	
<b>Block</b>	<u>Lots</u>	Block	<u>Lots</u>	
247	1 - 3, 5 - 7	123	1, 2, 3	
248	9	124	1	
		128	1, 3, 4	
		128.02	1, 2, 3	
		131	1, 4, 5	
		131.02	1 - 29	Inclusive
		137.02	1 - 9	Inclusive

Approved Solid Waste Types and Amounts: The Sanitary Landfill has been classified as a Class I Landfill which is permitted to accept solid waste types 10, 13, 13C, 23, 25, 27, 27A, 27I<sup>17</sup>. In calendar year 2005, an average of more than 800 tons of solid waste per day entered the Sanitary Landfill for disposal. While the Sanitary Landfill has a maximum estimated solid waste handling capacity of 2,000 tons per day, this Plan Amendment does not provide a specific daily limit on waste received.

Hours of Operation: Acceptance of materials occurs in accordance with the schedule set forth below.

ptember) (Remainder of year)
0 p.m. 7:30 a.m 4:00 p.m.
0 p.m. 8:00 a.m 12:00 noon
Closed
en <u>Holidays Closed</u>
y New Year's Day
ay Martin Luther King Day
Day President's Day
Veterans Day
ay Thanksgiving Day
giving Christmas Day
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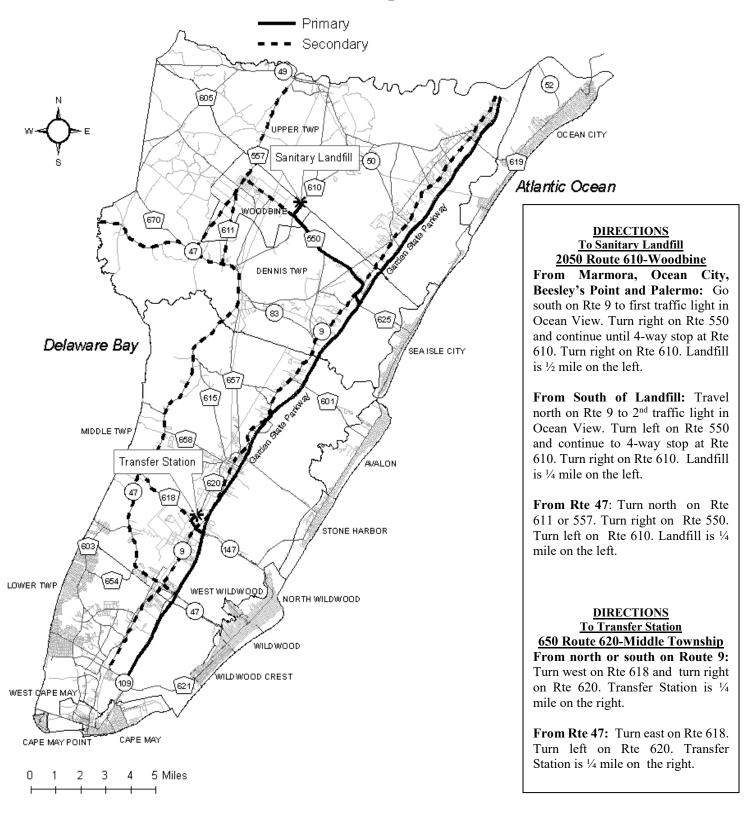
Approved Truck Routes: Except for operation of their collection service routes, all solid waste vehicles used for transportation of solid waste shall use the following routes for access to and exit from the Sanitary Landfill: Garden State Parkway, U.S. Route 9, State Route 47, County Route 550, County Route 557, and County Route 611 and the portion of County Route 610 that extends from the Sanitary Landfill south to the intersection of Route 550. All other routes are prohibited from use, especially those which pass through residential areas of Upper and Dennis Townships. See Exhibit VII-1 for a truck route map.

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 $<sup>^{\</sup>rm 17}$  NJDEP definitions of these waste types is provided in Appendix III.

Exhibit VII-1

# **CMCMUA Solid Waste Facilities Designated Truck Routes**



#### 2. CMCMUA Transfer Station

The CMCMUA currently owns and operates a Transfer Station/Materials Recovery Facility pursuant to a solid waste facility permit issued by the NJDEP under Facility ID Number 0506000264. This Transfer Station is located in Middle Township, New Jersey and provides solid waste disposal and recycling services to eleven (11) of the County's sixteen (16) municipalities in the southern portions of Cape May County. The Transfer Station is situated on a 19.12 acre site which houses the 10,580 square foot transfer station building, two (2) weigh scales, fire pond, elevated convenience drop off area, tarping platforms, freon recovery area, consumer electronics collection area and a paint and related finishes collection and recycling depot. Information regarding the specific location, approved solid waste types and amounts, the hours of operation and approved truck routes for this facility is detailed below.

Lot, Block and Street Address: Lots 14 and 15, Block 354, Township of Middle, New Jersey. 650 Shunpike Road, Burleigh, New Jersey.

Approved Solid Waste Types and Amounts: The Transfer Station has been classified as a Transfer Station/Materials Recovery Facility which is permitted to accept solid waste types 10, 13 and 13C. The Transfer Station has a maximum permitted capacity of 620 tons per day of material which includes solid waste and source separated material on any operating day. In calendar year 2005, a total of almost 81,000 tons of solid waste and recyclables were transferred by this facility.

Hours of Operation: Acceptance of material occurs in accordance with the schedule set forth below.

	Summer Schedule (End of May to mid-September)		Winter Schedule (Remainder of year)	
Monday through Friday:	7:00 a.m	3:30 p.m.	7:30 a.m	2:30 p.m.
Saturdays & Holidays:	7:30 a.m	12:30 p.m.	8:00 a.m	12:00 noon
Sunday:	Closed		Closed	
	Holidays Open		Holidays Closed	
	Good Friday		New Year's Day	
	Memorial Day		Martin Luther King Day	
	Independence Day		President's Day	
	Labor Day		Veterans Day	
	Columbus Day		Thanksgiving Day	
	Day after Thanksgiving		Christmas Day	

Approved Truck Routes: Except for operation of their collection service routes, all solid waste vehicles used for transportation of solid waste shall use the following routes for access to and exit from the Transfer Station: Garden State Parkway, U.S. Route 9, State Route 47, County Route 618, County Route 620 that extends from the Transfer Station south to the intersection of Route 618. Use of Shunpike Road north of the Transfer Station, Oyster Road, Johnstown Lane and all routes which

pass through residential areas of Middle Township are prohibited from use. See Exhibit VII-1 for a truck route map.

#### 3. Small Scale Incinerators

In accordance with the adopted County Plan, private solid waste incinerators in Cape May County must meet the minimum following requirements to remain incorporated in the County Plan:

- Maintain possession of a valid NJDEP permit to operate;
- Operate in accordance with all relevant laws and regulations including but not limited to NJDEP permit conditions; and
- Incinerate only those waste types identified in their NJDEP permit. Incineration of
  designated recyclables materials as identified in this Plan Amendment is specifically
  prohibited.

None of the previously incorporated small scale private solid waste incinerators meet these requirements therefore none have been included in the current inventory listing. South Jersey Pet Memorials, an animal crematorium, is reportedly operating in the District pursuant to an NJDEP permit. However, South Jersey Pet Memorials has repeatedly failed to respond to requests <sup>18</sup> for information regarding its facility. Since South Jersey Pet Memorials has not applied for incorporation into the County Plan and has rebuffed requests to submit relevant information regarding its facility and operations, it has not been included in this inventory listing.

# C. Policies and Procedures for New/Expanded Facilities to be Incorporated in the County Plan

# 1. Inclusion Process for New/Expanded Solid Waste Facilities

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-22) provides that "...no solid waste management plan shall include provisions for establishing any solid waste facility in competition with such facilities operated or for which bonds have been issues, by any such public authority". The New Jersey Legislature created twenty-two (22) solid waste management districts and gave those districts the responsibility to develop and implement comprehensive solid waste management plans to serve the municipalities within their jurisdictions. To fund these comprehensive programs, the New Jersey Legislature instituted flow control throughout New Jersey and provided the statutory provision for noncompeting solid waste facilities. While flow control that restricts the flow of waste out-of-state was found to be unconstitutional in the <u>Atlantic Coast</u> decision, the statutory provision that prohibits competition among solid waste facilities within a district has remained intact.

The tipping fee revenue generated from waste disposed at the Authority's solid waste facilities provides financial support for implementing Cape May County's integrated solid waste management strategy, which includes waste minimization, source separation, recycling, beneficial reuse and sanitary

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<sup>&</sup>lt;sup>18</sup> Two letters and three telephone conversations between the owner of South Jersey Pet Memorials and the Authority's staff failed to result in the submission of any information for this facility.

landfilling. This nationally recognized comprehensive solid waste management system provides convenient, reliable and secure solid waste disposal and recycling services for Cape May County. Allowing the inclusion in the County Plan of new facilities that seek to compete with the Authority's existing solid waste facilities would not only be inconsistent with the legislative intent of the Act, it would jeopardize the financial foundation that supports the continuation and expansion of the entire comprehensive solid waste management system. Therefore, this Plan Amendment prohibits the establishment of any new solid waste facility in Cape May County that would compete with a facility established by the Authority. New and/or expanded solid waste facilities shall be considered for incorporation into the County Plan only when a clear and demonstrated need for such new and/or expanded solid waste facilities exists and only if it can be decisively demonstrated that such facility would not compete with any facility established by the CMCMUA pursuant to the County Plan.

# 2. <u>Inclusion Process for New/Expanded Recycling Facilities</u>

The County Plan encourages public/private sector initiatives to help achieve the County's recycling goals and objectives through the development of properly located, technically sound and environmentally safe recycling facilities and services. To be incorporated into the County Plan, all proposed recycling facilities must accommodate additional types and or increased quantities of recyclable materials not already recycled at facilities previously included in the Plan. No proposed recycling facility shall be eligible for Plan inclusion if it seeks to compete with existing, publicly-owned recycling facilities already incorporated in the County Plan or seeks to divert recyclable materials from established municipal, County or CMCMUA sponsored recycling programs. Public or private sector initiatives which propose to recycle new types or expanded quantities of source-separated materials can supplement current recycling programs thereby increasing the total quantities of solid waste directed away from disposal. The County Plan requires that: (1) all proposed recycling facilities be located in zoning classifications which permit such activities; (2) relevant requirements of municipal land use plans be considered; and (3) detailed recycling reports be periodically provided to the CMCMUA and Cape May County municipalities on a quarterly and annual basis.

Prior to commencing receipt, storage, processing or transfer of any recyclable materials at a proposed recycling center, the owner or operator of the proposed recycling center shall submit to the CMCMUA the information required in the "Application For Proposed Recycling Facilities And Procedures And Criteria For County Plan Inclusion". The Applicant should also refer to N.J.A.C. 7:26A-3.2 while preparing the Application for any additional information, if required.

Any owner or operator of any recycling facility that has applied for and received a one time temporary approval (limited approval) to operate from the NJDEP pursuant to the regulations set forth in N.J.A.C. 7:26A, shall not be required to apply for inclusion in the County Plan. However, as set forth in the regulations at N.J.A.C. 7:26A-3.7(m), no limited approval shall be extended beyond a period of 270 days and no more than one limited approval shall be granted to the same Applicant for the same site within one calendar year commencing on the date of issuance of the original limited approval. Any

owner or operator of any recycling facility granted a limited approval that proposes to operate beyond a period of 270 days shall be required to apply for inclusion in the County Plan in sufficient advanced time to allow the formal approval process to proceed pursuant to the "Procedures for County Plan Inclusion".

#### 3. Procedures for County Plan Inclusion

a) Upon submission of the application package<sup>19</sup> to the Cape May County Municipal Utilities Authority, a copy of the site plan submitted with the application will be forwarded by the CMCMUA to the Offices of the Cape May County Planning Department for review by the County Planning staff for important issues such as traffic and drainage. The Planning staff will, within ten (10) days of receipt of an administratively complete site plan, submit a written report on the plan to both the CMCMUA and the Solid Waste Advisory Council (SWAC). The SWAC will consider this report in making its determination on the application.

If the County Planning Department determines that the site plan does not contain sufficient information to make an informed determination on important issues such as traffic and drainage, the Applicant, the CMCMUA and the Solid Waste Advisory Council will be informed in writing within the ten (10) day period.

- b) Upon submission of the application package to the Cape May County Municipal Utilities Authority, the CMCMUA will promptly contact, in writing, the municipality in which the proposed recycling center is to be located to request its informal review and comment regarding the proposed recycling center including any comments regarding issues of local zoning, safety and adjacent property use. The municipality shall have thirty (30) days to submit its written comments to the CMCMUA and the SWAC. The SWAC will consider all comments received from the municipality in making its determination on the application.
- c) Within thirty (30) days of receipt of an application for a proposed recycling facility, the CMCMUA will determine: (1) whether the entire application package is administratively complete; and (2) if the application is in conformance with the requirements of the County Plan.
- d) If an application fails to meet the criteria for administrative completeness, the CMCMUA will advise the Applicant that the application is incomplete, and will specify in writing any additional data, reports, specifications, plans or other information required for administrative completeness. The CMCMUA shall not forward any application for consideration by the SWAC until the Applicant has submitted the additional information requested.
- e) If the application is determined by the CMCMUA to be inconsistent with the requirements of the County Plan, a letter of determination of County Plan inconsistency will be forwarded to

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<sup>&</sup>lt;sup>19</sup> A complete copy of the Application Package is presented in Appendix V "APPLICATION FOR PROPOSED RECYCLING FACILITIES AND PROCEDURES AND CRITERIA FOR COUNTY PLAN INCLUSION"

the Applicant to advise that the application will not be considered for County Plan inclusion. Such letter shall state the specific reason(s) why the application is inconsistent with the County Plan. The Cape May County Planning Board, the SWAC and the municipality in which the proposed recycling center was to be located shall also be notified that the no further consideration of the application shall be made due to its inconsistency with the requirements of the County Plan.

If the applicant disagrees with the CMCMUA's letter of determination of County Plan inconsistency, the applicant may appeal such decision to the SWAC within thirty (30) days of the issuance of the CMCMUA's written determination. The applicant may appeal such determination by forwarding a letter to the SWAC which specifically describes the County Plan requirements that the proposed application is consistent with, the specific reason(s) for disagreement with the CMCMUA's inconsistency determination and any other relevant facts. The SWAC shall review such appeal in a timely manner and make a final determination regarding such appeal within three (3) months of receipt of the applicant's letter.

- f) If the application is deemed administratively complete, and is in conformance with the requirements of the County Plan, the CMCMUA shall draft a Recycling Plan Amendment for the proposed facility within sixty (60) days of such completeness determination and shall include all relevant comments received from the Cape May County Planning Department and the municipality in which the proposed recycling center is to be located. The CMCMUA shall also review the application for conformance with the requirements of the County Plan and shall report its findings to the SWAC.
- g) Once prepared, the proposed Recycling Plan Amendment shall then be forwarded by the CMCMUA to the SWAC for its review and consideration. The applicant shall be invited to make a presentation before the Cape May County SWAC and respond to any questions/concerns. Once the proposed Plan Amendment is recommended for adoption, modification or rejection by the SWAC, it will be sent to the Cape May County Board of Chosen Freeholders for its review and consideration. The Freeholder Board will conduct a public hearing in accordance with the requirements of the New Jersey Solid Waste Management Act prior to adoption, modification or rejection the proposed Plan Amendment. The specific details of the Plan Amendment consideration and approval process as set forth by the Act and NJDEP regulations are included with this document as an attachment. The process for considering an application for a proposed recycling facility shall be completed within six (6) months of the determination by the CMCMUA that an administratively complete application package was submitted by the Applicant.

h) To the extend the NJDEP adopts new regulations which modify the requirements set forth in the application package, or the County Plan is amended to modify any procedure or criteria for County Plan inclusion, the application package information shall be automatically updated to conform to the approved regulations set forth by the Department and/or the amended County Plan requirements.

#### **SECTION VIII**

#### RECYCLING AND SOLID WASTE ENFORCEMENT STRATEGIES AND PROGRAMS

# A. Goals, Objectives and Strategies

Solid waste enforcement plays a pivotal role in ensuring that generators, transporters and facilities comply with solid waste and recycling regulations and statutes. While a variety of solid waste and recycling enforcement strategies have previously been implemented at the municipal and County levels, a renewed focus on recycling enforcement is needed throughout Cape May County to achieve the State mandated recycling goals. The goal of this Plan Amendment is to continue the effective solid waste enforcement measures already in place and expand recycling enforcement activities to achieve the goals established by the New Jersey Mandatory Source Separation and Recycling Act. The following strategies shall be used to achieve this goal:

- The timely adoption of a revised ordinance for mandatory recycling in each municipality to expand the materials "designated" for recycling in the community, modify the collection system to include all materials mandated for recycling and establish uniform penalties for generators that fail to comply with the requirements of the ordinance;
- The establishment of a minimum number of recycling inspections to be undertaken at the municipal and County levels on an annual basis in conformance with the requirements of the Updated Statewide Solid Waste Management Plan;
- The establishment of penalties to be imposed for non-compliance with the Cape May County Solid Waste Management Plan in conformance with the requirements of the Updated Statewide Solid Waste Management Plan;
- The review and update of each municipal master plan, the County Comprehensive Plan and applicable regulatory and technical documents to incorporate the solid waste management policies set forth in this Plan Amendment thereby ensuring that all small and large scale development projects approved and constructed in Cape May County are in conformance with the source reduction, recycling, reclamation and disposal requirements of the County and the State; and
- The expansion of enforcement activities undertaken by the Cape May County Department of Health pursuant to its authority under the County Environmental Health Act (CEHA).

#### **B.** Municipal Level Enforcement

Municipalities play a critical role in solid waste and recycling enforcement. In order to achieve the recycling mandates established by the New Jersey Legislature and to comply with the requirements contained in the State Plan, each of Cape May County's sixteen (16) municipalities must revise their local enforcement strategies to be consistent with the requirements of this Plan Amendment.

# 1. Municipal Source Separation and Recycling Ordinance

The Mandatory Recycling Act requires that each municipality "...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 the generator, place these specified recyclable materials for collection in the manner provided by the ordinance." In response to the requirements of the Mandatory Recycling Act, Cape May County municipalities enacted source separation and recycling ordinances to require waste generators to comply with and participate in local recycling programs. During the past two (2) decades since the enactment of the Mandatory Recycling Act, municipalities have modified their ordinances to reflect the growth of their local source separation and recycling programs and the experience gained from operating such systems.

Consistent with the requirements of the State Plan, each municipality must review and revise its municipal source separation and recycling ordinance to comply with the requirements of this Plan Amendment. Within six (6) months of NJDEP approval of this Plan Amendment, the CMCMUA is required to submit to the NJDEP a copy of each municipality's then current source separation and recycling ordinance. To meet this submission deadline, each municipality in Cape May County must submit its updated municipal source separation and recycling ordinance to the CMCMUA within five (5) months of NJDEP's approval of this Plan Amendment. Based upon the 150 day maximum allowable time period established in the New Jersey Solid Waste Management Act for approval, modification or rejection of this Plan Amendment by the NJDEP and the requirements of the Mandatory Recycling Act as previously noted, the deadline for submission of updated municipal ordinances to the CMCMUA is anticipated to occur in December 2007. While the submission deadline established by the NJDEP will provide municipalities with ample time to update their ordinances, municipalities are strongly urged to begin modifying their mandatory ordinances as soon as possible to implement expansion of their recycling programs in accordance with this Plan Amendment.

To assist municipalities in modifying their mandatory source separation and recycling ordinances, the CMCMUA has developed a "Model Ordinance for Mandatory Recycling" which is presented in Appendix VI. This model ordinance is based upon a draft of a model ordinance provided by the NJDEP which incorporated those elements identified as municipal responsibilities in the recycling statute as well as NJDEP recommended elements based upon the State's recycling experience. In addition to the recommendations provided by the NJDEP, the CMCMUA has reviewed source separation and recycling ordinances currently utilized in successful programs and has drawn on the knowledge it has gained from twenty-five (25) years of recycling experience to create a model ordinance for use by Cape May County's sixteen (16) municipalities. This model ordinance provides the framework for updating of mandatory source separation and recycling ordinances to bring municipalities into compliance with the County Plan, upon adoption of this Plan Amendment.

The model ordinance is intended to be customized to meet the unique needs of each municipality; however, it is recommended that the revised municipal ordinance adopted by each municipality incorporate the elements, content and suggested language of the model ordinance to the extent practical for each community. For example, all designated recyclables listed in the model ordinance are mandated for recycling in Section III of this Plan Amendment. Therefore, all forty-one (41) categories of designated recyclable materials must be included in the municipality's ordinance. The use of consistent language in municipal ordinances will also facilitate the enforcement of local source separation and recycling mandates by the Cape May County Health Department, when such assistance is needed. To assist municipalities making such determinations regarding which elements of the model ordinance should be customized to meet the unique needs of each community and those elements for which the recommended language should be retained to the extent possible, a guidance document has been included along with the model ordinance in Appendix VI.

The NJDEP requires that each municipality establish a comprehensive enforcement program that includes, among other things, penalties to be imposed for non-compliance with the municipal source separation and recycling ordinance. To comply with this requirement, this Plan Amendment recommends, as is included in the model ordinance, that any person or entity failing to comply with any of the provisions provided in the ordinance shall, upon conviction thereof, be punishable by a fine of not less than \$50 and not more than \$500 or by imprisonment for a term not to exceed 90 days or by both and that for each successive day that such violation continues it shall constitute a separate offense. Municipalities may, at their discretion, establish an additional penalty level for repeat offenders who fail to comply with the requirements of the municipal source separation and recycling ordinance.

It is strongly recommended that each municipality create a dedicated recycling fund to act as a repository for all penalties paid by violators of the municipality's mandatory source separation and recycling ordinance. Establishment of such a dedicated fund would provide financial resources to support current and future recycling programs. In addition, all grant monies received from the State of New Jersey and the recycling rebates earned from the CMCMUA for recycling materials through the CMCIPF could all be deposited in this dedicated account to provided funds for recycling education, collection program expansion and other recycling uses identified by the municipality.

#### 2. Municipal Recycling Enforcement and Solid Waste Inspections

Municipal activities to enforce existing mandatory source separation and recycling ordinances and local solid waste requirements through the year 2006 have varied greatly among Cape May County's sixteen (16) municipalities. Some towns have routinely provided for recycling inspections, issued warnings to individuals and businesses that failed to comply with local source separation, recycling and solid waste requirements and have followed up with significant fines for repeat offenders. Other communities have established a limited inspection program and issue only warnings, not fines, while other municipalities have not implemented any recycling inspection and enforcement programs. To assist all Cape May County communities and particularly those that have not yet implemented a comprehensive inspection

and enforcement program in accordance with the requirements of the NJDEP, an overview of several enforcement programs that have been or are planned to be implemented locally is presented below. These examples include long-standing programs as well as some systems which have just recently been implemented or expanded. It must be noted that a number of other Cape May County municipalities have made significant effort and progress in implementing inspection and enforcement plans that are not described here. The examples selected were intended to demonstrate to local communities that regardless of the current status of their municipal inspection and enforcement programs, additional measures can and should be taken to implement or expand their enforcement programs to increase municipal recycling diversion rates.

# Example 1

Not unexpectedly, the municipality that consistently achieves the highest recycling diversion rate in Cape May County has a comprehensive recycling enforcement program. This mainland community has implemented an aggressive recycling enforcement program that has included, since January 2006, a full time inspector. In this community, the inspector proceeds on the collection route along with the trash and recycling crews on every collection day. Based upon the results of the initial inspection which is conducted by collection crew members, the inspector more carefully examines those waste containers identified by the crew for evidence of violations. The inspector checks for recyclables mixed in with the trash, examines recyclables set out for collection to determine whether they are contaminated and searches for other violations of the solid waste code, such as overweight receptacles and improper set out of construction debris. When the inspector confirms that a violation has occurred, he tags the set out container so that the crew does not collect the offending items. In the case of residential violations, the inspector determines whether the residents are home and, if so, clearly explains why their trash/recyclables will not be collected until the homeowner properly sorts or otherwise prepares the materials set out for collection. If the residents are not available, a "homeowner's information packet" is left at the door to provide the needed information to enable the homeowners to achieve compliance.

The inspection of all containers set out on the daily route for waste/recycling collection is typically completed during the morning hours. In the afternoon, the inspector contacts residences that received non-compliance tags within the past few days to determine if the violation has been corrected. Most residents promptly comply once their set out container has been tagged; however, a few residents typically receive a "two week notice" which is a warning that a fine will be imposed if the problem is not corrected within two (2) weeks. The inspector records approximately 200 incidents of containers being tagged, information packets distributed and warnings issued on a monthly basis. To better understand just how comprehensive this enforcement program is, 200 incidents per month equates to 3.6% of all residences within this municipality.<sup>20</sup>

Since this expanded inspection program began, this community has been able to successfully obtain the compliance of the vast majority of residential generators without the issuance of fines. Given the

<sup>20</sup> As of December 2006, 5,559 dwelling units in this municipality are zoned residential.

success that has been achieved in the residential sector, the inspection program is currently being expanded to include commercial generators.

#### Example 2

In one of Cape May County's smallest communities, the municipal recycling coordinator recently initiated an inspection and enforcement program. Prior to initiating the program, this seasonally impacted community mailed a letter to its residents explaining that source separation and recycling are mandatory and that fines can be issued for non-compliance. The recycling coordinator began inspecting residential containers set out on the single collection day per week that is needed to collect all solid waste and recyclables throughout the entire town. Each week the municipal recycling coordinator completes inspections on different portions of the collection route. When a violation is found, all relevant information regarding the infraction is recorded in a log and a warning letter is sent to the homeowner notifying them of the specific violation that was discovered and describing the steps that need to be taken in the future to comply with the municipal source separation and recycling mandate. While the inspection and enforcement program provides for a fine to be assessed to repeat offenders, penalty assessments have not been necessary as violators have properly complied once notified. Starting with the summer of 2007, the enforcement program will be expanded to include the three (3) seasonal businesses located in the municipality.

#### Example 3

A seasonally impacted, barrier island community that traditionally has had a low recycling rate and no inspection and enforcement program is now planning to implement a program to improve its municipal recycling rate. In this borough, the department of public works collects trash and recyclables on the same day. Therefore, the community plans to train and utilize the municipal collection crews to inspect all containers for violations as the route is collected. Once this program is implemented, the collection crew will be instructed to use the departmental communication system to contact the municipal recycling coordinator or department of public works clerk when they encounter the improper set out of recyclables or trash. The clerk and/or municipal recycling coordinator will be responsible for contacting the violator to provide a "friendly reminder" of the municipality's recycling and solid waste disposal requirements. Once this inspection program is instituted, the borough plans to utilize warnings and fines, if necessary, to gain compliance.

#### Example 4

This seasonally impacted municipality, with a relatively high percentage of business properties located within its boundaries, maintains a very strict inspection and enforcement program. The city's sanitary inspector, who is a public works department employee, performs inspections of residential and business properties on a daily basis and responds to complaints when received. When set out containers at residences, commercial establishments and/or construction sites are found to be in violation of local source separation, recycling or solid waste requirements, the non-compliant items are stickered, photos

are taken and the property owner receives a certified letter explaining the nature of the violation and the corrective measures needed to be taken. When a second offense occurs, a summons is issued to the violator. Fines are levied when the resident or business fails to promptly comply.

To insure that all residents and businesses are aware of the city's recycling and solid waste requirements, the sanitary inspector provides an information packet to all new property owners. Included in this packet is an advisory that if a code violation occurs, a summons will be issued without any supplemental warnings. The city reports that as of November 2006, 732 letters of violation and new resident packets had been distributed during the first eleven (11) months of calendar year 2006 and 481 summonses totaling \$88,000 had been issued to violators. Approximately 30% of the violations cited were failure to properly recycle, 40% were solid waste set out violations and the remaining 30% were property code violations.

#### Example 5

One mainland community has successfully implemented an enforcement program with its private hauler for trash set out violations. A system has been established by which the private hauler's collection crew contacts the department of public works when it finds violations for overweight containers, excessive trash quantities or trash set out with no container. The department of public works then contacts such violators to ensure their future compliance. Given the success of this municipality in establishing such a cooperative system with its contract hauler, it may be possible to expand this program to have the hauler's crew also identify and report recycling violations such as designated recyclables contained in trash, contaminated recyclables and/or the repeated absence of a generator to set out recyclables for collection.

#### **Municipal Recycling Enforcement Program Requirements**

Pursuant to the directive of the NJDEP, each district plan shall include a strategy for attainment of the 50% MSW recycling goal and 60% total solid waste recycling goal. This strategy must include, among other things, a comprehensive enforcement program that identifies the municipal entity(ies) responsible for enforcement of recycling mandates and specifies the minimum number of recycling inspections to be undertaken by these entities on an annual basis. As a result, each Cape May County municipality shall be required to include elements in its revised inspection and enforcement program that meet or exceed the following minimum requirements:

- The municipal recycling coordinator and/or other entities designated by the municipality in
  its ordinance shall be individually and/or severally empowered to enforce the provisions of
  the municipal source separation and recycling ordinance. The municipality shall also
  designate the department that will be primarily responsible for conducting recycling
  inspections and enforcement activities;
- The Cape May County Health Department (CMCHD) shall also be designated by the municipality in its ordinance to be empowered to enforce the provisions of the municipal source separation and recycling ordinance. The municipality shall retain primary

enforcement responsibility with the CMCHD serving in a secondary enforcement role which includes inspection of commercial establishments with proof of prior law enforcement actions;

• The minimum number of inspections that should be conducted in each municipality are as follows:

Residential units: The minimum number of annual inspections shall be established at 5% of the total dwelling units within the municipality or 1,000 inspections annually whichever is less.

Business properties and institutions: The minimum number of annual inspections shall be established at twenty-four (24) inspections in municipalities that have more than 100 businesses, a minimum of six (6) annual inspections in municipalities that have fewer than 100 businesses, and a minimum of one (1) annual inspection in municipalities that have fewer than six (6) businesses.

For municipalities that fall seriously short of the State mandated recycling goals by the end of calendar year 2011, the minimum number of annual inspections to be conducted in each municipality at residential properties should be increased to 10% of the total dwelling units and inspections at business properties and institutions should also be increased.

• The municipal inspection procedure shall include, but not be limited to, the method for identifying and documenting a violation, the procedure for notifying a violator of an infraction and the corrective action needed to be taken and the process for issuance of a warning or a fine. This procedure shall also include a method to record the number of residential and business inspections conducted and warnings/violations issued on an annual basis.

Each municipality shall be required to submit a copy of its inspection and enforcement program to the CMCMUA within five (5) months of NJDEP's approval of this Plan Amendment. Municipalities shall also submit to the CMCMUA, on an annual basis, a copy of its municipal enforcement log, or a summary thereof, for the prior calendar year.

#### 3. Municipal Master Plans

The New Jersey Mandatory Source Separation and Recycling Act requires each municipality to conduct a review and make necessary revisions to the recycling element and development regulations contained in its municipal master plan within thirty (30) days of the effective date of adoption of a mandatory source separation and recycling ordinance and at least once every thirty-six (36) months thereafter to reflect changes in State, County and municipal policies and objectives concerning the collection, marketing and recycling of designated materials. In accordance with the Mandatory Recycling Act, the revised master plan must specifically provide for the collection, marketing and recycling of designated recyclable materials within any development proposal for the construction of fifty (50) or more units of single-family residential housing or twenty-five (25) or more units of multifamily housing and any commercial or institutional development that proposes the utilization of 1,000 square feet or more of land.

In order to comply with the Updated Statewide Solid Waste Management Plan and this Plan Amendment, each municipality is required to update the recycling element in its municipal master plan after adoption of a new mandatory source separation and recycling ordinance. In developing and adopting revisions to the recycling element of its municipal master plan, each community has an opportunity to set forth a reinvigorated strategy for its source separation and recycling program as well as a statutory obligation to detail the requirements established to enable the realization of a recycling program that can achieve the State mandated recycling goals.

The New Jersey Mandatory Source Separation and Recycling Act provides an integrated approach to recycling enforcement. The Mandatory Recycling Act requires that each municipality adopt an ordinance to mandate source separation and recycling by all waste generators in the community and provides that such ordinance contain a method for "street level" enforcement. The municipal ordinance must also comply with the requirements established in the County Plan; in turn, the County Plan must be consistent with the Statewide Plan as well as recycling regulations promulgated by the NJDEP. In order to fully integrate recycling enforcement at the local level, the recycling element in the municipal master plan must be consistent with the framework contained in the municipal recycling ordinance. The recycling provisions contained in the municipal master plan should promote recycling as an integral part of its municipal policy by reiterating the requirements contained in the mandatory recycling ordinance.

At a minimum, the update to the recycling element within the municipal master plan should include the following provisions:

- A clear statement of the municipality's commitment to meeting the State mandated waste reduction goals;
- An explanation of the environmental and economic benefits derived from aggressive source separation and recycling programs and an overview of the recycling strategies which the municipality will use to achieve the State mandated recycling goals;
- A policy statement indicating consistency with the solid waste and recycling requirements contained in the County Solid Waste Management Plan, including a commitment to provide a system for collecting and recycling of all "designated" recyclables;
- A description of the collection system established pursuant to the municipal source separation and recycling ordinance including, but not limited to, information regarding the categories of recyclable materials collected at curbside, rear yard, alleyway, municipal and/or regional recycling depot, materials that are to be delivered by the generator to a private sector recycler and materials to be recycled on site by the generator. Information regarding methods of recycling at municipally owned and privately owned "public spaces" and at "special events" is also recommended for inclusion. Identification of the method in which materials are actually recycled by the community, that is, the recycling markets or final disposition method utilized for recyclable materials collected, is also required, by statute, to be identified;
- Provisions to facilitate community-wide participation in the recycling program. At a minimum, a definitive statement that all residential, commercial and institutional waste

- generators within the municipality must source separate "designated" materials for recycling and guidelines for the establishment of penalties for non-compliance must be included;
- Provisions for ongoing recycling education and promotion. The Mandatory Recycling Act
  requires that municipalities inform residents at least twice per year of the source separation
  and recycling requirements contained in the municipal recycling ordinance. The municipal
  master plan may expand this minimum requirement to include a comprehensive recycling
  education strategy.
- Designation of the position of municipal recycling coordinator and the establishment of primary responsibilities including, but not limited to, enforcement authority, if so granted by the municipality.
- Provision of adequate recycling areas for all new residential, commercial, institutional and industrial developments. The statutory obligation for municipal master plans is that they must include provisions for the collection, disposition and recycling of all materials designated in the municipal recycling ordinance for any development proposal for the construction of fifty (50) or more units of single family housing or twenty-five (25) or more units of multi-family housing and for any commercial or industrial development that proposes the utilization of 1,000 square feet or more of land. This Plan Amendment recommends that the minimum obligation regarding recycling for residential development be reduced to the construction of three (3) or more single family or multi-family dwelling units that seek approval from any municipal board or commission. All such developments must incorporate features to provide adequate storage space for source separated materials mandated to be recycled and it is recommended that the collection and marketing strategy proposed provide, at a minimum, the same level of collection service and frequency made available by the municipality to participants in its recycling collection program, if not serviced under said program.
- Provisions that require the modification of all relevant municipal ordinances, permits and codes, as necessary, to achieve compliance with the mandatory recycling ordinance and requirements for submission and approval of "recycling plans" for all activities requiring municipal approval. Additionally, for all activities that require municipal approval, including building permits, special event permits, mercantile licenses and other applicable approvals, requirements should be established for submission, review and approval of recycling plans to source separate all designated recyclable materials. Such plans should require verification by the permit holder to the code official that the required recycling activity did occur.
- Guidelines for periodic review of and modification to the recycling element of the master plan and the mandatory recycling ordinance to insure conformity.

# 4. <u>Incorporation of Municipal Recycling and Solid Waste Management Policies And Practices in Agreements, Bid Specifications and Other Applicable Documents</u>

To better achieve compliance with the recycling and solid waste management policies and practices established by the municipality and the County Solid Waste Management Plan, each municipality should incorporate these policies and practices into all applicable documents. It is specifically recommended that each municipality include in its standard form of bid specifications a requirement

for vendors providing equipment or services to comply with all municipally established solid waste management and recycling policies and practices as a material term and condition. The Authority has incorporated specific language in its standard bid specification package and contract documents to ensure that all private vendors from which the CMCMUA procures products and services strictly complies with the requirements established in the County Plan for source separation, recycling and solid waste disposal.

Each municipality is strongly encouraged to review their bid specifications package and associated contract documents and incorporate similar requirements to ensure compliance with municipal policies and the County Plan. Suggested language, which can be considered for incorporation in specifications and contracts, is presented in Appendix VII, Standard Form of Bid Specifications-Recycling and Solid Waste Disposal Requirements.

Upon adoption of this Plan Amendment by the NJDEP, the Department may require that any contract renewal or new contract for solid waste collection or disposal which is for a term in excess of one (1) year and which is inconsistent with this Plan Amendment be immediately renegotiated in order to bring such contracts into conformance with the adopted County Plan. Therefore, it is recommended that each municipality carefully consider the policies, practices and requirements set forth in this Plan Amendment prior to entering any new or amended agreement for the provision of recycling or solid waste collection services.

#### C. County Level Enforcement

Counties and the implementing agencies for solid waste management can also have a significant role in solid waste and recycling enforcement. All County departments and the CMCMUA shall evaluate their recycling and solid waste enforcement policies, strategies and programs for consistency with the requirements of this Plan Amendment.

#### 1. CMCMUA Enforcement Program at Authority Recycling and Solid Waste Facilities

To supplement the enforcement strategies implemented by Cape May County municipalities, which include refusal to pick up solid waste, substantial fines and education, the CMCMUA has implemented unique and effective recycling enforcement strategies that include a ban on landfilling of all designated recyclables, an inspection program for loads of recyclables and solid waste delivered to Authority facilities and the establishment of a system of warnings and monetary surcharges for violators. Each of the enforcement policies, strategies and programs utilized by the CMCMUA is detailed below.

# **Prohibition of Designated Recyclables**

Since 1990, Cape May County has had a unique ban on landfilling for all categories of recyclables specifically designated in the Cape May County Solid Waste Management Plan. As currently

provided for in the County Plan, and reaffirmed in this Plan Amendment, the CMCMUA prohibits the acceptance of solid waste loads for disposal at Authority solid waste facilities when such loads contain designated recyclable materials. Designated materials must be source separated by all waste generators, prior to waste disposal, for subsequent collection and recycling. This Plan Amendment expands the list of "designated" recyclable materials to a total of forty-one (41) items that are mandated to be recycled by all generators in Cape May County as previously set forth in Exhibit IV-1, Cape May County Recycling Program List of "Designated" Recyclables.

In addition to leaves being "designated" for recycling in the County Plan, the New Jersey Mandatory Source Separation and Recycling Act also prohibits the mixing of leaves with solid waste for disposal. The Mandatory Recycling Act also provides that "(n)o solid waste facility in this State, other than a leaf composting facility . . . shall accept for final disposal truckloads containing leaves at any time . . "21

# Prohibition of Out-of-County Generated Solid Waste/ Disposal of Prohibited Wastes

It is the policy of Cape May County to preserve the remaining disposal capacity within the CMCMUA's Sanitary Landfill for use by Cape May County residents, vacationers and businesses to meet their long-term needs. This policy is consistent with the intent of the Pinelands Comprehensive Management Plan<sup>22</sup> to prevent the disposal of non-Pinelands waste at the Authority's Sanitary Landfill. As a result, disposal of solid waste generated outside of Cape May County is prohibited at Authority facilities and violators shall be subject to the penalties established by the CMCMUA in its User Fees, Terms and Conditions document. The only limited exception to this prohibition regarding disposal of any out-of-County solid waste at CMCMUA facilities is when the load contains a limited quantity of solid waste that originated from one or more Pinelands municipalities, or from one or more non-Pinelands municipalities located within Atlantic, Burlington or Ocean counties. For such loads to be accepted for disposal at the CMCMUA Sanitary Landfill at least 50% of the solid waste contained in the load must have originated in Cape May County. The acceptance of such loads will be subject to the specific requirements of the CMCMUA in its User Fees, Terms and Conditions document.

The CMCMUA, in its User Fees, Terms and Conditions document, also establishes a list of materials that are specifically prohibited for disposal at both the Authority's Sanitary Landfill and Transfer Station. These prohibited wastes include, but are not limited to, categories of materials such as sewage sludge, bulk liquids, infectious waste and hazardous waste as these materials are not permitted for disposal at CMCMUA solid waste facilities by the NJDEP.

<sup>&</sup>lt;sup>21</sup> See Public Laws of 1989, Chapter 151, Section 2.

<sup>&</sup>lt;sup>22</sup> The Comprehensive Management Plan, at 7:50-6.73, provides that "(n)o waste shall be accepted for disposal, stored, collected, processed, transferred, separated, recycled, reclaimed, recovered or reused in the Pinelands unless it originates from one or more Pinelands municipalities or from one or more non-Pinelands municipalities located within Atlantic, Burlington, Cape May or Ocean Counties."

#### **CMCMUA Facility Inspections and Penalty Surcharges**

To ensure compliance with the disposal prohibitions described above, the Authority's staff shall continue to randomly inspect loads of solid waste delivered at the Sanitary Landfill and Transfer Station to determine if any designated recyclables, out-of-County waste and other prohibited wastes are contained in such loads. To better enforce the strategies set forth in this Plan Amendment and to respond to the requirements of the NJDEP to identify the minimum number of inspections to be conducted, the Authority's solid waste enforcement staff shall conduct at least two (2) random inspection days per month at the Sanitary Landfill and/or the Transfer Station. Each random inspection day shall include a minimum of twenty-five (25) evaluations of incoming solid waste loads to check for recycling and/or solid waste violations. Additionally, inspections shall be conducted by CMCMUA solid waste facility supervisors upon notification by operations personnel that a load of solid waste, based upon a visual inspection, potentially violates an established prohibition regarding the disposal of designated recyclables, out-of-County waste and other prohibited wastes.

To address the requirements of the adopted Statewide Plan, which mandates that each municipality recycle 50% of its municipal solid waste stream and each county recycle 60% of the total solid waste stream, the CMCMUA has expanded the focus of its routine enforcement duties to more effectively address the disposal of designated recyclable materials. When designated recyclables are found in a load of solid waste, a warning notice is issued to the solid waste hauler who delivered the load for disposal. "Notices of Non-Compliance" advise the solid waste hauler to determine the source of each solid waste load containing excess designated recyclables and instruct their customers regarding the proper procedures for source separation of designated recyclables to prevent future violations. The Authority's staff cooperates with private solid waste haulers and municipal public works departments to assist in providing information to non-compliant waste generators regarding source separation and recycling requirements as well as by offering technical assistance.

The Authority has previously and shall continue to issue "Notices of Non-Compliance" and assess a substantial per ton surcharge for the entire load to each hauler that disposes of solid waste loads containing excess quantities of designated recyclables. For purposes of quantifying the term "excess recyclables", the Authority has established that any load containing more than 5% by volume of designated recyclables may be subject to warning and/or penalties. Haulers and/or violators shall be issued up to two (2) "Notices of Non-Compliance" and repeat violators (three or more violations) shall be subject to a per ton surcharge in addition to applicable solid waste disposal fees. To respond to the requirements of the NJDEP to detail the penalties to be imposed for non-compliance with the requirements of the County Plan, the Authority shall establish such surcharge at a minimum of \$200 per ton for violations of the established prohibitions regarding the disposal of designated recyclables, out-of-County waste and other prohibited wastes. The actual per ton surcharge as well as applicable solid waste disposal fees are established annually by the Authority in its "User Fees, Terms and Conditions for the Use of the CMCMUA Solid Waste and Recycling Facilities".

In accordance with the Joint Agreement on Source Separation and Recycling, the CMCMUA also establishes a surcharge in it User Fees, Terms and Conditions document to discourage the skimming of high value recyclables and has instituted a surcharge to deter source separated recyclables from being mixed with solid waste or other contaminates.

For out-of-County waste and other prohibited waste violations, the CMCMUA levies both a flat rate surcharge and a per ton surcharge in addition to the applicable tipping fee as established in the User Fees Terms and Conditions document. As currently structured for out-of-County waste and other prohibited waste violations, the amount of both the flat rate and per ton surcharge doubles with each subsequent violation up to the third occurrence at which time the hauler's waste disposal privileges are temporarily suspended. If current recycling enforcement initiatives do not provide a sufficient level of deterrence to gain routine compliance with the source separation and recycling requirements established in this Plan Amendment, the CMCMUA shall evaluate the future use of flat rate and per ton surcharges that escalate for each subsequent recycling violation similar to those levied for out-of-County waste and other prohibited waste violations.

# 2. CMCMUA Enforcement Program at Off-Site Locations

To supplement the enforcement strategies implemented by Cape May County municipalities and the enforcement programs utilized by the CMCMUA at its facilities, the Authority has established an off-site inspection and enforcement program. This program includes performing surveillance and providing assistance to the Cape May County Health Department in the enforcement of NJDEP regulations and the requirements of the County Plan. The Authority has also significantly expanded its inspection and enforcement duties at off-site locations throughout the County to improve compliance with source separation mandates and discourage the disposal of designated recyclable materials. Each of the recycling and solid waste enforcement elements utilized by the CMCMUA at locations other than its own facilities is detailed below.

#### CMCMUA Enforcement of Solid Waste Regulations and the County Plan

The CMCMUA's enforcement personnel performs surveillance to ensure compliance with the NJDEP's Solid Waste Transportation / Transporter Regulations found at N.J.A.C. 7:26-3.4 and 3.5, as well as the solid waste truck route provisions of the County Solid Waste Management Plan, as amended herein. Violators of these solid waste transportation regulations are prosecuted through the NJDEP or the County Health Department's enforcement program.

The Authority also actively enforces the provisions of the County Plan which require that all non-recycled solid waste generated in Cape May County be disposed of at the CMCMUA Sanitary Landfill or transported out-of-State for disposal. Except for the CMCMUA's Sanitary Landfill, the use of an NJDEP permitted solid waste facility located in the State of New Jersey for disposal of Cape May County generated solid waste is specifically prohibited. The use of permitted solid waste transfer stations, located within the State of New Jersey, to facilitate the transportation of solid waste generated

within Cape May County to permitted out-of-State disposal facilities is not a violation of the provisions of the County Plan. Similarly, the use of permitted material recovery facilities, located within the State of New Jersey, to remove materials from Cape May County generated solid waste for the purpose of recycling or reuse is not a violation of the provisions of the County Plan, provided that the residue (i.e., the non-recycled/recovered materials) resulting from the Cape May County generated solid waste delivered to such materials recovery facility is disposed of in accordance with the provisions of the Cape May County Solid Waste Management Plan.

To ensure compliance with these requirements, the CMCMUA's enforcement staff inspects active construction and demolition sites within the County and performs surveillance of solid waste haulers to monitor the waste disposal locations utilized. All haulers transporting solid waste generated within Cape May County are responsible for compliance with the solid waste disposal procedures set forth in the County Plan. Accordingly, in the event of any dispute regarding non-compliance, it shall be the responsibility of each generator/hauler to maintain satisfactory documentation to demonstrate compliance with the solid waste disposal requirements of the County Plan. Violators of these solid waste disposal requirements are prosecuted through the County Health Department under authority provided by the County Environmental Health Act (CEHA) as detailed later in this Section.

The Authority's enforcement staff also periodically inspects area businesses to ensure that designated recyclables are recovered by the generator prior to final waste disposal in accordance with the County Plan. Such inspections typically consist of conducting random recycling audits at commercial generators located in Cape May County. To supplement the Authority's inspection of businesses, the CMCMUA has encouraged private solid waste haulers to notify their customers of the requirements to source separate and recycle designated materials. The Authority has also requested the assistance of haulers in distributing "informational cards", developed by the CMCMUA, to advise waste generators of the mandatory recycling requirements. Haulers that encounter non-compliant waste generators should seek additional enforcement assistance from the municipality's recycling coordinator or designated code enforcement official. Municipal recycling coordinators or other designated recycling enforcement personnel may also utilize the services of the County Health Department to resolve non-compliance issues involving commercial establishments that repeatedly fail to cooperate.

In addition to the enforcement measures described above, the CMCMUA's staff also assists municipalities and the County Health Department with monitoring the enforcement of other solid waste/recycling activities including but not limited to:

- Monitoring solid waste transporters for proper NJDEP registration;
- Investigating solid waste complaints received from citizens and the NJDEP for activities such as illegal dumping of solid waste and unregistered solid waste transporters;
- Investigating, with the assistance of municipal recycling coordinators, complaints received
  for failure of residential, commercial or institutional waste generators to source separate and
  recycle designated materials; and

• Conducting routine compliance monitoring of "Class B" recycling facilities, to determine if the materials being accepted at such facilities are in compliance with the operating approval issue by the NJDEP and the requirements of the County Plan.

# 3. Other CMCMUA Enforcement Programs, Policies and Agreements

The Authority also utilizes economic incentives and cooperative interlocal service agreements, as further detailed below, to achieve the goals of the County Plan.

# Withholding of Mini-Grants

As detailed in Section IV, Recycling Strategies and Programs, the CMCMUA will strive to utilize a portion of its Solid Waste Services Entitlement Funds, for as long as such funds are available, to provide mini-grants to assist municipalities in expanding their local source separation and recycling activities to achieve the goals of the County Solid Waste Management Plan. However, any municipality that fails to show significant progress toward achieving the State mandated recycling goals and fails to take action to improve recycling rates may become ineligible to receive such mini-grants for that year.

#### **Interlocal Services Agreement**

All sixteen (16) Cape May County municipalities and the CMCMUA have executed a "Joint Inter-Governmental Agreement for Solid Waste Disposal" and a "Joint Agreement on Source Separation and Recycling" to facilitate their partnership in a regional recycling and solid waste management system to serve the needs of Cape May County. In 1989, the Authority and participating municipalities executed the initial Joint Agreement on Source Separation and Recycling to address the requirements of the New Jersey Mandatory Source Separation and Recycling Act by formally establishing a regional, cooperative approach to recycling including the construction and operation of the Cape May County Intermediate Processing Facility to facilitate the receipt, processing and marketing of recyclable materials. In 1997, the "Joint Inter-Governmental Agreement for Solid Waste Disposal" extended the existing regional recycling partnership to provide solid waste disposal services at reduced rates and continue to provide supplemental services, such as the Litter Abatement Partnership Program, without charge to participating municipalities.

These Agreements have been expanded over time to include additional programs and services established by the CMCMUA as part of the County's comprehensive solid waste management system. The current Agreements, which were most recently updated in January 1, 2005, will continue to be in effect until December 31, 2011. This long-term cooperative partnership between all sixteen (16) Cape May County municipalities and the CMCMUA serves as the foundation for success in implementing the comprehensive solid waste management system that serves Cape May County today. Both the Joint Inter-Governmental Agreement for Solid Waste Disposal effective January 1, 2005 and the Joint Agreement on Source Separation and Recycling are included in Appendix IV.

# Public Bid Specifications/Contracts Issued by the CMCMUA

To better achieve compliance with the recycling and solid waste management policies and practices established by the County Solid Waste Management Plan, the CMCMUA incorporates these requirements into all applicable documents. The Authority has incorporated specific language in its standard bid specification package and contract documents to ensure that all private vendors and contractors from which the CMCMUA procures products and services strictly complies with the requirements established in the County Plan for source separation, recycling and solid waste disposal. The CMCMUA has also incorporated these policies and practices, as appropriate, into all technical and legal documents issued to ensure compliance with the County Plan.

# 4. County Health Department Solid Waste and Recycling Enforcement Program

The Commissioner of the NJDEP is authorized under the County Environmental Health Act (CEHA) N.J.S.A. 26:3A2-21 et seq., to delegate authority for both the implementation of any environmental program and enforcement of specified environmental health laws to certified local health agencies and provide funding for these activities. All local boards of health, whether they are certified CEHA agents or not, are authorized to enforce the Solid Waste Management Act in addition to State and local health codes. The NJDEP has entered an agreement with the County Health Department to inspect and enforce environmental regulations within Cape May County. The Cape May County Department of Health has been delegated authority under CEHA to aid the NJDEP by responding to complaints, conducting facility inspections and performing other activities identified as priorities by the NJDEP. In the State Plan, the NJDEP has established a list of solid waste priority activities to be performed by CEHA agencies. The State Plan requires the Cape May County Health Department (CMCHD) in its performance of solid waste activities under CEHA to adhere to the following list of priorities established by the NJDEP:

- Monitor transporters hauling solid waste to ensure compliance with NJDEP regulations and the County's Solid Waste Management Plan.
- Investigate all solid waste complaints received from citizens and NJDEP, such as illegal dumping of solid waste materials, unregistered transporters and unpermitted facilities. Respond back to NJDEP within ten (10) days of complaint receipt with the initial or final outcome of the complaint as the case may warrant.
- Conduct an annual routine compliance monitoring inspection of Class A recycling centers,
  General Class B recycling centers, Class C compost facilities, transfer/MRF stations, resource
  recovery facilities, operating landfills (except as noted below) and intermodal facilities. It is
  recommended that the annual inspections are conducted with an inspector from the NJDEP's
  Office of Solid Waste Compliance and Enforcement, provided a mutually agreed upon date
  can be arranged.
- Conduct semi-annual routine compliance monitoring inspections of exempt compost facilities. Concentrate on conducting the first inspection in late spring and the second inspection in late fall.

- Conduct inspections, as needed, of exempt and limited Class B facilities, when notification of activity at these sites is received from the NJDEP's Bureau of Recycling and Planning.
- Conduct fifty (50) recycling audits at commercial generators to ensure compliance with the State's Mandatory Source Separation and Recycling Act.
- Conduct an annual routine compliance monitoring inspection during the operation of farmland mulch sites.
- Continue to update the list of all known convenience centers, farmland mulch sites and Class A recycling centers and provide this list to NJDEP, Office of Local Environmental Management by December 31<sup>st</sup> each year.
- Conduct inspections, as needed, to ensure contaminated soil is handled as per NJDEP guidelines.
- Enforce the State Solid Waste Management Act as required by NJDEP; initiate enforcement proceedings in a court of competent jurisdiction against violators as appropriate. NJDEP shall be notified five (5) days prior to the convening of all settlement conferences and/or court actions. The notification shall include the proposed settlement amount or the penalty amount to be sought in the court action. In addition, follow-up reports on the outcome of all settlement conferences and court actions, including the penalty assessment and compliance plan (if applicable), shall be forwarded to NJDEP's Solid Waste Compliance and Enforcement Program.
- On a spreadsheet developed by the NJDEP, electronically submit a quarterly report to NJDEP's Office of Local Environmental Management indicating the solid waste facility inspected, date of inspection, name of inspector, compliance status and whether a Notice of Violation was issued to the facility.
- Compile and maintain files and records to support NJDEP and County enforcement actions.

Consistent with the State Plan, the CMCHD is also mandated to implement the requirements of the County Solid Waste Management Plan, as approved by the Department. Such County Plan enforcement activities to be undertaken by the CMCHD include, but are not limited to, enforcing transporter truck routes and solid waste inspections to keep recyclables out of the waste stream.

To comply with these requirements established by the NJDEP and the State Plan, the CMCHD enforces NJDEP solid waste regulations including, but not limited to, the rules regarding the transportation of solid waste. CMCHD personnel routinely monitor solid waste haulers operating in the County to ensure their compliance with relevant NJDEP solid waste regulations as well as the requirements of the County Plan. Violators of the State's solid waste transportation and disposal regulations are prosecuted by the County Health Department. The CMCHD, in collaboration with the CMCMUA, also enforces the provisions of the County Plan, including the requirement that all non-recycled solid waste generated in Cape May County must be disposed of at the CMCMUA Sanitary Landfill or transported out-of-State for disposal.

The County Health Department will also be expanding its activities to assist municipalities in the enforcement of local mandatory recycling ordinances pursuant to the statutory authority provided under CEHA. Once communities adopt a revised municipal recycling ordinance that is consistent with the model set forth in Appendix VI, Model Ordinance For Mandatory Recycling, the CMCHD will act in a secondary role for inspection of businesses that repeatedly fail to comply with the requirements of the municipal ordinance.

In addition to identifying the CMCHD's responsibilities for enforcement of solid waste and recycling mandates, the NJDEP also requires that this Plan Amendment specify the minimum number of recycling inspections that will be undertaken by the CMCHD. The CMCHD currently conducts seventy-five (75) inspections of businesses on an annual basis to determine compliance with not only recycling mandates but also solid waste regulations. The CMCHD shall continue to conduct a minimum of seventy-five (75) inspections of businesses on an annual basis in addition to its other enforcement duties related to routine inspections of solid waste and recycling facilities and responding to solid waste complaints.

#### 5. Other County Enforcement Programs, Policies and Agreements

This Plan Amendment recommends that all departments of the County of Cape May incorporate the policies and practices set forth in the County Plan into all planning, procurement, technical and legal documents, when appropriate, to achieve the goals of the adopted County Solid Waste Management Plan.

### Interlocal Services Agreement Between the County Health Department and the CMCMUA

In order to expand its solid waste enforcement capabilities, the Cape May County Health Department, with the concurrence of the County Board of Chosen Freeholders, has entered into an interlocal services agreement with the CMCMUA to enable the Authority to monitor and enforce the solid waste disposal requirements set forth in the adopted County Plan. The CMCMUA, acting as an agent of the CMCHD, is authorized to monitor and inspect solid waste collection, transportation and disposal practices associated with all solid waste generated within Cape May County in order to ensure compliance with the County Plan. The CMCHD has conferred to the CMCMUA the same powers and duties for the regulation of solid waste as have been granted to the CMCHD under CEHA. However, the scope and responsibility of the powers granted to the CMCMUA are limited to assuming the primary responsibility for monitoring, inspecting and investigating alleged or suspected incidents of noncompliance with the County Plan for all non-recycled solid waste which is generated within Cape May County and which is not transported out-of-State for disposal at a properly permitted solid waste facility. The Cape May County Environmental Health Act Program Revised Interlocal Services Agreement is presented in Appendix VIII.

# Solid Waste Management Policy Statement in the County Comprehensive Plan

The Cape May County Planning Board has the responsibility for developing and implementing a County-wide comprehensive plan for the physical development of Cape May County, pursuant to the County Planning Enabling Act of 1935 (C.40:27). The County Planning Board has adopted and updated this plan to provide a sound basis for decision making regarding subdivisions, site plans, roadways, sewers, water supply, open space and other important needs that shape the environment, quality of life and future growth of Cape May County. The County Comprehensive Plan sets forth a policy for solid waste which is based upon the County Solid Waste Management Plan adopted by the County Board of Chosen Freeholders and approved by the NJDEP. As a result, it is recommended that the Comprehensive Plan for Cape May County be updated as necessary by the County Planning Board to be consistent with this Plan Amendment.

#### **Public Bid Specifications/Contracts Issued by County Departments**

To better achieve compliance with the recycling and solid waste management policies and practices established by the County Solid Waste Management Plan, each department of the County of Cape May should incorporate these policies and practices into all applicable documents, as appropriate. It is specifically recommended that each County department include in its standard form of bid specifications a requirement for vendors providing equipment or services to comply with all established solid waste management and recycling policies and practices as a material term and condition. Each department of the County is strongly encouraged to review their bid specifications package and associated contract documents and incorporate language, which is presented in Appendix VII, Standard Form of Bid Specifications - Recycling and Solid Waste Disposal Requirements, to ensure compliance with the adopted County Plan.

#### D. State Level Penalties for County Plan Violations

The NJDEP requires that each County Plan specify the penalties to be imposed for non-compliance with the municipal source separation and recycling ordinance and the County Solid Waste Management Plan. In addition to the penalty provisions specified previously in this Section, all violators may also be subject to the penalties established in the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq, and the regulations promulgated by the NJDEP which can be found at N.J.A.C. 7:26-5.1. The NJDEP may assess a civil administrative penalty of not more than \$50,000 for each violation of each provision of the Act, or any rule promulgated. This penalty, of up to \$50,000, may also be assessed for each violation of an administrative order, permit, license or other operating authority issued by the NJDEP or for each violation of an approved district solid waste management plan. In its regulations, the NJDEP has created a penalty matrix to establish a range of penalties for environmental violations depending if the severity of the violation is minor, moderate or major. The penalty matrix is used by the NJDEP to ensure that all violators of regulatory provisions are treated in a similar manner.

Minor violations are subject to base penalties which are set at an amount to minimally deter future violations, assuming the violation was neither intentional nor negligent. Criteria considered by the NJDEP in determining if a violation should be subject to the minimum penalty include whether the violator has been fully cooperative and has promptly addressed the violation, if the violator has a satisfactory compliance and operating history and that no aggravating circumstances exist. When the violator should have known its act or omission was a violation of regulations or when the violation was willful or deliberate; a moderate or major penalty is assessed.

The penalty matrix assigns a specific penalty amount for each violation depending upon the seriousness of the violation and the conduct of the violator. Major violations constitute serious risk to health, safety and welfare of the people of the State and the economic viability and competitiveness of the solid waste collection industry. Moderate violations have the potential to result in substantial risk to public health, safety and welfare or to economic viability and competitiveness. Minor violations are those which are not included in either of the above categories or which are procedural in nature. All authorized enforcement agents operating in Cape May County should utilize the NJDEP's penalty matrix as a guide in enforcing the requirements of the County Plan.

In the State Plan, the NJDEP has indicated its intent to consider using its statutory and discretionary authority to withhold various grants from counties and/or municipalities that fail to perform adequately. To avoid any potential for withholding of grant funds, including the Solid Waste Services Entitlement Tax, Green Acres and a wide range of other environmental funding programs, all municipalities and agencies and departments of the County of Cape May are strongly encouraged to comply with the recycling and solid waste requirements established by the NJDEP in the State Plan which are being incorporated in the County Plan though this Plan Amendment.

#### **SECTION IX**

#### STATUS OF PREVIOUSLY ADOPTED AMENDMENTS

Upon the date of certification of this Plan Amendment by the NJDEP, the Cape May County Solid Waste Management Plan is reaffirmed, amended and/or supplemented as follows:

- 1. Except as noted below, the requirements of the Cape May County Solid Waste Management Plan, as previously amended by the County and approved by the New Jersey Department of Environmental Protection, are hereby reaffirmed and readopted as if set forth in full herein to the extent such requirements do not conflict with this Plan Amendment;
- 2. The Amendment to the Cape May County Recycling Plan to incorporate Bob Dougherty and Sons Recycling, Inc. and to establish a procedure for the review and incorporation of proposed non-site specific recycling projects into the Cape May County Recycling Plan, as adopted by the Cape May County Board of Chosen Freeholders on May 22, 1990 and approved by the NJDEP on November 19, 1990, is hereby modified to delete all sections related to Bob Dougherty and Sons Recycling, Inc. mobile tire shredder recycling facility as this mobile facility never initiated operations and Bob Dougherty and Sons Recycling is no longer in business;
- 3. The three (3) Amendments to the Cape May County Solid Waste Management Plan to respond to the court ordered termination of solid waste flow control and establish an alternate solid waste management strategy for Cape May County, as adopted by the Cape May County Board of Chosen Freeholders on October 2, 1997, April 28, 1998, and April 25, 2000, respectively, are hereby modified, as directed by the NJDEP Commissioner in its letter and certification dated October 2, 2000, to delete all requirements and references to:
  - The establishment and imposition of an Environmental Investment Charge ("EIC"); and
  - The in-district and out-of-district weighing procedures and reporting related to determining and collecting the EIC for all non-recycled solid waste generated within Cape May County.

Upon adoption, this Plan Amendment will revise and supersede the County's Solid Waste Management Plan, as previously adopted and amended, to the extent this Amendment is inconsistent therewith.