



Future of Hillsborough

Comprehensive Plan for Unincorporated Hillsborough County Florida

SOLID WASTE

As Amended by the Hillsborough County Board of County Commissioners June 5, 2008 (Ordinance 08-13)

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Hillsborough County Solid Waste

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* These portions of the Element have been adopted by the Board of County Commissioners as required by Part II, Chapter 163, Florida Statutes. The remainder of the Element contains background information.

Hillsborough County Solid Waste

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EXECUTIVE SUMMARY

The purpose of the Solid Waste Element is to provide standards to guide Hillsborough County in developing plans and policies in accordance with Chapter 9J-5, FAC, while demonstrating a commitment to eliminating identified and projected deficits in solid waste disposal capacity. The Solid Waste Element addresses and directs government activities, and provides guidance to the private sector, in meeting the solid waste needs of all residents of Hillsborough County. The goals, objectives, and policies of this element have been developed to correct existing problems and avoid anticipated future solid waste disposal system problems through the year 2025.

The Solid Waste Element is designed to meet the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Florida Statutes (FS), and has been prepared in accordance with "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance", Rule 9J-5.011, Florida Administrative Code (FAC). In addition to being consistent with the Tampa Bay Regional Policy Plan and The State Comprehensive Plan, the Solid Waste Element is consistent with all other Elements of the Comprehensive Plan.

The Solid Waste Element focuses on the facilities needed by existing residents and the anticipated needs of a growing population in unincorporated Hillsborough County. The Solid Waste Element contains an inventory of the unincorporated County's solid waste system and current as well as projected demands. A study of solid waste demands was conducted to determine needs and how they can be met. Chapter 9J-5, FAC, requires an extensive inventory of the current solid waste management system, including the identification of waste characteristics and an inventory identifying solid waste deficiencies. The goals, objectives and policies have been developed to correct existing problems, anticipate future solid waste needs and create a strategy to respond to these future solid waste needs.

Hillsborough County has provided for solid waste collection and disposal services for County residents since 1955. Under Chapter 13 of the County Code of Ordinances and Laws (the County Code), the County's Department of Solid Waste is responsible for overseeing the collection and disposal of all solid waste generated within unincorporated Hillsborough County. Pursuant to a Special Act by the Florida Legislature, Chapter 83-415, Law of Florida ("The Hillsborough County Resource Recovery Act of 1983"), areas of unincorporated Hillsborough County annexed by the cities of Plant City, Tampa, and Temple Terrace after June 1983 remain within the solid waste service area of the County.

Hillsborough County owns and/or operates several major solid waste facilities for the collection and disposal of solid waste. The cornerstone of the County's Solid

Waste System is the 1,200 ton per day Hillsborough County Resource Recovery Facility, operated under a 20 year operations and management contract with Ogden Martin Systems of Hillsborough, Inc. (OMSH) initiated in 1987.

In addition, the County franchises for private residential and commercial solid waste collection within its Service Areas. Homeowners in the County's Service Area are required by ordinance to pay annual disposal and collection service charges as part of their property tax statement. These charges entitle them to dispose of limited household waste and bulk items without an additional charge at County solid waste facilities if proper documentation is presented; and collection services consisting of two garbage, one recyclable and one yard waste collection per week.

The impact of the commercial, industrial and residential growth in the Tampa Bay Region's different solid waste collection and disposal systems is readily apparent from the presence of three waste-to-energy incinerators in the Tampa Bay area. As the growth continues, further alternatives for handling the growing volumes of solid waste must be explored by those local governments whose responsibility it is to collect and dispose of municipal solid waste.

Landfills are, and will continue to be, an integral part of the solid waste management system even with resource recovery and other waste reduction measures. There will always be residues and construction debris materials not suitable for burning or recycling. These materials must be disposed of properly and the landfill is an adequate means for disposal of such materials.

Recent Florida legislative actions reinforce the belief that source separation/recycling is an important and necessary tool for solid waste management. "An Act Relating to Waste Management", Chapter 88-130, Laws of Florida, is perhaps the most comprehensive solid and hazardous waste legislation enacted by the Florida Legislature since the 1970s.

The County is currently meeting and is projected to meet its Level of Service Requirements through the required time horizon with its current Class I Landfill and new Class I Landfill. The County's new Class I landfill facility will further expand its ability to maintain its Level of Service beyond the time frame of 2025.

In addition, the County continues to review its collection, recycling and disposal system to ensure that it will continue to meet the Federal and State requirements for solid waste management.

I. INTRODUCTION

STATUTORY REQUIREMENT

In 1985, the Florida Legislature passed the Local Government Comprehensive Planning and Land Development Regulation Act (LGCPLDRA), Chapter 163, Florida Statutes (FS). The LGCPLDRA strengthens the role of local governments in developing and implementing a comprehensive plan to guide and control future growth and development. Section 163.3177 6(c), FS, requires local governments to prepare a Solid Waste Element. Rule 9J-5.011, Florida Administrative Code (FAC), establishes the minimum criteria for preparing the Solid Waste Element.

Recent planning legislation has strengthened the legal status of local government comprehensive plans. The legislation also provides sanctions for communities that fail to adopt adequate comprehensive plans.

PURPOSE

The purpose of the Solid Waste Element is to provide standards to guide Hillsborough County in developing plans and policies in accordance with Chapter 9J-5, FAC, while demonstrating a commitment to eliminating identified and projected deficits in the solid waste management system. The Solid Waste Element addresses activities, and provides direction and assistance to the efforts of the private sector in meeting the solid waste needs of all residents of Hillsborough County.

The Solid Waste Element focuses on the existing systems and facilities and projected system needs based on population growth in unincorporated Hillsborough County. This is accomplished in this Element through an inventory of existing data, analysis of that data, identification of present and potential problems and their solutions, and projection of future solid waste disposal needs for specific planning periods.

ORGANIZATION

The Solid Waste Element consists of five parts: (1) Existing Inventory and Analysis; (2) Future Needs and Alternatives; (3) Goals, Objectives and Policies; (4) Plan Implementation and Monitoring; and (5) Consistency with State and Regional Plans. Summaries of methodologies employed and the public involvement process carried out in connection with preparation of the Solid Waste Element are included in the Appendices. For clarification of any unfamiliar terms used in this Element, a list of definitions is included.

II. INVENTORY AND ANALYSIS

The purpose of the Inventory and Analysis section is to discuss the existing County solid waste management system. The existing solid waste system is discussed in this Chapter for the purpose of setting the groundwork which leads into the goals, objectives and policies of this Element.

HILLSBOROUGH COUNTY SOLID WASTE MANAGEMENT SYSTEM OVERVIEW

All residences are charged for residential collection services on their property tax statements. Under Chapter 13 of the County Code of Ordinances and Laws (the County Code), the County's Department of Solid Waste is responsible for overseeing the collection and disposal of all solid waste generated within unincorporated Hillsborough County. Pursuant to a Special Act by the Florida Legislature, Chapter 83-415, Law of Florida (The Hillsborough County Resource Recovery Act of 1983), areas of unincorporated Hillsborough County annexed by the Cities of Plant City, Tampa, and Temple Terrace after June 1983 remain within the solid waste service area of the County.

Hillsborough County owns and/or operates several major solid waste facilities for the collection, recycling, and disposal of solid waste. The cornerstone of the County's Solid Waste System is the 1,200 ton per day Hillsborough County Resource Recovery Facility, operated under a 20 year operations and management contract with Ogden Martin Systems of Hillsborough, Inc. (OMSH) initiated in 1987. The County is currently in the design and permitting stage to increase the Facility's capacity from 1,200 tons per day to 1,800 tons per day, with a projected completion in 2009. The capacity expansion will also increase electrical production from 29 MW to 45 MW.

In addition, the County franchises for private residential and commercial solid waste collection within its Service areas. Homeowners in the County's Service areas are required by ordinance to pay annual disposal and collection service charges as part of their property tax statement. These charges entitles them to dispose of limited household waste and bulk items without an additional charge at County solid waste facilities if proper receipt is presented; and collection services consisting of two garbage, one recyclable and one yard waste collection per week.

LOCATION OF SOLID WASTE FACILITIES

There are several major solid waste facilities within Hillsborough County for the collection, recycling and disposal of solid waste. In addition to transporting and disposing of solid waste from residential and commercial customers, the Solid

Waste Management Department is also responsible under the County Code for franchising private solid waste collection services within the County.

Table 1 is a list of capital facilities owned by public entities in the County for the collection and disposal of solid waste. The Solid Waste Facilities Map in the Comprehensive Plan Map Series shows their locations in Hillsborough County. These facilities and equipment in the County's solid waste system will be described in more detail in the paragraphs to follow.

TABLE 1 HILLSBOROUGH COUNTY CAPITAL FACILITIES		
SITES	LOCATION	OWNER/OPERATOR
Hillsborough County/Resource Recovery Facility	350 Falkenburg Road	Hillsborough County/Covanta
South County Transfer Station	13000 US Hwy 41 South	Hillsborough County
Northwest County Transfer Station	8001 W. Linebaugh Ave.	Hillsborough County
Southeast County Landfill	15960 C.R. 672 in Picnic	Hillsborough County/ Waste Management Inc.
Falkenburg Yard Waste Facility	350 Falkenburg Road	Hillsborough County/ Consolidated Resource Recovery
South County Yard Waste Facility	13000 US Hwy 41 South	Hillsborough County/ Consolidated Resource Recovery
Northwest Yard Waste Facility	8001 W. Linebaugh Ave.	Hillsborough County/ Consolidated Resource Recovery
Alderman Ford Community Collection Center	CR 39 in Lithia	Hillsborough County
Hillsborough Heights Community Collection Center	CR 579 & I-4	Hillsborough County
Northwest Community Collection Center	8001 W. Linebaugh Ave.	Hillsborough County
South County Community Collection Center	13000 U.S Hwy 41 South	Hillsborough County
Wimauma Community Collection Center	West Lake Drive	Hillsborough County
Sheldon Road Household Chemical Collection Center	9805 Sheldon Road	Hillsborough County
East County Household Chemical Collection Center	CR 579 & I-4	Hillsborough County
South County Household Chemical Collection Center	13000 US Hwy 41 South	Hillsborough County
SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.		

OPERATIONAL RESPONSIBILITY FOR SOLID WASTE FACILITIES

The most prominent solid waste facility operated within the County's solid waste service area is the Hillsborough County Resource Recovery Facility, operated and

maintained under a 20-year contract to Hillsborough County by OMSH. This \$80,461,299 facility was dedicated on November 5, 1987, and is now in full commercial operation. This privately operated facility is open to receive waste six days a week. The County is currently in the design and permitting stage to increase the Facility's capacity from 1,200 tons per day to 1,800 tons per day, with a projected completion in 2009, with the Facility continuing to be operated by Covanta. The capacity expansion will also increase the electrical production from 29 to 45 Megawatt (MW).

The Hillsborough County Solid Waste Management System (HCSWMS) also includes two Class I sanitary landfills. The Southeast Landfill, permitted by the Florida Department of Environmental Protection (FDEP) as a Class I landfill, is owned by the County and operated by Waste Management, Inc., pursuant to a Life of Site contract. This landfill site currently has two permits; one that encompasses the existing 162 acre landfill footprint and another permit for the landfill capacity expansion area, which will eventually encompass 148 acres. The landfill site is the final depository for all ash residues, non-processables, and bypass wastes from the County's Solid Waste System. It also receives solid waste from the cities of Temple Terrace and Plant City, as well as solid waste, ash residues and bypass wastes from Tampa's Waste to Energy Facility. The landfill capacity expansion currently has two sections developed, providing 19 acres of additional capacity. The two next sections are in the County's 6 year Capital Improvement Program.

The County's Solid Waste System contains two transfer stations (Northwest and South) which are operated by the County's Solid Waste Management Department. These facilities receive residential and commercial waste six days a week. The County utilizes a fleet of 49 tractor vehicles and 43 trailers operated by 77 employees to transport processible solid waste to the County's Resource Recovery Facility and the Southeast County Landfill.

The Solid Waste Management Department also currently operates a system of five attended community disposal centers for receipt of large bulky items and bagged, boxed or bundled household waste. These facilities are for the sole use of those County residents paying the County's annual disposal service charge upon submitting proper identification to use these facilities. Commercial, industrial, and other non-residential wastes are not accepted at these facilities. The County operates three yard and wood waste processing facilities that receive yard and wood waste from commercial and residential generators and the franchise collectors.

The County has also established three permanent Household Chemical Collection facilities that receive household chemicals from residences. The facilities are each open one Saturday a month on a rotating basis.

DESCRIPTION OF COLLECTION SERVICES

Within the County's solid waste service area, solid waste is collected by private haulers operating under franchise agreements with the County. The Residential Franchise Collection Areas Map in the Comprehensive Plan Map Series (following page) shows the location of these residential franchise areas. The franchisees currently collect solid waste twice a week, recyclables once a week and yard waste once a week from approximately 225,000 single-family homes and condominium units.

Collection services are mandatory for residential properties, with the payment of collection services on the property tax bill. The collection services require the mandatory separation of yard waste from processible solid waste for residential and commercial customers.

RESIDENTIAL SOLID WASTE FRANCHISE COLLECTION AREAS

The three residential franchise collectors as part of their contract are also awarded an exclusive franchise to compete between the three franchise collectors for commercial customers throughout the County's service area.

The Cities of Temple Terrace, Plant City, and Tampa are responsible for collection of waste within their municipalities and designated service areas.

TABLE 2 RESIDENTIAL FRANCHISE COLLECTION AS OF OCTOBER 1, 1997

AREA 1:	WASTE MANAGEMENT
AREA 2:	REPUBLIC
AREA 3:	LIBERTY WASTE

SOURCE: Department of Solid Waste, January 2006.

OVERVIEW OF THE HILLSBOROUGH COUNTY RESOURCE RECOVERY FACILITY

This facility has been designed to receive and combust 1,200 tons of refuse generated by residential, commercial and industrial sources. Three separate combustion units are installed, each having a capacity of 400 tons per day. Provisions were made in the initial design to add a fourth combustion unit, thus increasing the Facility capacity to 1600 tons per day. The combustion units generate steam from the heat released from the burning of refuse, which is then converted by a 29 megawatt turbine generator to electrical power for sale to Tampa Electric Company. The capacity expansion will increase the electrical production to 45 MW. The Facility's design is based upon a mass burn technology and thus burns the refuse as it is delivered. The Facility utilizes the

Martin GMBH Stoker Gates featured in a total of 110 Martin Facilities in operation or under construction worldwide.

HISTORICAL SOLID WASTE GENERATION

The amount of solid waste generated within unincorporated Hillsborough County has remained steady over the past several years as indicated by the tonnage records listed in TABLE 3. Based on current population estimates, the average County resident generated about 5.69 pounds of solid waste per day in 2005.

YEAR	TONS PER YEAR	LBS PER PERSON
2000	673,684	5.34
2001	709,204	5.47
2002	757,125	5.68
2003	784,865	5.61
2004	839,217	5.88
2005	905,896	6.22

SOURCE: Hillsborough County Solid Waste Management Department, 2006
 Years 2004 and 2005 Impacted by Hurricane Debris

DESIGN CAPACITIES OF SOLID WASTE FACILITIES

Error! Reference source not found. Table 4 documents the design capacities of each major capital facility in the County's Solid Waste System. The paragraphs below discuss pertinent information regarding design capacity and impact of facility performance.

Resource Recovery Facility: The Hillsborough County Resource Recovery Facility has a design capacity of 1,200 tons of municipal solid waste per day using three 400 ton per day boiler lines. This design capacity is based on all units operating continuously 24 hours a day, seven days a week, with no downtime for normal plant system maintenance and unanticipated plant upsets.

Normally, achievement of 100 percent plant efficiency is impossible over an extended operating period due to the need for maintenance of such items as boiler and stoker equipment, the turbine generator, and electrical interconnection and air pollution control equipment. There are also times during the year when there are unanticipated malfunctions of plant equipment along individual boiler lines. Consequently, the actual available capacity of the waste-to-energy plant is somewhat less than the design capacity. Under the contract terms, OMSH has guaranteed that the Resource Recovery Facility will dispose of not less than 1,200 tons of solid waste during any day, 8,400 tons during the week, or 372,000 tons during any operating year. The annual contractual capacity roughly corresponds to an 85 percent plant availability.

In order to accommodate daily variations in the amounts of processible waste to the Facility, OMSH has agreed to accept daily deliveries of waste in amounts up to 25% of the weekly guarantee provided the weekly total is not exceeded.

Northwest Transfer Station: The County's Northwest Transfer Station is designed to receive and transfer a maximum of 1,200 tons of solid waste daily using an open top transfer system. It is currently receiving an average of 750 tons per day of solid waste with a peak of 1,200 tons per day. Waste delivered to the Station is transported to the County's Resource Recovery Facility. Scales are provided at the Station to weigh all incoming and outgoing vehicles. The County is currently in the design and permitting process of building a new transfer station at the Northwest County Facility with a design capacity of 1,200 tons per day with a peak of 2,500 tons per day, which will handle the solid waste transfer needs of the northwest area of the County through 2025.

South County Transfer Station: The County's South County Transfer Station has been in operation since November 1978. This station is designed to receive a maximum of 500 tons per day using a compactor system. The Station is currently receiving an average of 350 tons per day. Waste delivered to this Station is transported to the County's Resource Recovery Facility. Scales are provided at the Station to weigh all incoming and outgoing vehicles. The County is currently in the design and permitting process of building a new transfer station at the South County Facility with a design capacity of 750 tons per day with a peak of 1,500 tons per day, which will handle the solid waste transfer needs of the southern area of the County through 2025.

Southeast Landfill: The 175 acre permitted portion of this 2000 acre site has been designed and constructed to incorporate features consistent with the latest landfill regulations. The landfill includes a base clay liner ranging in thickness from four to twenty feet with a synthetic sidewall liner, a leachate collection system plus all required surface water drainage control structures. Nine groundwater monitoring wells and eight surface water monitoring well locations have been established at the site to allow surface and groundwater quality to be continuously monitored.

The County has proceeded with the design and construction of a new Class I Landfill with a total design area of 148 acres. 19 acres have already been permitted and constructed.

Falkenburg Yard and Wood Waste Processing Facility: The County's 16 acre yard and wood waste processing facility has been in operation since January 2, 1992. The facility is operated by the County's private contractor, Consolidated Resource Recovery, Inc. The facility produces fuel, mulch and soil amendment materials through a windrowing process from the yard and wood waste voluntarily delivered to the site and from the franchised collector. The facility

shares an access road and scales with the County's Waste to Energy Facility. The facility is capable of handling in excess of 100,000 tons a year and is registered as a Yard Waste Processing Facility through the FDEP.

Northwest Yard Waste Processing Facility: The County's 10 acre yard and wood waste processing facility has been in service since November 1997. The facility is operated by the County's private contractor, Consolidated Resource Recovery, Inc. The facility produces fuel, mulch and soil amendment materials through a windrowing process from the yard and wood waste voluntarily delivered to the site and from the franchised collector. The facility shares an access road and scales with the County's Northwest County Facility. The facility is capable of handling in excess of 100,000 tons a year and is registered as a Yard Waste Processing Facility through the FDEP.

South County Yard Waste Processing Facility: The County's 10 acre yard and wood waste processing facility has been in service since May 1998. The facility is operated by the County's private contractor, Consolidated Resource Recovery, Inc. The facility produces fuel, mulch and soil amendment materials through a windrowing process from the yard and wood waste voluntarily delivered to the site and from the franchised collector. The facility shares an access road and scales with the County's South County Facility. The facility is capable of handling in excess of 100,000 tons a year and is registered as a Yard Waste Processing Facility through the FDEP.

All these facilities are operated by Consolidated Resource Recovery, Inc. under a seven (7) year contract with one three extension.

Community Disposal Centers: The County currently operates five Community Disposal Centers that are available to residents who show receipt of paying the County's annual disposal service charge. The Centers, which have attendants, are designed to receive a range in tons per day due to a variety of size and number of roll-off containers at each site.

Household Chemical Collection Centers: The County operates three permanent Household Chemical Collection Centers, one located in the southern part of the County in Apollo Beach and one in the northwest part of the County on Sheldon Road just south of Linebaugh Avenue, and one in the northeastern part of the County on CR 579. The facilities accept household chemicals from residences, and each are open one Saturday a month on a rotating basis.

TABLE 4 DESIGN CAPACITIES AND SERVICE LEVELS HILLSBOROUGH COUNTY SOLID WASTE FACILITIES – TONS PER DAY		
FACILITY	DESIGN CAPACITY	SERVICE LEVEL

		Average	Peak
Hillsborough County	1,200	1,100	1,800
Resource Recovery Facility			
South County Transfer Station	400	200	500
Northwest County Transfer Station	750	700	1200
Southeast County Landfill	50-75 Year Life	750	1600
Falkenburg Yard Waste Facility	250	200	500
South County Yard Waste Facility	250	200	500
Northwest Yard Waste Facility	250	100	150
Alderman Ford Community Collection Center	20	11	25
Hillsborough Heights Community Collection Center	60	30	50
Northwest Community Collection Center	200	65	120
South County Community Collection Center	50	16	30
Wimauma Community Collection Center	50	3	5
Sheldon Road Household Chemical Collection Center	750 Customers per Event	370	500
East County Household Chemical Collection Center	750 Customers per Event	125	200
South County Household Chemical Collection Center	750 Customers per Event	175	250

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

HAZARDOUS WASTE

Hazardous waste is generated within Hillsborough County through many different sources. Some manufacturers create large quantities of hazardous waste; these businesses are very carefully monitored by the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) to ensure their waste is properly handled and disposed. Many other businesses that are vital to our everyday lives also create small amounts of hazardous waste. These businesses include dry cleaners, photo labs, automobile service stations and body shops, hospitals, clinics, funeral homes, dental offices and many other businesses. Their compliance with hazardous waste regulations is monitored by the FDEP and the Environmental Protection Commission (EPC), and all matters relating to biomedical waste are monitored by Health and Rehabilitative Services (HRS) and FDEP.

Residents also generate hazardous waste in the form of leftover paints and related products, pesticides and herbicides, and cleaning solvents. These wastes are exempt from the Resource Conservation and Recovery Act (RCRA) requirements and may be disposed of in a Class I landfill. The State of Florida, as reported by the FDEP, generates approximately 120,000 tons of household hazardous waste annually.

Currently there are several businesses located in the State of Florida which have demonstrated financial responsibility to FDEP to transport, process, and coordinate with an out-of-state treatment, storage, and disposal facility (TSDF) for the treatment and disposal of hazardous waste. Federal and state regulations require large quantity generators (LQGs - generators of greater than 1000 kilograms of hazardous waste per month) and small quantity generators (SQGs - generators of between 100 and 1000 kilograms of hazardous waste per month) to process their waste in accordance with the RCRA's cradle-to-grave concept. At this time, Universal Waste and Transit is a FDEP permitted TSDF presently operating in Hillsborough County.

"To meet the need for managing small quantities of hazardous waste, and encourage proper hazardous waste disposal, the 1988 Florida legislature established a grant program to construct safe, secure local or regional hazardous waste collection centers, and initiate the operation of the centers for the collection and removal of hazardous waste. The hazardous waste stream that is targeted by this legislation is household hazardous waste and exempt small quantity generators waste." (Section 403.7265 Florida Statutes). Hillsborough County received the State's grant monies and has sited two household chemical collection facilities in the County, that are open one weekend a month on a rotating basis.

The Hillsborough County Solid Waste Management Department (HCSWMD) has updated the department's special waste program to provide a level of quality assurance to meet mandated State and Federal requirements. The Federal requirements are those associated with Sub-Title "D" of RCRA which provide for aggressive screening of the waste stream to eliminate or reduce the introduction of hazardous waste at the landfill, resource recovery facility, and transfer stations. The HCSWD has established an intensive education program to comply with CFR 25, 1910, as it pertains to mandatory employer training requirements for those employees who could potentially come in contact with hazardous wastes or materials at their job sites.

III. FUTURE NEEDS AND ALTERNATIVES

The projected future needs are discussed in this section for the purpose of setting the groundwork leading to the Goals, Objectives and Policies of this Element. Projection of future needs was done using professionally accepted planning methods that are discussed in this section.

PROJECTION OF FUTURE NEEDS

Population and Tonnage Projections

The most widely accepted method of estimating current and projected solid waste quantities is to establish per capita waste generation factors. Projection of future solid waste quantities are then based on these per capita waste generation factors in conjunction with population, and other significant growth indicators.

The assumptions and data sources used for the projections of the Hillsborough County Solid Waste Management System are as follows:

HILLSBOROUGH COUNTY SYSTEM HISTORICAL AND PROJECTED TONNAGES POPULATION ESTIMATES AND PROJECTIONS

ASSUMPTIONS AND DATA SOURCES:

- 1) Hillsborough County System consists of Unincorporated Hillsborough County, Temple Terrace, North Tampa Annexation Area, with small portions of City of Tampa's and Plant City's waste stream.
- 2) Population figures are from the Planning Commission's August 2004 Population and Housing Estimates by Jurisdiction and Census Tract
- 3) Hillsborough County's and the City of Tampa's Waste to Energy Facilities were retrofitted in 2000 and 2001 respectively.
- 4) Hillsborough County's system includes increased recycling and yard waste separation.
- 5) The County's Waste to Energy Facility capacity is projected to be 370,000 in 2005, through the expansion of the facility in 2009 to 555,000 tons per year and beyond.
- 6) City of Tampa and Hillsborough County's Ash will continue to go to the Landfill.
- 7) Processable waste unable to be processed at the County's Waste to Energy Facility will be disposed of at the County's Southeast County Facility.
- 8) Per Capita Generation Rate for Hillsborough County's Unincorporated Service Area will be 5.69 pounds per person a day, an average of 2002-2005.
- 9) Temple Terrace tonnage projections for 2005-2006 as provided by Temple Terrace, 2007-2025 projections continued at 2006 levels.
- 10) Tonnage information from 1989-1997 from DSW SWIMS, 1994-2005 on fiscal year basis.
- 11) Plant City is currently taking the majority of their waste outside of the County. This is projected to continue.
- 12) Projected tonnages for Unincorporated Hillsborough County are divided into the respective waste categories by the same average percentage for 2002-2005.
- 13) Majority of Processable Diversions goes to the Southeast County Landfill.

Tables 5 through 10 provide the historical and projected tonnages and the components of solid waste received into the Hillsborough County Solid Waste Management System from each jurisdiction and the County total.

TABLE 5 TEMPLE TERRACE HISTORICAL AND PROJECTED TONNAGES					
	Processable	Non-Processable	Tires	Yard Waste	Total Tons
1989	10,604	1,172	0	0	11,776
1990	11,186	1,001	0	0	12,187
1991	10,909	347	0	0	11,256
1992	9,114	7	1	0	9,122
1993	9,407	17	3	0	9,427
1994	9,772	63	4	0	9,839
1995	11,227	99	3	0	11,329
1996	11,647	23	3	0	11,673
1997	12,301	3	5	0	12,308
1998	13,390	29	9	1,573	15,001
1999	12,896	3	7	1,599	14,505
2000	13,162	0	4	1,529	14,695
2001	14,405	0	8	1,248	15,661
2002	14,731	0	5	1,425	16,161
2003	15,407	0	5	1,495	16,907
2004	16,208	0	8	1,463	17,679
2005	16,759	0	6	1,031	17,796
2006	17,094	0	7	1,500	18,601
2007	17,436	0	7	1,500	18,943
2008	17,785	0	7	1,600	19,392
2009	18,140	0	7	1,600	19,747
2010	18,503	0	7	1,600	20,110
2011	18,873	0	7	1,600	20,480
2012	19,251	0	7	1,600	20,858
2013	19,636	0	7	1,700	21,343
2014	20,029	0	7	1,700	21,736
2015	20,429	0	7	1,700	22,136
2016	20,838	0	7	1,700	22,545
2017	21,254	0	7	1,700	22,961
2018	21,680	0	7	1,800	23,487
2019	22,113	0	7	1,800	23,920
2020	22,555	0	7	1,800	24,362
2021	23,007	0	7	1,800	24,814
2022	23,467	0	7	1,800	25,274
2023	23,936	0	7	1,900	25,843
2024	24,415	0	7	1,900	26,322
2025	24,903	0	7	1,900	26,810

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

TABLE 6 CITY OF TAMPA HISTORICAL AND PROJECTED TONNAGES

	Processable	Non-Processable	Ash	Tires	Yard Waste	Total Tons
	653	50,493	82,708	0	0	133,854
1989	19,940	24,303	82,904	0	0	127,147
1990	4,637	18,628	82,512	0	0	105,777
1991	3,782	8,341	83,918	13	13	96,067
1992	2,006	10,273	83,900	1,177	473	97,829
1993	0	11,158	86,713	866	13	98,750
1994	0	11,144	96,050	985	0	108,179
1995	24	10,488	94,427	948	0	105,887
1996	0	12,109	94,844	1,208	0	108,161
1997	0	19,573	97,487	655	0	117,715
1998	42,076	15,622	88,575	566	0	146,839
1999	164,016	603	52,269	673	0	217,561
2000	145,164	3,199	60,059	115	2,538	211,075
2001	7,364	20,213	93,609	0	14,819	136,005
2002	6,014	22,672	93,640	0	16,607	138,933
2003	24,399	11,823	90,859	0	17,587	144,668
2004	22,638	17,982	91,710	0	17,053	149,383
2005	20,000	20,000	95,000	0	18,000	153,000
2006	20,000	20,000	95,000	0	18,000	153,000
2007	20,000	20,000	95,000	0	18,000	153,000
2008	20,000	20,000	95,000	0	18,000	153,000
2009	20,000	20,000	95,000	0	20,000	155,000
2010	25,000	20,000	95,000	0	20,000	160,000
2011	25,000	20,000	95,000	0	20,000	160,000
2012	25,000	20,000	95,000	0	20,000	160,000
2013	25,000	20,000	95,000	0	20,000	160,000
2014	25,000	20,000	95,000	0	22,000	162,000
2015	30,000	20,000	95,000	0	22,000	167,000
2016	30,000	20,000	95,000	0	22,000	167,000
2017	30,000	20,000	95,000	0	22,000	167,000
2018	30,000	20,000	95,000	0	22,000	167,000
2019	30,000	20,000	95,000	0	22,000	167,000
2020	40,000	20,000	95,000	0	22,000	177,000
2021	40,000	20,000	95,000	0	22,000	177,000
2022	40,000	20,000	95,000	0	22,000	177,000
2023	40,000	20,000	95,000	0	22,000	177,000
2024	40,000	20,000	95,000	0	22,000	177,000
2025						

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

TABLE 7 PLANT CITY HISTORICAL AND PROEJCTED TONNAGES

	Processabl e	Non- Processable	Tires	Yard Waste	Total Tons
1989	21,687	3,306	0	0	24,993
1990	20,284	2,866	0	0	23,150
1991	15,226	1,517	0	0	16,743
1992	11,416	183	409	0	12,008
1993	530	16	597	0	1,143
1994	6	0	531	0	537
1995	0	0	556	0	556
1996	0	0	324	0	324
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	0	0	0	0	0
2000	0	0	0	0	0
2001	0	0	0	0	0
2002	0	0	0	0	0
2003	0	0	0	0	0
2004	0	0	0	0	0
2005	82	0	62	0	144
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

TABLE 8 UNICORPORATED HILLSBOROUGHCOUNTY ESTIMATED AND PROJECTED POPULATION – HISTORICAL AND PROJECTED TONNAGES RESIDENTIAL WASTE STREAM

Population	Tons	Processable	Non-	Yard	Tires	Recycling	Total
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	Projected						Processable	Waste
1989							508,947	534,556
1990	519,348	522,199	197,115			12,258	0	4,426
1991	525,035	495,837	196,023	13,044	0	0	13,323	222,390
1992	531,748	504,035	195,971	8,033	5,258	516	21,257	231,035
1993	540,576	513,410	203,742	9,796	9,650	545	20,660	244,393
1994	558,558	528,833	210,920	11,188	9,573	545	20,500	252,726
1995	576,541	547,616	222,554	11,976	10,705	571	23,497	269,303
1996	594,523	567,633	231,381	13,357	12,615	595	19,716	277,664
1997	612,506	599,046	240,179	15,551	14,055	612	19,743	290,140
1998	630,488	647,225	197,996	10,609	40,179	370	33,798	282,952
1999	648,471	675,546	202,668	12,206	57,667	446	34,182	307,169
2000	666,453	673,684	214,114	14,134	62,768	443	34,931	326,390
2001	691,575	709,204	223,349	16,195	71,104	498	33,779	344,925
2002	710,414	757,125	241,409	18,841	73,930	604	35,446	370,230
2003	729,253	784,865	260,035	22,021	80,456	503	31,076	394,091
2004	766,930	839,217	284,537	22,490	89,977	516	31,250	428,770
2005	782,557	905,896	290,007	33,867	113,042	556	30,241	467,713
2006	798,185	851,853	278,842	24,944	92,033	568	33,442	429,829
2007	813,812	868,531	284,302	25,432	93,835	579	34,096	438,244
2008	829,439	885,209	289,761	25,920	95,637	590	34,751	446,660
2009	845,066	901,887	295,220	26,409	97,439	601	35,406	455,075
2010	860,694	918,565	300,680	26,897	99,241	613	36,061	463,491
2011	876,321	935,243	306,139	27,385	101,043	624	36,715	471,906
2012	891,948	951,921	311,598	27,874	102,844	635	37,370	480,321
2013	907,575	968,600	317,058	28,362	104,646	646	38,025	488,737
2014	923,203	985,278	322,517	28,850	106,448	657	38,680	497,152
2015	938,830	1,001,956	327,976	29,339	108,250	668	39,334	505,568
2016	954,642	1,018,831	333,500	29,833	110,073	679	39,997	514,083
2017	970,454	1,035,706	339,024	30,327	111,896	691	40,659	522,597
2018	986,266	1,052,581	344,548	30,821	113,720	702	41,322	531,112
2019	1,002,078	1,069,456	350,072	31,315	115,543	713	41,984	539,627
2020	1,017,890	1,086,331	355,596	31,809	117,366	724	42,647	548,142
2021	1,033,702	1,103,207	361,119	32,304	119,189	736	43,309	556,657
2022	1,049,514	1,120,082	366,643	32,798	121,012	747	43,972	565,172
2023	1,065,326	1,136,957	372,167	33,292	122,835	758	44,634	573,687
2024	1,081,138	1,153,832	377,691	33,786	124,659	769	45,297	582,202
2025	1,096,950	1,170,707	383,215	34,280	126,482	781	45,959	590,717

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

	Processable	Non-Processable	Yard Waste	Tires	Total
1989	215,910	117,944	0	0	333,854
1990	214,635	93,765	0	0	308,400
1991	219,825	53,622	0	0	273,447

1992	233,505	36,040	2,437	1,019	273,001
1993	233,226	31,340	2,961	1,490	269,017
1994	239,928	31,480	2,914	1,785	276,107
1995	234,635	39,607	2,811	1,260	278,313
1996	241,003	45,671	2,367	928	289,969
1997	251,506	53,476	2,898	1,026	308,906
1998	276,436	73,114	9,868	4,855	364,273
1999	287,201	59,350	16,495	5,331	368,377
2000	288,451	28,942	24,250	5,651	347,294
2001	298,064	26,666	32,697	6,852	364,279
2002	316,980	23,021	40,009	6,885	386,895
2003	308,583	25,017	50,610	6,564	390,774
2004	316,993	23,885	62,590	6,978	410,447
2005	319,723	28,425	81,678	8,357	438,183
2006	328,494	26,007	60,071	7,453	422,024
2007	334,925	26,516	61,247	7,599	430,287
2008	341,357	27,025	62,423	7,745	438,550
2009	347,788	27,534	63,599	7,891	446,812
2010	354,220	28,043	64,775	8,037	455,075
2011	360,651	28,553	65,951	8,183	463,337
2012	367,083	29,062	67,127	8,329	471,600
2013	373,514	29,571	68,303	8,475	479,863
2014	379,945	30,080	69,479	8,621	488,125
2015	386,377	30,589	70,655	8,766	496,388
2016	392,884	31,105	71,845	8,914	504,748
2017	399,392	31,620	73,035	9,062	513,109
2018	405,899	32,135	74,225	9,209	521,469
2019	412,407	32,650	75,415	9,357	529,829
2020	418,914	33,165	76,605	9,505	538,189
2021	425,422	33,680	77,795	9,652	546,550
2022	431,929	34,196	78,985	9,800	554,910
2023	438,436	34,711	80,175	9,948	563,270
2024	444,944	35,226	81,365	10,095	571,631
2025	451,451	35,741	82,555	10,243	579,991

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

	Processabl e	Non- Processabl e	Yard Waste	Tires	Recycling	Total	Ash
1989	404,855	129,701	0	0	0	534,556	99,702
1990	411,750	106,023	0	0	4,426	522,199	98,485
1991	415,848	66,666	0	0	13,323	495,837	93,623
1992	429,476	44,073	7,695	1,535	21,257	504,036	103,389
1993	436,968	41,136	12,611	2,035	20,660	513,410	99,708

1994	450,848	42,668	12,487	2,330	20,500	528,833	100,172
1995	457,189	51,583	13,516	1,831	23,497	547,616	100,488
1996	472,384	59,028	14,982	1,523	19,716	567,633	100,318
1997	491,685	69,027	16,953	1,638	19,743	599,046	95,452
1998	474,432	83,723	50,047	5,225	33,798	647,225	91,073
1999	489,869	71,556	74,162	5,777	34,182	675,546	87,755
2000	502,565	43,076	87,018	6,094	34,931	673,684	93,245
2001	521,413	42,861	103,801	7,350	33,779	709,204	91,393
2002	558,389	41,862	113,939	7,489	35,446	757,125	90,763
2003	568,618	47,038	131,066	7,067	31,076	784,865	88,668
2004	601,530	46,375	152,567	7,494	31,250	839,217	88,500
2005	609,730	62,292	194,720	8,913	30,241	905,896	91,481
2006	607,336	50,950	152,104	8,021	33,442	851,853	92,500
2007	619,227	51,948	155,082	8,178	34,096	868,531	92,500
2008	631,118	52,945	158,060	8,335	34,751	885,209	92,500
2009	643,009	53,943	161,038	8,492	35,406	901,887	135,000
2010	654,899	54,940	164,016	8,649	36,061	918,565	135,000
2011	666,790	55,938	166,994	8,806	36,715	935,243	135,000
2012	678,681	56,935	169,972	8,963	37,370	951,921	135,000
2013	690,572	57,933	172,950	9,120	38,025	968,600	135,000
2014	702,462	58,931	175,928	9,278	38,680	985,278	135,000
2015	714,353	59,928	178,905	9,435	39,334	1,001,956	135,000
2016	726,384	60,937	181,919	9,593	39,997	1,018,831	135,000
2017	738,416	61,947	184,932	9,752	40,659	1,035,706	135,000
2018	750,447	62,956	187,945	9,911	41,322	1,052,581	135,000
2019	762,478	63,965	190,958	10,070	41,984	1,069,456	135,000
2020	774,510	64,975	193,971	10,229	42,647	1,086,331	135,000
2021	786,541	65,984	196,984	10,388	43,309	1,103,207	135,000
2022	798,572	66,993	199,998	10,547	43,972	1,120,082	135,000
2023	810,604	68,003	203,011	10,706	44,634	1,136,957	135,000
2024	822,635	69,012	206,024	10,865	45,297	1,153,832	135,000
2025	834,666	70,021	209,037	11,024	45,959	1,170,707	135,000

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

	Processable	Non-Processable	Yard Waste	Tires	Recycling	Ash	Total
1989	437,799	184,672	0	0	0	182,410	705,179
1990	463,160	134,193	0	0	4,426	181,389	684,683
1991	446,620	87,158	0	0	13,323	176,135	629,613
1992	453,788	52,604	7,708	1,958	21,257	187,307	621,233
1993	448,911	51,442	13,084	3,812	20,660	183,608	621,809
1994	460,626	53,889	12,500	3,731	20,500	186,885	637,959

1995	468,416	62,826	13,516	3,375	23,497	196,538	667,680
1996	484,055	69,539	14,982	2,798	19,716	194,745	685,517
1997	503,986	81,139	16,953	2,851	19,743	190,296	719,515
1998	487,822	103,325	51,620	5,889	33,798	188,560	779,941
1999	544,841	87,181	75,761	6,350	34,182	176,330	836,890
2000	679,743	43,679	88,547	6,771	34,931	145,514	905,940
2001	680,982	46,060	107,587	7,473	33,779	151,452	935,940
2002	580,484	62,075	130,183	7,494	35,446	184,372	909,291
2003	590,039	69,710	149,168	7,072	31,076	182,308	940,705
2004	642,137	58,198	171,617	7,502	31,250	179,359	1,001,564
2005	649,209	80,274	212,804	8,981	30,241	183,191	1,073,219
2006	644,431	70,950	171,604	8,028	33,442	187,500	1,023,454
2007	656,663	71,948	174,582	8,185	34,096	187,500	1,040,474
2008	668,903	72,945	177,660	8,342	34,751	187,500	1,057,601
2009	681,149	73,943	180,638	8,499	35,406	230,000	1,074,635
2010	693,403	74,940	185,616	8,656	36,061	230,000	1,093,676
2011	710,664	75,938	188,594	8,813	36,715	230,000	1,115,724
2012	722,932	76,935	191,572	8,970	37,370	230,000	1,132,779
2013	735,208	77,933	194,650	9,127	38,025	230,000	1,149,942
2014	747,491	78,931	197,628	9,285	38,680	230,000	1,167,013
2015	759,782	79,928	202,605	9,442	39,334	230,000	1,186,092
2016	777,222	80,937	205,619	9,600	39,997	230,000	1,208,375
2017	789,670	81,947	208,632	9,759	40,659	230,000	1,225,667
2018	802,127	82,956	211,745	9,918	41,322	230,000	1,243,068
2019	814,592	83,965	214,758	10,077	41,984	230,000	1,260,376
2020	827,065	84,975	217,771	10,236	42,647	230,000	1,277,694
2021	849,548	85,984	220,784	10,395	43,309	230,000	1,305,020
2022	862,039	86,993	223,798	10,554	43,972	230,000	1,322,355
2023	874,540	88,003	226,911	10,713	44,634	230,000	1,339,800
2024	887,050	89,012	229,924	10,872	45,297	230,000	1,357,154
2025	899,569	90,021	232,937	11,031	45,959	230,000	1,374,517

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

Table 11 shows the summary tonnage of the Hillsborough County Solid Waste System (HCSWMS) by type of waste. The system solid waste stream is projected to rise with the population growth of the unincorporated area of the County and Temple Terrace. The Tampa and Plant City contributions are expected to remain constant. The HCSWMS's total tonnage, with the continuation of the current disposition system is projected to rise from its current level of 621,809 tons in 1993 to 884,692 tons in 2015, a 42 percent increase.

	Processabl e	H.C. WTE Capacity	Processabl e Diversions	Processabl e Diver. - Other	Processabl e Diver. - SELF	Non- Processabl e	Total Ash	Total Landfill
1989	437,799	422,069	15,730		16,233	184,672	182,410	383,315

1990	463,160	426,135	37,025		36,918	134,193	181,389	352,500
1991	446,620	410,374	36,246	31,482	4,764	87,158	176,135	268,057
1992	453,788	429,458	24,330	23,416	914	52,604	187,307	240,825
1993	448,911	421,225	27,686	19,668	8,018	51,442	183,608	243,068
1994	460,626	417,097	43,529	15,871	26,518	53,889	186,885	267,292
1995	468,416	422,005	46,411	16,622	29,154	62,826	196,538	288,518
1996	484,055	423,159	60,896	17,681	41,018	69,539	194,745	305,302
1997	503,986	401,476	102,510	18,901	83,609	81,139	190,296	355,044
1998	487,822	389,043	98,779	11,519	87,260	103,325	188,560	379,145
1999	544,841	368,665	176,176	1,303	174,873	87,181	176,330	438,384
2000	679,743	367,514	312,229	0	312,229	43,679	145,514	501,422
2001	680,982	345,147	335,835	0	335,835	46,060	151,452	533,347
2002	580,484	359,001	221,483	8,469	213,014	62,075	184,372	459,461
2003	590,039	370,000	220,039	1,453	218,586	69,710	182,308	470,604
2004	642,137	362,891	279,246	715	278,531	58,198	179,359	516,088
2005	649,209	350,407	298,802	0	298,802	80,274	183,191	562,267
2006	644,431	370,000	274,431	0	274,431	70,950	187,500	532,881
2007	656,663	370,000	286,663	0	286,663	71,948	187,500	546,111
2008	668,903	370,000	298,903	0	298,903	72,945	187,500	559,348
2009	681,149	555,000	126,149	0	126,149	73,943	230,000	430,092
2010	693,403	555,000	138,403	0	138,403	74,940	230,000	443,343
2011	710,664	555,000	155,664	0	155,664	75,938	230,000	461,601
2012	722,932	555,000	167,932	0	167,932	76,935	230,000	474,867
2013	735,208	555,000	180,208	0	180,208	77,933	230,000	488,141
2014	747,491	555,000	192,491	0	192,491	78,931	230,000	501,422
2015	759,782	555,000	204,782	0	204,782	79,928	230,000	514,710
2016	777,222	555,000	222,222	0	222,222	80,937	230,000	533,160
2017	789,670	555,000	234,670	0	234,670	81,947	230,000	546,617
2018	802,127	555,000	247,127	0	247,127	82,956	230,000	560,083
2019	814,592	555,000	259,592	0	259,592	83,965	230,000	573,557
2020	827,065	555,000	272,065	0	272,065	84,975	230,000	587,040
2021	849,548	555,000	294,548	0	294,548	85,984	230,000	610,532
2022	862,039	555,000	307,039	0	307,039	86,993	230,000	624,032
2023	874,540	555,000	319,540	0	319,540	88,003	230,000	637,542
2024	887,050	555,000	332,050	0	332,050	89,012	230,000	651,062
2025	899,569	555,000	344,569	0	344,569	90,021	230,000	664,591

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

YEAR	PROJECTED WASTE TONNAGE TO LANDFILL	LANDFILL AVAILABLE TONNAGE
1989	383,315	12,319,540
1990	352,500	11,967,040
1991	268,057	11,698,983
1992	240,825	11,458,158

1993	243,068	11,215,090
1994	267,292	10,947,798
1995	288,518	10,659,280
1996	305,302	10,353,978
1997	355,044	9,998,934
1998	379,145	9,619,789
1999	438,384	9,181,405
2000	501,422	8,679,983
2001	533,347	8,146,636
2002	459,461	7,687,175
2003	470,604	7,216,571
2004	516,088	25,180,483
2005	562,267	24,618,216
2006	532,503	24,085,713
2007	545,726	23,539,987
2008	558,956	22,981,032
2009	429,692	22,551,339
2010	442,936	22,108,404
2011	461,187	21,647,217
2012	474,445	21,172,771
2013	487,711	20,685,060
2014	500,985	20,184,076
2015	514,266	19,669,810
2016	532,708	19,137,102
2017	546,158	18,590,944
2018	559,616	18,031,328
2019	573,083	17,458,245
2020	586,558	16,871,687
2021	610,042	16,261,644
2022	623,536	15,638,109
2023	637,038	15,001,071
2024	650,550	14,350,520
2025	664,072	13,686,449

Note: Obtained permit for landfill expansion in 2004.

SOURCE: SOLID WASTE MANAGEMENT DEPARTMENT 2006.

County's Ability to Meet Level of Service Requirements

The County's Southeast County Landfill as shown in Table 13 **Error! Reference source not found.**, is projected to be able to maintain the County's Level of Service Standard through the year 2025 and beyond. This projection is a worst case scenario that assumes that no additional composting or recycling capacity is added and that no additional waste to energy capacity is built or contracted for through the facilities located within the region beyond what is described above. All processible waste above the projected capacity of the County's Waste to Energy Facility is diverted to the Landfill along with the projected Non-processible Waste and Incinerator Ash.

Solid Waste Management Techniques

Hillsborough County will continue to evaluate its system and the disposition alternatives of waste reduction, recycling, composting, waste to energy and landfilling. Hillsborough County is committed to continuing to dispose of its solid waste in an environmentally sensitive and cost efficient manner; that meets the ever-changing regulations and requirements of the State of Florida and the federal government.

IV. GOALS, OBJECTIVES AND POLICIES

GOAL 1: Hillsborough County shall provide for an environmentally sound and efficient solid waste management system.

ISSUES: The impact of commercial, industrial and residential growth in Hillsborough County is readily apparent. As growth continues, responsibilities for collections, handling and disposal of the growing volumes of solid waste must be undertaken by the County for its residents. The County government must plan and operate its solid waste management system in an efficient and environmentally sensitive manner.

OBJECTIVE 1.1: The County shall maintain level of service capacity at all facilities consistent with that identified in the Capital Improvements Element.

Policy 1.1.1:

The County shall conduct an annual review of existing facility capacities to identify facility capacity deficiencies for County disposal facilities.

Policy 1.1.2:

Disposal facility deficiencies will be corrected prior to funding any solid waste program enhancements.

OBJECTIVE 1.2: The County shall provide for increases in disposal capacity of solid waste facilities to meet future needs.

Policy 1.2.1:

The County shall conduct an annual review of future facility needs and budget for those needs within the Capital Improvements Element.

OBJECTIVE 1.3: The County shall continue to operate solid waste facilities in compliance with minimum air, groundwater and surface water pollution standards established by federal, state and local laws, regulations and guidelines.

Policy 1.3.1:

The County shall conduct an annual review of facility operations and operating practices to evaluate compliance with federal and state requirements.

Policy 1.3.2:

The County shall conduct an annual review of technology and innovations available in solid waste management to exceed federal and state requirements.

Policy 1.3.3:

Based on annual reviews, county staff shall provide recommendations of measures to correct or enhance the existing solid waste management system.

Policy 1.3.4:

The level of service to be maintained by all facilities shall be as stated in the Capital Improvements Element.

OBJECTIVE 1.4: The County shall minimize the environmental damage attributable to the solid waste stream.

Policy 1.4.1:

The County shall continue to review and evaluate existing solid waste disposal practices to ensure compliance with minimum regulatory standards of the Florida Department of Environmental Protection, the Environmental Protection Commission of Hillsborough County and the U.S. Environmental Protection Agency.

Policy 1.4.2:

No new solid waste or hazardous waste management sites shall be approved for location in the Coastal High Hazard Area. No new public landfill sites shall be located in the Coastal Planning Area.

Policy 1.4.3:

The County shall on an annual basis provide recommendations for a program and implementation strategy to further environmental protection from solid waste within the County.

OBJECTIVE 1.5: The County's solid waste management system shall take all practical measures to minimize the volume of the solid waste stream.

Policy 1.5.1:

The County shall continue recycling programs to separate the majority of newspaper, glass, plastic bottles, steel cans and aluminum cans reaching County disposal facilities.

Policy 1.5.2:

The County shall continue to review and implement recycling and waste reduction programs designed to reduce the per capita solid waste stream reaching County disposal facilities in compliance with state legislative guidelines.

Policy 1.5.3:

The County shall continue its voluntary recycling public awareness program through increased education and the promotion of waste reduction in an

effort to maintain the state recycling goal for newspapers, aluminum, glass and plastic containers.

Policy 1.5.4:

The Solid Waste Management Department will continue to promote and enhance the public information and educational programs concerning waste reduction, proper yard waste management techniques, composting and recycling.

GOAL 2: Hazardous waste will be handled in a manner which minimizes risk to the citizens and the environment.

ISSUES: Numerous large and small quantity generators of hazardous materials and wastes, including both commercial and industrial facilities, are located within Hillsborough County. While many of these facilities are registered and regulated under federal and state programs, large cumulative quantities of hazardous materials are improperly handled, treated and disposed of by small businesses, as well as the general public, often because they are unfamiliar with the complex and rapidly changing regulations. An inadequate number and distribution of facilities for the storage, treatment and especially transfer of hazardous materials/wastes continues to be a problem. Improved public education and stricter enforcement of existing regulations are needed.

The Environmental Protection Commission of Hillsborough County is the local environmental regulatory agency charged with controlling water pollution throughout Hillsborough County by interlocal agreement with the Florida Department of Environmental Protection.

The Environmental Protection Commission is responsible for keeping an inventory of small quantity hazardous waste generators in Hillsborough County. Local Fire Departments are also active in hazardous materials emergency programs.

OBJECTIVE 2.1: The County shall continue to develop and maintain its existing comprehensive hazardous waste management and emergency response programs which facilitate source reduction as well as the proper transfer, storage, disposal and recycling of hazardous materials and hazardous wastes.

Policy 2.1.1:

The Fire Department shall continue to assist the Environmental Protection Commission with its responsibility to promote public education on the types of hazardous materials and hazardous wastes as well as their proper use, storage and disposal.

Policy 2.1.2:

The County shall continue to promote the recycling and proper disposal of household hazardous waste by maintaining the County's existing household hazardous waste collection center system.

Policy 2.1.3:

The County shall maintain a comprehensive chemical emergency preparedness program, including the continued operation of a hazardous materials response team. The County shall identify legal mechanisms to obtain payment for cleanup from the responsible parties.

Policy 2.1.4:

By 2008, the County shall request the Metropolitan Planning Organization to prepare a hazardous materials and waste transport plan to reduce environmental and public health risks.

Policy 2.1.5:

The County and the Environmental Protection Commission shall ensure that existing hazardous waste generators, as well as hazardous waste transporters and treatment/storage/disposal facilities, are identified and regulated.

Policy 2.1.6:

The Environmental Protection Commission shall continue to regulate and revise, where necessary, all Class I and Class III landfill operating plans to ensure that adequate safeguards exist to prevent the disposal of hazardous wastes.

Policy 2.1.7:

The County shall, upon request of other local governments, the Tampa Bay Regional Planning Council or the state, provide technical assistance in the planning and location of a hazardous waste treatment/storage/disposal facility to minimize the potential for adverse environmental impacts and to protect public health and safety.

Policy 2.1.8:

The County initiated an interlocal agreement with the Environmental Protection Commission (EPC) that ensures that 20 percent annual verification inspections of small quantity hazardous waste generators within the County are performed, and that EPC will ensure corrective actions for Small Quantity Generators (SQGs) where necessary.

OBJECTIVE 2.2: The County shall further federal and state regulatory agencies objectives relating to the enforcement of hazardous waste laws and regulations.

Policy 2.2.1:

The County shall request a comprehensive study of hazardous waste sites from the Environmental Protection Agency, the Environmental Protection Commission (EPC) of Hillsborough County, and the Florida Department of Environmental Protection in the inventory of hazardous waste contamination sites within County boundaries.

Policy 2.2.2:

The County shall continue to assist the EPC, in providing technical assistance to the Environmental Protection Agency and the Florida Department of Environmental Protection to rank clean-up priorities. The County shall continue to assist said agencies in their efforts to direct federal and state funds to the implementation of investigations, and clean-up actions for currently identified potential chemical contamination sites.

Policy 2.2.3:

The County shall continue to assist the EPC, to direct federal and state funds to the implementation of cleanup actions for all currently identified Superfund sites within County boundaries.

OBJECTIVE 2.3: The County shall further federal and state regulatory agencies management objectives relating to hazardous waste and hazardous materials laws and regulations.

Policy 2.3.1:

The County shall continue, through its Hazardous Materials Response Team, to provide emergency response to hazardous waste incidence thus reducing the potential risk to its citizens.

Policy 2.3.2:

The County, in cooperation with EPC, shall continue to provide the information needed by hazardous waste generators to comply with federal and state regulations.

Policy 2.3.3:

The County shall designate an agency and provide necessary funding in order to continue to provide its employees a safe working environment through mandatory training for those employees who could potentially come in contact with hazardous wastes or materials at their job sites.

V. PLAN IMPLEMENTATION AND MONITORING

Implementing a plan means to carry the plan to action. Implementation occurs when the programs and activities stated in the goals, objective and policies are established and carried out. The goals, objectives and policies in the Solid Waste Element suggest a number of programs, and activities to be developed for the purpose of addressing the solid waste problems and needs for the residents of unincorporated Hillsborough County.

A monitoring and evaluation process has been developed by The Planning Commission. This will provide a consistent process for all Elements of the Comprehensive Plan in the preparation of the required five-year evaluation and appraisal report. The monitoring and evaluation procedures will address:

- a. Citizens' participation in the process;
- b. Updating appropriate baseline data and measurable objectives to be accomplished in the first five-year period of the plan, and for the long-term period;
- c. Accomplishments in the first five-year period, describing the degree to which the goals, objectives and policies have been successfully reached;
- d. Obstacles or problems which resulted in under achievement of goals, objectives or policies;
- e. New or modified goals, objectives or policies needed to correct discovered problems; and
- f. A means of ensuring continuous monitoring and evaluation of the plan during the five-year period.

The monitoring and evaluation process will serve as a reporting mechanism to keep The Planning Commission apprised on a regular basis as to how the plan is being implemented and updated.

VI. DEFINITIONS

For the purposes of this element of the comprehensive plan update, the following definitions apply:

Class I Landfill - a landfill which receives more than 20 tons (or 50 cubic yards) of solid waste per day. Initial cover is required at the end of each working day.

Class III Landfill - a landfill which receives only construction debris, trash or yard waste. Initial cover is required once every week unless the site is operated as a composting facility.

Hazardous Material - a substance or material in a quantity or form that may pose an unreasonable risk to health and safety, or property when stored, transported, or used in commerce.

Hazardous Waste - as defined in 40 CFR 261.3. A waste, or a combination of wastes which because of its quantity, concentration, physical, chemical, or infectious characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed, stored, treated, or otherwise managed.

Recycling - any process by which materials which would otherwise become solid waste are collected, separated, processed, and sold for reuse or reused.

Solid Waste - garbage, refuse, and other discarded solid materials, including solid materials resulting from industrial, commercial, or agricultural operations, governmental operations, and from community activities, but does not include solids or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluent, dissolved materials in irrigation return flows, other common water pollutants or special wastes, or any by-products, the sale or reuse of which is intended by the person from whose process they resulted.

Solid Waste Disposal Facility - any solid waste management facility which is the final resting place for solid waste, including landfills and incineration facilities that produce ash from the process of incinerating municipal solid waste.

Transfer Station - a facility where solid waste is placed before being transferred to a solid waste processing or disposal facility.

