

The Solid Waste Authority
of Palm Beach County

Integrated Solid Waste
Management Plan



August 2006

Preface to the 2006 Plan

This document represents a substantial departure in format and organization from the earlier versions of the Solid Waste Authority Plan. These changes begin with the title. This document was previously titled Comprehensive Solid Waste Management Plan, Resource Recovery and Recycling Program. The title has been shortened to Integrated Solid Waste Management Plan. This change appropriately reflects the Authority's fundamental strategy for solid waste management which is discussed in further detail in the Introduction.

The changes in this plan also reflect the modifications that have occurred in the solid waste system in the intervening years. Earlier versions of this plan reflected a solid waste system that was being developed, with new facilities under construction or being planned, and new programs being developed and implemented to comply with environmental laws and regulations. At the same time, many of these laws and regulations were themselves undergoing substantial revisions and modifications. This 2006 revised plan reflects a system whose major capital components are now in place, which now has programs functioning to address the major legislative and regulatory initiatives of the late 1980's and early 1990's, and is intended to have the flexibility to accommodate additional changes in law if they occur.

The Solid Waste Authority plan was developed to comply with the planning and resource recovery elements of Chapter 403 Florida Statutes and Chapter 17-7 (now 62-701) Florida Administrative Code. As such, this plan is not directly comparable with the format and structural requirements for local government comprehensive planning as identified in Chapter 9J-5 Florida Administrative Code. However, this plan can serve as the basis for a solid waste sub-element of a local government plan. The Solid Waste Sub-Element of the Palm Beach County Comprehensive Plan was developed based on the Solid Waste Authority Plan, and is attached as an appendix to serve as a model for incorporating the elements of the Integrated Solid Waste Management Plan in the local government comprehensive planning process for other units of government within Palm Beach County.

Although this Plan differs in many ways from previous versions, it is nevertheless based on the information developed in those earlier editions. In particular, the sections providing background on the Authority are primarily revisions and extensions of those same sections of the earlier versions of the Plan. The authors of those prior versions merit acknowledgment for the original development of this information.

While all plans are intended to be living and dynamic documents, it is hoped that the plan itself will not require substantive amendment on a regular basis to keep pace with the implementation of various system elements. As one goal of Integrated Solid Waste Management is flexibility, so this plan is intended to address alternatives without requiring extensive modifications.

Table of Contents

	Page
Introduction	1
The Solid Waste Authority	8
Policies and Goals.....	14
Existing Conditions.....	31
Level of Service	38
Future Conditions	41
Appendix A - Solid Waste Authority Special Act	
Appendix B - Solid Waste Authority Rule I	
Appendix C - Solid Waste Authority Rule II	
Appendix D - Solid Waste Authority Rule III	
Appendix E – Solid Waste Authority Rule IV	
Appendix F - Landfill Depletion Model	

List of Tables

Table	Title	Page
1	Solid Waste System Transfer Stations.....	34
2	Solid Waste Authority Waste and..... Recovered Materials Processing Facilities	34
3	Solid Waste System Disposal Facilities	35
4	Recycling Activity in Palm Beach County	36
	1989 through 1995	
5	Closed Disposal Facilities Managed by the	37
	Solid Waste Authority	
6	Residential and Commercial Waste Generation Rates	39
7	2005 Per Capita Waste Generation Rates	42
8	Historical Per Capita Waste Generation Rates	43

List of Figures

Figure	Title	Page
1	Schematic Diagram of a Typical Double Lined Landfill Design	7
2	Location of Solid Waste Authority Facilities	32
3	Map of NCRRF Site Showing Facility Locations	33

INTRODUCTION

Integrated Solid Waste Management

The methods, technologies and policies for the management of Municipal Solid Waste (MSW) underwent a period of intensive evaluation and review from the mid 1960's to the mid 1980's. Federal, State and Local governments, along with private sector service providers and the environmental activist community all participated in these efforts to resolve the interrelated issues of dwindling landfill capacity and the environmental consequences of solid waste disposal. The result of that evaluation is the management philosophy commonly identified as Integrated Solid Waste Management (ISWM).

Perhaps the most fundamental goal of ISWM is to reduce the amount of waste that must ultimately be placed in landfills for disposal. Conservation of landfill space results from effective ISWM operations.

ISWM is, at its most basic level, a system to manage solid waste through a combination of techniques and programs. ISWM presents no single solution; it is based on the premise that multiple solutions are needed to address the various elements of waste management and the waste stream. ISWM systems are designed to address the fact that the municipal solid waste stream is made up of distinct components that can be managed separately.

Another fundamental component of ISWM systems is that they are based on local conditions and circumstances. There is no standard set of technologies or programs for an ISWM system. The nature of the local area, its population, the nature of its waste stream, and the local resources, economics and environment are the keys to designing an ISWM system to address local needs.

ISWM systems rely on the concept of strategic planning. This means that waste management policies must be established for the long term, and that the planning process should also involve anticipating changes that are likely to occur in the future. The elements of the ISWM system, their capacity, and the composition of the waste stream itself need to be regularly assessed as a part of the planning process. The entire strategic planning process of ISWM needs to be an ongoing effort to assure the success of the system.

Flexibility needs to be built into all the elements of an ISWM system. This means flexibility in the basic elements of the ISWM plan, and also in the design of the components of the system, to enable them to accommodate change. This flexibility allows an ISWM system to respond to changes in regulatory programs, local needs and changes in the solid waste stream, and also enables policy makers to evaluate new management alternatives, as they become available.

The Waste Management Hierarchy

ISWM is based on using the various options available for different segments of the waste streams in a hierarchy of waste management alternatives. The hierarchy of management options should be used to evaluate the system components against community needs. Each of the elements in the hierarchy is interrelated with the others. An essential component of ISWM system planning is assuring that the waste management options chosen complement each other.

The hierarchy of ISWM as defined in this plan is Source Reduction, Recycling, Composting, Combustion and Landfill. The hierarchy can be visualized as a pyramid, with Source Reduction at the top, and Landfill as the base.

Source Reduction

Source Reduction as an element of ISWM, represents an activity which actually precedes waste management, at the point of waste generation, by examining how products are manufactured, purchased and used. Because it takes place prior to waste generation, it represents the system component which has the least amount of direct control by the ISWM system operators.

Source Reduction addresses product manufacture, purchasing habits and product use. Options available in implementing source reduction efforts include product reuse, increasing the recycled content of products or packaging, reduction in material volume of either product or packaging, increasing the usable life of a product, and decreasing the total quantity or toxicity of products used. Source reduction begins in the design, manufacture and packaging of products by business and industry, and continues through selective buying and reuse of products by individuals or businesses.

Source reduction efforts all take place prior to disposal. They represent a break from the traditional management strategies for managing wastes for disposal. As such they represent a challenge for ISWM systems in that they are not technologies, per se, and therefore are not amenable to traditional methods for implementation and determining performance for a program. The benefits of source reduction are conceptually clear, but implementing and quantifying source reduction activities for large scale ISWM systems is still in its infancy. Public information and education programs are key components for successful source reductions efforts.

Recycling

Recycling has always been an option in waste management systems, but was not commonly implemented on a large scale as a waste management tool from the 1950's to the 1980's. Recycling consists of separating materials from the waste stream, either at the source, or by recovering materials from mixed waste prior to disposal, turning those

materials into commodities, often through some form of processing or re-packaging, and returning those materials to the stream of commerce as a feedstock for new products or processes.

Recycling programs typically consist of educational elements to encourage participation (in voluntary programs), compliance and enforcement mechanisms (in mandatory programs), collection programs for source separated materials, processing facilities for source separated materials and recovery of materials from unsegregated wastes, and marketing programs to deliver the recovered commodities to the stream of commerce. Although individual programs may differ, most address the recycling of a set of basic materials such as containers made of aluminum, glass, ferrous metal and plastic, and paper products such as corrugated cardboard and newspaper.

Participation by waste generators in collection programs plays a significant role in recycling programs, by assuring a steady stream of materials for the market. This means that educational and informational efforts have to be an ongoing component of recycling programs.

Two factors typically exert the most influence in determining which materials will be addressed in recycling programs. The first is legislative mandates. Many state legislatures have identified a list of materials that are to be included in local recycling programs, as well as a target percentage for the recovery and recycling of those materials. The other principal factor is the market demand for the recovered materials. If a stable market for recovered materials is available, preferably at the local or regional level, they can be considered as potential candidates for recycling. Without a stable and reliable market for recovered materials, recycling programs may accumulate quantities of material which may eventually have to be disposed of rather than recycled.

Composting

Composting is a sub-area of recycling that addresses the organic portion of the solid waste stream. At its most basic level, composting uses the action of microorganisms to process waste materials and produce a product that can be used as a soil amendment. Some industries and segments of the agricultural community have long been using composting as a means to reduce their waste generation and enhance the productivity of their farmland. While some communities have also had long standing composting programs, particularly for yard wastes and leaves, as part of their waste management systems, the impetus for wider application of this waste management tool arose in the late 1980's in response to legislative mandates for recycling and waste reduction.

The most common material handled in composting programs is yard waste and leaves. These materials can be composted in "backyard" systems by individual property owners. They can also be collected and processed in centralized programs, alone or in combination with other wastes.

Waste water treatment sludge is the material which is most frequently combined with yard waste in centralized composting programs. This combination can be very effective, as it can produce a quality, marketable product, and resolve two waste management issues. While waste water treatment sludge, meeting the appropriate standards, can be directly applied to some agricultural lands, the long term reliability of land application as a disposal method, combined with limitations of land application on a day-to-day basis due to weather, make composting of waste water sludge an attractive alternative for sludge management.

Some efforts have been made to compost municipal solid waste, but this technology is still developing. Substantial amounts of pre-processing are necessary to separate the compostable fraction from the rest of the waste stream. The quality of the product is very dependent on the quality of this initial separation. Until these technologies have matured, municipal solid waste composting will not be available as a viable waste management tool for large scale integrated systems.

Composting, like recycling, is very dependent on the availability of markets for its products to assure program success. The marketability of compost products is itself dependent upon the quality of the compost. Both regulations and market demand determine how a given compost product may be used.

Combustion

The combustion of municipal solid waste in a modern waste to energy facility serves two functions: a reduction in the volume of solid waste subject to final disposal in a landfill, and the recovery of energy. Modern waste to energy facilities, particularly those constructed since the early 1980's, are more similar to today's power plants than they are to older solid waste incinerators. But because they are one of the highest cost components in ISWM systems, in terms of capital expenditures for construction, and because of concerns about the environmental impacts of air emissions and ash management, waste combustion facilities are the most controversial component of ISWM systems.

Local governments evaluating waste combustion face several basic choices and options. The first pertains to facility ownership and operation. Typically some communities have chosen to own their facilities, and contract the operation to a private concern, while others choose not to own or operate the facilities, but enter into contracts with private owner-operators for the delivery of waste.

A second choice is combustion technology. Mass burn units combust waste without any preprocessing at the facility other than to remove items too large to be fed into the combustion unit. Refuse Derived Fuel (RDF) facilities preprocess the waste, usually removing metals, non-combustibles and reducing the size of the burnable fraction.

Air pollution control technologies present another set of options. Acid gas control can be achieved through wet or dry scrubbers, or dry sorbent injectors. Particulate control can be achieved through fabric filter baghouses or electrostatic precipitators. Other control technologies for control of NO_x (Nitrogen Oxides), Mercury and organics such as dioxin are available and will probably become regulatory requirements in the near future.

The ultimate choice to be faced is whether to utilize combustion as component of the ISWM system. The size of the community to be served, its rate of growth, the overall economic conditions, and community priorities and social factors all play a role in this decision.

Landfill

Landfills are the single most widely used waste management method in the United States. Landfill disposal capacity is a necessary component of any ISWM system. This is the case because even though source reduction and recycling, including composting can divert significant quantities of solid waste, not all materials are recyclable. Even though combustion can significantly reduce the volume of waste destined for disposal, some ash residue and non-processible materials will remain.

Landfills represent the base of the hierarchy, and the one depletable resource of the ISWM system. Once waste is placed in a landfill for disposal, that capacity is irrevocably lost, and must eventually be replaced. In addition to losing this capacity, the ISWM system must close, care for and continue to monitor landfills that have reached their capacity. These are the reasons landfill capacity conservation is one of the fundamental objectives of ISWM systems.

The design of landfills, and the technology used in constructing landfills has undergone dramatic changes in the last ten to fifteen years. These changes have been driven by changes in regulations and by the decisions by landfill operators to provide extra levels of protection to the environment. The two most significant design and construction changes involve the liners which are constructed to intercept leachate (water which percolates through waste in the landfill) and the management of landfill gas which is generated within the landfill as waste decomposes.

Landfill liners today incorporate low permeability clays, existing on site or brought to the facility, and one or more geo-composite or synthetic liners, with intervening layers of soil, piping and geotextile materials to enhance the drainage of any leachate collected. Figure 1 is a cross-section of the liner system used by the Authority for its Class I landfill, which accepts ash and residue from the Waste to Energy plant, and unprocessed garbage. The liners are integrated with systems to collect and treat the leachate collected, then safely dispose of it.

Landfill gas management systems collect the gas, which is predominantly methane, carbon dioxide and water vapor, to prevent it from seeping from the landfill into the

environment. This gas can be burned in a flare to safely dispose of it, or it can be utilized as a fuel when economic conditions are favorable. Landfill gas can be combusted in several types of generating units to produce electricity.

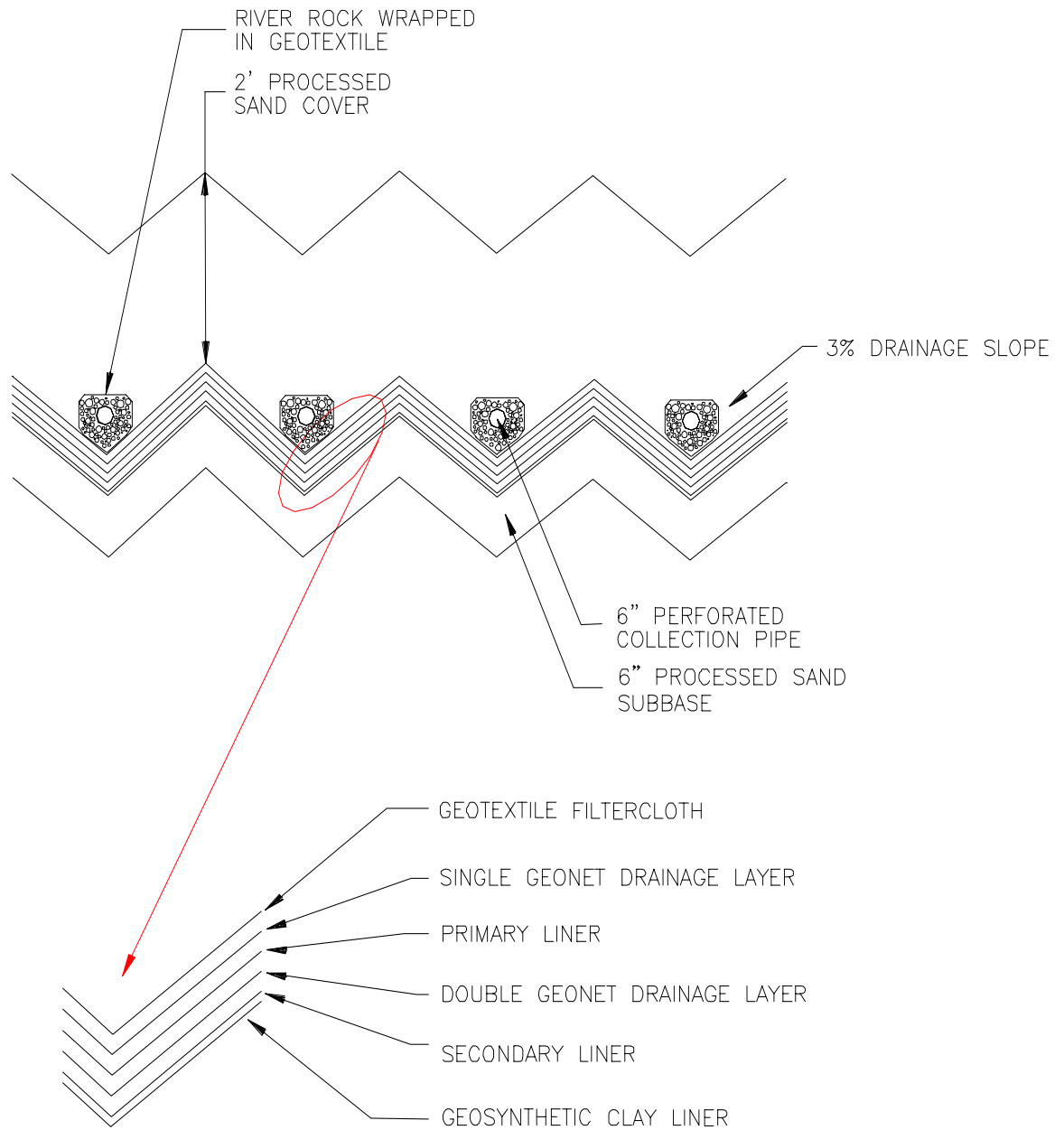


Figure 1. Schematic Diagram of a Typical Double Lined Landfill Design.

THE SOLID WASTE AUTHORITY

Legislative Background

Palm Beach County has established a mechanism for dealing with the solid waste problem on a county-wide basis, and developing an effective, long-term solution. The County's far-sighted approach was the outcome of the combined and cooperative efforts of a number of concerned citizens, state and local agency officials and legislators. The culmination of these efforts were contained in legislation which created the Solid Waste Authority to coordinate the management of solid waste throughout the County in order to meet local governments expanding requirements for safe and sanitary processing and disposal of solid waste.

The Solid Waste Authority of Palm Beach County was established as an independent special taxing district created by the Florida Legislature under the Palm Beach County Solid Waste Act, Chapter 75-473, Laws of Florida, Special Acts of 1975, as amended and supplemented (the "Act"). The Act was amended in 1991, converting the Authority to a dependent special taxing district, with the County Commissioners of Palm Beach County serving as the Board of the Solid Waste Authority.

Under the Act, the Solid Waste Authority of Palm Beach County was established for the purpose of developing and implementing plans for an integrated County-wide solid waste management system comprised of recycling, resource recovery, transfer station and landfill facilities to serve the future needs of the county at reasonable cost. There have been various amendments to the original enabling legislation since 1975. Appendix A is a copy of the Act and an historical summary of the various amendments to the enabling legislation since 1975.

Among other specific purposes and powers, the Act gives the Authority the power to construct and operate solid waste disposal facilities including resource recovery facilities. It authorizes the Authority to issue revenue bonds to fund all or part of the acquisition and construction costs for solid waste management facilities. The Authority is empowered to charge reasonable rates and fees to cover the costs developing and operating the solid waste system. In addition, the Act specifies that no person shall operate, maintain, construct, expand, or modify any waste management facility without first having received a valid operating permit from the Authority.

On May 10, 1978 the Solid Waste Authority was designated by then Governor Askew as the lead implementation planning agency responsible for solid waste management and resource recovery in Palm Beach County; pursuant to Section 4006 of Public Law 94-580, RCRA and Chapter 403.706 of the State of Florida RRMA.

In 1986 and 1988, the Act was amended to transfer the responsibility for collection of solid waste and billing for solid waste collection fees in the unincorporated areas of the county from the Board of County Commissioners to the Solid Waste Authority. In addition the 1986 amendments authorized the Authority to levy a county wide, non ad

valorem annual disposal special assessment as a means to finance the construction and operation of the solid waste system.

The Authority completed "The Comprehensive Solid Waste Management and Resource Recovery Plan" in 1979, as required by state statute, addressing the problems associated with solid waste management on a county-wide basis. The plan was again amended in 1988, to address new legislative mandates in the Florida Solid Waste Management Act of 1988. This document constitutes the third amendment to the plan, now called "The Integrated Solid Waste Management Plan". Unlike the previous two versions, there is no statutory requirement for the development and adoption of the current plan.

Agency Organization

The Authority is governed by a seven member policy making board. The Board consists of the seven members of the Board of County Commissioners of Palm Beach County.

The Executive Director of the Authority is appointed by and directly accountable to the Board. All other employees of the Authority are appointed and removed by the Executive Director. The employee organizational chart for the Authority is included in the annual budget document.

The Authority board appoints members to its Citizen's Advisory Committee (CAC). The CAC serves as a formal mechanism to secure public input into the activities of the Authority, and advise the Board on matters of policy. The CAC consists of eleven members, representing the seven County Commission Districts plus four members appointed at large.

History of Operations and System Development

During the initial years of its existence, the Authority's activities were focused on planning functions and analysis of waste management alternatives, which culminated in the completion of the 1979 Comprehensive Plan.

This Comprehensive Plan called for a system of solid waste management facilities, including six transfer stations, two regional processing and disposal facilities, and ancillary facilities. The six transfer stations were planned to be located such that substantially all of the solid waste collected in the urbanized coastal portion of the County will be within 10 to 12 miles of a transfer station or one of the regional facilities. This plan served as the basis for the Authority securing Bond financing to acquire and develop the system.

In 1978, the Authority entered into an agreement with the City of Delray Beach to operate a solid waste transfer station and to provide \$525,000 in capital improvements. In 1980, the Authority entered into agreements with the cities of Belle Glade and South

Bay and with the Board of County Commissioners to assume responsibility for receiving solid waste collected in the Glades region of the County and for transporting this solid waste to the Pahokee Landfill. In 1981, the Authority also assumed responsibility for operating the County's Pahokee Landfill.

In April 1983, the Authority and the County entered into an agreement in which all of the County's landfill facilities were transferred to the Authority effective October 1, 1983. These landfill facilities consisted of the Cross State landfill (which had ceased operations in 1976), the Pahokee landfill (closed in 1984), the Lantana landfill (closed in 1987) and the Dyer Boulevard landfill (closed in 1990). At the time of their transfer to the Authority, these landfills accounted for the disposal of an estimated 88% of the total volume of solid waste collected throughout the County.

Once the Authority assumed ownership and operational responsibility for the County facilities, further steps in implementing the Comprehensive plan were directly related to the securing of Bond financing for system development. In 1983, the Authority took its first major step in implementing the Comprehensive Plan when it completed the initial system financing with the sale of \$43,500,000 of Revenue Bonds. The purpose of the 1983 Bonds was to provide the funds needed to pay the cost of (1) closing out the Pahokee landfill, the Lantana landfill and a portion of the Dyer Boulevard landfill; (2) the acquisition of approximately 1,300 acres of land adjacent to the Dyer Boulevard landfill to serve as the site for the North County Regional Resource Recovery and Solid Waste Disposal Facility and to provide additional landfill capacity to meet the County's estimated long-term landfill needs; (3) the construction or reconstruction of three transfer stations in South County (Delray Beach), South Central County (Lantana) and the Glades Region (Belle Glade); and (4) the initial planning for the Northern Resource Recovery Facility.

In 1984, the Solid Waste Authority of Palm Beach County issued \$320,000,000 of Revenue Bonds. The bonds were issued (1) to finance a series of projects for the North County Regional Resource Recovery and Solid Waste Disposal Facility and related facilities (2) to pay capitalized interest on the bonds, (3) to make a deposit in the Debt Service Reserve Account, and (4) to pay expenses relative to the issuance of the Bonds.

The proceeds of the 1984 Bonds were to provide funds for the following projects: (1) the Northern Resource Recovery Facility which can process in excess of 2,000 tons per day of garbage and trash generated in the County into salable electricity and recover certain materials, including ferrous metals and aluminum cans; and (2) site work, utilities, including water and waste water facilities, with a deep-well injection system for effluent disposal, a fire protection system, scale houses, an administration building, a maintenance building for Authority vehicles and equipment and other ancillary facilities including off-site traffic and aesthetic improvements.

In 1985, the Authority sold an additional \$100,000,000 of Bonds. The purpose of the 1985 Bonds was to provide the funds needed to pay the cost of (1) refunding the 1983 Bonds; (2) acquiring approximately 1,650 acres of land in the southern portion of the

County to serve as a Class III (trash) landfill and the site for a second resource recovery facility to be developed by the Authority known as the Southern Resource Recovery Facility (SRRF); (3) the initial development of the South County Class III (trash) landfill and the final phases of development of the Dyer Boulevard landfill; and (4) the construction of three additional transfer stations in North County (Jupiter), West Central County (Royal Palm Beach) and Southwest County.

On September 20, 1988, the Board of County Commissioners entered into an interlocal agreement with the Solid Waste Authority for the purpose of transferring programs relating to solid waste management. Some of the programs and responsibilities of the Solid Waste Authority include:

1. The powers and duties to establish a mandatory collection system for solid waste and to impose reasonable rates, fees and charges to all users of said system;
2. The powers and duties to grant franchises, contracts, issue permits or otherwise provide for the collection of solid waste in Palm Beach County and establish reasonable rates, fees and charges;
3. The powers and duties to carry out the responsibilities and programs for the determination of the full costs of solid waste management and solid waste management fees, and to coordinate the same with municipalities in Palm Beach County as more specifically set out in Section 403.7049, FS, (1988);
4. To cooperate, coordinate and communicate on behalf of Palm Beach County with the Florida Department of Environmental Protection and other applicable departments in the development and/or implementation of the state solid waste management program as more specifically set out in Section 403.705, FS, (1988);
5. To carry out the local government solid waste responsibilities on behalf of Palm Beach County regarding disposal facilities and recycling programs as more specifically set out in Section 403.706, FS, (1988);
6. To apply for and receive solid waste management grants from the State of Florida to assist in the development and operation of recycling programs and education programs to carry out the requirements of recycling as appropriate to take advantage of and fulfill the provisions of Sections 403.709 and 403.7095, FS, (1988);
7. To seek and obtain financing, if necessary, regarding solid waste management facilities as more specifically set out in Section 403.712, FS, (1988);
8. To avail itself of the provisions of Section 403.713, FS, regarding the collection, separation, transportation and/or disposal of solid waste within Palm Beach County;

9. To develop programs and apply for and receive grants from the State of Florida on behalf of Palm Beach County to encourage the collection, re-use and proper disposal of used oil as such grants are provided for in Section 403.763, FS, (1988);
10. To develop programs and apply for and receive grants on behalf of Palm Beach County for the collection, processing and disposal of waste tires as such grants are provided for in Section 403.719, FS (1988).

In 1989 the Authority issued \$83,045,000 of Refunding Revenue Bonds, Series 1989 to refund a portion of the 1985 Bonds.

In 1991 the Authority issued \$10,000,000 of Revenue Bond Anticipation Notes to fund the acquisition of additional property for the South County facility. Also in 1991, the Authority renegotiated the franchise contracts assumed pursuant to the 1988 interlocal agreement for an additional two year period.

In 1992 the Authority sold \$58,510,000 of Refunding and Improvement Bonds. The 1992 Bonds refunded earlier issues, satisfied the 1991 Bond Anticipation Notes, and funded projects to replace the Glades Transfer Station, expand the footprint and capacity of the North County landfill, and expand the capacity of the North County Materials Recovery Facility (MRF) located at the North County site. Also in 1992, as part of the program which included expansion of the North County site, the Board of the Authority directed staff to pursue alternatives that would eliminate the need to utilize the South County site for landfill disposal.

In 1993 the Authority competitively bid the collection franchises for solid waste and recycling collection in the unincorporated area. The franchises cover both residential and commercial waste and recycling collection. Ten franchise districts were bid, and five year exclusive contracts were awarded. In addition, non-exclusive collection contracts for construction and demolition debris were awarded to 21 haulers for the unincorporated area of the county. These contracts were subsequently bid in 1998 and 2003, and are scheduled to be bid again in 2008.

In 1994 the Authority secured approval from the Florida Department of Environmental Protection (FDEP) to expand the capacity of the landfill at the North County site. This change included expanding the landfill footprint, increasing the permitted height, and allowing steeper slopes on the sides of the landfill. Also in 1994, the Authority completed the development and implementation of the Landfill depletion model as the means to evaluate the disposal capacity of the solid waste system.

In 1996 the Authority entered into a transaction to exchange property for the South County Site for another parcel of land of equal size in the Everglades Agricultural Area (EAA). In this three party transaction, the South County site was acquired by the South Florida Water Management District (SFWMD) for use as a water management area, and

the Authority utilized the proceeds from that sale to acquire the Western Site in the EAA from a farming concern.

In 1997 the Authority issued \$266,590,000 in Refunding Revenue Bonds, Series 1997A to refund the 1984 Bonds and issued \$33,885,000 in Fixed Rate Improvement Revenue Bonds (Series 1997 B) to fund the following improvements: expansion of the Residential Materials Recycling Facility to 600 tons per day, acquisition and construction of the new Central County Transfer Station, and improvements to the Resource Recovery Facility, the Compost Facility, the Yard Waste Processing Facility, and the South County Transfer Station.

In 1998 the Authority issued \$36,405,432 Refunding Revenue Bonds, Series 1998A and \$19,170,000 Refunding Revenue Bonds, Taxable Series 1998B, to refund certain of the Authority's outstanding Series 1989, Series 1992, and Series 1997A bonds.

In 2002 the Authority issued \$30,560,000 Refunding Revenue Bonds, Series 2002A to refund portions of the Series 1992 Bonds and issued \$39,869,386.20 in Fixed Rate Improvement Revenue Bonds (Series 2002 B) to fund the acquisition and construction of the following: acquisition and development of the Southwest County Transfer Station, modification and expansion of the West Central Transfer Station and the North County Transfer Station, and other projects.

In 2004 the Authority issued \$34,385,000 in Refunding Revenue Bonds to refund the outstanding Series 1997B Bonds.

POLICIES AND GOALS

Introduction

The Policies and Goals of the Solid Waste Authority establish the foundation on which the ISWM Plan is to be implemented. The intent of this section is to identify, for each major element of the Authority's operations and responsibilities, the underlying basis for actions taken by the Authority to develop and implement the ISWM system.

The Authority has developed Policy Statements and Goals in the following areas:

- Integrated Solid Waste Management
- Source Reduction
- Recycling
- Organic Reclamation
- Combustion
- Collection Services
- Transfer Stations
- Special Wastes
- Hazardous Waste Management
- Solid Waste System Operations
- Environmental Management
- Public Participation
- Intergovernmental Coordination
- Administration and Management
- Emergency Management

The policy statements are summaries of the intent of the Authority, establishing the direction to be pursued in each of the areas addressed. The goals which accompany each policy statement identify the activities to be undertaken, or the end points to be achieved to fulfill the policies. While the goals are listed in order, this does not constitute a priority ranking.

Integrated Solid Waste Management

Policy Statement

It shall be the Policy of the Solid Waste Authority of Palm Beach County to utilize the principles of Integrated Solid Waste Management to conserve landfill capacity, while recovering energy and material resources from the solid waste stream through a well planned and operated system using source reduction, recycling, composting, combustion and landfill.

It shall be the Policy of the Solid Waste Authority to develop an Integrated Solid Waste Management System to provide flexible, dependable and cost effective programs for managing the solid waste generated in Palm Beach County. In this regard, it is the intent of the Solid Waste Authority to provide for periodic review and revision of the Integrated Solid Waste Management Plan.

Goal A:

Develop a system of programs and facilities for effectively and economically managing solid waste, using source reduction, recycling, composting, combustion and landfill.

Goal B:

Utilize the elements of source reduction, recycling and composting to reduce the amount of waste delivered for combustion or landfill.

Goal C:

Provide for a coordinated County-wide system to assure the realization of Federal, State, regional and local government goals for solid waste management.

Goal D:

Provide a plan and schedule for the construction of the necessary solid waste management facilities for Palm Beach County.

Goal E:

Develop Emergency Management Plans to assure that Authority facilities are properly prepared to respond to localized or countywide disasters.

Source Reduction

Policy Statement

It shall be the policy of the Solid Waste Authority of Palm Beach County to develop and manage a countywide source reduction program. This will be a comprehensive program to address all areas of source reduction including decreased consumption, reduced material volume, reduced toxicity or products and/or operating procedures, and reuse. The program is intended to make waste prevention a priority for Palm Beach County.

Goal A:

Develop programs to encourage residents to consider opportunities such as rental or repair in lieu of purchase; reducing unwanted direct mail; and changing buying habits to reduce the purchase of single-use and disposable products wherever appropriate.

Goal B:

Expand existing educational and incentive programs to encourage residents to implement source separation or composting as an alternative to the disposal of yard waste.

Goal C:

Develop educational programs to inform residents of options for less or non-toxic alternatives to common household chemical products.

Goal D:

Develop programs to assist businesses with source reduction efforts.

Goal E:

Participate in the development of quantitative methods to evaluate the effectiveness of source reduction activities.

Recycling

Policy Statement

It shall be the policy of the Solid Waste Authority to implement programs to recover recyclable materials from the solid waste stream within Palm Beach County. Recycling programs will include both materials mandated for recycling by law or regulation, and any other materials which may be effectively recovered and marketed as commodities.

Goal A:

Provide for a reduction in the waste stream requiring ultimate disposal by recovering recyclable materials to the maximum extent practical.

Goal B:

Provide for a recycling program convenient for all residents and businesses in Palm Beach County to encourage source separation of materials from the waste stream.

Goal C:

Provide for sufficient processing capacity for source-separated recyclable materials generated.

Goal D:

Encourage the procurement by local businesses, government and residents of all manner of goods made all or in part from recycled materials.

Goal E:

Assist in the development and expansion of secondary materials markets at the local, regional, state and national levels.

Goal F:

Maximize materials recovery, revenues and market stability, through pursuing revenue sharing programs with municipal and commercial customers, selling recovered materials at the highest dollar value associated with each commodity and pursuing long term marketing arrangements with consumers or brokers.

Organics Reclamation

Policy Statement

It shall be the Policy of the Solid Waste Authority of Palm Beach County to utilize organics reclamation to manage selected portions of the solid waste stream such as vegetation and wastewater treatment plant sludge, and create products that have value as commodities for agricultural or horticultural uses. Some of the technologies include composting, mulching, and drying.

It shall further be the policy of the Solid Waste Authority to develop organics processing facilities in cooperation with the generators of wastewater treatment plant sludge so adequate processing capacity and materials are available to assure long term viability of organics reclamation programs.

Goal A:

Enable generators of wastewater treatment plant sludge to contract with the Authority for additional processing capacity as an alternative to landfill disposal or land application.

Goal B:

Utilize technologies that provide assured processing capacity for organics received.

Goal C:

Implement operational practices to assure regulatory compliance and the production of the highest quality end-products achievable with the feedstock received.

Goal D:

Establish programs to market end-products.

Combustion

Policy Statement

It shall be the policy of the Solid Waste Authority of Palm Beach County to utilize combustion, with the recovery of energy, to manage those portions of the solid waste stream which cannot be efficiently managed through waste reduction, recycling or organics reclamation.

Goal A:

Utilize the existing waste-to-energy facility to assure that the waste reduction and energy production goals are achieved.

Goal B:

Utilize landfill gas as an energy source where circumstances permit economically viable facilities.

Goal C:

Evaluate combustion and disposal capacity on a regular basis to enable policy decisions regarding the expansion of combustion capacity to be addressed on a timely basis.

Goal D:

Assure, through annual inspections and compliance activities that the waste-to-energy facility operates in compliance with contract requirements and appropriate regulations.

Landfill

Policy Statement

It shall be the policy of the Solid Waste Authority to utilize landfill disposal for the wastes and residues remaining after applying waste reduction, recycling, organics reclamation and combustion technologies to the waste stream.

It shall further be the policy of the Solid Waste Authority to provide sufficient landfill disposal capacity to assure the continued safe and environmentally sound management of wastes in the event that waste reduction, recycling, organics reclamation or combustion technologies do not achieve their full potential for reduction of the waste stream.

Goal A:

Utilize landfill designs and construction practices which assure compliance with regulatory requirements and provide long term protection of the environment.

Goal B:

Review and refine operating practices on an ongoing basis to assure the maximal use of available landfill capacity.

Goal C:

Evaluate landfill consumption and capacity on an annual basis to determine the remaining life of disposal facilities and to ensure that policy decisions regarding the expansion or replacement of landfill capacity are addressed in a timely manner.

Goal D:

Implement cost effective programs to recover usable and marketable materials from the waste received at the landfill, prior to disposal.

Goal E:

Utilize management and operating practices to assure that landfills are designed, constructed, operated and closed cost effectively and assuring regulatory compliance, environmental protection, and reduction of potential for nuisances.

Collection Services

Policy Statement

It shall be the Policy of the Solid Waste Authority of Palm Beach County to provide for an adequate level of solid waste and recycling collection for the residents, and businesses of unincorporated Palm Beach County.

It shall be the Policy of the Solid Waste Authority of Palm Beach County to assure that collection services are dependable and cost effective and shall support the Authority's compliance with all state, local and federal laws.

Goal A:

Provide a level of service which meets the collection needs of the vast majority of the County while encouraging recycling and the separation of vegetative waste.

Goal B:

Utilize a competitive process to select competent collectors to provide collection services and assure exclusivity of franchise collection contracts as required.

Goal C:

Assure compliance with regulatory requirements for sanitary collection and transport of wastes.

Goal D:

Provide contract administration and customer service programs necessary to ensure dependable, comprehensive collection services.

Goal E:

Utilize a special assessment as the means to bill residential customers for collection costs in the unincorporated area of the county.

Transfer Stations

Policy Statement

It shall be the policy of the Solid Waste Authority to provide a system of transfer stations to enhance the efficiency of collection of solid waste and recyclables in Palm Beach County.

It shall further be the policy of the Solid Waste Authority to strategically locate, construct and operate transfer stations throughout Palm Beach County as required to improve the overall efficiency of the solid waste system.

Goal A:

Operate transfer stations to assure compliance with regulatory requirements and environmental protection.

Goal B:

Review and refine operating practices on a regular basis to assure maximum efficiency.

Goal C:

Implement operational procedures to maximize waste separation efforts at Authority transfer facilities.

Goal D:

Implement programs to assure employees are adequately trained in driver safety, waste identification and emergency response.

Goal E:

Review transfer station system capacity on a regular basis to determine need for modification or expansion of the transfer station system.

Special Wastes

Policy Statement

It shall be the policy of the Solid Waste Authority to implement special waste management programs for those wastes designated as special wastes in law or regulation, and also for any wastes accepted by the Authority which require testing, documentation or special handling to assure operational compliance and worker safety.

Goal A:

Encourage the generators of special wastes to apply methods and technology for the reduction or recycling of special wastes as an alternative to disposal.

Goal B:

Assure compliance with regulations by implementing appropriate tracking and management systems for special wastes received by the Authority.

Goal C:

Implement recycling and utilization programs for special wastes received by the Authority to minimize landfill disposal of special wastes.

Goal D:

Develop programs which address those wastes requiring landfill disposal, such as treated biomedical wastes.

Goal E:

Implement training and education programs to assure the occupational health and safety of all waste management personnel is protected when handling special wastes.

Hazardous Waste Management

Policy Statement

It shall be the policy of the Solid Waste Authority of Palm Beach County to encourage the proper and responsible management of hazardous wastes within Palm Beach County. Also, to the maximum extent practicable, the potential for the improper introduction of hazardous wastes into the environment shall be minimized.

It shall further be the policy of the Solid Waste Authority of Palm Beach County to develop and operate such hazardous waste collection facilities as may be deemed prudent and necessary to manage the County's Household Hazardous Waste and Conditionally Exempt Small Quantity Generators (CESQG).

Goal A:

Minimize the potential for the delivery of hazardous wastes to the NCRRF and the landfills.

Goal B:

Enable citizens to conveniently dispose of their household hazardous wastes in a manner which protects public health and the environment.

Goal C:

Provide a means of hazardous waste disposal which is reasonably accessible to the Conditionally Exempt Small Quantity Generator.

Goal D:

Integrate collection programs with source reduction efforts to assist citizens in reducing the amount of household hazardous waste they generate.

Goal E:

Develop operational and educational programs to assist residents in the proper handling and management of household hazardous waste. Such programs shall not include efforts to permanently store, treat or dispose of hazardous wastes at Authority facilities.

Solid Waste System Operations

Policy Statement

It shall be the Policy of the Solid Waste Authority to operate its solid waste management facilities to minimize their impact on adjacent and neighboring properties.

It shall further be the Policy of the Solid Waste Authority to utilize screening and landscape buffers, maximizing the use of native Florida vegetation, to minimize visual impacts and noise. The Solid Waste Authority shall use operational best management practices to prevent or reduce pollution, provide for adequate water quality protection, and minimize odors which may emanate from solid waste facilities.

Goal A:

Assure that the solid waste facilities are, to the extent possible, aesthetically compatible with surrounding land uses.

Goal B:

Manage solid waste facilities to minimize potential odor, noise and traffic impacts.

Goal C:

Develop operating plans for individual facilities as appropriate to address issues of pollution prevention, operational practices, safety procedures and facility maintenance.

Goal D:

Develop plans to use closed facilities, to the extent practical, for park and open space purposes, integrating surrounding community recreational needs into the end-use plans for facilities.

Environmental Management

Policy Statement

It shall be the Policy of the Solid Waste Authority to implement environmental monitoring programs and control systems and to minimize the potential for any negative environmental impact and assure the compliance of facility operations with Federal state and local regulations.

Goal A:

Utilize facility designs, operating methods and monitoring programs to assure the protection of surface and ground water quality while developing and operating solid waste processing and disposal facilities.

Goal B:

Utilize technology and operating practices to protect ambient air quality from pollution by using state-of-the-art solid waste processing techniques and control technologies.

Goal C:

Utilize efficient and cost effective technologies to mitigate for environmental impacts which cannot otherwise be avoided or reduced.

Goal D:

Provide for long term care, using reclamation and restoration techniques where appropriate, for older, closed landfills under Authority control.

Goal E:

Provide for a comprehensive litter abatement and illegal dumping deterrence programs. Coordinate efforts with private and governmental state, local and federal entities which foster similar programs to create and fulfill a comprehensive local program.

Public Participation

Policy Statement

It shall be the Policy of the Solid Waste Authority of Palm Beach County to provide public information and education programs for all components of the integrated solid waste management system and to inform the public, municipalities, local governments and industry organizations of the systems objectives.

It shall further be the Policy of the Solid Waste Authority to assure the public has access to information about the various components of the integrated solid waste management program, and provide the timely response to inquiries from the public.

Goal A:

Develop comprehensive educational programs for all the elements of the integrated solid waste management system.

Goal B:

Develop new and enhance existing youth education programs.

Goal C:

Provide forums for the public and local governments to present concerns and recommendations and involve community and business interests in early planning efforts when programs being developed affect them financially.

Goal D:

Prepare audio/visual, print productions and personal presentations that enhance the achievement of the educational objectives.

Intergovernmental Coordination

Policy Statement

It shall be the Policy of the Solid Waste Authority to establish and maintain an intergovernmental coordination program to augment its Integrated Solid Waste Management Plan. The program shall be used to assure that appropriate regulatory agencies and other units of government are adequately informed of Authority policy decisions and activities regarding operational strategy, management, compliance and enforcement.

Goal A:

Provide direct liaison with the County, local municipalities, regional planning agencies, special districts, the Department of Environmental Protection and other State agencies in order to develop an effective solid waste management program.

Goal B:

Assure consistency of the Authority's Plan with the appropriate elements of local government comprehensive plans. Identify areas of conflict which may exist and assist in providing for their resolution.

Goal C:

Establish planning practices which minimize duplication and are capable of responding to changing Federal, State, regional and local goals.

Goal D:

Participate in intergovernmental efforts to abate litter, control illegal dumping and coordinate compliance and enforcement activities for permitted facilities.

Administration and Management

Policy Statement

It shall be the Policy of the Solid Waste Authority to implement administrative and management systems to maximize efficiency in the delivery of services, minimize costs for delivery of services, avoid duplication of efforts and provide a management structure to assure the Solid Waste Authority is achieving its goals and objectives.

Goal A:

Provide an organizational framework of staff, contract operators and technical consultants to implement the policy statements and goals of the Governing Board, as adopted by this plan.

Goal B:

Adopt annual budgets to efficiently provide for the systems needs and comply with the provisions of applicable law and financial commitments, and utilize annual disposal assessments and tipping fees to fund the operational costs of the disposal system not supported by other revenues.

Goal C:

Encourage a high level of technical expertise and professional competence of Solid Waste Authority staff through education, seminars, professional associations and technical certifications.

Goal D:

Implement procurement programs to comply with applicable laws and regulations, assure the highest value is received for the dollars expended and provide participation opportunities for all types of businesses, including Minority/Women Business Enterprises.

Goal E:

Monitor technology improvements, financial circumstances, and other factors to facilitate efficient and economical implementation of solid waste system elements.

Goal F:

Conduct studies and evaluations to assure accuracy of disposal assessments, waste reduction, recycling or other activities required for regulatory compliance or effective management.

Emergency Management

Policy Statement

It shall be the Policy of the Solid Waste Authority to develop and maintain systems and procedures that ensure continuity of operations following hurricanes or other natural disasters or emergency events. It shall further be the policy of the Authority to efficiently and effectively conduct debris management activities for unincorporated Palm Beach County in accordance with its responsibility as a support agency to Palm Beach County under ESF3 and in a manner consistent with the Solid Waste Authority Emergency Management Manual.

Goal A:

Develop and maintain an emergency management plan that ensures effective disaster preparedness, post-disaster damage assessment, disaster recovery, debris management, and intergovernmental and public communication.

Goal B:

Resume solid waste collection operations in unincorporated Palm Beach County as soon as is safe to do so in order to protect the health, safety and welfare of all of the residents of Palm Beach County.

Goal C:

Procure and maintain contracts with debris management contractors, in a manner consistent with the Authority's procurement policies, to ensure rapid deployment of debris collection and management resources following a disaster.

Goal D:

Manage the debris collection activity for unincorporated Palm Beach County in an efficient and effective manner consistent with the Debris Management Plan while striving to maximize the reimbursement of incurred costs from the Federal Emergency Management Agency and other agencies.

Goal E:

Effectively communicate information on facility status and debris collection progress to our customers so they can plan their recovery activities accordingly.

EXISTING CONDITIONS

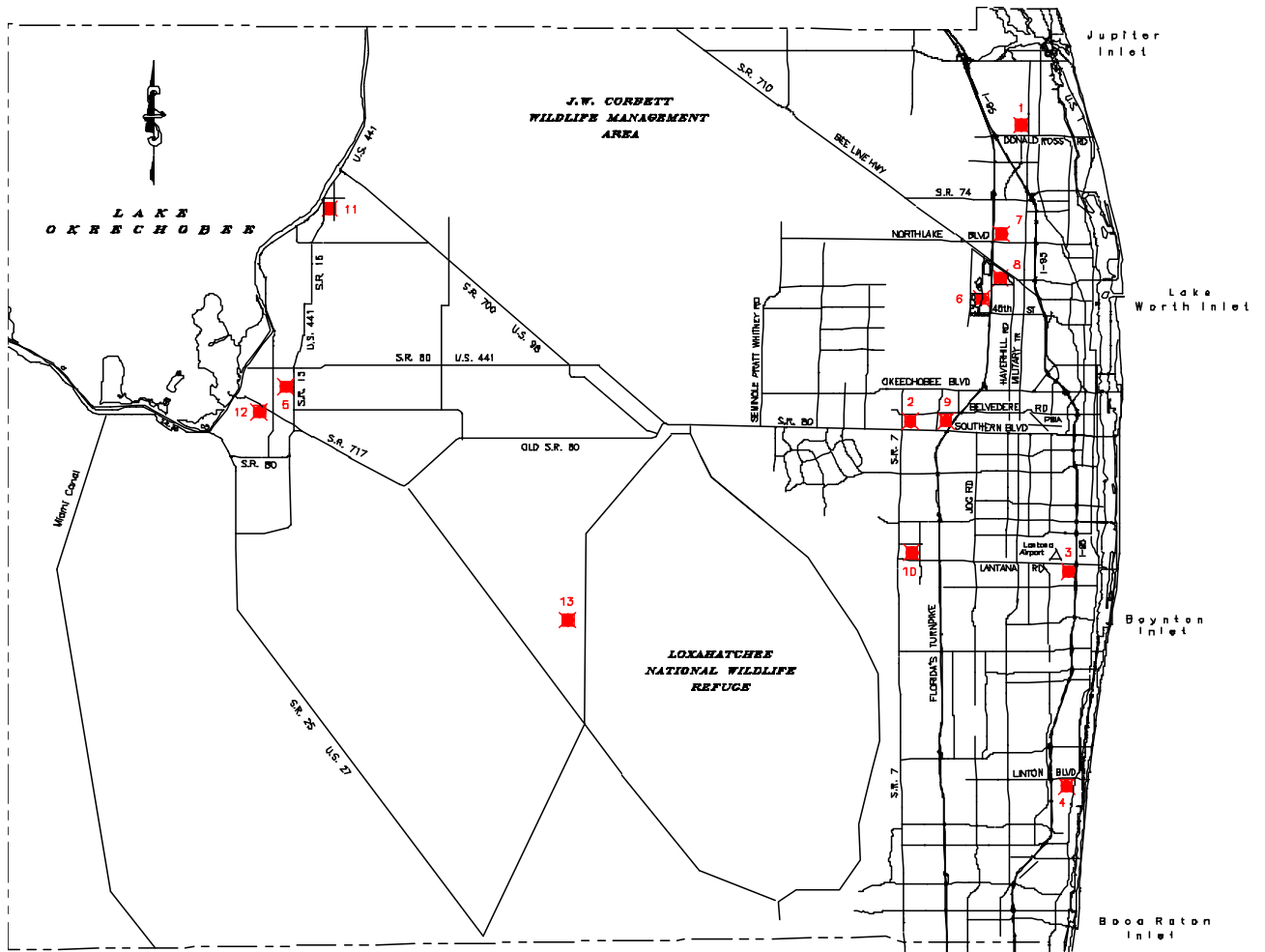
Solid Waste System Capacities and Services

The solid waste system developed and operated by the Authority consists of transfer, processing and disposal facilities, plus closed disposal facilities which the Authority owns or monitors. Figure 2 is a map of Palm Beach County showing the locations of the solid waste facilities managed by the Authority. In addition to the facilities of the Authority, certain transfer and disposal facilities owned and operated by units of government are included as elements of the county wide system. The facilities operated by local governments are not commercial facilities, and manage wastes for only the local governmental units that operate them.

All of the operating facilities have an identified capacity to transfer, process or dispose of waste. The purpose of this section is to identify the remaining available capacity of those facilities, and identify the level of service that has been established for waste collection, and per capita generation of solid waste. These capacities and levels of service serve as the basis for predicting future conditions and projecting the need for new or expanded capacity.

This data summarizes Solid Waste Authority designated transfer stations, processing facilities and disposal facilities serving Palm Beach County as of 2006. Sludge disposal sites are managed pursuant to waste water regulations and are not included in the designation of solid waste disposal sites. Locations of transfer stations reflect the ultimate siting location, or the result of annexation of Authority facilities into municipalities. Capacities of transfer stations reflect design capacities, which provide some flexibility to accommodate peak waste flow days. All waste processing facilities operated by the Solid Waste Authority are located at the North County Resource Recovery Facility (NCRRF) site in West Palm Beach. Figure 3 shows the locations of the waste processing facilities on the NCRRF site.

The Waste to Energy facility is an RDF (Refuse Derived Fuel) municipal waste combustor. The Ferrous Processing facility cleans and densifies ferrous metals recovered in the RDF production process, and white goods and scrap ferrous recovered from the Class III landfill. The Materials Recycling Facility and the Commercial Materials Recycling Facilities process the source-separated recyclable materials received by the Authority through physical separation, densification or baling. The Compost facility processes mulched yard waste and waste water treatment sludge. The capacities for waste processing facilities are in tons per year and are based on either contract quantities or a combination of design data and operating experience. These capacities are shown on Tables 1 through 3.



LEGEND

- | | |
|------------------------------------|---|
| 1 North County Transfer Station | 7 West Lake Park Road Landfill |
| 2 West Central Transfer Station | 8 Dyer Boulevard Park (closed landfill) |
| 3 Central County Transfer Station | 9 Cross State Landfill |
| 4 South County Transfer Station | 10 Lantana Landfill |
| 5 Glades Regional Transfer Station | 11 Pahokee Landfill |
| 6 North County Facility | 12 Belle Glade Landfill |
| | 13 Western Site |

Figure 2. Location of Solid Waste Authority Facilities.

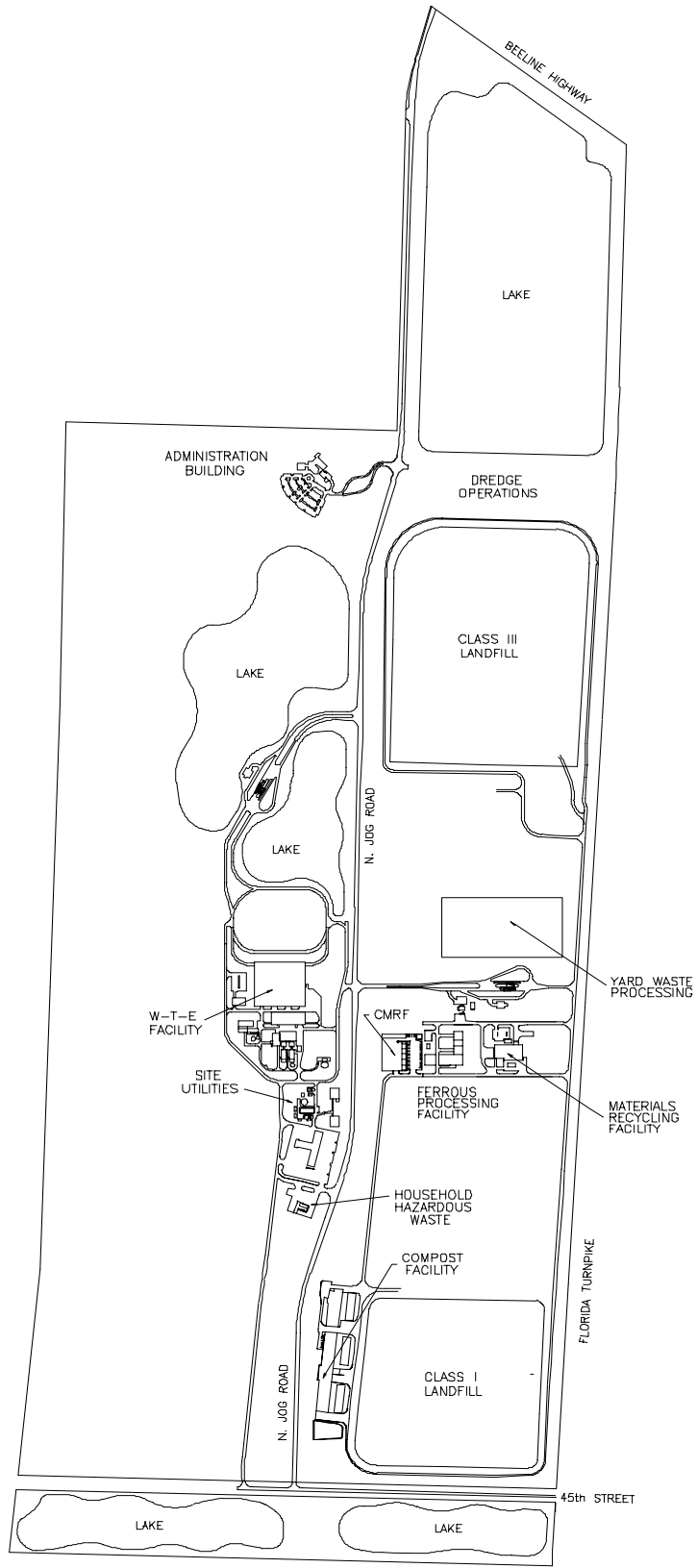


Figure 3. Map of NCRRF Site Showing Facility Locations.

**Table 1
Solid Waste System Transfer Stations**

Owner Operator	Transfer Stations		Status
	Location	Design Capacity	
Authority	Belle Glade	500 tons/day	Active
Authority	Lantana	2400 tons/day	Active
Authority	Delray Beach	1000 tons/day	Active
Authority	Royal Palm Beach	1900 tons/day	Active
Authority	Jupiter	1900 tons/day	Active
Authority	South West County	2400 tons/day	Planned
Town of Palm Beach	Palm Beach	40 tons/day*	Active

* Facility serves Town of Palm Beach collection vehicles only.

**Table 2
Solid Waste Authority Waste and Recovered Materials Processing Facilities**

Facility	Processing Facilities	
	Capacity in Tons per Year	
Waste to Energy	624,000*	
Ferrous Processing	45,000*	
Materials Recycling	175,000	
Commercial Materials Recycling	22,000	
Compost	120,000	

* Capacity based on design capacity or contract with facility operator.

**Table 3
Solid Waste System Disposal Facilities**

Disposal Facilities					
Owner/Operator	Location	Waste Type	Acres	Life	Status
Authority Landfill	West Palm Beach	Mixed	334.0	15*	Active
Town of Palm Beach	Unincorporated	Vegetative	28.0	20+	Active
Town of Palm Beach	Unincorporated	Vegetative	5.0	20+	Active
Lake Worth Drainage District	Unincorporated	Vegetative	20.0	20+	Active

* It is projected that the capacity of the landfill will be consumed by the year 2021.

Recycling and Waste Reduction Activities

Part of the Solid Waste Authority's solid waste management program is waste reduction; that is, reducing the amount of refuse sent to the landfills. The 1988 Solid Waste Management Act established a state-wide goal of 30% recycling; with specific goals of 50% recycling of ferrous, aluminum, glass and plastic containers, and newsprint. The Authority has implemented collection and processing programs to meet, and ultimately exceed the goals established by the State. In addition to these five materials, the Authority's residential collection programs currently include aseptic packaging, magazines, corrugated cardboard gable-top containers (milk, juice, etc.), and other aluminum products. Commercial Recycling programs include office paper and corrugated cardboard, plus the same materials as the residential programs. Special waste recycling includes materials such as yard waste, construction/demolition debris, tires, white goods and used oil. This is not an exhaustive list of materials, nor will the program be limited to only these materials. As markets are developed that assure that the materials recovered are recyclable, they may be added to the recycling programs.

Beyond the state-wide recycling goal, the Solid Waste Authority has established a goal of reducing the quantity of waste being delivered for combustion or landfill by 50

Table 4 shows the progress of Palm Beach County toward achieving the recycling and waste reduction goals.

Table 4
Recycling Activity in Palm Beach County
2000 through 2004⁽¹⁾

(2) Year	(3) DEP (%)	(4) DEP Tons	(5) SWA (%)	(6) SWA Tons	(7) Total MSW
99/00	30	669,238	44	813,394	2,230,794
00/01	39	876,282	51	1,171,860	2,246,877
01/02	36	816,920	51	1,221,343	2,269,222
02/03	33	768,542	51	1,287,989	2,328,915
03/04	33	829,717	43	1,035,104	2,514,295

NOTES:

1. Numbers are, as reported to DEP in Palm Beach County's Recycling and Education Grant Applications.
2. DEP fiscal year: July 1 through June 30.
3. Adjusted DEP recycling rate applied toward 30% goal. DEP calculation allows only 15% of special waste recycling.
4. Recycled tons corresponding to adjusted rate.
5. Unadjusted recycling rate. SWA calculation includes all special waste recycling.
6. Recycled tons corresponding to unadjusted rate.
7. Total MSW reported for the year. Includes materials not handled by Authority facilities.

Recycling reduces the amount of waste brought into landfills and thereby reduces the amount of land needed for landfilling. The space saved extends the life of these facilities, postponing the need to expand new facilities. The Authority anticipates that by increasing the recycling of waste, the environmental impact associated with landfilling, illegal dumping and littering will be reduced.

Household and Small Quantity Generator Hazardous Waste Collection

The Solid Waste Authority has implemented programs to accept HHW at no cost to the resident, and CESQG waste with the generator paying the cost of disposal. HHW is now collected at the Central facility on the North County Resource Recovery facility site, and at the transfer stations. CESQG waste is accepted from generators who register with the Authority.

Solid Waste Collection

The Solid Waste Authority is responsible for providing solid waste and recycling collection in unincorporated Palm Beach County. The unincorporated area is divided into nine franchise areas. These franchise areas are serviced by contract haulers that are awarded exclusive franchises through a competitive bid process. The franchise areas are designed to have similar characteristics (rural, suburban or urban) within each district, and have a geographical continuity to allow more efficient routing of collection vehicles. The current franchise agreements expire on September 30, 2008. Pursuant to the Special Act, the agreements must be awarded every five years through a competitive process.

In addition to the exclusive franchise districts for solid waste and recycling, the Authority issues franchises for roll-off collection of construction and demolition debris on a non-exclusive basis in the unincorporated area.

Closed Facilities

Landfills which have reached their ultimate capacity are closed and require monitoring and care to assure that they do not become threats to the environment or public health. The Solid Waste Authority has responsibility for six closed facilities. Several of these facilities were closed prior to the Authority assuming control, ownership or liability for the properties. For facilities closed prior to 1990, groundwater quality surrounding the facilities is monitored under permits issued by FDEP. Facilities closed after 1990 are subject to a long term care requirement under Florida Statutes, which includes maintenance and monitoring of groundwater quality and the establishment of escrow accounts to fund the long term care. The following table summarizes the closed facilities of the Solid Waste Authority.

Table 5
Closed Disposal Facilities Managed by the Solid Waste Authority

Closed Disposal Facilities			
Facility	Year Closed	Operator	Status
Belle Glade	1990	City of Belle Glade	Long Term Care
Cross State	1978	Palm Beach County	Monitoring
Dyer	1995	Palm Beach County/SWA	Long Term Care
Lantana	1988	Palm Beach County/SWA	Monitoring
Pahokee	1984	Palm Beach County/SWA	Monitoring
West Lake Park	1968	Palm Beach County	Monitoring

LEVEL OF SERVICE - COLLECTION AND DISPOSAL

As the entity responsible for collection of solid waste in the unincorporated county, the Authority establishes the Level of Service (LOS) for unincorporated area collections as part of the collection franchises. As the service provider for solid waste disposal county wide, it is also the responsibility of the Solid Waste Authority to establish a LOS for disposal on a county-wide basis.

Collection LOS

The LOS for collection in the unincorporated county is established through the collection franchises managed by the Authority. The LOS for collection is as follows:

Component	Level of Service
Residential	Twice per week garbage collection; Twice per week bulk trash collection; Once per week vegetation collection; Once per week recyclables collection.
Commercial	Minimum once per week garbage and trash; Recyclables collection is available to all businesses.

Disposal LOS

At the most basic level, the LOS for disposal is 100 percent. That is, the Authority will manage all the solid waste it receives. Beyond this simple point, the LOS for disposal serves as the basis for determining the life of the disposal system and for determining the need for additional capacity and its timing. Additionally, the LOS is the basis for the Authority's rate structure.

The Authority expresses its disposal LOS in two ways. For long range planning purposes, the LOS for disposal is based on the county-wide per capita waste generation rate, as measured by the amount of waste delivered to Authority facilities for disposal. This basis for developing the per capita generation rate is discussed at greater length in the following section on population and waste generation. The LOS for disposal is 9.54 pounds per capita per day. This per capita generation rate excludes recyclable materials delivered to private facilities, and wastes such as yard waste and construction/demolition debris delivered to private recycling facilities.

For billing purposes and when necessary to determine the LOS by land use, the SWA uses waste generation rates determined by waste generation studies. The latest waste generation study was completed in 1997. The waste generation rates for residential property are expressed in tons per year for four categories of residential property: single family, mobile homes, multi-family with four units or less per building, and multi-family

with five units or greater per building. For the purpose of the SWA's non-ad valorem special assessment the two multi-family categories are combined.

The waste generation rates for commercial property are expressed in pounds per square foot per year in categories based on the Property Appraiser's classification (PA code). For the purpose of the SWA's non-ad valorem special assessment, commercial properties are further grouped into one of four categories: low generators, medium generators, high generators, and non-generators.

The waste generation rates for residential and commercial property are presented below.

**Table 6
Residential and Commercial Waste Generation Rates**

Residential Generation Rates

Category	Garbage/Trash (TPY)	Vegetation (TPY)	Total
Single Family	1.10	0.85	1.95
Mobile Home	1.10	0.58	1.68
Multi-Family < 5 Units	0.72	-	0.72
Multi-Family >= 5 Units	0.72	-	0.72

Commercial Generation Rates

PA Code	Use	Lbs/Sq. Ft.	Category
37	Dept. Store	1.72	Low
60	Auditorium	1.96	Low
62	Bank	1.33	Low
68	Mortuary	1.90	Low
72	Parking Structure	0.30	Low
81	Hvy. Manufacturing	1.50	Low
83	Mini Warehouse	1.83	Low
91	Churches	1.03	Low
5399	Hospitals with Incinerators	1.32	Low
9299	Museums	1.12	Low
17	Dormitory	8.10	Medium
34	Strip Store	4.00	Medium
35	Retail Shop	7.47	Medium
36	Discount Store	4.92	Medium
38	Neigh. Shop. Center	5.34	Medium
39	Community Shop. Center	5.34	Medium
40	Shop. Center Regional	5.34	Medium
41	Shop. Ctr. Super Reg.	5.34	Medium

4299	Pharmacy-Stand Alone	2.30	Medium
44	Hotel	4.28	Medium
45	Hotel/Motel/Resort/RV Park	4.28	Medium
46	Low Rise Motel	4.28	Medium
47	High Rise Motel	4.28	Medium
49,50,51	Office-Lo Rise	2.52	Medium
52	Medical Office	2.97	Medium
53	Hospital	3.62	Medium
54	Nursing Home	2.17	Medium
58	Bowling Alley	2.02	Medium
59	Arena	2.08	Medium
61	Theater	8.46	Medium
63	Branch Bank	6.22	Medium
65	Garage	6.61	Medium
66	Vehicle Sales/Rep.	6.53	Medium
67	Service Shop	6.74	Medium
69	Clubhouse	4.87	Medium
71	Transport Term.	2.09	Medium
73	Nursery/Daycare	5.63	Medium
75	Auto Sales/Svc.	3.85	Medium
80	Light Manufacturing	4.58	Medium
82	Dist. Warehouse	2.25	Medium
84	Warehouse	5.20	Medium
85	Aircraft Hangar	6.10	Medium
86	Barns	5.17	Medium
87	Pre-Fab Metal Bldg.	5.73	Medium
88	Tech. Manufacturing	2.22	Medium
90	School	7.68	Medium
92	Educational/Religious	3.71	Medium
42	Supermarket	16.35	High
43	Convenience Store	21.33	High
55	Bar/Nightclub	12.37	High
56	Restaurant	25.58	High
57	Fast Food Restaurant	40.03	High
64,74	Service Station	16.21	High
70	Cold Storage/Packing	13.34	High

FUTURE CONDITIONS

Population Growth and Waste Generation Rates

Effective solid waste infrastructure management requires evaluating both existing demand and projecting future capacity needs. Two key components are the per capita waste generation rate, upon which the LOS is based, and the population growth rate. Using this information, the waste processing and disposal capacity of the existing system and planned additions can be evaluated to determine the life span of the landfill. Because landfill disposal capacity of any given facility is finite and non-renewable, ISWM systems are designed to conserve landfill capacity.

To calculate the amount of solid waste to be disposed at Authority facilities and, therefore, the projected facilities demand, population projections, per capita generation rates, and historical records are used. This data is compiled and entered into the Authority's Landfill Depletion Model, which is discussed in detail later in this Chapter.

Recent projections indicate that the population of Palm Beach County is anticipated to increase from an estimated 1,265,900 people in 2005 to 1,916,200 people in 2030. The SWA uses the University of Florida Bureau of Economic and Business Research medium permanent population projections as published in Florida Population Studies. BEBR projections are presented in 5 year intervals. The periodic growth rates are as follows:

Date Range	Ave. Annual Growth Rates
2005-2010	2.19%
2010-2015	1.77%
2015-2020	1.62%
2020-2025	1.45%
2025-2030	1.27%

The between interval population estimates are calculated through interpolation using the periodic growth factors

Per capita waste generation rates are developed using the actual quantities of waste delivered to Authority facilities and the annual estimate of population from the University of Florida. The SWA uses two per capita generation rates: one for Class I material (garbage, recyclables, sludge and special wastes) and one for Class III material (trash, building debris, land clearing debris and vegetation). These rates are calculated by dividing the delivered pounds by the estimated population and dividing by 365 days. For fiscal year 2005, the Authority received 2,203,456 tons of MSW and recyclables. The population of Palm Beach County was estimated at 1,265,900. The per capita solid waste generation rate is estimated at 9.54 pounds per day. A breakdown of incoming waste by classification according to Authority scale data is presented in Table 6.

Table 7
2005 Waste Generation Unit Rates
Pounds Per Capita Per Day

Waste Classification	Tons	Pounds Per Capita
Garbage	1,129,444	4.89
Trash	210,279	.91
Vegetative	265,503	1.15
Building Debris/Land Clearing	147,008	.64
Sludge	78,846	.34
Fill	220,220	.95
Tires	2,438	.01
Miscellaneous	14,103	.06
Subtotal MSW	2,067,841	8.95
Recyclables	135,615	.59
Total MSW	2,203,456	9.54

Following a period of relatively stable per capita generation rates in the 1990's, the per capita generation rate has increased steadily since the year 2000. Outside of vegetation, the average generation rates of Class 3 material (excluding fill) for the years 2001 through 2005 were as follows: 1.22, 1.23, 1.21, 1.23, and 1.56 pounds per person per day. The increase in the most recent year was the result of increased building debris caused by hurricanes Frances and Jeanne. It is anticipated that the per capita generation rate of Class 3 material will remain at or near the current level during this period of high storm activity.

Vegetation is a significant component of the Class 3 waste stream. The per capita generation rate of vegetation has remained relatively stable over the past three years. The rates for the years 2001 through 2005 were as follows: .92, .99, 1.11, 1.15, and 1.15. It is anticipated that the per capita generation of vegetation will remain stable in the future. The vast majority of the vegetation received by the Authority is recovered and diverted for alternative uses, including feedstock for the compost facility, boiler fuel for the Okeelanta power plant, and landfill side slope stabilization.

The Class 1 generation rate (excluding sludge) has increased steadily since the 2001 fiscal year. The rates for the past five years were as follows: 4.98, 5.08, 5.15, 5.34, and 5.54. While the recent hurricane activity has certainly contributed to the most recent increases, it is the Authority's view that the bulk of the increase is due to other factors, including a strong economy, an active real estate market and in particular sales of existing homes, and the increasing use of disposables. The Authority believes the Class 1 per capita generation rate will continue to rise for the foreseeable future.

Table 8
Historical Per Capita Generation Rates

	Class 1 Material	Class 3 Material	Total	Vegetation
1995/1996	4.63	2.08	6.71	.60
1996/1997	4.74	1.95	6.69	.73
1997/1998	4.85	2.24	7.09	1.01
1998/1999	5.02	2.41	7.43	1.04
1999/2000	4.97	2.24	7.21	1.00
2000/2001	4.98	2.14	7.11	.92
2001/2002	5.08	2.22	7.30	.99
2002/2003	5.15	2.32	7.46	1.11
2003/2004	5.34	2.38	7.73	1.15
2004/2005	5.54	2.71	8.24	1.15

Class 1 rate excludes sludge, which is relatively stable and largely diverted for composting. Class 3 rate excludes fill material, which is diverted for reuse and fluctuates significantly due to market conditions and Authority need. Class 3 material includes vegetation.

It must be noted that the per capita waste generation rates used to evaluate system capacity are not comparable to or derivative of the residential generation rates used for Annual Special Assessment purposes. The residential rates used for the Special Assessment incorporate only residential generation, whereas the rates used herein include both the residential and commercial solid waste impact as a function of permanent population. Additionally, these generation rates include only the waste the Authority receives and do not include materials delivered to permitted recyclers or shipped out of county. For the purpose of planning for long term disposal capacity, it is assumed that the material not coming to the Authority's system will continue to be diverted from the system. To the extent that this assumption is incorrect, the estimated landfill life will be shorter than forecast. But given the fact that the Authority performs an annual review of waste generation and consumption data as part of the landfill depletion model update, any substantive change will be detected, its potential impact evaluated, and any planning revisions made long before the disposal capacity of the landfill can be significantly impacted.

Forecasting Landfill Capacity

The principles of integrated solid waste management as put forth in the Environmental Protection Agency's hierarchy of integrated solid waste management are designed to minimize the quantity of waste disposed in landfills. The recycling, composting, and resource recovery programs that make up a part of the Authority's solid waste management system divert materials from landfill disposal and decrease the volume of landfill space consumed.

Despite the existence of these programs, the Authority recognizes the unique characteristics of landfilling as a waste disposal option, not the least of which is the reality that landfill space, unlike other forms of infrastructure, is a depleting resource. Recycling, organics reclamation, and resource recovery are all factors in increasing the life of a given landfill volume, however given existing technology, there will always be a need to landfill some portion of the waste stream. It is reasonable to assume that although the need to provide replacement capacity can be delayed through recycling, organics reclamation, and resource recovery programs, it cannot be prevented. The availability of landfill capacity is a driving force behind the solid waste management system decision making process.

Prudent planning requires identifying the time at which the need for replacement capacity becomes critical and taking the required steps to ensure that replacement capacity is available. Although replacement landfill capacity can be secured in several ways, including siting a new landfill and contracting with a private landfill operator, the long lead time in siting, permitting, and constructing a landfill site, often greater than ten years, necessitates effective long range planning in order to ensure viability of available options. The Authority's primary long range planning tool is the Landfill Depletion Model.

The Landfill Depletion Model is intended to forecast the estimated life of the Authority's North County landfills in order to assist with facility planning decisions and to assess the impact of alternatives and alternative states of nature on landfill life. As a planning tool, the model is useful in identifying the point or points in time at which a decision is required in order to ensure the availability of disposal capacity.

The Landfill Depletion Model considers the dynamic interrelationships between the available processing and disposal options, population projections and growth rates, per capita generation rates, recycling rates, diversion rates, incineration capacity and reduction effectiveness, landfill compacted densities, and cover material requirements and produces a projected date of landfill depletion. With this date established and the anticipated lead time known, the latest date at which a decision must be made can be determined.

Because of the many factors impacting the rate of landfill depletion and in order to minimize the possibility of falling behind on the critical path, the Landfill Depletion Model is run on an annual basis when the latest population projections become available. The following is a description of the procedures followed in the annual update of the model.

Landfill Depletion Model Procedures

Population projections and per capita waste generation rates are used to forecast annual waste generation for the next 30 years. The annual waste tonnages are adjusted downward to account for recycling, incineration, and waste reduction activities. The net

landfill tonnage is converted to cubic yards and the landfill depletion determined using estimated compacted densities.

Population Projections

Palm Beach County is one of the most rapidly growing areas in the country. Recent projections indicate that the population of Palm Beach County is anticipated to increase from an estimated 1,265,900 people in 2005 to 1,916,200 people in 2030, an average annual increase of almost 1.7%. Both the population growth and the timing of population growth are critical to properly assessing landfill longevity.

The Authority uses the University of Florida Bureau of Economic and Business Research medium permanent population projections as published in *Population Studies* annually in February. These population projections are the same projections used by Palm Beach County Planning and Zoning for planning purposes. The BEBR projections are presented in 5 year intervals. The between interval population estimates are calculated through interpolation using the periodic growth factors.

Tourism being one of Palm Beach County's largest economic contributors, there is an annual surge in population between Thanksgiving and Easter. Due to the difficulty in predicting seasonal population, which fluctuates with general economic conditions and the weather, among other factors, the solid waste generation projections are made using only permanent population. As a result of this, the per capita generation rates used in the model may not be comparable to those of other jurisdictions.

Per Capita Generation Rates

Two per capita generation rates are utilized in the model: one for Class I material (garbage) and one for Class III material (trash). Class I material is delivered to the North County Resource Recovery Facility for incineration with material in excess of the plant's capacity landfilled directly in the Class I landfill. Class III material is delivered to the Class III landfill for processing and disposal.

In order to determine the assumed per capita generation rates, Authority incoming waste tonnages for the preceding several years are reviewed in an effort to identify any trends. The source of data is Authority scale reports. In the absence of any discernible trend, the waste tonnage from the previous year is divided by the BEBR medium permanent population estimate for the previous year to produce the generation rates in pounds per person per year. The per capita generation rates used in the model reflect only the material the Authority receives or reasonably expects to receive. Currently, considerable amounts of heavy construction and demolition debris and clean vegetation are delivered to private recyclers permitted by the Authority. Material that is currently diverted to private recyclers is assumed to continue to be delivered to private recyclers unless there is some compelling reason to believe that the situation will change. Socioeconomic, regulatory, and other factors that could affect the estimate are evaluated for their potential impact.

The model can be programmed to incorporate changing per capita generation rates using an average annual growth/reduction rate. As indicated earlier in this text, the per capita generation of Class 1 material in Palm Beach County is increasing. The Authority's planning assumptions currently include a continuing increase in the per capita generation of Class 1 material. Class 3 waste generation is expected to remain stable. Again, factors which could possibly result in a future change in per capita generation, such as regulatory action covering packaging and disposable products, are considered. For a complete discussion of the Authority's per capita waste generation assumptions readers are urged to read the Landfill Depletion Model which is included as Appendix F.

Given the fact that the Authority performs an annual review of waste generation and consumption data as part of the annual landfill depletion model update, any substantive changes in factors which may affect the generation of solid waste will be detected, their potential impact evaluated, and any planning revisions made long before the disposal capacity of the landfill is significantly impacted.

Waste Disposal

Class I material is assumed to be delivered to the plant unless the plant is at capacity, in which case it is delivered to the Class I landfill as raw garbage. Class III material is assumed to be delivered to the Class III landfill, except as follows. Currently, considerable quantities of Class III material are commingled at the transfer stations and delivered to the Resource Recovery Facility or diverted to the Class 1 landfill for operational reasons. Operational constraints at the transfer stations, particularly in the southern part of the County, will most likely result in the commingling continuing. Additionally, the SWA diverts a large percentage of building debris and C&D processor residue to the Class 1 landfill because of the gypsum content in this material and the potential for odor. This commingling is considered in the Authority's landfill projections.

Recycling and Materials Recovery

The total annual generation of Class I and Class III material is adjusted to account for recycling and waste reduction activities. The Class I waste stream is adjusted to account for recovered residential and commercial recyclables delivered to the Materials Recycling Facility as well as ferrous metals and aluminum recovered at the Resource Recovery Facility. A review of current recycling rates, recycling trends and projected enhancements of the existing programs is required to establish the assumptions used in the model.

The Class III waste stream is adjusted downward to account for the diversion of clean yard waste and other materials to alternative processing and recovery. Recent performance in these activities is used to forecast future Class III recycling success.

Resource Recovery Facility Performance

The Resource Recovery Facility has a rated capacity of 624,000 tons per year, however the plant has surpassed 800,000 tons of processible waste for all of the past ten years. The

residuals from the plant include ash, process residue, and unprocessibles. These residuals are landfilled in the Class I landfill. Recent plant performance is evaluated to determine the estimated reduction provided by the plant. Unprocessibles typically amount to approximately 3% of total delivered waste and the Operating and Maintenance Agreement with the plant operator contracted by the Authority specifies a minimum 60% reduction by weight. Present and projected future plant performance is evaluated in order to establish a forecast for probable average future performance.

As the addition of a third boiler to the Resource Recovery Facility is an option, the model includes a scenario for the addition of a third boiler, which is assumed to provide increased throughput to 1,100,000 tons of processible waste per year beginning in the year 2012 or sooner. The SWA is presently investigating options for expanding incineration capacity, including the third boiler and/or a second waste to energy facility.

Compacted Densities

Incoming solid waste tonnage is converted to consumed landfill volume by multiplying by the average compacted density. Although industry standards do exist, in reality landfill compacted densities vary widely based on the type of material landfilled and the operating procedures employed. Because the Authority landfills large quantities of ash and process residue from the RDF Resource Recovery Facility in the Class I landfill and diverts nearly all clean vegetation, the accuracy of industry averages cannot be relied upon for Authority system planning purposes.

To avoid uncertainty in estimating the compacted densities the Authority conducts an annual survey to determine the volume of landfill space consumed. The landfill is surveyed at least annually and the calculated waste volume for the prior year is subtracted from that for the present year to determine the volume depleted in the year. Using Authority waste tonnage data, the average landfill compacted density for the year and life-to-date is calculated. These densities are used to arrive at the density assumptions used in the model.

Landfill Cover

Because daily cover is included in the annual volume used in the density calculation, it is not addressed in the model. Final cover consuming landfill volume is assumed to be 5% of the total landfill volume and is accounted for by reducing the available landfill capacity by 5%.

Available Landfill Volume

The available landfill volumes have been calculated by the SWA's engineers, Camp, Dresser, and McKee, using CAD analysis. CDM estimates total landfill volume at 51,884,000 cubic yards prior to settlement, of which 9,698,800 cubic yards are in Class 3 cells. This estimate assumes landfilling to 167 feet NGVD, which is 7 feet above the permitted height, with settlement to 160 feet. Because the Landfill Depletion Model uses compacted densities that include settlement, the volume above 160 feet NGVD, an estimated 1,760,000 yards, has been deducted for the purpose of the model. Therefore, the total

estimated landfill volume is 50,124,427 cubic yards. Through September 30, 2005, 8,835,794 cubic yards of Class 1 volume and 4,839,917 cubic yards of Class 3 volume have been depleted.

The Authority has two landfill depletion scenarios, referred to as the “Maximize Class I” and the “Balanced Life” scenarios. The "Maximize Class I" scenario consists of 262 acres and 40,754,579 cubic yards of Class I space and 72 acres and 9,369,848 cubic yards of Class III space. The “Balanced Life” scenario assumes that the Authority manages the site in such a manner as to provide capacity for both Class 1 and Class 3 material at the North County landfill through the life of the site. Because current projections indicate that the Authority will exhaust the Class 3 cells by 2015, seven years before the Class 1 cells will be depleted, balancing the life of the site will require landfilling Class 3 material in the Class 1 cells.

The landfill depletion model provides results for these scenarios and can be programmed to evaluate other potential scenarios if necessary. The Authority is currently considering accelerating the development of the replacement landfill site in order to reserve capacity for Resource Recovery Facility Residues at the existing site through 2040.

Unforeseen Events

The waste generation rates used in the model do not include an allowance for increased depletion resulting from a hurricane or other natural disaster. Additionally, the model assumes that the Resource Recovery Facility will be operating without any extended outages other than scheduled maintenance and minor outages. To the extent that these assumptions do not hold true, the estimated landfill life will be shorter than that predicted by the model.

Uncertainty

As with any forecast, assumptions based on current experience and expected future occurrences are relied upon to predict future events. To the extent that assumptions prove to be unrealistic or expected future occurrences do not materialize, actual results will deviate from the forecast and that deviation may be substantial. The danger of a substantial deviation is mitigated somewhat by the frequency of the analysis. Nonetheless, understanding the variability of the results is essential.

For this reason, the Landfill Depletion Model analysis is programmed with the ability to perform various sensitivity analyses and this type of analysis is performed every time the model is updated. Several states of nature consisting of an optimistic, pessimistic, and most likely set of assumptions are evaluated with the result being a range of time within which landfill depletion is probable. Although it is unlikely that all of the pessimistic or all of the optimistic assumptions will be the most accurate, such an occurrence is possible. For this reason, the Landfill Depletion Model results must be viewed with the inherent uncertainties in mind.

Recognizing the inherent uncertainties, the Landfill Depletion Model is by design a conservative document. Relatively conservative assumptions are used in an effort to

reduce the possibility of over-estimating the life of the landfill. Given the rapidity of regulatory and technological change in the solid waste industry along with the general trend away from landfill disposal, decreased consumption of landfill capacity in the future is probable. More responsible approaches to packaging, decreased use of disposable products, decreased use of non-recyclable materials, the ability to recycle and reuse a wider variety of materials, approved alternative uses for incinerator ash, and changes in landfill technology have the potential to significantly increase landfill longevity. As any of the above go from concept to reality, the model will be adjusted accordingly.

Identifying Future Facility Needs

Given the information available on the current capacity of the various components of the solid waste system, and the growth of the waste stream due to increases in population and per capita generation, it is possible to project needs for future facilities for the system. These can be addressed both in terms of additional capacity and the time at which the capacity will be required, to determine both the potential size of a facility and the dates siting, construction and operations should be commenced. Identification of a future need does not in and of itself dictate the specific siting of a facility, but it does represent a recognition that the existing waste transfer, processing and disposal capacity is not unlimited and should be regularly examined for adequacy. Options may remain open to forego new facilities, but these options may involve consequences for existing facility capacities.

Just as siting is not explicitly addressed, the operational characteristics of future facilities are not dictated by simply identifying a requirement for additional capacity or facilities in the future. Questions of location, ownership and operational responsibility are all part of the decision making process that arises out of the need for additional transfer, processing and disposal capacity.

An important aspect of planning for future facility needs is the lead time necessary to develop new capacity. It may take a minimum of three to five years to develop a transfer station or recycling facility, while ten years or more may be necessary to site and develop a disposal facility. This lead time makes it important to regularly evaluate the capacity of system components, to enable the policy and operational decisions regarding future facilities to be made with sufficient time to avoid delays or problems.

As indicated earlier in this report, the major components of the current system are 5 active Authority Transfer Stations, with a sixth proposed for South West County, plus composting, ferrous processing, materials recycling, waste to energy and landfill facilities. The following paragraphs discuss each of these system elements in turn, and identify in general terms the needs and options currently available.

Transfer Stations

The South County Transfer Station is significantly overcapacity and opportunities for expansion are limited. This facility was designed and constructed prior to development of the legislatively mandated recycling programs and the Authority's waste reduction and recycling goals, and is not able to accommodate source separated materials as efficiently as the Authority's newer facilities. In addition the Solid Waste Management Plan, as initially developed, proposed an additional transfer facility in the south portion of the county, and the absence of that facility is contributing to the capacity overloads at the South County and to a lesser degree the Central County facilities. The Authority is currently in the process of completing the site acquisition for the Southwest County Transfer Station. Once completed, this facility will provide an additional 2,400 tons per day of capacity alleviating the capacity shortage in the southern part of the County and accommodating future growth.

The Authority has moved aggressively to expand the Central County Transfer Station in Lantana. The construction of the new Central County Transfer Station is nearing completion. At a cost of approximately \$28 million, this six bay facility with approximately 58,000 square feet of tipping floor area is the largest in the Authority's system. The design of the future Southwest County Transfer Station will be based on this design. Phase II of the Lantana project includes the renovation of the existing transfer station building, which will be dedicated to transporting recyclables. The capacity of the combined facilities will be in excess of 3,400 tons per day.

In FY 2004, the Authority acquired the industrial property adjacent to the West Central Transfer Station. The Authority intends to renovate the existing structure to serve as a transfer station for vegetative waste and recyclable materials. This expansion will free up tipping floor capacity in the existing transfer station building, which is necessary to accommodate future growth. This project is currently in the design phase.

Planned improvements to the North County Transfer Station in Jupiter include the construction of a vegetation handling area outside the main building. This will free up tipping floor capacity in the existing building, which is necessary to accommodate future growth.

These planned improvements are expected to provide sufficient capacity to accommodate projected growth in the County for the next 30 years.

Organics Reclamation

The compost facility is essentially at capacity. This facility is somewhat unique in that its capacity to accept and process waste water treatment sludge is allocated via contractual arrangements with waste water facilities in the county. The construction and operating costs of the compost facility are also allocated on a shared basis between the waste water utilities and the Authority. It is also important to note that composting is

only one alternative these facilities have available as options for beneficial reuse or disposal.

One such alternative is biosolids pelletization. With the goal of halting the land application of sludge within the Okeechobee Basin, the Authority along with Palm Beach County, the Loxahatchee River Environmental Control District, the City of Boca Raton, and the South County Regional Waste Water Treatment Board formed a partnership to jointly build and operate a sludge pelletization facility on the Authority's North County site. The Authority has contracted with New England Fertilizer Company for the design, construction and operation of the facility. As an added benefit, landfill gas from the adjacent landfill will be used to fuel the sludge dryers. This project is nearing construction start.

Additional compost facility capacity will merit consideration only if waste water facilities seek to develop this option in cooperation with the Authority, and continue to pay their pro-rata share of construction and operating costs. The Authority has no plans to expand the compost facility at this time.

Ferrous Processing

The primary source of ferrous materials for this facility is the waste to energy facility. While some incremental increase in ferrous recovery at the waste to energy plant may result in additional material available for processing, it is unlikely that the capacity of the ferrous processing facility will be exceeded within the projected life of the existing facility or the contract with the facility operator.

The ferrous processing facility is located within the footprint of the landfill at the North County facility, meaning that the facility will eventually need to be relocated in order to complete landfill construction. The processing equipment can be relocated, and several alternative locations are available on the North County site. Keeping the facility in close proximity to the waste to energy plant is essential to maximizing efficiency.

Materials Recycling

The existing Residential Materials Recycling Facility and its associated facility for processing paper from the commercial waste stream, the CMRF, is located in the footprint of the landfill adjacent to the ferrous processing facility, and will likewise require relocation at a future date. The Authority is currently in the process of securing a site. The existing RMRF was significantly expanded to 600 tons per day, assuming two eight hour shifts, in 1998. The current average throughput is approximately 400 tons per day operating one shift 5-6 days per week.

Waste to Energy

The capacity of the waste to energy facility has been reached, and the Authority is currently evaluating options for expanding combustion capacity. Options include the

addition of a third boiler to the existing Resource Recovery Facility and/or the construction of a second incinerator. The Authority currently landfills nearly 500,000 tons per year of unprocessed combustible waste that exceeds the plant's capacity, and the amount continues to increase. The results of the landfill depletion model indicate that the benefits of increased combustion capacity upon the life of the existing landfill are limited however the potential benefit with respect to the future landfill site is significant.

Landfill

The need for future disposal capacity is certain. As the one component of the integrated system which is ultimately depleted, planning for future disposal capacity is an inevitable activity. The goal of this plan, through the use of the landfill depletion model, is to predict the dates when these activities should begin. This is important because recent activities around the country have demonstrated that the lead time necessary for the development of a new landfill disposal site can range from seven years to more than ten years, depending on the particular circumstances involved.

In 1996, the Authority sold the property which had been acquired in the southern part of the developed coastal area of the county, and concurrently acquired a parcel of equivalent size in the more western area of the county. This site is referred to as the Western Site. The 1,600 acre site is expected to provide approximately 230 million cubic yards of airspace, which is approximately 4.5 times the capacity of the existing landfill. The expected life of this site is 50 years, assuming no increase in combustion capacity, and significantly longer otherwise.

The landfill depletion model is used as a tool to determine when the time has arrived to address future disposal capacity needs. That time is now. Starting now allows for the potential to study alternatives to landfill development and/or development alternatives for a future landfill site. Questions of facility ownership (private vs. public), operational responsibility (private vs. public) and location (existing site, alternative in-county site, or out of county site) can all be considered as matters of policy. Given the time available, the Authority has the security of having land already available should unforeseen events accelerate the pace of landfill depletion.

Appendix A

**Palm Beach County Solid Waste Act
Chapter 2001-331, Laws of Florida**



CHAPTER 2001-331

HOUSE BILL NO. 945

An act relating to the Solid Waste Authority of Palm Beach County, a dependent special district in Palm Beach County; codifying the Authority's charter, chapter 75-473, Laws of Florida, as amended, pursuant to s. 189.429, F.S.; providing legislative intent; amending, codifying, and reenacting all special acts relating to the Solid Waste Authority of Palm Beach County as a single act; providing a short title; providing declaration of legislative intent; providing for application to incorporated and unincorporated areas; providing definitions; providing purposes and powers; providing exemption from taxation; providing prohibition, permits, and penalty; providing enforcement; providing injunctive relief; providing judicial review; providing severability; repealing all prior special acts related to the Authority; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

SECTION 1. Pursuant to section 189.429, Florida Statutes, this act constitutes the codification of all special acts relating to the Solid Waste Authority of Palm Beach County. It is the intent of the Legislature in enacting this law to provide a single, comprehensive special act charter for the Solid Waste Authority of Palm Beach County, including all current legislative authority granted to the Authority by its several legislative enactments and any additional authority granted by this act.

SECTION 2. Chapters 75-473, 77-626, 79-536, 79-539, 79-542, 84-501, 84-502, 86-433, 88-544, 91-334, 93-345, and 94-462, Laws of Florida, relating to the Solid Waste Authority of Palm Beach County, are codified, reenacted, amended, and repealed as herein provided.

SECTION 3. The charter for the Solid Waste Authority of Palm Beach County is re-created and reenacted to read:

SECTION 1. Short title.—This act may be known and cited as the “Palm Beach County Solid Waste Act.”

SECTION 2. Declaration of legislative intent.—In order to enhance the beauty and quality of our environment, conserve our natural resources, prevent the spread of disease and creation of nuisances, protect the public health, safety, and welfare, and provide a coordinated resource recovery and

waste management program for Palm Beach County, it is necessary to form a countywide authority for the management of solid waste to meet the expanding problems related to the processing and disposal of solid waste within Palm Beach County to:

- (1) Provide for the safe and sanitary processing and disposal of solid waste.
- (2) Provide a coordinated countywide program for the management of hazardous waste and control of solid waste processing and disposal in cooperation with federal, state, and local agencies responsible for the prevention, control, or abatement of air, water, and land pollution.
- (3) Require the municipalities and the county to plan for and develop an adequate solid waste collection system.

SECTION 3. Creation of countywide solid waste authority.—In order to effectuate the intent and purpose of this act as set forth in section 2, the Solid Waste Authority of Palm Beach County is created as a dependent special district. Its board shall consist of the seven members of the Board of County Commissioners of Palm Beach County. A quorum of the board shall be four members.

SECTION 4. Application to incorporated and unincorporated areas.—This act shall apply to both the incorporated and unincorporated areas of Palm Beach County.

SECTION 5. Definitions.—As used in this act, unless some other meaning is plainly intended:

- (1) “Act” means this act and all amendments thereto.
- (2) “Authority” means the Solid Waste Authority of Palm Beach County.
- (3) “Clerk” means Clerk of the Circuit Court of Palm Beach County, Florida.
- (4) “Cost of acquisition and/or construction” means the cost of acquiring, constructing, reconstructing, improving, extending, equipping, and furnishing any resource recovery and solid waste management facilities, including the cost of demolishing, removing, or relocating any buildings, structures, or utilities on lands acquired or to be acquired, including the cost of acquiring lands to which such buildings, structures, or utilities may be moved or relocated, the cost of all labor and materials, the cost of financing charges, discounts on the purchase price of bonds

otherwise permitted hereunder, and interest on the bonds of the Authority prior to, during, and for a period not exceeding 2 years after completion thereof, payments under and fees and expenses in connection with any derivative agreements, the cost of establishing and funding initial reserves, the cost of engineering, financial, and legal services plans, specifications, studies, surveys, estimates of cost and of revenues, and other expenses necessary or incidental to determining the feasibility or practicability of any such construction or acquisition, administrative expenses, and such other costs and expenses as may be necessary or incidental to such acquisition, construction, reconstruction, improvement, extension, equipping, or furnishing, the financing thereof, placing such resource recovery and solid waste management facilities in operation, and the issuance of bonds under this act.

(5) "County" means Palm Beach County, Florida.

(6) "Department" means the Department of Environmental Protection or any successor agency performing a like function.

(7) "Derivative agreements" means contracts commonly known as investment contracts, interest rate swap agreements, or contracts providing for payments based on levels of or changes in interest rates, or contracts to exchange cash flows or a series of payments, to hedge payment, rate, spread, of similar exposure, which the governing body of the Authority determines to be necessary, desirable, or appropriate to achieve a desirable effective interest rate in connection with bonds, notes, or bond anticipation notes issued by the Authority.

(8) "Director" means the Executive Director of the Solid Waste Authority of Palm Beach County or his or her duly authorized representative.

(9) "Disposal" means the disposition of solid waste by resource recovery, processing, recycling, or the placing of solid waste materials on the land for final disposition, or any combination thereof.

(10) "Fiscal year" means the year beginning October 1 of each year and ending September 30 of the following year.

(11) "General obligation bonds" means bonds or other obligations secured by the full faith and credit and taxing power of the Authority and payable from ad valorem taxes levied and collected on all taxable property in Palm Beach County, without limitation of rate or amount, and may be additionally secured by the pledge of either or both the proceeds of special assessments levied against benefited property or revenues derived from solid waste disposal systems.

(12) "Hazardous waste" has the same meaning as the term is defined in section 403.703(21), Florida Statutes, or any successor law or regulation.

(13) "Municipality" means all incorporated municipalities or special taxing districts exercising municipal powers in relation to collection and disposal of solid waste, lying and being in Palm Beach County, Florida.

(14) "Person" or "persons" means any and all persons, natural or artificial, including any individual, firm, or association, any facility, or any municipality or private corporation organized or existing under the laws of the State of Florida or any other state and any county or governmental agency of this state or the Federal Government.

(15) "Processing" means the act of modifying or altering the nature of solid waste materials to facilitate reuse, transfer, transport, and disposal, including, but not limited to, systems employing physical, thermal, organic, or chemical techniques.

(16) "Property appraiser" means the Property Appraiser of Palm Beach County, Florida.

(17) "Recycling" means any process by which solid waste materials are recovered and reused in manufacturing, agricultural, power production, and other processes.

(18) "Resource recovery" means the process by which materials in solid waste retaining useful physical or chemical properties are reused or recycled for the same or other purposes, including use as an energy source.

(19) "Revenue bonds" means bonds or other obligations of the Authority secured by and payable from the rates, fees, charges, and other income collected by the Authority from the users of its resource recovery and solid waste management facilities, or by pledge of the full faith and credit of the Authority, or by a combination thereof.

(20) "Solid waste" means garbage, sewage, sludge, septage, rubbish, refuse, and other discarded solid or liquid materials resulting from domestic, industrial, commercial, agricultural, and governmental operations, but does not include solid or dissolved materials in domestic sewage, storm drainage, or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows, or other common water pollutants.

(21) "Solid waste system" or "resource recovery and solid waste management facilities" or "project" means any plant, facility, or property and additions, extensions, and improvements thereto, at any time constructed or acquired as part thereof, useful or necessary or having the capacity for future use for resource recovery or solid waste management and, without limiting the generality of the foregoing, shall include vehicles used for transport from transfer stations to treatment sites and incinerators for the purposes of reducing the volume of or disposing of solid waste by burial, as well as proper disposal of residue from incineration, and shall include all real and personal property and any interest therein, rights, easements, and franchises of any nature whatsoever, and equipment, machinery, furnishings, fixtures, and replacements, relating to any such solid waste system and necessary or convenient for the operation thereof.

(22) "Tax collector" means the Tax Collector of Palm Beach County, Florida.

(23) "Transport" means the act of movement of solid waste materials to facilitate processing, reuse, and disposal.

(24) "Waste management" means the systematic control of the generation, storage, collection, transport, treatment, processing, recycling, recovery, and disposal of solid waste.

SECTION 6. Purposes and powers.—For the purposes of this act, all of Palm Beach County is deemed to be a special district. In addition to other powers, duties, and responsibilities necessary to carry out the provisions of this act, the Authority shall have the power to:

(1) Adopt and from time to time thereafter alter, rescind, modify, or amend rules, guideline, and orders necessary for its operation in accordance with chapter 403, Florida Statutes, and all successor laws. No such rules or amendments thereto shall be adopted or become effective until after a public hearing has been held by the Authority pursuant to notice published in a newspaper of general circulation in the county at least 21 days prior to the hearing. When approved by the Authority, such rules shall have the force and effect of law. Nothing in this act shall be construed so as to prevent the Authority from adopting rules which are more strict and extensive than those imposed by the department.

(2) Adopt a resource recovery and waste management program for Palm Beach County that shall provide for the transportation, storage, separation, processing, recovery, recycling, or disposal of solid waste

generated or existing within the county and modify and update such program or plan as necessary or as may be required by law.

(3) Acquire, at its discretion, personal or real property or any interest therein by gifts, lease, eminent domain, or purchase. The Authority may enter upon any land or water for the purpose of making surveys and may exercise the right of eminent domain whenever public necessity or convenience requires in accordance with chapters 73 or 74, Florida Statutes, and other applicable law.

(4) Appoint an executive director to be responsible to the Authority and who shall serve at its pleasure. There shall be such other officers and employees as may be provided by the Authority. The officers shall be appointed or removed by the executive director subject to confirmation by the Authority. The employees shall be appointed and removed by the executive director. The Authority shall fix the salary of the executive director and shall have, but may delegate to the executive director, the power to fix the salaries of all other officers and employees of the Authority. The Authority shall also have the power to employ or appoint engineers, accountants, attorneys, and such other personnel as may be required for the operation and management of the Authority and to fix their compensation.

(5) Require surety bonds for any of the officers and employees in such amounts as the Authority deems necessary. The premiums for the bonds shall be paid in the same manner as any other operating expense.

(6) Sue and be sued, implead and be impleaded, and complain and defend in all courts.

(7) Adopt, use, and alter a corporate seal.

(8) Acquire, construct, reconstruct, improve, maintain, equip, furnish, and operate at its discretion such resource recovery and waste management facilities as are required to carry out the purposes and intent of this act and to meet the requirements of chapter 403, Florida Statutes, and other applicable law.

(9) Conduct studies, develop programs, provide continuing management and monitoring of waste projects, programs, and facilities directly or indirectly affecting the solid waste management system in Palm Beach County, and contract for such periods as may be agreed upon by the parties, with governmental agencies, individuals, public or private corporations, municipalities, or any other person in carrying out the purposes of this act and the requirements of chapter 403, Florida Statutes, and other applicable law.

(10) Fix, alter, charge, and establish reasonable rates, fees, and other charges for the facilities provided by the Authority, including, but not limited to, planning, permitting, inspection, collection, enforcement, and disposal site developing and operation, which rates, fees, and charges must be sufficient to cover all costs for said normal functions and facilities, including, but not limited to, permits, fees, and disposal costs.

(11) Without limitation, borrow money and issue evidence of indebtedness and accept property, gifts, or grants or loans of money from the Federal Government, state government, and other sources, public or private, which loans and grants shall be expended in accordance with the purposes and provisions of this act.

(12) Issue revenue bonds.

(a) The Authority shall have the power and is hereby authorized to issue revenue bonds for the purpose of paying all or part of the costs of acquisition and/or construction of resource recovery and waste management facilities. The issuance of such revenue bonds shall be authorized by resolution of the Authority, which resolution may be adopted at a regular or special meeting by a majority vote of members voting thereon and at the same meeting at which it is introduced. Such revenue bonds may be issued in one or more series and shall bear such date or dates of issuance, bear interest at such rate or rates, not exceeding the maximum rate permitted under section 215.84, Florida Statutes, or any successor statute, mature at such time or times, not exceeding 40 years from their respective dates of issuance, be subject to such terms of redemption, with or without premium, be issued in such form, registered or not, with or without interest coupons, entitle the holder thereof to such conversion or registration privileges, be executed in such manner, be in such denomination or denominations, payable in such medium of payment at such place or places, which may be any bank or trust company within or without the state, have such rank or priority, be secured in such manner, and have such other characteristics as may be provided in the resolution of the Authority authorizing the issuance of such bonds or in such subsequent resolutions as the Authority may adopt prior to the issuance of such bonds. All bonds issued under this act shall have and are hereby declared to be and to have all the qualities and incidents of negotiable instruments under the Uniform Commercial Code—Investment Securities Laws of the state. The Authority may sell such bonds at private sale and in such manner and for such price or prices as it may determine to be in the best interest of the Authority, but no such bonds shall be sold at a price as will yield to the purchaser thereof income at a rate exceeding the maximum rate permitted under section 215.84, Florida Statutes, or any successor statute, as computed according to the standard tables of bond

values. If said bonds are sold at public sale, a notice of such sale shall be published at least once at least 10 days prior to the date of such sale in a newspaper published and circulated in the county and in a financial newspaper or journal circulating in New York City, New York. The Authority may issue interim bonds, notes, certificates, or receipts, with or without coupons, exchangeable for definitive bonds when such bonds have been executed and are available for delivery.

(b) The Authority shall fix and revise from time to time the rates, fees, or other charges for the services and facilities furnished by the Authority, and such rates, fees, or other charges shall be so fixed and adjusted as to provide sufficient funds to pay the principal of and interest on all bonds issued as the same become due and payable for such purposes, and including the cost of operating, maintaining, and repairing the facilities of the Authority and all such other payments required by the proceedings providing for the issuance of such bonds. Such rates, fees, or other charges shall not be subject to supervision or regulation by the state, any political subdivision, or any commission, board, or agency.

(c) The Authority, in the issuance of revenue bonds, shall have the authority to pledge all or any part of the revenues derived from the operation of the facilities of the Authority and shall have the power to determine the rank or priority of such pledge of revenues for any purpose, including different issues of bonds, and to grant to the holders of the bonds a lien on all or any part of the revenues prior to the use of such revenues for any other purposes.

(d) All revenues received by the Authority shall be deemed to be trust funds to be held and applied as provided in this act. The Authority may also provide that each issue of bonds or any combined issue of bonds may be secured by a trust agreement by and between the Authority and a corporate trustee, which may be any trust company or bank within or without the state. Such trust agreement may pledge or assign the revenues to be received and provide for the rank and priority between different trust agreements for different issues of bonds. The resolution or resolutions providing for the issuance of bonds or such trust agreements may contain such provisions for protecting and enforcing the rights and remedies of the holders of the bonds as may be reasonable and proper, not in violation of the law, including covenants setting forth the duties of the Authority relating to the construction, acquisition, improvement, maintenance, operation, repair, and cost of any project or facility, as is customary in trust agreements or trust indentures securing bonds or debentures of corporations, and may contain such other provisions as the Authority may deem reasonable and proper for the security of the holders of such bonds.

(e) The Authority is also hereby authorized to issue refunding bonds for the purpose of refunding any bonds of the Authority then outstanding, including the payment of any redemption premium thereon, and interest accrued or to accrue to maturity or to the prior redemption of such outstanding bonds, as the case may be, or for the combined purpose of refunding such outstanding bonds and paying the cost of acquisition and/or construction of one or more projects. The issuance of such revenue refunding bonds shall be authorized by resolution of the board of the Authority in the same manner as provided in paragraph (a). Such refunding bonds may be issued to refund such outstanding bonds as they mature and become payable, or as they are called for redemption prior to their stated dates of maturity, and the Authority shall be authorized to invest the proceeds or part of the proceeds of such refunding bonds, pending the dates of maturity of such outstanding bonds or the dates upon which such outstanding bonds are to be called prior to their stated dates of maturity, in such lawful securities as the Authority shall deem desirable, for the purpose of refunding such outstanding bonds in the manner provided in this paragraph. The issuance of such revenue refunding bonds, the maturities and other details thereof, the rights of the holders thereof, the security for the payment thereof, and the rights, duties, and obligations of the Authority in respect of the same shall be governed by the provisions of this act insofar as the same may be applicable.

(f) The Authority shall also have power to issue notes prior to the issuance of bonds, but such notes shall mature in not less than 3 years and the payment thereof shall be subject to any prior pledge of the revenues of the Authority or any ad valorem taxes of the Authority.

(g) The Authority may also issue bond anticipation notes after the authorization of the issuance of bonds in the manner provided in section 215.431, Florida Statutes, or successor law.

(13) Enter into interest rate swap agreements in connection with tax-exempt bonds and to issue debt to finance payments under such interest rate swap agreements. The use of interest rate swap agreements to reduce borrowing costs will enable the Authority to have flexibility to finance or refinance projects relating to its solid waste system in a more economically efficient manner. The Authority, other special districts, and municipalities already have the express power to enter into interest rate swap agreements and other derivative products with respect to their taxable bonds under the Taxable Bond Act of 1987, part VII, chapter 159, Florida Statutes. The Legislature finds that the ability of the Authority to enter into derivative agreements shall serve a public purpose by reducing interest costs to the Authority and enhancing the marketability of the Authority's bonds, notes, or bond anticipation notes. Further, such derivative agreements afford the Authority the ability to achieve the lowest

effective borrowing costs or terms most suitable to the Authority. The provisions of this paragraph are designed to serve a public purpose by providing for the health, safety, welfare, and economic well-being of the people of the county. Further, these provisions are intended to provide express authority to exercise the powers granted hereby and shall not be construed in limitation of any existing powers of the Authority to enter into or carry out any derivative agreements. This paragraph shall be a supplemental and alternative authority to any other provisions of special or general law.

(14) Seek injunctive relief in a court of competent jurisdiction to prevent the violation of this act or any resolution, rule, or regulation adopted pursuant to the powers granted by this act without the necessity of showing of a public nuisance in such legal proceedings.

(15) Sell or otherwise dispose of any byproducts produced by the operation of resource recovery or waste management facilities to any governmental agency, individual, public or private corporation, municipality or any other person.

(16) Levy ad valorem tax on the taxable property in the special district solely for the purposes of this act and not to exceed 1 mill on the dollar, subject to referendum. Property taxes determined and levied under this section shall be certified by the Authority to the property appraiser and extended, assessed, and collected in accordance with the provisions of chapter 197, Florida Statutes. At any time after making a tax levy under this section and certifying the same to the county and the state, the Authority may issue tax anticipation notes of indebtedness in anticipation of the collection of such taxes.

(17) When the fees or charges for the services and facilities and any waste disposal or resource recovery facility are not paid when due and payable and are in default for 30 days or more, following written notice to such delinquent customer, discontinue and shut off the supply of the services and facilities of said system to the person, firm, corporation, or other body, public or private, so supplied with such services or facilities until such fees, rates, or charges, including legal interest, penalties, and charges for the shutting off and discontinuance or the restoration of such services or facilities, are fully paid. Such delinquent fees or charges, together with legal interest, penalties, and charges for the shutting off and discontinuance or the restoration of such services or facilities, and reasonable attorney's fees, costs, and other expenses may be recovered by the Authority in a court of competent jurisdiction.

(18) Transfer, sell, or assign to any governmental agency, individual, public or private corporation, municipality, or other person, at whatever

terms it deems reasonable, any property which it finds is not needed to carry out the purposes of this act.

(19) As necessary to carry out its resource recovery and/or disposal plans or programs when necessary to carry out any other provision of this act, require that all wastes collected by public or private agencies from any municipality or unincorporated area of the county be transported to Authority-designated processing and disposal facilities in a manner and form as may be mandated in accordance with this act, particularly paragraphs (2) and (8) of this section. This act shall not be construed to preclude public or private agencies from operating permitted transfer stations, provided that solid waste transferred or transported therefrom shall be delivered to Authority-designated processing and disposal facilities as set forth in this section.

(20) Perform any and all governmental functions of the county, or of any municipality, related to solid waste provided for by general law, including, but not limited to, chapter 403, Florida Statutes, or any successor law, pursuant to written contract or interlocal agreement. For those purposes, the Authority may employ the special assessment procedures contained in sections 7 and 8 of this act. The Palm Beach County Board of County Commissioners shall set for the unincorporated portions of the county all fees necessary to accomplish the purposes of this paragraph, and the governing body of any municipality shall set the required fees for its respective jurisdiction. Any such fees must be sufficient to pay all costs incurred by the Authority in connection with the solid waste services to be provided, including the cost of billing services.

(21) Establish a mandatory collection system for the county and impose reasonable rates, fees, and charges to all users of said system. The Authority may establish annual collection special assessments for users of this collection system in like manner as the disposal assessments provided for in this section or sections 7 or 8.

(22) Grant franchises and contracts, issue permits, or otherwise provide for the collection of solid waste in the county and receive the assignment of such franchises, contracts, and permits, and establish reasonable rates, fees, and charges therefor.

(23) In connection with or incidental to, the sale and issuance of bonds, enter into any contracts which the Authority determines to be necessary or appropriate to achieve a desirable, effective interest rate in connection with the bonds or notes by means of, but not limited to, contracts commonly known as investment contracts, funding agreements, interest rate swap agreements, currency swap agreements, forward payment conversion agreements, or futures; contracts providing for

payments based on levels of or changes in interest rates; contracts to exchange cash flows or a series of payments; or contracts including, without limitation, options, puts, or calls, to hedge payment, rate, spread, or similar exposure. Such contracts or arrangements may also be entered into by the Authority in connection with, or incidental to, entering into any agreement which secures bonds or provides liquidity therefor. Such contracts and arrangements shall be made upon the terms and conditions established by the Authority after giving due consideration for the credit worthiness of the counterparties, where applicable, including any rating by a nationally recognized rating service or by any other criteria as may be appropriate.

(24) Notwithstanding the prohibition against extra compensation set forth in section 215.425, Florida Statutes, provide for an extra compensation program, including a lump-sum bonus payment program, to reward outstanding employees whose performances exceed standards, if the program provides that a bonus payment may not be included in an employee's regular base rate of pay and may not be carried forward in subsequent years.

Section 7. Special assessments; methods of levy and collection.— Since all improved properties in the county receive a direct, substantial benefit by the provision of solid waste disposal and collection services by the Authority, the Authority shall have the additional power to impose, levy, collect, or have collected, in accordance with the provisions of chapter 197, Florida Statutes or section 7, 8 or 9 of this charter, the annual disposal special assessments herein authorized and defined as a means of financing the construction and/or acquisition of additions, extensions, and improvements to the solid waste system, the payment of the principal of and interest on bonds issued pursuant to this act, the cost of operating, maintaining, and repairing the solid waste system, and all other payments that are required to be made by the Authority in connection with the purposes of this act.

(1) Definitions.—For the purposes of this section and sections 8 and 9, the following terms shall have the following meanings:

(a) “Addendum to annual disposal special assessment roll” or “addendum” means the list prepared by and confirmed by the Authority each fiscal year containing the same information as the annual disposal special assessment roll as to any parcels of improved real property not incorporated on the corresponding annual disposal special assessment roll and incorporating any changes as to the information specified for any parcel or improved real property on the corresponding annual disposal special assessment roll, including any additions to or deletions from such annual disposal special assessment roll.

(b) “Annual disposal special assessment” means the annual disposal special assessment imposed upon a parcel or parcels of improved real property for this disposal of solid waste for the applicable fiscal year based upon the classification of the use of such parcel or parcels of improved real property as set for the in the rate resolution.

(c) “Annual disposal special assessment roll” means the list prepared and confirmed by the Authority each fiscal year containing a summary description of each parcel of improved real property, the name and address of the owner of each such parcel as indicated on the records maintained by the property appraiser, and the amount of the annual disposal special assessment applicable to each parcel of improved real property.

(d) “Collection” means, with respect to solid waste services, the process whereby solid waste is removed and transported to a solid waste facility.

(e) “Governmental agencies” means all state, federal, or local agencies or units of government located within the county, including, but not limited to, the School Board of Palm Beach County, all county agencies and departments, all municipalities within the county, all special districts and municipal service taxing units with all or part of their boundaries within the county, and any municipality or special district or other unit of government, the boundaries of which are not within the county but which is the owner of improved real property within the county.

(f) “Improved real property” means all real property located within the county that generates or is capable of generating solid waste and that contains buildings, structures, or other improvements designed or constructed for and capable of use or used for human habitation, human activity, or commercial enterprises.

(g) “Owner” means the person or persons owning an interest in improved real property.

(h) “Rate resolution” means the resolution or resolutions of the Authority described in paragraph (3)(b) of this section and paragraph (2)(b) of section 8 of this charter.

(2) Purpose.—It is the purpose of this section to require all persons within the county and all governmental agencies to use exclusively the solid waste system operated and maintained by the Authority or designated by the Authority for the disposal of all solid waste generated within both the incorporated and unincorporated areas of the county; to establish a

schedule of assessments for all improved real property in both the incorporated and unincorporated areas of the county to pay for the cost of financing, operating, and maintaining the solid waste system; to establish the method and procedure for the classification of such improved real property in the establishment of such schedule of annual disposal special assessments; to provide for a method and procedure for the collection of such assessments from the owners of such improved real property; and to provide for the operation of the solid waste system.

(3) Determination of annual disposal special assessments; public hearing.—On or before October 1 of each year, the Authority shall hold a public hearing for the following purposes:

(a) To adopt a budget for the operation and maintenance of the solid waste system for the ensuing fiscal year, including moneys for the payment of the principal of and interest on bonds and other outstanding or anticipated indebtedness, including all reserves necessary therefore, for the payment of necessary reserves for capital expenditures and the renovation, improvements, and replacements of existing facilities of the solid waste system, for the enforcement and administration of the billing and collection of the annual disposal special assessments providing for hereunder, including necessary reserves for anticipated delinquent or uncollectible annual disposal special assessments, and for the payment of the current operation and maintenance of the solid waste system.

(b) To adopt a rate resolution incorporating a schedule of annual disposal special assessments to impose upon the owners of all improved real property in both the incorporated and unincorporated areas of the county which shall constitute a lien as provided for in paragraph (5) and to establish the classification of the use of such parcel of improved real property in order to provide revenues which, together with other moneys of the Authority lawfully available therefore, shall be sufficient to fund the budget referred to in paragraph (a). The rates established by the Authority in each year under the provisions of the rate resolution shall be sufficient to provide moneys for the purposes described in paragraph (a), and the Authority shall not establish rates over and above the rates that are necessary to comply with the provisions of paragraph (a) and the budgetary requirements of any proceedings of the Authority heretofore or hereafter adopted in connection with the issuance of any of its bonds, notes, or other evidence of indebtedness.

Notice of said public hearing shall be published in a newspaper of general circulation in the county at least twice, with the first publication being at least 20 days prior to the date set for the public hearing. Said public hearing may be continued to a date certain without the necessity of further newspaper advertisement or public notice.

(4) Scope of annual disposal special assessment; discount for early payment; delinquency.—

(a) The annual disposal special assessments incorporated in the rate resolution applicable to each parcel of improved real property shall be the annual disposal special assessments for each such parcel of improved real property for the disposal of all solid waste generated or capable of being generated as determined by the Authority on each such parcel of improved real property during the ensuing fiscal year.

(b) The annual disposal special assessments shall be imposed against the owners of all improved real property in both the incorporated and unincorporated areas of the county if such real property is improved real property on or before September 1 prior to the fiscal year in which the annual disposal special assessments are imposed.

(c) The owner and description of each parcel of improved real property shall be that designated on the real property records maintained by the property appraiser.

(d) The annual disposal special assessments shall be due and payable 30 days after the mailing of the original annual disposal special assessments billing. On all annual disposal special assessments imposed and collected, discounts for early payment thereof shall be at the rate of 4 percent in the month of November and at any time within 30 days after the mailing of the original annual disposal special assessments billings; 3 percent in the month of December; 2 percent in the month of January; and 1 percent in the month of February. The annual disposal special assessments paid in March shall be without discount. The annual disposal special assessments shall become delinquent if not fully paid by March 31 of the fiscal year for which the annual disposal special assessments are imposed. All delinquent annual disposal special assessments shall bear an initial penalty of 3 percent of the full amount of the annual disposal special assessments if not paid by March 31 of the fiscal year for which the annual disposal special assessments are imposed and an additional penalty of 1 percent per month on the delinquent principal amount on the first day of June and on the first day of each month thereafter until the annual disposal special assessments are paid in full.

(5) Annual disposal special assessments shall constitute a lien on improved real property.—All annual disposal special assessments imposed against the owners of improved real property shall constitute, and are hereby imposed as, liens against such improved real property as of October 1 of the fiscal year for which the annual disposal special

assessments are imposed. Until fully paid and discharged or barred by law, the annual disposal special assessments shall be prior to all other liens, except that such liens shall be on parity with a lien of state, county, and municipal taxes, and any lien for charges for services created pursuant to section 159.17, Florida Statutes. If any annual disposal special assessment liens become delinquent by not being fully paid by March 31 of the fiscal year for which the annual disposal special assessments are imposed and remain delinquent, the Authority shall cause to be prepared a notice of lien containing the amount of the delinquent annual disposal special assessments, including the amount of the first penalty, a legal description of the improved real property against which the lien is imposed, and the name of the owner of such real property as indicated on the real property records maintained by the property appraiser of the county. Said notice of lien shall be recorded in the public records of the county on or about September 30 of the fiscal year for which the annual disposal special assessments were levied, or as soon thereafter as the Authority shall determine. A copy of the notice of lien shall be served on the owner of record as provided in section 713.18, Florida Statutes, within 10 days after the notice of lien is recorded.

(6) Notification and payment of annual disposal special assessments; discharge of recorded liens.—The Authority shall collect the payment of all current or delinquent annual disposal special assessments from November 1 of the fiscal year for which the annual disposal special assessments are imposed until paid for satisfied as herein provided. The Authority shall mail notices of the annual disposal special assessments to the owners of each parcel of improved real property in the manner and containing the information as follows:

(a) The first notice shall be mailed on or about November 1 of each fiscal year to all owners, and such notice shall contain the amount of the annual disposal special assessments for the then-current fiscal year and a schedule of the discounts available to the owners for early payments. Such notice shall further advise the owners that failure to pay the annual disposal special assessments in a timely manner may result in a loss of title.

(b) The second notice shall be mailed on or about March 31 of such fiscal year to those owners who have failed to pay any or all of the then-due-and-owing annual disposal special assessments, and such notice shall contain a schedule of the initial penalty for nonpayment and shall further advise the owner that a notice of lien will be filed by the Authority against that parcel of improved real property on the public records of the county provided for that purpose. However, if such annual disposal special assessments, together with any penalties thereon, are received prior to September 30 of the fiscal year for which the annual disposal

special assessments were levied, then such notice of lien will not be filed. Such notice shall further advise the owners that failure to pay the annual disposal special assessments in a timely manner may result in a loss of title.

(c) The third notice shall be mailed on or before June 1 of such fiscal year to those owners who have failed to pay any or all of the then-due-and-owing annual disposal special assessments, and such notice shall contain a schedule of the additional penalty incurred by the owners for each month from June 1 and thereafter.

In addition to the collection of any penalties, the Authority shall recover from the owner any cost that may be incurred in connection with such delinquent payments. When any such lien or liens have been fully paid or discharged, the Authority shall properly cause evidence of the satisfaction and discharge of such lien to be provided. Said lien or liens shall not be assigned by the Authority to any person.

(7) Enforcement of delinquent annual disposal special assessments.—All delinquent annual disposal special assessment liens may be enforced at any time by the Authority at least 30 days subsequent to the date of the service of the notice of lien for the amount due under such recorded liens, including all penalties, plus costs and a reasonable attorney's fee, by proceeding in a court of equity to foreclose such liens in the manner in which a mortgage lien is foreclosed under the laws of Florida, or the collection and enforcement of payment thereof may be accomplished by any other method authorized by law. It shall be lawful to join in any complaint or foreclosure, or any such legal proceeding, any one or more lots or parcels of land that are the subject of a lien or liens. The Authority is authorized and directed to execute and deliver, upon request, a written certification certifying the amount, including all penalties, plus costs, due for delinquent annual disposal special assessments or under any recorded liens for any parcel of real property, or certifying that no such annual disposal special assessments are due, except current and nondelinquent annual disposal special assessments.

(8) Calculation of annual disposal special assessments.—

(a) Based upon the rate resolution, the Authority shall cause to be prepared an annual disposal special assessment roll. Such annual disposal special assessment roll shall contain a summary description of each parcel of improved real property within the county on or before September 1 prior to the fiscal year for which the annual disposal special assessments are to be imposed, the name and address of the owner of each parcel of improved real property, the rate applicable to each parcel of improved real property as specified in the rate resolution, and the amount

of the annual disposal special assessments applicable to each parcel of improved real property. The summary description of each parcel of improved real property shall be in such detail as to permit ready identification of each parcel on the real property records. The information specified above to be included in the annual disposal special assessment roll shall conform to that maintained by the property appraiser on the real property records.

(b) Upon completion of the preparation of the annual disposal special assessment roll, the Authority shall at any regular or special meeting review the annual disposal special assessment roll for preparation in conformity with the rate resolution. The Authority shall make such changes or additions as necessary to conform such annual disposal special assessment roll to the rate resolution. If, upon the completion of such review, the Authority shall be satisfied that the annual disposal special assessment roll has been prepared in conformity with the rate resolution, the Authority shall ratify and confirm the annual disposal special assessment roll and certify that the annual disposal special assessment roll is correct and proper and is to be used in collecting the annual disposal special assessments.

(c) On or before October 1 of the fiscal year for which the annual disposal special assessment roll is confirmed, the Authority shall cause to be prepared an addendum to the annual disposal special assessment roll containing the addition or deletion of any parcels of improved real property not incorporated into or deleted from the annual disposal special assessment roll but constituting improved real property on September 1 prior to the fiscal year for which the annual disposal special assessments are imposed. Included in such addendum shall be any change in the information specified for each parcel of improved real property on the annual disposal special assessment roll. Such addendum to the annual disposal special assessment roll shall contain information required for the annual disposal special assessment roll and shall be reviewed by the Authority and certified as the annual disposal special assessment roll of the Authority.

Section 8. Collection of annual disposal special assessments by tax collector; alternative method of levy and collection.—The Authority may, to the extent permitted by law, utilize the office of the tax collector for the purpose of collecting the annual disposal special assessments imposed under this act. The Authority may, in connection with the collection of the annual disposal special assessment, proceed in the manner set forth in this section as an alternative to that set forth in section 7 of this charter, or as provided by Chapter 197, Florida Statutes, as it may be amended from time to time. In the event the Authority chooses to follow the method of collection set forth in this section, it must first enter into written

agreements with the property appraiser and the tax collector to perform the duties as outlined in this section. Said agreements shall be entered into voluntarily and at the sole options of the property appraiser and the tax collector, and shall provide for reimbursement to them of all costs associated with their duties hereunder.

(1) Purpose.—It is the purpose of this section to provide for an additional and alternative, but in no event exclusive, method and procedure for the collection of annual disposal special assessments from the owners of all improved real property in both the incorporated and unincorporated areas of the county, in the same manner as the collection of ad valorem taxes by the county and through the tax bill issued by the tax collector.

(2) Determination of annual disposal special assessments; public hearing.—On or before July 3 of each year, or such other date as may be specified by Chapter 197, Florida Statutes, the Authority shall hold a public hearing for the following purposes:

(a) To adopt a budget for the operation and maintenance of the solid waste system for the ensuing fiscal year, including moneys for the payment of the principal and interest on bonds and other outstanding or anticipated indebtedness, including all reserves necessary therefrom, for the payment of necessary reserves for capital expenditures and the renovation, improvements, and replacements of existing facilities of the solid waste system, for the enforcement and administration of the billing and collection of the annual disposal special assessments provided for hereunder, including necessary reserves for anticipated delinquent or uncollectible annual disposal special assessments, and for the payment of the current operation and maintenance of the solid waste system.

(b) To adopt a rate resolution incorporating a schedule of annual disposal special assessments to be imposed upon the owners of all improved real property in both the incorporated and unincorporated areas of the county to establish the classification of the use of such parcel or parcels of improved real property in order to provide the revenues to fund the budget referred to in paragraph (a). Such rate resolution adopted at the public hearing shall further authorize the collection of the annual disposal special assessments in the same manner as the collection of ad valorem taxes by the county and through the utilization of the office of the tax collector of the county.

Notice of said public hearing shall be published in a newspaper of general circulation in the county at least twice, with the first publication being at least 20 days prior to the public hearing. Additional notice shall also be provided to each affected property owner by first class mail of both the potential for loss of his or her title through the use of the ad valorem

collection method and the time and place of said public hearing. Said public hearing may be continued to a date certain without the necessity of further newspaper advertisement or public notice.

(3) Scope of annual disposal special assessments.—

(a) The annual disposal special assessments incorporated in the rate resolution applicable to each parcel of improved real property shall be the annual disposal special assessments for each such parcel of improved real property for the disposal of all solid waste generated on each such parcel of improved real property during the ensuing fiscal year.

(b) The annual disposal special assessments shall be imposed against the owners of all real property in both the incorporated and unincorporated areas of the county if such real property is improved real property on or before January 1 prior to the fiscal year in which the annual disposal special assessments are imposed.

(c) The owner and description of each parcel of improved real property shall be that designated on the real property records maintained by the property appraiser.

(4) Enforcement and collection.—The annual disposal special assessments shall be due and payable on November 1 of each year or at such other times as prescribed by the amended tax bill. Such annual disposal special assessments shall be collected and enforced by the tax collector in the same manner that ad valorem taxes are collected, including, but not limited to, provisions of law relating to discount for early payment, prepayment by installment method, and penalty for delinquent payment.

(5) Annual disposal special assessments shall constitute a lien on improved real property.—All annual disposal special assessments imposed against the owners of improved real property shall constitute, and are hereby imposed as, liens against such improved real property as of October 1 of the fiscal year for which the annual disposal special assessments are imposed. Until fully paid and discharged or barred by law, the annual disposal special assessments shall remain liens equal in rank and dignity with the lien of the county ad valorem taxes and superior in rank and dignity to all other liens, encumbrances, titles, and claims in, to, or against the real property involved. If any annual disposal special assessment liens become delinquent by not being fully paid by March 31 of the fiscal year for which the annual disposal special assessments are imposed and remain delinquent, the Authority shall cause to be prepared a notice of lien containing the amount of the delinquent annual disposal special assessments, including the amount of the first penalty, a legal

description of the improved real property against which the lien is imposed, and the name of the owner of such real property as indicated on the real property records maintained by the property appraiser of the county. The Authority shall cause to be mailed on or before June 1 of such fiscal year to those owners who have failed to pay any or all of the then-due-and-owing annual disposal special assessments a notice of intention to file lien, and such notice shall contain a schedule of the additional penalty incurred by the owners for each month from June 1 and thereafter and a notice that a lien will be filed if not paid on or before September 30. If the assessment is not paid, a notice of lien shall be recorded in the public records of the county on or about September 30 of the fiscal year for which the annual disposal special assessments were levied, or as soon thereafter as the Authority shall determine.

(6) Payment of annual disposal special assessments.—It shall be the duty of the tax collector, pursuant to law, to collect payments of all annual disposal special assessments referred to in this section. The tax collector shall distribute the annual disposal special assessments so collected to the Authority at the times and in the manner provided by law. The tax collector shall mail to all owners of improved real property such notices as are required by law.

(7) Enforcement of delinquent annual disposal special assessments.—All delinquent annual disposal special assessment liens may be enforced by the Authority in the manner provided by law.

(8) Certification to property appraiser and tax collector.—

(a) Upon adoption by the Authority of the rate resolution provided herein, the Authority shall forthwith deliver a certified copy of the rate resolution to the property appraiser and tax collector. Based upon said rate resolution and pursuant to written contracts between the Authority and the property appraiser and the Authority and the tax collector, the property appraiser shall include the annual disposal special assessments on the tax notice issued pursuant to section 197.3635, Florida Statutes, or any successor laws, and the tax collector shall collect the annual disposal special assessments as provided by law.

(b) Nothing contained in this section shall be construed or interpreted to preclude the Authority from submitting, within its discretion, a separately prepared notice of the annual disposal special assessments imposed on certain improved real property to the owner of such property if, in the opinion of the Authority, such procedure shall facilitate the billing and collection of such annual disposal special assessments, which notice shall be in addition to the notice submitted by the property appraiser.

(9) Additional proceedings.—The Authority shall conform with and shall do and provide such additional proceedings as may be necessary to enable the Authority to collect the annual disposal special assessments in the same manner as the collection of ad valorem taxes of the county and through the utilization of the office of the tax collector to the extent that the general law relating to the method of collection shall require further and additional notices or other proceedings of the Authority.

Section 9. Annual disposal special assessments to governmental agencies; applicability of annual disposal special assessments to tax-exempt improved real property.—

(1)(a) The Authority shall bill all governmental agencies owning improved real property within both the incorporated and unincorporated areas of the county and said governmental agencies shall pay the annual disposal special assessments imposed under the applicable classification specified in the rate resolution.

(b) The discounts for early payment shall not be applicable to the annual disposal special assessments imposed against governmental agencies owning real property. Such governmental agencies shall pay in the manner provided herein the full annual disposal special assessments imposed.

(c) The annual disposal special assessments imposed against governmental agencies shall become delinquent if not fully paid within 60 days from the date the notice of such annual disposal special assessments is mailed. All delinquent annual disposal special assessments shall bear an initial penalty of 4 percent of the full amount of the annual disposal special assessments if not paid by the expiration of the 60-day period and an additional penalty of 1 percent per month on the delinquent amount, plus the initial penalty, on the first day of each month thereafter until said annual disposal special assessment are paid in full.

(d) The Authority shall have the authority to enforce the collections of any delinquent annual disposal special assessments by the institution of an appropriate action against the governmental agency in a court of competent jurisdiction for a judgment for the amount due under such annual disposal special assessments, including all penalties, plus costs and a reasonable attorney's fee.

(e) The provisions of paragraphs (5), (6), and (7) of section 7 of this charter and paragraphs (5) and (6) of section 8 of this charter shall not be applicable to the annual disposal special assessments imposed against improved real property owned by any governmental agency.

(2) Applicability of annual disposal special assessments to tax-exempt improved real property.—The tax exemption of property from taxation under chapter 196, Florida Statutes, or any other law or constitutional provision shall not relieve the owner of any improved real property in the county from the provisions hereof or from the imposition by the Authority of the annual disposal special assessments applicable to such improved real property as specified in the rate resolution.

Section 10. Limitations on franchises.—The Authority shall adopt by resolution a procedure for granting exclusive franchises, subject to the following limitations:

(1) No franchise, contract, or permit shall be granted or extended for a period of time exceeding 5 years.

(2) A public hearing shall be held prior to the adoption of any rates, fees, or charges to the public.

(3) No exclusive franchise shall be granted except pursuant to a procedure adopted by the Authority which shall include the following minimum requirements:

(a) The entire process shall comply with Chapter 286, Florida Statutes.

(b) The procedure shall encourage competition among potential franchisees.

(c) The franchise award shall occur at a regular meeting of the Authority and shall be confirmed by a subsequent resolution, which shall contain sufficient findings to demonstrate that the award was in the best interest of the public to be served thereby.

(d) Any party aggrieved by the franchise award may appeal the award in writing, within 30 days after the award, to the Authority, which shall decide said appeal by written order within 60 days after its receipt by the Authority. An unsuccessful appellant may thereafter appeal the Authority's decision by writ of certiorari to the circuit court.

Section 11. Exemption from taxation.—The property, moneys, and other assets of any countywide authority created hereunder and all of its revenues or other income shall be exempt from all taxation, licenses, fees, or other charges of any kind imposed by the state or by the county or by any municipality, political subdivision, taxing district, or other public agency or body of the state.

Section 12. Prohibition; permits; penalty.—

(1) It is unlawful to violate this act or the rules duly adopted pursuant to it. After the effective date of this act, no person shall:

(a) Place or deposit any solid waste in or on the lands or waters located within the county except in a manner consistent with the countywide solid waste program.

(b) Burn solid waste except in a manner consistent with the countywide solid waste program.

(c) Accomplish or authorize any act inconsistent with the provisions of this act and those of Chapter 403, Florida Statutes.

(2) No person shall operate, maintain, construct, expand, or modify any resource recovery or waste management facility without first having applied for and received a valid operating permit from the Authority.

(3) Any person found in violation of any provision of this act or any rules adopted pursuant to it commits a misdemeanor of the second degree and shall be punished as provided by law. If such violation be continuing, each 24-hour day or fraction, thereof during which such violation occurs shall constitute a separate offense.

Section 13. Enforcement.—The director of the Palm Beach County Health Department shall determine compliance with the provisions of this act which relate to sanitary collection, storage, processing, and disposal of solid waste, in accordance with the provisions of Palm Beach County Environmental Control Ordinance No. 78-5 and any amendments thereto. Any and all violations shall be reported in writing and a copy of the official inspection report shall be presented to the violator and a copy of said inspection report shall also be delivered to the executive director of the Authority.

(1) If any resource recovery or management facility fails to comply with the provisions of the rules adopted by the department or the Authority pursuant to Chapter 403, Florida Statutes, or under this act, the director of the Palm Beach County Health Department shall give the violator a reasonable time, by formal notice, within which to correct such violation. Should the violation continue beyond the time specified for correction, the director of the Palm Beach County Health Department shall notify the environmental control officer, in writing, of such failure to correct the violation.

(2) Upon notice of the director of the Palm Beach County Health Department that a resource recovery or waste management facility has failed to correct violations, the environmental control officer shall notify the Palm Beach County Environmental Control Hearing Board of such noncompliance, whereupon the hearing board shall, within 45 days after such notice, order the violator to appear before it to show cause why remedial action should not be taken. Any meetings before the hearing board shall be conducted in accordance with the provisions of Palm Beach County Environmental Control Ordinance No. 78-5 and any amendments thereto.

(3) If, after due public hearing, the hearing board upholds the violation, the hearing board shall make a decision setting forth findings of fact and such conclusions of law as are required in view of the issues presented. The decision shall contain an order framed in the manner of a writ of injunction requiring the violator to refrain from committing, creating, maintaining, or permitting the violation and take such affirmative action as the hearing board deems reasonable and necessary under the circumstances to correct such violation.

Section 14. Injunctive relief.—If preventive or corrective measures are not taken in accordance with any order of the hearing board, or if the environmental control officer finds that a violation of the provisions of this act exists so as to create an emergency requiring immediate action to protect human health or welfare, the environmental control officer may institute proceedings in the Circuit Court for Palm Beach County to enforce this act or rules or orders pursuant thereto. Such injunctive relief may include both temporary and permanent injunctions. Any proceedings initiated under this section shall be brought for and in the name of the Authority.

Section 15. Judicial review.—Any person aggrieved by any action or decision of the hearing board may seek appropriate judicial review.

Section 4. If any provision of this act or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the act which can be given effect without the invalid provision of application, and to this end the provisions of this act are declared severable.

Section 5. This act shall be construed as a remedial act and shall be liberally construed to promote the purpose for which it is intended.

Section 6. Chapter 75-473, 77-626, 79-536, 79-539, 79-542, 84-501, 84-502, 86-433, 88-544, 91-334, 93-345, and 94-462, Laws of Florida, are repealed.

Section 7. This act shall take effect upon becoming a law.

Approved by the Governor May 25, 2001.

Filed in Office Secretary of State May 25, 2001.

Appendix B

Solid Waste Authority Rule I Solid Waste Management Permits



RULE I

SOLID WASTE MANAGEMENT PERMITS

1. Scope of Rule.

- 1.1 This Rule sets forth procedures on how to obtain a solid waste management facility permit from the Solid Waste Authority of Palm Beach County. This Rule also provides requirements and procedures for the issuance, denial, renewal, extension, transfer, modification, suspension, and revocation and enforcement of solid waste management facility permits. This Rule shall not preclude the application of any other permit requirements or procedures for certain types of facilities or activities as contained in other rules of the Authority.

2. Definitions.

- 2.1 When used in this Rule, unless the context clearly indicates otherwise, the term:
- (a) "Authority" means the Solid Waste Authority of Palm Beach County.
 - (b) "Biohazardous Waste" means any solid waste or liquid waste which may present a threat of infection to humans. The term includes, but is not limited to, nonliquid human tissue and body parts; laboratory and veterinary waste which contains human disease-causing agents; discarded sharps; human blood, human blood products, and body fluids.
 - (c) "Clean debris" means any solid waste which is virtually inert and which is not a pollution threat to ground or surface waters and is not a fire hazard and which is likely to retain its physical and chemical structure under expected conditions of disposal or use. The term includes uncontaminated concrete, including embedded pipe or steel, brick, glass, ceramics and any wastes designated by the Department.
 - (d) "Compost" means solid waste which has undergone biological decomposition of organic matter, and has been disinfected using composting or similar technologies, and has been stabilized to a degree which is potentially beneficial to plant growth and which is used or sold for use as a soil amendment, artificial top soil, growing medium amendment or other similar uses.
 - (e) "Composting" means the process by which biological decomposition of organic solid waste is carried out under controlled aerobic conditions, and which stabilizes the organic fraction into a material which can easily and

Appendix B

safely be stored, handled and used in an environmentally acceptable manner. The presence of anaerobic zones within the composting material will not cause the process to be classified as other than composting. Simple exposure of solid waste under uncontrolled conditions resulting in natural decay is not composting.

- (f) "Comprehensive Plan" means the Comprehensive Solid Waste Management Plan, Resource Recovery and Recycling Program for the Solid Waste Authority of Palm Beach County, as adopted by the Authority.
- (g) "Construction and demolition debris" means solid waste generally considered to be not water soluble and nonhazardous in nature, including, but not limited to, steel, glass, brick, concrete, asphalt roofing materials.
- (h) "County" means Palm Beach County, Florida.
- (i) "Department" means the State of Florida Department of Environmental Regulation or any successor or agency performing a like function.
- (j) "Disposal" means the disposition of solid waste by resource recovery or the placing of solid waste materials on the land for final disposition, or any combination thereof.
- (k) "Executive Director" means the Executive Director of the Authority or his designee.
- (l) "Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land for the processing, storage or disposal of solid waste or recyclable materials. A facility may consist of several operational units.
- (m) "Garbage" means all kitchen and table food waste, animal or vegetative waste that is attendant with or results from the storage, preparation, cooking or handling of food materials.
- (n) "Generation" means the act or process of producing solid waste or recyclable materials.
- (o) "Health Unit" means the Palm Beach County Public Health Unit.
- (p) "Municipality" means all incorporated municipalities or special taxing districts exercising municipal powers in relation to collection and disposal of solid waste, lying and being in Palm Beach County, Florida.

Appendix B

- (q) "Operation" means the disposal, storage, processing or treatment of solid waste or recyclable materials at and by a Solid Waste Management facility.
- (r) "Operation permit" means the legal authorization granted by the Authority to operate or maintain any facility for a specified period of time.
- (s) "Palm Beach County Solid Waste Act" means Chapter 75-473, Laws of Florida, as amended.
- (t) "Permit" means an operation permit as defined herein.
- (u) "Permit condition" means a statement or stipulation which is issued with a permit and which must be complied with.
- (v) "Person" means any and all persons, natural or artificial, including any individual, firm or association, facility or any municipal or private corporation organized or existing under the laws of the State of Florida or any other state and any county or governmental agency of this state or the federal government.
- (w) "Pollution" means the presence in the outdoor atmosphere or waters in the state of any substances, contaminants, noise, or manmade or man-induced impairment of air, land or waters or alteration of the chemical, physical, biological, or radiological integrity of air, land or water in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation unless authorized by applicable law.
- (x) "Processing" means the act of modifying or altering the nature of solid waste materials to facilitate reuse, transfer, transport, and/or disposal including but not limited to, systems employing physical, thermal, organic and/or chemical techniques.
- (y) "Recovered materials" means those materials which have a known recycling potential, can feasibly be recycled, and have been diverted or removed from the solid waste stream for sale, use or reuse, by separation, collection, or processing.
- (z) "Recycling," means any process by which solid waste, or materials which would otherwise become solid waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

Appendix B

- (aa) "Resource Recovery" means the process by which materials in solid waste retaining useful physical and/or chemical properties are reused or recycled for the same or other purposes.
- (bb) "Recyclable material" means those materials which are capable of being recycled and which would otherwise be processed or disposed of as solid waste.
- (cc) "Sludge" means the accumulated solids, residues, and precipitates generated as a result of waste treatment or processing, including wastewater treatment, water supply treatment, or operation of an air pollution control facility, and mixed liquids and solids pumped from septic tanks, grease traps, privies, or similar waste disposal appurtenances.
- (dd) "Solid waste" means garbage, trash, construction and demolition debris, sewage sludge, rubbish, refuse, white goods and other discarded solid or liquid materials resulting from domestic, industrial, commercial, agricultural, and governmental operations, but does not include solid or dissolved material in domestic sewage, storm drainage or other significant pollutants in water resources such as silt, dissolved materials in irrigation return flows, or other water pollutants.
- (ee) "Solid waste management" means the process by which solid waste is collected, transported, stored, separated, processed, or disposed of in any way, according to an orderly, purposeful, and planned program.
- (ff) "Solid waste management facility" means any solid waste recycling facility, volume reduction facility, transfer station, or other facility, the purpose of which is resource recovery, recycling, processing, or storage of solid waste or recovered materials. The term does not include facilities which use or ship recovered materials unless such facilities are managing solid waste.
- (gg) "Time of Retention" means the amount of time data, reports and records must be retained by the permittee. Time of Retention shall be 12 months unless otherwise specified.
- (hh) "Trash" means combinations of yard trash and construction and demolition debris along with other debris such as paper, cardboard, cloth, glass, street sweepings, plastic and other like matter.
- (ii) "Transfer Station" means a site the primary purpose of which is to store or hold solid waste for transport to a processing or disposal facility.

- (jj) "Storage" means the containment or holding of solid waste or recyclable materials, on a temporary basis, in such a manner as not to constitute disposal of such solid waste or recyclable materials.
- (kk) "Transport" means the act of movement of solid waste materials to facilitate processing, reuse, and/or disposal.
- (ll) "Volume reduction facility" means incinerators, pulverizers, compactors, shredding and baling facilities, composting facilities, and other facilities which accept and process solid waste for recycling.
- (mm) "Waste Management" means the systematic control of the generation, storage, collection, transport, treatment, processing, recycling, recovery and disposal of solid waste.
- (nn) "White goods" means solid waste consisting of inoperative and discarded refrigerators, ranges, water heaters, freezers, and other similar domestic or commercial large appliances.
- (oo) "Yard trash" means solid waste consisting of vegetative matter resulting from landscaping maintenance and land-clearing operations.

3. Conflict of Definitions.

- 3.1 In case of conflict between definitions contained herein and as they may be stated elsewhere, the definitions stated herein shall prevail. Definitions in other Solid Waste Authority rules may be used to clarify the meaning of terms used in this Rule unless use of such definition would defeat the purpose or alter the intended effect of the provisions of this Chapter.

4. General Prohibition.

- 4.1 No solid waste management facility in Palm Beach County shall be operated, maintained, expanded, or modified without the appropriate and currently valid permit issued by the Authority, unless the source is exempted by Authority rule. The Authority may issue a permit only after it receives reasonable assurance that the construction and operation of the facility will not cause violation of any of the provisions of the Palm Beach County Solid Waste Act, the Comprehensive Plan or the rules promulgated thereunder. A permitted facility may only be operated, maintained, expanded or modified in a manner that is consistent with the terms of the permit.

5. Exemptions.

- 5.1 The following solid waste management facilities are exempted from the permit requirements of the Rule. The following exemptions do not relieve any facility from any other requirements of the Palm Beach County Solid Waste Act, the Comprehensive Plan or rules of the Authority.
- (a) Facilities operated by the Authority pursuant to its responsibilities under the Palm Beach County Solid Waste Act and the Comprehensive Plan.
 - (b) Structural changes which will not change the quality, nature or quantity of an existing and permitted solid waste management facility which will not cause pollution.
 - (c) Processing, storage or transport of solid waste or recovered materials, generated by a household, by the occupants of that household.

6. Procedure to Obtain Permit; Application.

- 6.1 Any person desiring to obtain a permit from the Authority shall apply on forms prescribed by the Authority and shall submit the number of completed applications and such additional information as the Authority by law may require.
- 6.2 Processing fees for all permits shall be established by the Governing Board of the Authority as part of the annual budget.
- 6.3 All fees shall be deposited in an Account created by the Authority.
- 6.4 To be considered by the Authority, each application must be accompanied by the proper processing fee, except for applications filed by state agencies created pursuant to Chapter 20, F.S., and water management districts created pursuant to Chapter 373, F.S. The fee shall be paid by check, payable to the Solid Waste Authority of Palm Beach County. The fee is non-refundable except as provided in this section.
- 6.5 When an application is received without the required fee, the Authority shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
- 6.6 Upon receipt of the proper application fee, the permit processing time requirements stated in this Rule shall begin.
- 6.7 Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Section 6.2 of this Rule and shall restart the time requirements of Section 7.

For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different volumes or types of wastes processed which require a detailed review.

7. Permit Processing.

- 7.1 Within 30 days after receipt of an application for a permit and the correct processing fee the Authority shall review the application and shall request submittal of additional information required by this Rule or any other rules or regulations.
- 7.2 Within 30 days after receipt of such additional information, the Authority shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information.
- 7.3 If the applicant believes the request of the Authority for such additional information is not authorized by law or rule, the Authority, at the applicant's request, shall begin to process the permit application. Such a request by the applicant shall be in writing and shall be clearly labeled as a request for the Authority to process the application. The applicant's request shall state the reasons why the applicant believes the Authority request for additional information is not authorized by law or rule. The applicant shall clearly state that the applicant requests the Authority to process the application without that information.
- 7.4 Permits shall be presented to the Governing Board of the Authority to be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application, whichever occurs last.

8. Consultation.

- 8.1 The applicant, is encouraged to consult with Authority personnel before submitting an application, or at any other time concerning the operation, expansion, or modification of any solid waste management facility. However, any representation by the Authority shall not relieve any person from any requirement of Florida law, rules or regulations, or Authority rules or regulations.

9. Standards for Issuing or Denying Permits; Issuance; Denial.

- 9.1 A permit shall be issued to the applicant upon such conditions as the Authority may direct, only if the applicant affirmatively provides the Authority with

reasonable assurance based on plans, data or other information, that the construction, expansion, modification, operation, or activity of the facility will not be contravention of the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules, or other applicable law.

- 9.2 A permit shall be issued by the Authority only if the applicant affirmatively demonstrates that the facility has received the appropriate permits, approvals or proof of exemption from the Department, Health Unit, Local Zoning Authority, and any additional state or local agencies regulating the construction or operation of the facility.
- 9.3 If, after review of the application and all the information, the Authority determines that the applicant has not provided reasonable assurance that the construction, modification, expansion, or operation of the facility will be in accord with applicable laws, plans or rules, the Authority shall deny the permit.
- 9.4 The Authority may issue any permit with specific conditions necessary to provide reasonable assurance that Authority rules or applicable law or rules can be met.
- 9.5 No Authority permits shall be issued for a term of more than five (5) years unless otherwise specified by statute, rule, or order of the Authority.
- 9.6 No permit shall be issued for an facility subject to a Department or Health Unit notice of violation or judicial action initiated by the Department. Upon resolution of the enforcement action by agreement, permit, final order, or judicial action a permit may be granted subject to the applicable requirements of Authority rules. This prohibition shall only be applicable when the enforcement action involves the same activity as the activity for which a permit is being sought. The Authority shall take into consideration a permit applicant's violation of any Department or Health Unit rules at any facility when determining whether the applicant has provided reasonable assurances that Authority standards will be met.
- 9.7 The applicant shall be promptly notified if the Authority intends to deny the application, and shall be informed of the reasons for the intended denial, and of the right to request a hearing before the Governing Board of the Authority.
- 9.8 The issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., Department rules, Health Unit rules, or rules of Department approved local programs.

10. Modification of Permit Conditions.

- 10.1 For good cause and after notice the Authority may require the permittee to conform to a new or additional conditions. The Authority shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Authority may grant additional time.
- 10.2 For the purpose of this Section, good cause shall include, but not be limited to, any of the following:
 - (a) A showing that an improvement in solid waste management activities can be accomplished because of technological advances without unreasonable hardship.
 - (b) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
 - (c) Revision of the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules which require the modification of a permit condition for compliance.
- 10.3 A permittee may request a modification of a permit by applying to the Authority.

11. Renewals and Extensions.

- 11.1 Renewals. The Authority shall notify the permittee 120 days prior to the expiration date of a permit . Failure to receive this notification shall not absolve the permittee from making a timely application for permit renewal.
- 11.2 Prior to ninety days before the expiration of any Authority operation permit, the permittee shall apply for a renewal of a permit. If the application is submitted prior to 90 days before the expiration of the permit, it will be considered timely. When the application for renewal is timely, the existing permit shall remain in effect until the renewal application has been finally acted upon.
- 11.3 If the renewal application is submitted 60 days or less from the expiration date, it will not be considered timely.
- 11.4 Permits shall be renewed after administrative review by the Executive Director. Permit conditions may be subject to modification at the time of renewal pursuant to Section 10 of this Rule.

12. Suspension and Revocation.

- 12.1 Permits shall be effective until suspended or revoked by the Governing Board of the Authority, surrendered, or expired and shall be subject to the provisions

of the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules, or other applicable law.

- 12.2 Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- 12.3 A permit issued pursuant to this rule shall not become a vested property right in the permittee. The Governing Board of the Authority may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (a) Submitted false or inaccurate information in his application or operational reports.
 - (b) Has violated law, Department or Health Unit orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Authority rules.
 - (d) Has refused lawful inspection.
- 12.4 No revocation shall become effective except after notice is served by personal service or certified mail, upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department or Health Unit order alleged to be violated, and the facts alleged to constitute a violation thereof.

13. Enforcement.

- 13.1 Enforcement of the provisions of this rule and the permits issued thereunder shall be conducted by the Health Unit pursuant to the Palm Beach County Solid Waste Act.

14. Financial Responsibility.

- 14.1 The Authority shall require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Authority rules. Acceptable form for bonds shall be cash, irrevocable letter of credit or surety bond. Bond amounts shall be determined based on site plans, types of waste received, quantities of waste stored and any other factors that may affect the operation of the facility. Bond amounts shall be made a condition of the permit and approved by the Governing Board of the Authority.

15. Transfer of Permits.

- 15.1 A permit is issued in the name of a person. Upon sale or legal transfer of a permitted facility, the new owner must apply by letter for a transfer of permit within thirty (30) days. Unless the transferor notifies the Authority of the transfer and to whom transferred, the transferor will remain liable for performances in accord with the permit until the transferee applies for a transfer of permit. Transfer of permits shall not become final until approved by the Governing Board of the Authority. The transferee shall be subject to the permit conditions and financial responsibility provisions contained in the permit.
- 15.2 Once transferred the permit will remain in effect until the original expiration date. A permit may not be transferred to a new operational location. Relocation of facilities shall require the permittee to apply for a new permit.

16. Facility Operation - Problems.

- 16.1 If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Authority rules.

17. Permit Conditions.

- 17.1 All permits issued by the Authority shall include the following general conditions:
- (a) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Palm Beach County Solid Waste Act.
 - (b) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the Authority.
 - (c) The issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other permit that may be required for other aspects of the total project which are not addressed in this permit.

Appendix B

- (d) This permit conveys no title to land or water, does not constitute recognition or acknowledgment of title.
- (e) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department or Health Unit rules.
- (f) The permittee shall properly operate and maintain the facility and systems that are installed and used by the permittee to achieve compliance with the conditions of this permit, or other permits required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (g) The permittee, by accepting this permit, specifically agrees to allow authorized Authority personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - 1. Have access to and copy any records that must be kept under conditions of the permit; upon reasonable prior notice
 - 2. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - 3. Sample or monitor any substances at any location reasonably necessary to assure compliance with this permit or Authority rules.
 - 4. Reasonable time and reasonable prior notice may depend on the nature of the concern being investigated.
- (h) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Authority with the following information:
 - 1. A description of and cause of noncompliance; and
 - 2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to

Appendix B

enforcement action by the Authority or by the Department for penalties or for revocation of this permit.

- (i) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Authority may be used by the Authority as evidence in any enforcement case involving the permitted facility arising under the Florida Statutes or Authority rules. Such evidence shall be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (j) The permittee agrees to comply with changes in Authority rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Authority rules to challenge the appropriateness or validity of such changed rules or statutes.
- (k) This permit is transferable only upon Authority approval in accordance with Authority rules. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Authority.
- (l) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (m) Upon request, the permittee shall furnish all records and plans required under Authority rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Authority.
- (n) When requested by the Authority, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Authority, such facts or information shall be corrected promptly.

Appendix C

Solid Waste Authority Rule II Hazardous Waste Services Authorization



RULE II

HAZARDOUS WASTE SERVICES AUTHORIZATION

1. Scope of Rule.

- 1.1 This Rule sets forth procedures on how to obtain a hazardous waste services authorization from the Solid Waste Authority of Palm Beach County. The hazardous waste services authorization allows Conditionally Exempt Small Quantity Generators to dispose of their hazardous waste at Solid Waste Authority Hazardous Waste Collection Facilities. This Rule also provides requirements and procedures for the issuance, denial, renewal, extension, transfer, modification, and revocation of hazardous waste services authorizations. This Rule shall not preclude the application of any other authorization requirements or procedures for certain types of facilities or activities as contained in Federal, State, or local laws and regulations or other rules of the Authority.

2. Definitions.

- 2.1 When used in this Rule, unless the context clearly indicates otherwise, the term:
- (a) "Authority" means the Solid Waste Authority of Palm Beach County.
 - (b) "Conditionally Exempt Small Quantity Generator" means a generator generating less than 100 kg of hazardous waste in a calendar month.
 - (c) "Comprehensive Plan" the Comprehensive Solid Waste Management Plan, Resource Recovery and Recycling Program for the Solid Waste Authority of Palm Beach County, as adopted by the Authority.
 - (d) "County" means Palm Beach County, Florida.
 - (e) "DER" means the State of Florida Department of Environmental Regulation.
 - (f) "Director" means the Executive Director of the Solid Waste Authority of Palm Beach County or his duly authorized representative.
 - (g) "Generator" means any person whose act or process produces hazardous waste or whose act first causes a hazardous waste to be subject to regulation.

Appendix C

- (h) "Large Quantity Generator" means a generator who generates over 1000 kg of hazardous waste in a calendar month.
- (i) "Health Unit" means the Palm Beach County Public Health Unit.
- (j) "Household Hazardous Waste" means any hazardous waste generated by households, including single and multiple dwellings and other residential sources.
- (k) "Hazardous Waste" means a hazardous waste as defined in the Code of Federal Regulations, Chapter 40, Part 261.3.
- (l) "Hazardous Waste Services Authorization" is the legal authorization granted to a conditionally exempt small quantity generator by the Authority, to deliver hazardous waste to a Solid Waste Authority Hazardous Waste Management facility.
- (m) "Palm Beach County Solid Waste Act" means Chapter 75-473, Laws of Florida, as amended.
- (n) "Authorization" means a hazardous waste services authorization as defined herein.
- (o) "Authorization condition" means a statement or stipulation which is issued with an authorization and which must be complied with.
- (p) "Person" means any and all persons, natural or artificial, including any individual, firm or association, facility or any municipal or private corporation organized or existing under the laws of the State of Florida or any other state and any county or governmental agency of this state or the federal government.
- (q) "Small Quantity Generator" means a generator who generates more than 100 kg, but less than 1000 kg of hazardous waste in a calendar month.

3. Conflict of Definitions.

In case of conflict between definitions contained herein and as they may be stated elsewhere, the definitions stated herein shall prevail. Definitions in other Authority rules may be used to clarify the meaning of terms used in this Rule unless use of such definition would defeat the purpose or alter the intended effect of the provisions of this Rule.

4. Prohibitions.

- 4.1 No hazardous waste shall be delivered or disposed of at any Authority facility by large quantity generators or small quantity generators.
- 4.2 No hazardous waste shall be delivered or disposed of at any Authority facility by Conditionally Exempt Small Quantity generators without the appropriate and currently valid authorizations issued by the Authority.

5. Exemptions.

- 5.1 The following generators are exempted from the authorization requirements of the Rule:
 - (a) Household Hazardous Waste generators.
 - (b) Facilities constructed and operated by the Authority pursuant to its responsibilities under the Palm Beach County Solid Waste Act and the Comprehensive Plan.
- 5.2 These exemptions do not relieve any generator from any other requirements of Federal, State or local laws or regulations, the Palm Beach County Solid Waste Act, the Comprehensive Plan or rules of the Authority.

6. Procedure to Obtain Authorization; Application.

- 6.1 Any person desiring to obtain an authorization from the Authority shall apply on form prescribed by the Authority and shall submit the number of completed applications and such additional information as the Authority by law may require.
- 6.2 Processing fees for all authorizations shall be established by the Governing Board of the Authority as part of the annual budget.
- 6.3 Processing fees shall be deposited in an account created by the Authority.
- 6.4 To be considered by the Authority, each application must be accompanied by the proper processing fee, except for applications filed by state agencies created pursuant to Chapter 20, F.S., and water management districts created pursuant to Chapter 373, F.S. The fee shall be paid by check, payable to the Solid Waste Authority of Palm Beach County. The fee is non-refundable except as provided in this section.
- 6.5 When an application is received without the required fee, the Authority shall either return the unprocessed application or arrange with the applicant for the pick up of the application.

- 6.6 Upon receipt of a complete application and the processing fee, the processing time requirements stated in this Rule shall begin.
- 6.7 Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Section 6.2 of this Rule and shall restart the time requirements of Section 7. For purposes of this Subsection, the term “substantial modification” shall mean a modification which is reasonably expected to lead to substantially different volumes or types of wastes which require a detailed review.

7. Authorization Processing.

- 7.1 Within 30 days after receipt of an application for authorization and the correct processing fee the Authority shall review the application or request submittal of additional information.
- 7.2 Within 30 days after receipt of such additional information, the Authority shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information.
- 7.3 If the applicant believes the request of the Authority for such additional information is not authorized by law or rule, the Authority, at the applicant's request, shall begin to process the authorization application. Such a request by the applicant shall be in writing and shall be clearly labeled as a request for the Authority to process the application. The applicant's request shall state the reasons why the applicant believes the Authority request for additional information is not authorized by law or rule. The applicant shall clearly state that the applicant requests the Authority to process the application without that information.
- 7.4 Authorizations shall be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the authorization application, whichever occurs last.

8. Consultation.

- 8.1 The applicant is encouraged to consult with Authority personnel before submitting an application. However, any representation by the Authority shall not relieve any person from any requirement of Federal, State or local laws and regulations or Authority Rules.

9. Standards for Issuing or Denying Authorizations; Issuance; Denial.

- 9.1 An authorization shall be issued to the applicant in such conditions as the Authority may direct, only if the applicant affirmatively provides the Authority with reasonable assurance that the waste generated and delivered to the Solid Waste Authority shall not be in contravention of the Federal, State, or local laws and regulations, the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules.
- 9.2 If, after review of the application and all the information, the Authority determines that the applicant has not provided reasonable assurance that the waste will be managed in accord with applicable laws, plans or rules, the Authority shall deny the authorization.
- 9.3 The Authority may issue any authorization with specific conditions necessary to provide reasonable assurance that Authority rules can be met.
- 9.4 No authorization shall be issued for a term of more than five (5) years.
- 9.5 No authorization shall be issued to a generator subject to a DER or Health Unit notice of violation or judicial action initiated by the DER or Health Unit. Upon resolution of the enforcement action by agreement, final order, or judicial action an authorization may be granted subject to the applicable requirements of Authority rules. This prohibition shall only be applicable when the enforcement action involves the activity as the activity for which an authorization is being sought. The Authority shall take into consideration an authorized applicant's violation of any DER rules at any facility when determining whether the applicant provided reasonable assurances that Authority standards will be met.
- 9.6 The applicant shall be promptly notified if the Authority intends to deny the application, and shall be informed of the reasons for the intended denial.
- 9.7 The issuance of an authorization does not relieve any person from complying with the requirements of Federal, State, or local laws or regulations.

10. Modification of Authorization Conditions.

- 10.1 For good cause and after notice, the Authority may require the authorized party to conform to new or additional conditions. The Authority shall allow the authorized party a reasonable time to conform to the new or additional conditions and on application of the authorized party the Authority may grant additional time.
- 10.2 For the purpose of this Section, good cause shall include, but not be limited to, any of the following:

- (a) A showing that an improvement in hazardous waste management activities can be accomplished because of technological advances without unreasonable hardship.
- (b) Adoption or revision of Federal Statute or Regulation, Florida Statutes, rules, or standards or local ordinances which require the modification of an authorization condition for compliance.
- (c) Revision of the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules which require the modification of an authorization condition for compliance.
- (d) Circumstances beyond the control of the Authority which prevent the Authority from disposing of any previously approved waste stream at a federally permitted treatment, storage or disposal facility.

10.3 An authorized party may request a modification of an authorization by applying to the Authority.

11. Renewals.

11.1 Prior to ninety days before the expiration of any Authority authorization, the authorized party shall apply for a renewal of an authorization on forms and in a manner prescribed by the Authority. A renewal application shall be timely and sufficient. If the application is submitted prior to ninety days before expiration of the authorization, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation authorization. When the application for renewal is timely and sufficient, the existing authorization shall remain in effect until the renewal application has been finally acted upon by the Authority.

12. Suspension and Revocation.

12.1 Authorizations shall be effective until suspended, revoked, surrendered, or expired at shall be subject to the provisions of the Palm Beach County Solid Waste Act, the Comprehensive Plan or Authority rules.

12.2 Failure to comply with Federal, State or local pollution control laws and regulations shall be grounds for suspension or revocation.

12.3 An authorization issued pursuant to this rule shall not become a vested property right to the authorized party. The Authority may revoke any authorization issued if it finds that the authorization holder or his agent:

- (a) Submitted false or inaccurate information in his application or operational reports.

- (b) Has violated law, DER orders, rules, local ordinances or authorization conditions.
- (c) Has failed to submit reports or other information required by Authority rules.
- (d) Has refused lawful inspection.

12.4 No revocation shall become effective except after notice is served by personal service or certified mail. The notice shall specify the grounds for the revocation, including the provision of the law, rule or local ordinance alleged to be violated, or the authorization condition or DER order alleged to be violated, and the facts alleged to constitute a violation thereof.

13. Financial Responsibility.

13.1 The Authority may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Authority rules.

14. Transfer of Authorizations.

14.1 An authorization is issued in the name of a person. Upon sale or legal transfer of an authorized facility, the new owner must apply by letter for a transfer of authorization within thirty (30) days. Unless the transferor notifies the Authority of the transfer and to whom transferred, the transferor will remain liable for performances in accord with the authorization until the transferee applies for a transfer of authorization.

15. Facility Operation - Problems.

15.1 If the authorized party is temporarily unable to comply with any of the conditions of the authorization, the authorized party shall immediately notify the Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence. Such notification does not release the authorized party from any liability for failure to comply with Federal, State or local laws or regulations, or Authority rules.

16. Authorization Conditions.

16.1 All Hazardous Waste Services Authorizations issued by the Authority shall include the following general conditions:

Appendix C

- (a) The terms, conditions, requirements, limitations and restrictions set forth in this authorization, are "authorization conditions" and are binding and enforceable pursuant to Palm Beach County Solid Waste Act. The authorized party is placed on notice that the Authority will review this authorization periodically and may revoke the authorization for any violation of these conditions.
- (b) This authorization is valid only for the specific wastes applied for and indicated in the approved application. Any unauthorized deviation from the approved application, specifications, or conditions of this authorization may constitute grounds for revocation by the Authority.
- (c) The issuance of this authorization does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This authorization is not a waiver of or approval of any other authorization that may be required for other aspects of the total project which are not addressed in this authorization.
- (d) This authorization conveys no title to land or water, does not constitute recognition or acknowledgment of title.
- (e) This authorization does not relieve the authorized party from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this authorized source, or from penalties therefore; nor does it allow the authorized party to cause pollution in contravention of Florida Statutes, DER rules or local ordinances, unless specifically authorized.
- (f) The authorized party, by accepting this authorization, specifically agrees to allow authorized personnel of the Authority and/or the Health Unit, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the authorized activity is located or conducted to:
 - 1. Have access to and copy any records that must be kept under conditions of the authorization;
 - 2. Inspect the facility, equipment, practices, or wastes regulated under this authorization; and
 - 3. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this authorization or Authority rules.

Appendix C

4. Reasonable time may depend on the nature of the concern being investigated.
- (g) If, for any reason, the authorized party does not comply with or will be unable to comply with any condition or limitation specified in this authorization, the authorized party shall immediately provide the Authority with the following information:
1. A description of and cause of noncompliance; and
 2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The authorized party shall be responsible for any and all damages which may result and may be subject to enforcement action by the Authority or by the DER for penalties or for revocation of this authorization.
- (h) In accepting this authorization, the authorized party understands and agrees that all records, notes, monitoring data and other information relating to the hazardous wastes generated which are submitted to the Authority may be used as evidence in any enforcement case involving the authorized facility arising under Federal, State, or local laws or regulations, or Authority rules. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (i) The authorized party agrees to comply with changes in Federal, State or local laws or regulations, or Authority rules and after a reasonable time for compliance; provided, however, the authorized party does not waive any other rights granted by Federal, State or local laws or regulations, or Authority rules.
- (j) This authorization is transferable only upon Authority approval in accordance with Rule Section 14, as applicable. The authorized party shall be liable for any non-compliance of the authorized activity until the transfer is approved by the Authority.
- (k) This authorization or a copy thereof shall be prominently displayed at the work site of the authorized activity.
- (l) Upon request, the authorized party shall furnish all records and data required under Authority rules. During enforcement actions by the DER or Health Unit, the retention period for all records will be extended automatically unless otherwise stipulated by the Authority.

Appendix C

- (m) When requested by the Authority, the authorized party shall within a reasonable time furnish any information required by authorization or law which is needed to determine compliance with the authorization. If the authorized party becomes aware the relevant facts were not submitted or were incorrect in the authorization application or in any report to the Authority, such facts or information shall be corrected promptly.

Appendix D

**Solid Waste Authority Rule III
Standards and Criteria for Materials Recovery Facilities**



Rule III

Standards and Criteria for Materials Recovery Facilities

1. Scope of Rule.

- 1.1 This Rule sets forth the standards and criteria to be used in evaluating permit applications for materials recovery facilities issued pursuant to Solid Waste Authority Rule I. This rule shall not preclude the application of any other permit requirements or procedures for certain types of facilities or activities as contained in other rules of the Authority.

2. Definitions.

- 2.1 All definitions contained in Chapter 75-473, Laws of Florida, as amended, and Solid Waste Authority Rule I, to the extent they are consistent with the definitions of this rule, are applicable to the terms used in this rule.
- 2.2 When used in this rule, unless the context clearly indicates otherwise, the term:
- (a) “Acceptable Materials” means construction and demolition debris, yard trash, and other recyclable materials which have been source separated .
 - (b) “Construction and demolition debris” means discarded materials generally considered to be not water-soluble and nonhazardous in nature, including, but not limited to, steel, glass, brick, concrete, asphalt roofing material, pipe, gypsum wallboard, and lumber, from the construction or destruction of a structure as part of a construction or demolition project or from the renovation of a structure, and including rocks, soils, tree remains, trees, and other vegetative matter that normally results from land clearing or land development operations for a construction project, including such debris from construction of structures at a site remote from the construction or demolition project site. Mixing of construction and demolition debris with other types of solid waste will cause it to be classified as other than construction and demolition debris. The term also includes:
 - (i) Clean cardboard, paper, plastic, wood, and metal scraps from a construction project;
 - (ii) Except as provided in FS 403.707(13)(j), unpainted, non-treated wood scraps from facilities manufacturing materials used for construction of structures or their components and unpainted, non-treated wood pallets provided the wood scraps and pallets are separated from other solid waste where generated and the generator of such wood scraps or pallets implements reasonable

Appendix D

practices of the generating industry to minimize the commingling of wood scraps or pallets with other solid waste; and

- (iii) De minimis amounts of other nonhazardous wastes that are generated at construction or destruction projects, provided such amounts are consistent with best management practices of the industry.
- (d) “Materials recovery facility”(MRF) means a solid waste management facility that provides for the extraction from solid waste of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.
- (e) ”Recovered Screened Materials - Yard Trash” (RSM) means the recovered screened material resulting from the processing of yard trash, as defined by the Department. This material shall be managed in a manner consistent with Department regulations and policies.
- (f) ”Recovered Screened Materials - C/D” (RSM) means the recovered screened material resulting from the processing of construction and demolition debris from which all Class I solid waste has been removed. This material shall be treated and managed in a manner consistent with Department regulations and policies.
- (g) “Source separated” means recovered materials are separated from solid waste where the solid waste and recovered materials are generated. The term does not require that various types of recovered materials be separated from each other and recognizes de minimis solid waste, in accordance with industry standards and practices, may be included in the recovered material.
- (h) “Recovered Materials Processing Facility”(RMPF) means a facility that provides for the processing of only source separated recyclable materials
- (h) “Processing capacity” means the volume or tonnage of materials that a solid waste management facility is capable of processing per day through use of site specific processing equipment and manpower as detailed in an approved operational plan.
- (i) “Special wastes” means solid wastes that can require special handling and management, including but not limited to white goods, waste tires, used oil, lead-acid batteries, construction and demolition debris, ash residue, yard trash and biological wastes.
- (j) “Speculative Accumulation” is the recovery and stockpiling of materials removed from solid waste, for which no feasible means of recycling is readily available.

3. Conflict of Definitions.

- 3.1 In case of conflict between definitions contained herein and as they may be stated elsewhere, the definitions stated herein shall prevail. Definitions stated elsewhere may be used to clarify the meaning of terms used in this rule, unless use of such definitions would defeat the purpose or alter the intended provisions of this rule.

4. Prohibitions.

- 4.1 No materials recovery facility will be permitted to process any material that is not source separated, except for yard waste and construction/demolition debris (C/D).
- 4.2 No materials recovery facility shall be operated, maintained, expanded or modified without the appropriate and currently valid permit issued by the Authority. The Authority may issue a permit to a materials recovery facility only after it receives reasonable assurance that the operation of the materials recovery facility will not cause a violation of any of the provisions of the Palm Beach County Solid Waste Act, Authority Plans, or any rules promulgated thereunder.
- 4.3 No materials recovery facility may engage in the speculative accumulation of materials.

5. Standards and Criteria.

- 5.1 Materials Recovery Facilities shall be designed and operated to recycle a minimum of fifty percent (50%) of each individual waste stream or waste type received by the facility.
- 5.2 Materials Recovery Facilities are permitted to recycle only acceptable materials, as defined herein.
- 5.3 Applications for Materials Recovery Facilities shall include site plans of sufficient detail to show the size, location and volume of stockpile areas for each individual waste stream or waste type, and for each recovered material produced.
- 5.4 Materials Recovery Facilities shall weigh all incoming waste and source separated materials, as well as all wastes and recovered materials leaving the facility.
- 5.5 Proof of financial responsibility shall be provided in the form of cash, irrevocable letter of credit or surety bond. The amount of the bond shall be

based upon the cost to load, transport to Authority facilities and dispose of the permitted quantities of stockpiled wastes identified on the site plan.

- (a) In the event another agency requires a bond as a condition of approval, and said bond provides proof of financial responsibility for items identical to those required by the Authority, the Authority may, at its option, waive the requirement for a bond.

6. Reporting Requirements.

6.1 All Materials Recovery Facilities shall report their recycling activities on a monthly basis and on Authority approved report forms.

- (a) All quantities of materials received, processed, recovered, stockpiled, transshipped and shipped for disposal shall be reported in tons.
- (b) All Facility Report Forms shall be submitted to the office of Special Programs by the fifteenth day of each month and shall document the facility's previous month's recycling activities.

7. Exemptions.

7.1 Recovered Materials Processing Facilities shall be exempt from the provisions of this rule.

Appendix E

Solid Waste Authority Rule IV Standards and Criteria for Roll-off Collection Service





YOUR PARTNER FOR
SOLID WASTE SOLUTIONS

Rule IV

Standards and Criteria for Roll-Off Collection Service

1. Scope of Rule.

1.1 This Rule sets forth the standards and criteria to be used in evaluating Permit applications for the collection of construction and demolition debris and horticultural or agricultural wastes. The roll-off collection service in unincorporated Palm Beach County shall be exclusive to the Permits granted by the Authority.

2. Definitions.

2.1 All definitions contained in Chapter 75-473, Laws of Florida, as amended, and Solid Waste Authority of Palm Beach County Rules I and III, to the extent they are consistent with the definitions of this rule, are applicable to the terms used in this rule.

2.2 When used in this rule, unless the context clearly indicates otherwise, the term:

- A. **Collection** shall mean the process whereby materials collected are removed and transported to a Designated Facility.
- B. **Construction and Demolition Debris (C&D)** shall mean materials generally considered to be not water soluble and non-hazardous in nature, including, but not limited to, steel, glass, brick, concrete, roofing material, pipe, gypsum wallboard, and lumber from the construction or destruction of a structure as part of a construction or demolition project. Mixing of a de minimis amount of waste other than C&D from the construction site will not automatically cause it to be classified as other than C&D.
- C. **Designated Facility** shall mean an Authority owned disposal, processing, recovery, recycling or transfer facility which receives such material, or another facility if permitted or specifically designated in writing by the Authority.

- D. **Equipment Yard** means a real property location that shall be utilized by the Permittee for the storage and keeping of all equipment needed by the Permittee to provide all services under this Agreement in the Service Area.
- E. **Hazardous Waste** shall mean solid waste as defined by the State of Florida Department of Environmental Protection as a hazardous waste in the State of Florida Administrative Codes, or by any future legislative action.
- F. **Horticultural or Agricultural Waste** shall mean vegetative wastes attendant to the operation of horticultural or agricultural nurseries. Horticultural or Agricultural waste shall not include any other type of waste, including, but not limited to, Special Wastes or Garbage.
- G. **Permit Administrator** shall mean the Authority's designated agent who shall act as the Authority's representative during the term of the Roll-off Collection Permits.
- H. **Permittee** shall mean that person or entity that has entered into a Roll-off Collection Permit with the Authority to provide Roll-off Collection Services.
- I. **Roll-off Collection Service** shall mean the Collection of only C&D roll-off containers, or the Collection of C&D by other mechanical means, at temporary locations in the Service Area, limited to new construction sites and remodeling or refurbishment sites. Such service shall not include Special Wastes, Garbage or Recyclable Materials. Roll-off Collection Service shall also mean the collection of Horticultural or Agricultural wastes, but only when the customer chooses to use roll-off containers for Horticultural or Agricultural waste.

3. Conflict of Definitions

- 3.1 In case of conflict between definitions contained herein and as they may be stated elsewhere, the definitions stated herein shall prevail. Definitions stated elsewhere may be used to clarify the meaning of terms used in this rule, unless use of such definitions would defeat the purpose or alter the intended provisions of this rule.

4. Prohibitions

- 4.1 No person shall provide Roll-off Collection Service in unincorporated Palm Beach County or any other area in which the Authority administers collection services without first obtaining a Roll-off Collection Service Permit from the Authority.
- 4.2 Collection of Garbage, Special Waste or any waste other than Construction and Construction and Demolition Debris, and Horticultural or Agricultural Waste, as defined in this rule, in a roll-off container, is prohibited. Mixing of wastes is prohibited.

5. Exemptions

- 5.1 The following activities are exempted from the permit requirements of this rule. This exception does not provide relief from any other requirements of the Authority or any other agency.
- (a) Collection and transportation, for recycling or disposal, of construction and demolition debris at a residence by the occupants of that residence.
 - (b) Collection and transportation, for recycling or disposal, of land clearing debris.
 - (c) Collection and transportation, for recycling or disposal, of source separated recovered material.

6. Standards and Criteria

- 6.1 Permittee shall be allowed to provide Roll-Off Collection Services within unincorporated Palm Beach County.
- 6.2 Permittee shall maintain an Equipment Yard and office in Palm Beach County where complaints shall be received. An Equipment Yard and office must be established and maintained within Palm Beach County within six (6) months of the commencement of the Permit until October 14, 1999. Effective October 15, 1999, an Equipment Yard and office must be established within Palm Beach County before a Permit is issued.
- 6.3 The term of the Permits shall be for three years unless terminated by the Authority or the Permittee.
- 6.4 The Authority shall be paid \$10,000 per year by the Permittee for each year of the Permit, beginning on the date of Permit application, with \$10,000 to be paid by the Permittee on the effective date of the permit during the second and third year of the Permit.
- 6.5 The Permittee shall, during the term of this Permit, and any extensions hereof, maintain in full force and effect commercial general liability insurance and automobile liability insurance, which specifically covers all exposures incident to the Permittee's operations under this Permit. Worker's Compensation coverage must be maintained in accordance with statutory requirements as well as Employer's Liability Coverage in an amount not less than \$100,000.00 per each accident, \$100,000.00 by disease and \$500,000.00 aggregate by disease.
- 6.6 The Permittee shall obtain, at their own expense, all Permits and licenses required by law or ordinance and maintain the same in full force and effect. Any changes of the licenses or Permits shall be reported to the Authority within ten (10) working days of the change.
- 6.7 All C&D and Horticultural and Agricultural Waste shall be transported to a Designated Facility.

- 6.8 The Permittee shall collect waste with as little disturbance as possible and shall leave any receptacle at the same point it was collected. The Permittee shall not litter or cause any spillage to occur upon the premises or the right-of-way wherein the collection shall occur. During transportation, all waste shall be contained, tied, or enclosed so that leakage, spillage, and litter is prevented. In the event of any spillage or leakage caused by the Permittee, the Permittee shall promptly clean up all spillage or leakage at no cost to the Authority or the customer.
- 6.9 For all collection services, the charges shall be determined through open competition, by agreement between the Permittee and the customer. The Permittee shall be responsible for billing and collecting, transportation, disposal and container rental charges for this service. However, the Permittee may not improperly dispose of waste if the customer does not pay their bill. The Permittee shall pay the Authority and/or the Authority Permitted processor for all solid waste disposal costs incurred for disposing of solid waste at the Designated Facilities.

7. Reporting Requirements

- 7.1 All Permittees shall report their roll-off collection activities on a quarterly basis and on Authority approved report forms.
- (a) All Collection Report Forms shall be submitted to the office Customer Information Services by the fifteenth day of each month and shall document the previous quarter's collection activities.

8. Permit Conditions

- 8.1 Each Permit shall be issued subject to the General Conditions embodied in Solid Waste Authority Rule I, Section 17.
- 8.2 The General permit conditions may be supplemented with Specific permit conditions.

9. Enforcement and Fines

- 9.1 The conditions of a Permit issued pursuant to this rule shall be enforced as set forth in of Chapter 75-473, Laws of Florida, as amended.
- 9.2 Fines or loss of Permit will be incurred by the Permittee for non-compliance of Permit conditions, as set forth in the special terms and conditions.
- 9.3 A Permit issued under this rule may be suspended or revoked under the terms of Solid Waste Authority Rule I, Section 1.
- 9.4 The failure of the Authority at any time to require performance by the Permittee of any provisions hereof shall in no way affect the right of the Authority thereafter to enforce the same. Nor shall waiver by the Authority of any breach of any provisions hereof be taken or held to be waived of any succeeding breach of such provisions or as a waiver of any provision itself.

10. Indemnification

10.1 The Permittee will hold the Authority harmless from any and all liabilities, losses or damages the Authority may suffer as a result of claims, demands, costs or judgments against the Authority arising out of the wrongful acts or omission of the Permittee or its employees, which said liabilities, losses, damages, claims, demands, costs or judgment arise directly out of the matters which are the subject of this Rule and the work to be performed thereby. The Permittee shall not be responsible for nor require to indemnify or hold the Authority harmless for any act, omission, negligence or other liability to the extent caused by the act or omission in whole or in part of the Authority or any one of its employees or agents.

11. Title to Waste

11.1 The Permittee shall have no right to take, keep, process, alter remove or otherwise dispose of any collected waste without specific written authorization from the Permit Administrator.

12. Procedures to Obtain Permit; Application, Processing and Standards for Issuing or Denying Permits.

12.1 Any person desiring to obtain a permit from the Authority shall apply on forms prescribed by the Authority and shall submit the number of completed applications and such additional information as the Authority may require.

12.2 To be considered by the Authority, each application must be accompanied by the proper Permit fee, as specified in Section 4 of this Rule. The fee shall be paid by check, payable to the Solid Waste Authority of Palm Beach County. The fee is non-refundable except as provided in this section.

12.3 In addition to the requirements listed in Section 4 of this Rule, the applicant must have at least one year of roll-off collection experience. Other considerations such as references, criminal and civil litigation history, and other matters deemed pertinent to the Authority will be evaluated as part of the application review.

12.4 Within 30 days after receipt of an application for a Permit and the Permit fee, the Authority shall review the application and shall request submittal of additional information required by this Rule or any other rules or regulations.

12.5 Within 30 days after receipt of such additional information, the Authority shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information,

12.6 Permits shall be presented to the Governing Board of the Authority to be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application, whichever occurs last.

- 12.7 A Permit shall be issued to the applicant upon such conditions as the Authority may direct, only if the applicant affirmatively provides the Authority with reasonable assurance that all the terms of this Rule, as may be supplemented by specific terms and conditions, have been met and will be maintained.
- 12.8 The applicant shall be promptly notified if the Authority intends to deny the application and shall be informed of the reasons for the intended denial, and of the right to request a hearing before the Governing Board of the Authority.
- 12.9 The issuance of a Permit does not relieve any person from complying with the requirements of Chapter 403, Florida Statutes, Department of Environmental Protection Rules, OSHA rules, Department of Transportation rules, and federal, state, and local rules and ordinances.

13. Transfer of Permits

- 13.1 A permit is issued in the name of a person. Upon sale or legal transfer of a permitted facility, the new owner must apply by letter for a transfer of permit within thirty (30) days. Unless the transferor notifies the Authority of the transfer and to whom transferred, the transferor will remain liable for performances in accord with the permit until the transferee applies for a transfer of permit. Transfer of permits shall not become final until approved by the Governing Board of the Authority. The transferee shall be subject to the permit conditions and financial responsibility provisions contained in the permit.
- 13.2 Once transferred, the permit will remain in effect until the original expiration date. A permit may not be transferred to a new operational location. Relocation of facilities shall require the Permittee to apply for a new Permit.

14. Modification of Permit Conditions

- 14.1 For good cause and after notice, the Authority may require the Permittee to conform to a new or additional condition. The Authority shall allow the Permittee a reasonable time to conform to the new or additional conditions and on application of the Permittee the Authority may grant additional time.
- 14.2 For the purpose of this Section, good cause shall include, but not be limited to, any of the following:
- (a) Adoption or revision of Florida Statutes, local ordinances, rules or standards that require the modification of a permit condition for compliance.
 - (b) Adoption or revision of the Palm Beach County Solid Waste Act, the Solid Waste Authority of Palm Beach County Comprehensive Plan or Authority Rules which require the modification of a permit condition for compliance.

14.3 A Permittee may request a modification of a permit by applying to the Authority.

14.4 **Suspension and Revocation**

- 15.1 Permits shall be effective until suspended or revoked by the Governing Board of the Authority, surrendered, or expired and shall be subject to the provisions of the Palm Beach County Solid Waste Act, the Solid Waste Authority of Palm Beach County Integrated Solid Waste Management Plan, Authority Rules or other applicable law.
- 15.2 A Permit issued to this rule shall not become a vested property right in the Permittee. The Governing Board of the Authority may revoke any permit issued by it if it finds that the permit holder or his agent:
- (a) submitted false or inaccurate information in his application or operation reports;
 - (b) has violated law, Palm Beach County Health Department orders, rules or permit conditions;
 - (c) has failed to submit operational reports or other information required by Authority Rules;
 - (d) has refused lawful inspection.
- 15.3 A violation of any Permit condition shall be grounds for immediate suspension or revocation of this permit at the election of the Governing Board of the Authority
- 15.4 No revocation shall become effective except after notice is served by personal service or certified mail, upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department of Health Unit order alleged to be violated, and the facts alleged to constitute violation thereof.



ROC _____

Application to Provide Roll-Off Collection Services in Unincorporated Palm Beach County

1. Application Date: _____
2. Applicant: _____
Owner(s) _____
Principals _____
Corporate Officers _____
3. Mailing Address: _____

Authorized Agent _____
Phone Number _____ Fax Number: _____
4. Equipment Yard Address _____

5. References and Years of Experience (include name, address, phone number and description of roll-off collection experience for no less than three (3) references:
 - Reference 1: _____

 - Reference 2: _____

 - Reference 3: _____

6. List Trucks, Manpower and Containers to be used in the operations of the roll-off collection services.

(If necessary, list additional resources on separate sheet and attach)

Please include application fee with application

Appendix F

Solid Waste Authority Landfill Depletion Model



2006 LANDFILL DEPLETION MODEL

**Solid Waste Authority of Palm Beach County
North County Landfills
Landfill Depletion Model**

February 14, 2006



Solid Waste Authority of Palm Beach County

**7501 North Jog Road
West Palm Beach, FL 33412
561-640-4000**

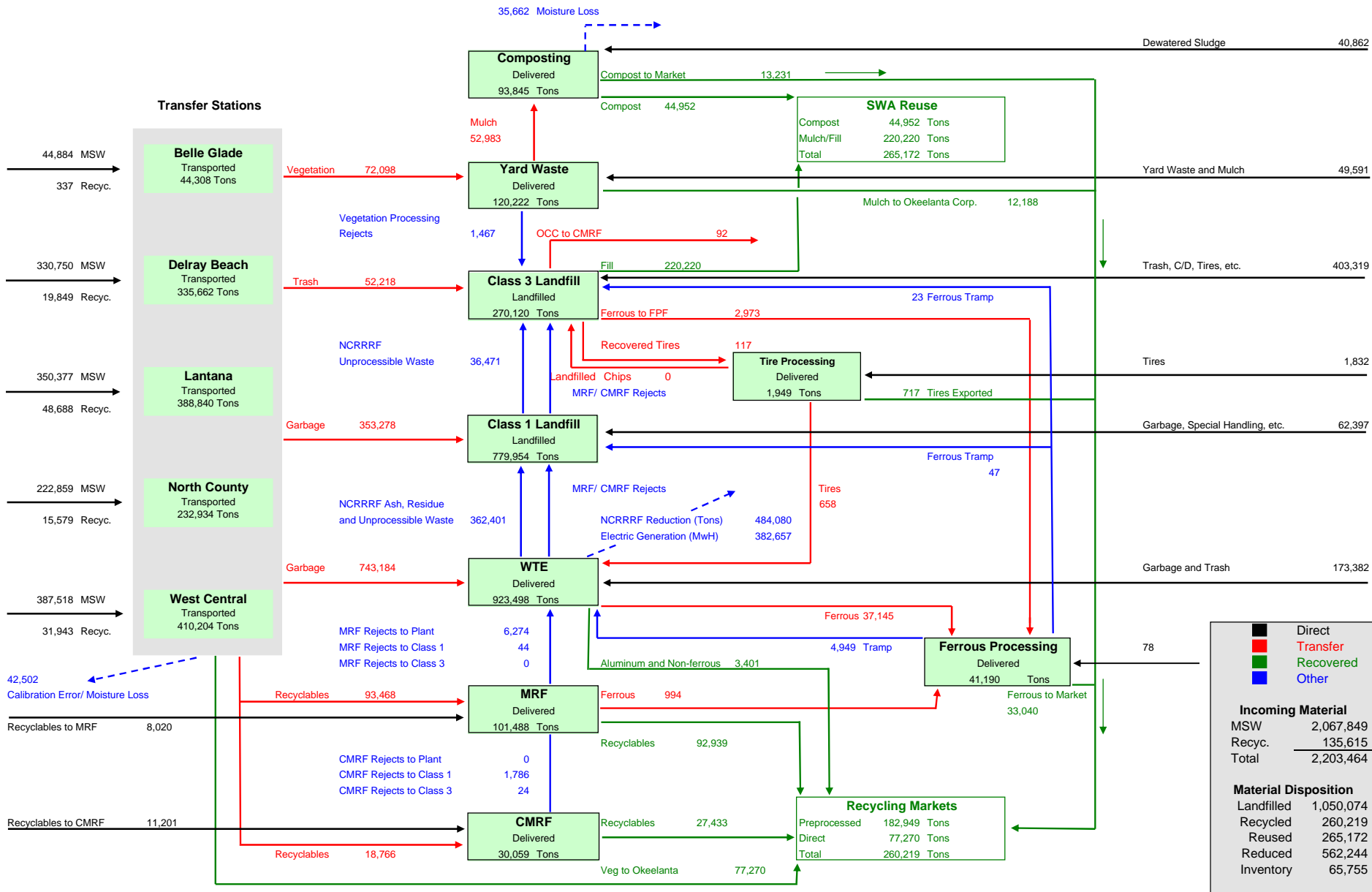
2006 Landfill Depletion Model
February 14, 2006

Table of Contents

1.0 Introduction	1
1.1 Purpose	1
1.2 Model Description	2
1.3 Prior Results	2
2.0 Landfill Depletion Model Assumptions	3
2.1 Population	3
2.2 Waste Generation	4
2.3 Waste Disposal	8
2.4 Unforeseen Events	8
2.5 Recycling Rates	9
2.6 Compacted Densities	9
2.7 Cover Material	9
2.8 Available Landfill Volumes	11
2.9 Resource Recovery Facility	11
3.0 Model Results	12
3.1 Summary of Results	12
3.2 Special Scenario - Reserve Landfill Capacity for Resource Recovery Residues	12
3.3 Sensitivity Analysis - Three States of Nature	12
4.0 Summary and Conclusions	14
Appendix A: Landfill Depletion Model Output	16
Appendix B: Historical Incoming Solid Waste Tonnage	26

Produced By:
Daniel Pellowitz, Business Analyst
Department of the Managing Director
Solid Waste Authority of Palm Beach County
561-640-4000

Solid Waste Authority of Palm Beach County Waste Flow Diagram - FY 2004/2005



Material Disposition	Quantity (Tons)
Landfilled	1,050,074
Recycled	260,219
Reused	265,172
Reduced	562,244
Inventory	65,755

Incoming Material	Quantity (Tons)
MSW	2,067,849
Recyc.	135,615
Total	2,203,464

2006 Landfill Depletion Model

February 14, 2006

1.0 Introduction

1.1 Purpose

The principles of integrated solid waste management as put forth in the Environmental Protection Agency's hierarchy of integrated solid waste management are designed to minimize the quantity of waste disposed in landfills. The recycling, composting, and resource recovery programs that make up a part of the SWA's solid waste management system divert materials from landfill disposal and decrease the volume of landfill space required to serve the Palm Beach County population.

Despite the existence of these programs, the SWA recognizes the unique characteristics of landfilling as a waste disposal option, not the least of which is the reality that landfill space, unlike other forms of infrastructure, is a depletable resource. Recycling, composting, and resource recovery are all factors in increasing the life of a given landfill volume, however given existing technology, there will always be a need to landfill some portion of the waste stream. It is reasonable to assume that although the need to provide replacement capacity can be delayed through recycling, composting, and resource recovery programs, it cannot be prevented. The availability of landfill capacity is a driving force behind the solid waste management system decision making process.

Prudent planning requires identifying the time at which the need for replacement capacity becomes critical and taking the required steps to ensure that replacement capacity is available. Although replacement landfill capacity can be secured in several ways, including siting a new landfill and contracting with a private landfill operator, the long lead time in siting, permitting, and constructing a landfill site, often greater than ten years, necessitates effective long range planning in order to ensure the viability of available options. The SWA's primary long range planning tool is the Landfill Depletion Model.

The Landfill Depletion Model is intended to forecast the estimated life of the SWA's landfills in order to facilitate facilities planning decisions and to assess the impact of alternatives and alternative states of nature on landfill life. As a planning tool, the model is useful in identifying the point or points in time at which a decision is required in order to ensure the availability of disposal capacity.

The Landfill Depletion Model considers the dynamic interrelationships between the available processing and disposal options, population projections and population growth rates, per capita generation rates, recycling rates, diversion rates, incineration capacity and reduction effectiveness, landfill compacted densities, and cover material requirements and produces a projected date of landfill depletion. With this date established and the anticipated lead time known, the latest date at which a decision must be made can be determined.

Because of the many factors impacting the rate of landfill depletion and in order to minimize the possibility of falling behind on the critical path, the Landfill Depletion Model is run on an annual basis when the latest population projections become available.

1.2 Model Description

Population projections and per capita waste generation rates are used to forecast annual waste generation for the next 30 years. The annual waste tonnages are adjusted downward to account for recycling, incineration, and waste reduction activities. The net landfill tonnage is converted to cubic yards and the landfill depletion determined using estimated compacted densities. In every period, the cubic yards depleted in the period are deducted from the remaining volume at the end of the prior period to determine the volume remaining. A negative number in the "Landfill Volume Remaining" column indicates that the landfill is at capacity. The main schedules are as follows:

Table 1	Estimated Population and Solid Waste Generation
Table 2	Class 1 Landfill Depletion
Table 2A	Class 1 Landfill Depletion - Third Boiler at NCRRRF
Table 3	Class 3 Landfill Depletion
Table 3A	Class 3 Landfill Depletion - Third Boiler at NCRRRF
Table 4	North County Landfill Depletion Under Balanced Life Scenario
Table 4A	North County Landfill Depletion Under Balanced Life Scenario- Third Boiler at NCRRRF

1.3 Prior Results

The landfill depletion model was last updated in January 2005 and was based on operating data through FY 2004. The model predicted final depletion would occur in 2021 assuming the Class 1 and Class 3 landfills reach capacity at the same time. The model further indicated that adding a third boiler to the Resource Recovery Facility in the year 2007 would extend the life of the landfill to 2024.

Although the model is a long range planning tool, an evaluation of short term performance versus actual results is an important aspect of the annual review in order to identify any short term changes which may impact long term results. The following table presents projected, actual, and percent variance data for the previous year:

	Projected	Actual	Variance
Total Solid Waste Generation	1,786,063	1,904,390	-6.6%
Class 1 Generation	1,228,496	1,279,162	-4.1%
Class 3 Generation	557,566	625,228	-12.1%
Total Generation Rate (ppd)	7.46	7.72	-3.5%
Class 1 Generation Rate	5.22	5.34	-2.3%
Class 3 Generation Rate	2.24	2.38	-6.2%
Total Landfilled Tonnage	974,362	1,050,074	-7.8%
Class 1 Landfilled Tonnage	751,760	779,954	-3.8%
Class 3 Landfilled Tonnage	222,602	270,120	-21.3%
<i>Note:</i>			
<i>(1) Total generation is net of out-of-county recyclables, sludge, and clean and restricted use fill.</i>			
<i>(2) Total landfill quantity is net of recovered fill material, metals, and OCC.</i>			
<i>(3) Per capita generation rates expressed net of fill and sludge.</i>			

Total generation of MSW and recyclables increased from 1,752,230 to 1,904,390 tons, an increase of 152,160 tons, and exceeded expectations. This change is comprised of a 67,613 ton (5.6%) increase in Class 1 material and an 84,547 ton (15.6%) increase in Class 3 material. Significant changes in the Class 1 waste stream included an increase of 62,703 tons (5.9%) of garbage. This increase resulting from both growth and the power outages caused by Hurricane Jeanne, which pushed the garbage tonnage to 96,423 tons in October 2004 versus 83,280 tons in October 2003. On the Class 3 side, building debris increased 61,689 tons (72.3%) to 147,008 tons and trash increased 18,653 tons (9.7%). The increase in building debris is largely attributable to the damage caused by hurricanes Frances and Jeanne.

Landfill consumption exceeded the projection by 7.8%. Total landfilled material amounted to 1,050,074 tons versus the projection of 974,362 tons. The Class 1 landfill quantity exceeded the projection by 28,194 tons due to higher than expected garbage tonnage. The Class 3 landfill quantity exceeded the projection by 47,518 tons primarily due to the increase in building debris.

It must be noted that the *Landfill Depletion Model* is a long range planning tool. Short-term variances can be expected because the assumptions in the model are designed to achieve long term results. Nothing in the above analysis indicates that any fundamental change has taken place which could impact the long term accuracy of the model.

2.0 Landfill Depletion Model Assumptions

2.1 Population

Recent projections indicate that the population of Palm Beach County is anticipated to increase from an estimated 1,265,900 people in 2005 to 1,916,200 people in 2030. Both the population growth and the timing of population growth are critical to properly assessing future waste generation and landfill longevity.

The SWA uses the University of Florida Bureau of Economic and Business Research medium permanent population projections as published in *Florida Population Studies (Vol. 38 No.2, Bulletin No. 141)*. The BEBR population projections are the same projections used by Palm Beach County Planning and Zoning for planning purposes. The average annual growth rate from 2005 through 2030 is approximately 1.67%. The BEBR projections are presented in 5 year intervals. The between interval population estimates are calculated through interpolation using the periodic growth factors. The between interval growth rates are as follows:

Average Annual Growth Rates		Average Annual Growth Rates	
		2005-2010	2.19%
2010-2015	1.77%	2015-2020	1.62%
2020-2025	1.45%	2025-2030	1.27%

Tourism being one of Palm Beach County's largest economic contributors, there is an annual surge in population between Thanksgiving and Easter. Due to the difficulty in predicting seasonal population, which fluctuates with general economic conditions and the weather, among other factors, the solid waste generation projections are made using only permanent population. As a result of this, the per capita generation rates used in the model may not be comparable to those of other jurisdictions.

The Bureau of Economic and Business Research provides no estimate beyond 2030. The model assumes that the build-out population is the 2030 BEBR medium projection and freezes population for years beyond 2030 at the 2030 projection. Given that the projected landfill depletion date is prior to 2030, population growth beyond 2030 has a limited impact on the projection.

2.2 Waste Generation

Two per capita generation rates are utilized in the model: one for Class 1 material (garbage) and one for Class 3 material (trash). Class 1 material is delivered to the North County Resource Recovery Facility for incineration with material in excess of the plant's capacity landfilled directly in the Class 1 landfill. Class 3 material is delivered to the Class 3 landfill for processing and disposal. In order to calculate the per capita generation rates, SWA incoming waste tonnages for the preceding several years are reviewed in an effort to identify any trends. The data source is SWA scale reports. The per capita generation rates used in the model reflect only the material the SWA receives or reasonably expects to receive.

Currently, considerable quantities of primarily heavy construction and demolition debris and clean vegetation are delivered to private recyclers permitted by the SWA. Material that is currently diverted to private recyclers is assumed to continue to be delivered to private recyclers unless there is some compelling reason to believe that the situation will change. Socioeconomic, regulatory, and other factors that could affect the estimate are evaluated for their potential impact.

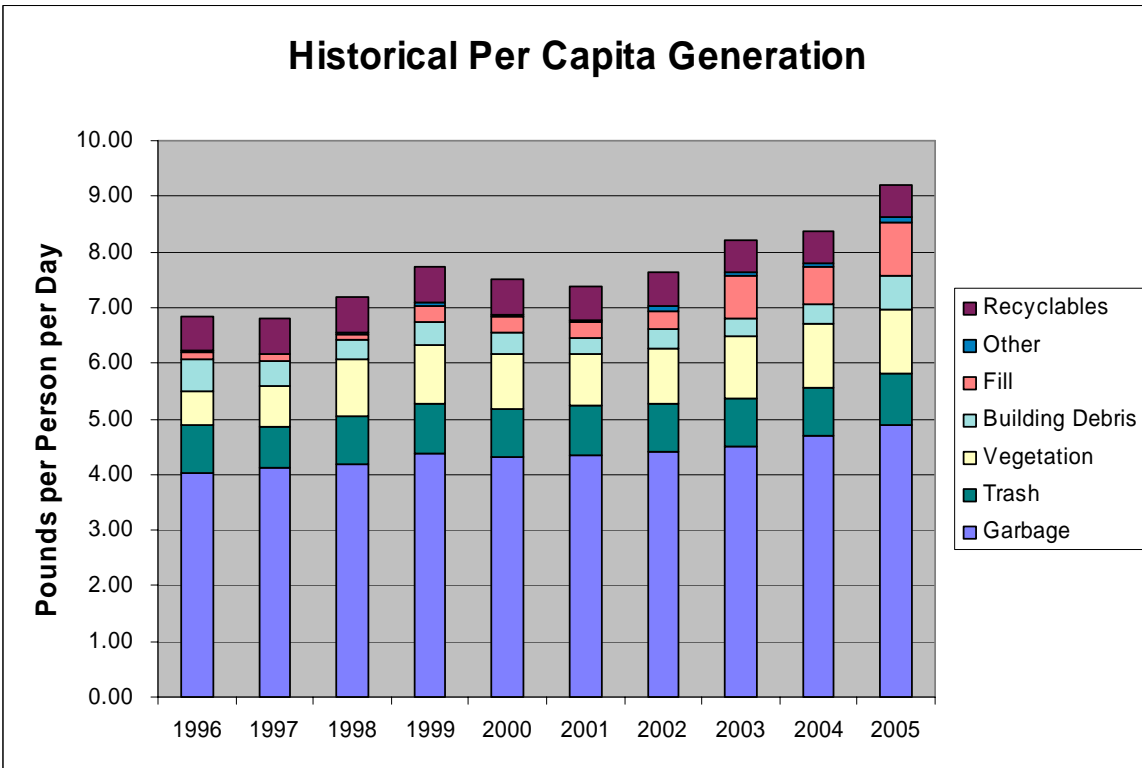
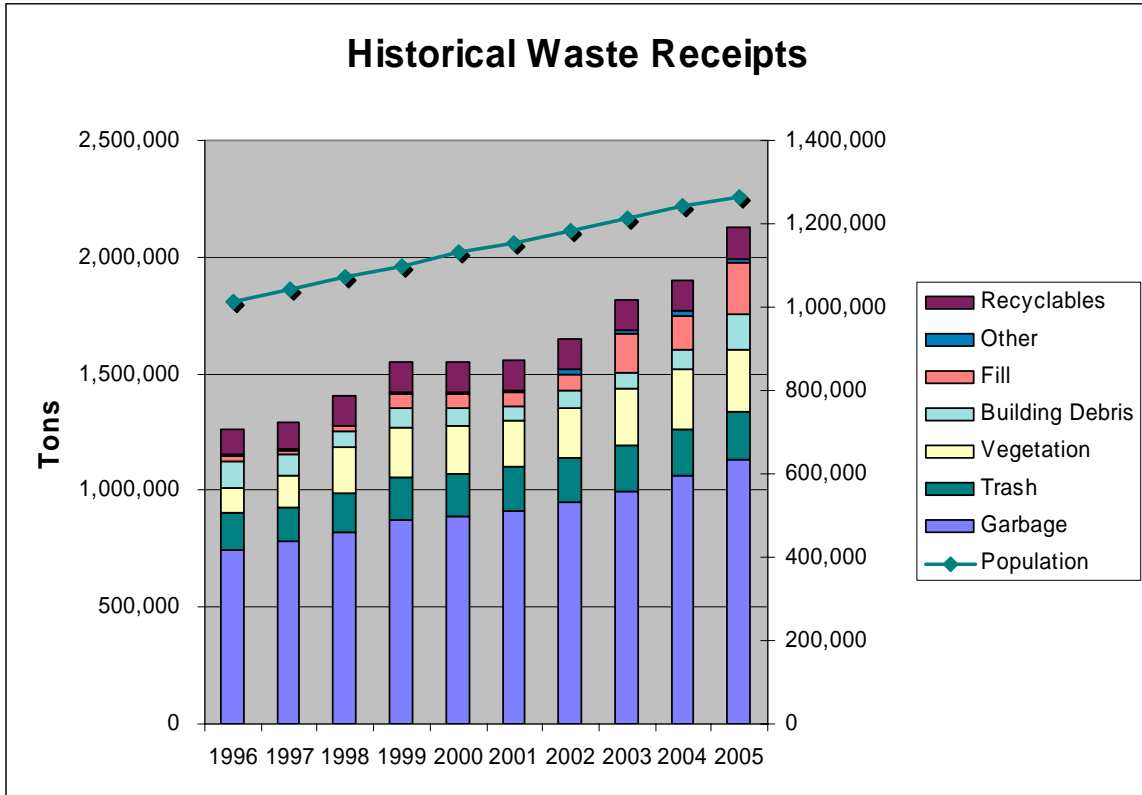
2.2.1 Per Capita Generation Rates - Discussion

The per capita generation rate increased from 8.66 pounds per person per day in FY 2003-2004 to 9.54 in FY 2004-2005. Significant changes in specific materials include garbage (4.71 to 4.89), trash (.85 to .91), and construction debris (.38 to .64). The per capita generation rates are calculated by dividing the average daily pounds of waste received by the BEBR estimated permanent projection for April 2005. Fluctuations in the per capita generation rates can result from many factors, including changes in the waste stream, increased or decreased private sector recycling activity, and error in the population estimate.

The tons of garbage received by the SWA increased from 1,066,741 tons in FY 2003-2004 to 1,129,444 tons in FY 2004-2005, an increase of 5.9%. Last year's increase was 6.9%. The massive power outages caused by hurricanes Frances and Jeanne resulted in significant food spoilage and contributed to the increase. Recyclables deliveries increased from 130,356 tons to 135,615 tons, an increase of 4.0%. The per capita generation of recyclables increased from .57 to .59 pounds per person per day, an increase of 3.5%, reversing a five year trend of declining generation rates. This increase resulted from a reemphasis on the SWA's core recycling program.

Because the SWA operates both a Class 1 and a Class 3 landfill, incoming MSW is characterized as either Class 1 or Class 3 material. The Class 1 generation rate, which includes garbage, recyclables, direct landfill, and other special wastes increased from 5.34 to 5.54 pounds per person per day due to increased garbage deliveries. The Class 3 generation rate increased from 2.38 to 2.71 pounds per person per day due to increased construction debris deliveries. Combining the Class 1 and Class 3 generation rates presented above and including only the materials that impact the landfill, the total per capita generation rate increased from 7.73 to 8.24 pounds per person per day.

The current and historical estimated per capita waste generation rates are presented in detail on Page 6 and summarized in the table on Page 7.



**Solid Waste Authority of Palm Beach County
Historical Per Capita Generation Rates**

	Fiscal Year							Base Year
	2004/2005	2003/2004	2002/2003	2001/2002	2000/2001	1999/2000	1998/1999	1985/1986
Population	1,265,900	1,242,270	1,211,448	1,183,197	1,154,464	1,131,184	1,098,859	753,700
Tonnage	2,203,456	1,962,951	1,880,348	1,708,332	1,613,406	1,605,097	1,603,665	1,222,930
Garbage	1,129,444	1,066,741	997,657	950,713	914,801	890,355	874,767	536,775
Trash	210,279	191,626	191,692	189,420	188,740	179,716	183,408	290,327
Vegetative	265,503	260,042	244,823	212,942	193,234	205,691	208,037	30,724
CD	147,008	85,319	72,467	75,836	66,084	74,622	87,009	354,574
Sludge	78,846	64,566	62,952	61,812	56,388	53,177	54,364	119
Clean Fill	220,220	146,155	167,054	70,839	58,804	63,683	58,313	1,733
Tires	2,438	3,694	3,224	1,499	1,878	2,192	5,407	2,690
Miscellaneous	14,103	14,452	11,236	17,416	5,398	4,877	3,124	5,988
Subtotal MSW	2,067,841	1,832,595	1,751,105	1,580,477	1,485,327	1,474,313	1,474,429	1,222,930
Recyclables	135,615	130,356	129,243	127,834	128,079	130,784	129,235	0
Total MSW	2,203,456	1,962,951	1,880,348	1,708,311	1,613,406	1,605,097	1,603,664	1,222,930
Garbage	4.89	4.71	4.51	4.40	4.34	4.31	4.36	3.90
Trash	0.91	0.85	0.87	0.88	0.90	0.87	0.91	2.11
Vegetative	1.15	1.15	1.11	0.99	0.92	1.00	1.04	0.22
CD	0.64	0.38	0.33	0.35	0.31	0.36	0.43	2.58
Sludge	0.34	0.28	0.28	0.29	0.27	0.26	0.27	0.00
Clean Fill	0.95	0.64	0.76	0.33	0.28	0.31	0.29	0.01
Tires	0.01	0.02	0.01	0.01	0.01	0.01	0.03	0.02
Miscellaneous	0.06	0.06	0.05	0.08	0.03	0.02	0.02	0.04
Subtotal MSW	8.95	8.08	7.92	7.32	7.05	7.14	7.35	8.89
Recyclables	0.59	0.57	0.58	0.59	0.61	0.63	0.64	0.00
Total MSW	9.54	8.66	8.50	7.91	7.66	7.78	8.00	8.89
Major Categories (pounds per person per day)								
Class 1	5.54	5.34	5.15	5.08	4.98	4.97	5.02	3.95
Class 3	2.71	2.38	2.32	2.22	2.14	2.24	2.41	4.93
Sludge	0.34	0.28	0.28	0.29	0.27	0.26	0.27	0.00
Fill	0.95	0.64	0.76	0.33	0.28	0.31	0.29	0.01
Garbage and Trash	8.24	7.73	7.46	7.30	7.11	7.21	7.43	8.88

Notes:

- (1) Population projections are provided by BEBR.
(2) FY 2003/2004 and 2004/2005 waste tonnage impacted by Hurricanes Frances and Jeanne.

2.2.2 Assumed Per Capita Generation Rates

In the model, incoming MSW and recyclables are grouped into four major categories, Class 1 (garbage), Class 3 (trash), sludge, and fill of which sludge and fill are not considered in the model because of alternative disposal and use options.

Class 1 material consists of the following: garbage, recyclables, direct landfill, special handling, animals, and other miscellaneous wastes. Class 3 material consists of trash, vegetation, building debris, land clearing debris, tires, trailers, and asbestos. The values for the Class 1 and Class 3 categories for the last fourteen years are as follows:

	<u>Class 1 Material</u>	<u>Class 3 Material</u>	<u>Total</u>	<u>Vegetation</u>
1991/1992	4.66	2.28	6.94	.25
1992/1993	4.56	2.50	7.07	.67
1993/1994	4.78	2.18	6.96	.56
1994/1995	4.64	2.30	6.94	.81
1995/1996	4.63	2.08	6.71	.60
1996/1997	4.74	1.95	6.69	.73
1997/1998	4.85	2.24	7.09	1.01
1998/1999	5.02	2.41	7.43	1.04
1999/2000	4.97	2.24	7.21	1.00
2000/2001	4.98	2.14	7.11	.92
2001/2002	5.08	2.22	7.30	.99
2002/2003	5.15	2.32	7.46	1.11
2003/2004	5.34	2.38	7.73	1.15
2004/2005	5.54	2.71	8.24	1.15

The key element that must be considered in establishing the per capita generation rate assumptions in this revision of the model is the general trend in the generation rates and the probability that this trend will continue or reverse.

As previously discussed, the increase in the Class 3 generation rate resulted from increased building debris deliveries primarily from the western communities. In the aftermath of Hurricanes Frances and Jeanne and as a precaution for future storms, many homeowners in the western communities removed large standing trees from their lots. This activity resulted in the generation of considerable quantities of land clearing debris (which the SWA codes as building debris). While building debris deliveries seemed to be declining in the last several months of FY 2004-2005, they have since spiked up again following Hurricane Wilma. Since we seem to be in a period of heightened hurricane activity, which may continue for some time, an increase in the per capita generation rate appears warranted.

Outside of vegetation, the average generation rate of Class 3 material for each of the past five years in chronological order was as follows: 1.22, 1.23, 1.21, 1.23, and 1.56 pounds per person per day. Evidence suggests that the generation rate will remain high through FY 2005-2006, but should eventually subside in the absence of significant storm events. Given the high level of uncertainty, the forecast generation rate is set at the midpoint of the last two years' actual generation rates, or 1.40 pounds per person per day.

Vegetation is the second component of the Class 3 generation rate. The per capita generation rate of vegetation increased at an average annual rate of 2.8% over the previous five years but remained steady at 1.15 pounds per person per day in FY 2004-2005. The assumed generation rate of vegetation remains at 1.18 pounds per person per day. The total Class 3 generation rate is therefore set at 2.58 pounds per person per day.

The Class 1 generation rate increased 3.7% from 5.34 pounds per person per day to 5.54 pounds per person per day, the highest rate on record. Scale data for the first three months of FY 2005-2006 indicates that the rate may go even higher as garbage tonnage is up 3.3%. To what extent the recent hurricanes have affected generation is uncertain, however they do have an effect. A further increase in the per capita generation rate is warranted. The generation rate is set at

5.72 pounds per person per day. This is a 3.3% increase over the actual generation rate for FY 2004-2005.

The model provides for an average annual growth/reduction rate for the per generation rates. The SWA has always assumed that increased awareness of waste minimization, recycling, and reuse of solid waste as well as improved markets for recovered materials would help to prevent any future increase in per capita generation. Recent data indicates that this assumption may not be reasonable. The per capita generation of Class 1 material has increased an average of 2.7% per year since FY 2000-2001. The growth rate is assumed to be 1.35%, which is one half the four year growth rate, under the assumption that the growth rate will slow in the future.

It must be noted that the calculated per capita generation rates are dependent upon the BEBR annual population estimate. A low population estimate, which BEBR produced in the late 90's, and was verified by the 2000 census, will inflate the per capita generation rate. The potential for error increases as the time since the last census increases. The model does incorporate a sensitivity analysis to reflect the uncertainty in the assumptions and to accommodate alternative points of view. Readers are advised to review the sensitivity analysis presented in Section 3.2 and to consider the inherent uncertainty when using these projections.

The generation rates include only the waste the SWA receives and not materials delivered to permitted recyclers or shipped out of the county. It is assumed that the material not coming to the SWA's system will continue to be diverted from the system. To the extent that this assumption is incorrect, the estimated landfill life will be shorter than that predicted by the model. Because the SWA performs an annual review of waste generation and consumption data as part of the landfill depletion model update, any substantive changes will be detected, their potential impact evaluated, and any planning revisions made long before the disposal capacity of the landfill is significantly impacted.

2.3 Waste Disposal

Class 1 material is assumed to be delivered to the plant unless the plant is at capacity, in which case it is delivered to the Class 1 landfill as raw garbage. Class 3 material is assumed to be delivered to the Class 3 landfill, except as follows. Currently, considerable quantities of Class 3 material are either commingled at the transfer stations and delivered to the Resource Recovery Facility or diverted to the Class 1 landfill for operational reasons. Operational constraints at the transfer stations, particularly in the southern part of the county, will most likely result in the commingling continuing. Additionally, the SWA diverts a large percentage of building debris and C&D processor residue to the Class 1 landfill because of the gypsum content in this material and the potential for odor. The model incorporates the commingling of Class 3 material by including a factor for commingled Class 3 material expressed as a percent of incoming Class 3 material. The rate used in the model is 30%. This rate is comprised of an 11% commingled rate for vegetation and a 44% commingled rate for the balance of the Class 3 material.

2.4 Unforeseen Events

The waste generation rates used in the model do not include an allowance for increased depletion resulting from the landfilling of storm debris from a hurricane or other natural disaster. Through the effective use of temporary debris sites the SWA is able to manage the post-disaster cleanup and dispose of storm debris with limited impact on landfill capacity. The SWA's ability to accomplish this has been demonstrated following Hurricanes Irene, Frances, Jeanne, and Wilma.

Additionally, the model assumes that the Resource Recovery Facility will be operating without any catastrophic outages, other than scheduled maintenance and minor outages, that would result in more than 5% downtime over the life of the plant. This assumption was recently tested following a fire in the boiler building in October 2005. Despite the magnitude of the damage, the plant was fully operational within two months. The downtime in previous models was assumed to be 10% although there were no significant outages over the past fifteen years. Given the speed with which the plant was brought back online following such a destructive fire, the assumed downtime has been reduced from 10% to 5%.

2.5 Recycling Rates

The total annual generation of Class 1 and Class 3 material is adjusted to account for recycling and waste reduction activities. During FY 2004-2005, 135,615 tons of recyclables were delivered to SWA facilities (*WIMS 047C*). This is a 4.0% increase in relation to FY 2003-2004. The per capita generation of recyclables increased from .57 to .59 pounds per person per day after five consecutive decreases dating back to the high of .64 pounds per person per day reached in FY 1998-1999. Dividing the per capita generation rate for recyclables by the per capita generation rate of Class 1 material produces an average reduction rate of 10.6%, which is .2% less than last year and the fifth consecutive decline. This performance was impacted by the storm due to the combined effects of increased waste generation and interrupted recycling collection service. The SWA is endeavoring to reinvigorate the recycling program, and some improvement is assumed. The assumed Class 1 recycling rate remains at 13% of Class 1 material in the model.

On the Class 3 side the most significant recycling activity involves clean vegetation. During the year the SWA recovered and/or recycled 197,492 tons of vegetation and mulch, amounting to 74.4% of the 265,503 tons of inbound vegetative debris and up from 69.0% the prior year. Additional recovered materials included 2,973 tons of ferrous metal, 92 tons of cardboard, and 1,375 tons of tires delivered to the resource recovery facility or exported. In total, the SWA recovered and/or recycled 201,932 tons or 32.3% of the 625,228 tons of Class 3 material (net of clean fill) delivered in FY 2004-2005. Because this year's result is little changed from last year's recovery rate of 33.9%, the assumed Class 3 recycling rate remains at 33% in the model.

2.6 Compacted Densities

Forecasted incoming solid waste tonnage is converted to consumed landfill volume by multiplying by the average compacted density. Although industry standards do exist, in reality landfill compacted densities vary widely based on the type of material landfilled and the operating procedures employed. Because the SWA landfills large quantities of ash and process residue from the RDF Resource Recovery Facility in the Class 1 landfill and diverts nearly all clean vegetation, the accuracy of industry averages cannot be relied upon for SWA system planning purposes.

To avoid uncertainty in estimating the compacted densities the SWA conducts an annual survey to determine the volume of landfill space consumed. The landfill is surveyed at least annually and the calculated waste volume for the prior year is subtracted from that for the present year to determine the volume depleted during the year. Using SWA waste tonnage data, the average landfill compacted density for the year and life-to-date is calculated. These densities are used to arrive at the density assumptions used in the model. It must be noted that the densities used in the model are conservative because the consumed volume includes space consumed by cover material.

As can be seen on the following page, the average density over the life of the landfill is 1,735 pounds per cubic yard in the Class 1 landfill and 1,291 pounds per cubic yard in the Class 3 landfill. These rates are used in the model.

The model calculates the Class 1 volume depleted by applying the above compacted density to plant residues and the estimated density of raw garbage of 1,200 pounds per cubic yard to the estimated quantity of landfilled raw garbage, and summing the two. The Class 3 volume is calculated by dividing the estimated compacted density into the pounds of landfilled solid waste.

2.7 Cover Material

Because daily cover is included in the annual volume used in the density calculation, it is not addressed in the model. Final cover consuming landfill volume is assumed to be 5% of the total landfill volume. The assumption in the previous model was 15% of waste volume. The change is based upon the SWA's adopting of a "close as you go" strategy that minimizes the need for intermediate cover as well as the availability of real fill consumption data from the ongoing closure of the first four cells of the Class 1 landfill. The estimated volume consumed by final cover is accounted for by reducing the available landfill capacity by 5%.

Solid Waste Authority of Palm Beach County
Landfill Depletion Model Landfill Density Calculation

Class 1 Annual Landfill Density Estimate

	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Direct Haul	32,991	49,569	47,158	58,061	67,297
Transfer	162,918	189,967	229,896	304,661	353,278
Non-Processible	98	94	241	51	0
Residue	221,788	228,021	239,510	234,499	232,174
Uncombusted RDF	0	1,719	277	1,179	239
Ash	116,310	119,562	116,294	111,032	126,965
Total Tonnage to Landfill Disposal	534,105	588,932	633,376	709,483	779,953
Cubic Yards Depleted	725,949	535,916	686,458	785,940	959,009
Estimated Average Density	1,471	2,198	1,845	1,805	1,627

Class 3 Annual Landfill Density Estimate

	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Direct haul	168,257	176,573	263,580	268,754	400,344
Transfer	35,920	45,831	70,175	102,924	91,712
Total Tonnage	204,177	222,404	333,755	371,678	492,056
Transfer Out Tires	262	249	234	179	117
Recovered Fill	58,804	70,839	167,054	146,155	220,220
Recovered Road Material/Concrete	0	0	0	0	0
Recovered Ferrous and White Goods	3,244	3,116	2,687	2,906	2,973
Fuel to Okeelanta or Wheelabrator	0	0	0	0	0
Cardboard	95	46	55	81	92
Net Transfer to Reduction Program	0	0	0	0	0
Vegetation/Mulch	0	(2,166)	(1,747)	(1,976)	(1,467)
Total Recovered Material	62,405	72,086	168,283	147,345	221,935
Total Tonnage to Landfill Disposal	141,772	150,318	165,472	224,333	270,121
Cubic Yards Depleted	180,101	191,507	298,364	368,102	428,853
Estimated Average Density	1,574	1,570	1,109	1,219	1,260

Life to Date Average Landfill Density Estimate

	Class 1		Class 3	
	Annual	Cumulative	Annual	Cumulative
Tons Disposed 10/01/98 - 9/30/99	504,930	3,874,856	163,903	2,029,375
Tons Disposed 10/01/99 - 9/30/00	543,500	4,418,356	143,682	2,173,057
Tons Disposed 10/01/00 - 9/30/01	534,105	4,952,461	141,772	2,314,829
Tons Disposed 10/01/01 - 9/30/02	588,932	5,541,393	150,318	2,465,147
Tons Disposed 10/01/02 - 9/30/03	633,376	6,174,769	165,472	2,630,619
Tons Disposed 10/01/03 - 9/30/04	709,483	6,884,252	224,333	2,854,952
Tons Disposed 10/01/04 - 9/30/05	779,953	7,664,205	270,121	3,125,073
Cubic Yards Depleted at 9/30/99 (1)		4,616,000		3,132,000
Estimated Average Density to 9/30/99		1,679		1,296
Cubic Yards Depleted at 9/30/00		5,142,522		3,372,990
Estimated Average Density to 9/30/00		1,718		1,289
Cubic Yards Depleted at 9/30/01 (1)		5,868,471		3,553,091
Estimated Average Density to 9/30/01		1,688		1,303
Cubic Yards Depleted at 9/30/02 (1)		6,404,387		3,744,598
Estimated Average Density to 9/30/02		1,730		1,317
Cubic Yards Depleted at 9/30/03 (1)		7,090,845		4,042,962
Estimated Average Density to 9/30/03		1,742		1,301
Cubic Yards Depleted at 9/30/04 (1)		7,876,785		4,411,064
Estimated Average Density to 9/30/04		1,748		1,294
Cubic Yards Depleted at 9/30/05 (1)		8,835,794		4,839,917
Estimated Average Density to 9/30/05		1,735		1,291

(1) Yardage Pro-Rated for density calculation to account for timing differences.

(2) Yardage based on annual survey.

2.8 Available Landfill Volumes

The available landfill volumes have been calculated by the SWA's engineers, Camp Dresser and McKee, using CAD analysis. CDM estimates total landfill volume at 51,884,000 cubic yards prior to settlement, of which 9,698,800 cubic yards are within Class 3 cells. This estimate assumes landfilling to 167 feet NGVD, 7 feet above the permitted height of 160 feet, with settlement to 160 feet. Because the Landfill Depletion Model uses compacted densities that include settlement, the volume above 160 feet NGVD, an estimated 1,760,000 yards, has been deducted for the purpose of the model. Therefore, the total estimated landfill volume is 50,124,427 cubic yards. Through September 30, 2005, 8,835,794 cubic yards of Class 1 volume and 4,839,917 cubic yards of Class 3 volume have been depleted.

The SWA uses two landfill depletion scenarios, referred to as the "Maximize Class 1" and the "Balanced Life" scenarios. The "Maximize Class 1" scenario consists of 262 acres of Class 1 capacity and 72 acres of Class 3 capacity. With the 1,760,000 cubic yards deducted from the Class 1 and Class 3 landfills on a proportional basis, there is an estimated 40,754,579 cubic yards of Class 1 space and 9,369,848 cubic yards of Class 3 space (Class 3 Cells 1-6 and 8). The "Balanced Life" scenario allows for the landfilling of Class 3 material in the Class 1 cells to balance the life of the site and to eliminate the need to operate two sites concurrently. The landfill depletion model provides results for these scenarios and can be programmed to evaluate other potential scenarios if necessary.

2.9 Resource Recovery Facility (NCRRRF)

The rated capacity of the NCRRF is 624,000 tons per year, however the plant has surpassed 800,000 tons of processible waste for the past ten years. Processible waste processed at the NCRRRF in FY 2004-2005 totaled 884,005 tons, compared to 847,337 tons in FY 2003-2004, 870,197 tons in FY 2002-2003, 871,748 tons in FY 2001-2002, 857,608 tons in FY 2000-2001, and 810,049 tons in FY 1999-2000. In FY 2003-2004, the facility lost power for several days due to damage caused by Hurricane Frances, reducing throughput by approximately 20,000 tons. In October 2005 a fire at the plant resulted in a complete shutdown for nearly seven weeks and reduced throughput for an additional week. Due to this fire, the SWA anticipates a reduction in throughput for FY 2005-2006 to approximately 770,000 tons. Additionally, the SWA anticipates a 50% reduction in throughput in FY 2011 during a major retrofit. For this reason, out of conservatism, throughput at the current level is not assumed.

In the previous model the assumed plant throughput was 780,000 tons, reflecting 10% downtime. In the current model, the assumed throughput is changed to 817,000 tons, reflecting the following: the SWA's long range planning assumption of 860,000 tons of processible waste per year; the long term successful operating history of the plant; and a reduction in the estimated downtime to 5% based on the rapid recovery time from the two recent unscheduled outages.

The residuals from the plant include ash, process residue, and unprocessibles. Unprocessibles are estimated at 3.9% of total delivered waste in the present model, which is equal to the average of the past five years (3.0% in FY 2000-2001, 3.6% in FY 2001-2002, 4.3% in FY 2002-2003, 4.1% in FY 2003-2004, and 4.3% in FY 2004-2005). Process residue and ash totaled 39.4% in FY 2000-2001, 38.4% in FY 2001-2002, 40.9% in FY 2002-2003, 40.8% in FY 2003-2004, and 40.6% in FY 2004-2005. The Operating and Maintenance Agreement with the plant operator requires a minimum 60% reduction over the life of the contract, therefore ash and residue are estimated at 40% of processible waste.

As the addition of a third boiler to the Resource Recovery Facility is an option, the model includes a scenario for the addition of a third boiler with increased throughput to 1,100,000 tons of processible waste beginning in the year 2012. The SWA is presently investigating options for expanding incineration capacity. The quantity of potentially combustible waste landfilled is climbing. In FY 2004-2005, the SWA landfilled 353,278 tons of combustible Class 1 waste, compared to 304,661 tons in FY 2003-2004 and 229,896 tons in FY 2002-2003.

3.0 Model Results

3.1 Summary of Results

The summary results of the landfill depletion model for the two space allocation scenarios and the two Resource Recovery Facility scenarios are presented below in Table 3.1 and in the following paragraphs. The landfill depletion model results are included in Appendix A of the Report for further inspection.

In the "Maximize Class 1" scenario, the estimated landfill depletion dates for the Class 1 and Class 3 landfills are 2022 and 2015, respectively, compared to 2023 and 2016 in the prior model. In the "Balanced Life" scenario, final depletion is expected to take place in 2021, which is unchanged from the previous model. The volume allocation associated with the balanced life scenario is approximately 75% Class 1 and 25% Class 3 landfill volume.

Constructing a third boiler at the Resource Recovery Facility in 2012 is anticipated to add approximately one year to the life of the site on a balanced basis, placing the ultimate depletion in the year 2022, down from 2024 in the previous model. The change is the result of moving the anticipated online date from 2007 to 2012, which is consistent with current planning. The volume allocation associated with the balanced life scenario and the third boiler is approximately 74% Class 1 and 26% Class 3.

Table 3.1 Landfill Depletion Using Present Landfill Configuration

Scenario		Maximize Class 1	Balanced Life
Two Boiler Results	Class 1	2022 (262 AC)	2021
	Class 3	2015 (72 AC)	2021
Three Boiler Results	Class 1	2023 (262 AC)	2022
	Class 3	2015 (72 AC)	2022

3.2 Special Scenario - Reserve Landfill Capacity for Resource Recovery Residues

Because the SWA's Resource Recovery Facility is anticipated to be operational until at least 2040, the SWA may wish to reserve capacity for process residue and ash at the current landfill. The model was used to evaluate this alternative. If the SWA ceases landfilling all unprocessed waste at the current site at the end of FY 2018, it is estimated that sufficient capacity would exist to accommodate unprocessibles, process residue, and ash through FY 2030. If the SWA wishes to reserve capacity through FY 2040, the SWA would have to cease landfilling at the current site at the end of FY 2016.

If the SWA adds a third boiler to the Resource Recovery Facility, in order to reserve capacity through FY 2030 the SWA would have to cease landfilling all unprocessed waste at the end of FY 2019. If the SWA wishes to reserve capacity through FY 2040, the SWA would have to cease landfilling at the current site at the end of FY 2015.

3.3 Sensitivity Analysis - Three States of Nature

The above results are based upon a set of assumptions that represents a reasonable best guess. As with any model, these assumptions are based upon current circumstances and information. Some assumptions will inevitably vary; therefore, the actual results will deviate from the projections. In order to ascertain the potential magnitude of these

deviations, the model has been run using “Most Likely”, “Optimistic”, and “Pessimistic” assumption sets.

The assumptions under the Optimistic and Pessimistic assumption sets are modified as follows:

Assumptions	Optimistic	Pessimistic
Generation Rates	5% Lower	5% Higher
Recycling Rates	20% Higher	5% Lower
Compacted Densities	10% Higher	10% Lower

Generation Rates

The range for the Class 1 generation rate is somewhat conservative because the calculated annual generation rate has been below the optimistic assumption thirteen of the last fourteen years and has never exceeded the high end of the range. The Class 3 generation rate has been relatively stable for the past five years and even before that the variation in Class 3 deliveries generally resulted from fluctuations in vegetation, which is largely recycled. The Class 3 generation rate hasn't exceeded the pessimistic assumption in recent history and has been lower than the optimistic assumption twelve of the last fourteen years.

Recycling Rates

The 20% increase in the Class 1 recycling rate under the "optimistic" assumption set assumes the introduction of new programs to collect additional materials, such as mixed paper and commercial paper. The 5% lower assumption under the "pessimistic" assumption set assumes no new programs and a slight erosion in participation.

Compacted Densities

The Class 1 and Class 3 life-to-date compacted densities have been within the assumed ranges for more than ten years.

Sensitivity Results

The results of the sensitivity analysis are presented on Page 15. The analysis indicates that based on the current configuration, on a balanced basis the landfill is reasonably expected to be fully depleted at a time ranging from 2019 to 2023. Assuming addition of a third boiler at the NCRRRF in 2012 and using the current landfill configuration, the landfill can be reasonably expected to be depleted during the time period ranging from 2019 to 2025.

This exercise was undertaken to demonstrate how the estimate can vary given the realization of extreme values of the key assumptions. On a balanced life basis, the earliest predicted depletion date is 2019, which is three years beyond the life of the bonds issued to finance the existing SWA facilities. Given an estimated ten year lead time to site, permit, and construct a replacement landfill, the earliest a decision regarding the development of future capacity must be made is approximately 2009. If a 3rd boiler is constructed at the NCRRRF a decision is required by 2009. If the SWA decides to reserve capacity for plant material through 2030 or longer, a decision may be required sooner.

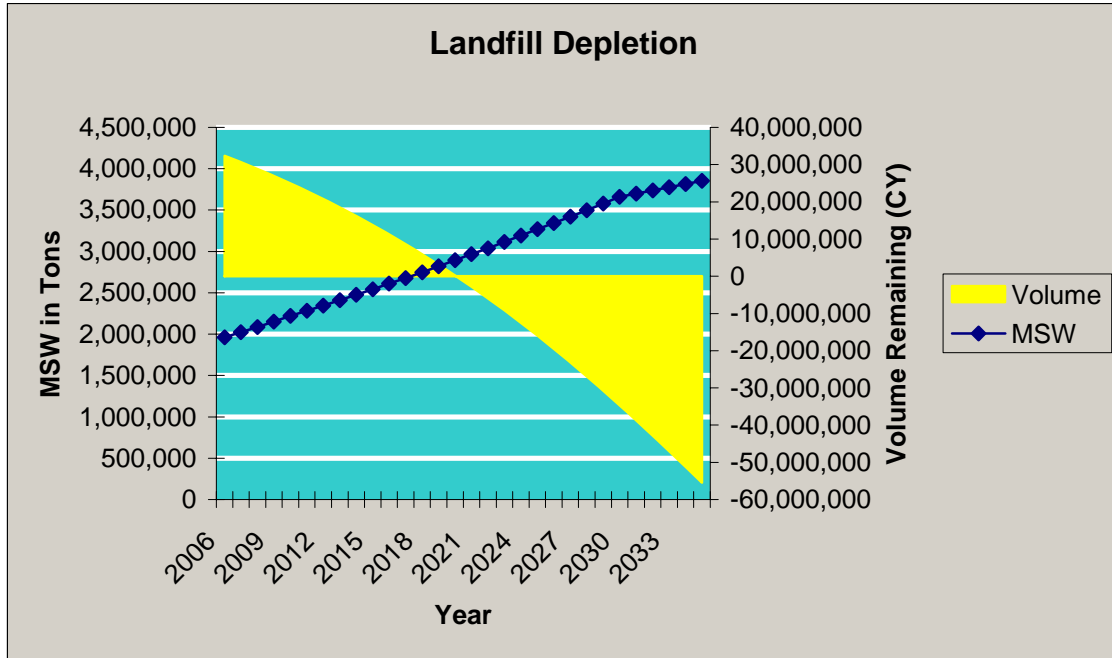
4.0 Summary and Conclusions

The landfill depletion model is designed to forecast the estimated life of the SWA's North County landfills in order to facilitate facilities planning decisions and assess the impact of alternatives and alternative states of nature on landfill life. The model was last updated in January 2005 and was based on 2003-2004 operating data and existing assumptions. Given current information and expectations of future events, the *2006 Landfill Depletion Model* predicts the estimated life of the North County landfills as follows:

Table 4.1 Summary Depletion Model Results

Depletion Results for Current Configuration	
Acreage	334
Available Capacity	50,124,427
Remaining Capacity	36,448,716
Two Boiler Depletion Year and Years Remaining	2021 (16 years)
Two Boiler Landfill Consumption	Class 1: 75%; Class 3: 25%
Three Boiler Depletion Year and Years Remaining	2022 (17 years)
Three Boiler Landfill Consumption	Class 1: 76%; Class 3: 24%

The above estimates are based on a reasonable Most Likely set of assumptions. As with any forecast, the result is subject to uncertainty. The most critical factor affecting the results is the increasing per capita generation rates. Should actual performance deviate from the assumptions adopted herein, results will vary. As this analysis is performed annually, any events that could potentially impact the life of the landfill will be identified long before depletion and afford the SWA the opportunity to plan accordingly.



Scenario Summary				
	Current Values:	Most Likely	Optimistic	Pessimistic
Assumptions:				
Class_1_Gen_Rate	5.72	5.72	5.43	6.01
Class_3_Gen_Rate	2.58	2.58	2.45	2.71
Class_1_Recycling	13.00%	13.00%	15.60%	12.40%
Class_3_Recycling	33.00%	33.00%	33.00%	33.00%
Class_1_Cover	5.00%	5.00%	5.00%	5.00%
Class_3_Cover	5.00%	5.00%	5.00%	5.00%
Garbage_Density	1,200	1,200	1,320	1,080
Trash_Density	1,291	1,291	1,420	1,162
Plant_Residuals_Density	1,735	1,735	1,909	1,562
Class_3_Plant_Residue_Density	1,735	1,735	1,909	1,562
Class_1_Growth_Rate	1.35%	1.35%	1.35%	1.35%
Class_3_Growth_Rate	0.00%	0.00%	0.00%	0.00%
Results:				
Class_1_Depletion	2022	2022	2024	2020
Class_3_Depletion	2015	2015	2016	2014
Balanced_Depletion	2021	2021	2023	2019
Class1_3Boil_Depletion	2023	2023	2026	2021
Class3_3Boil_Depletion	2015	2015	2016	2014
Balanced_Depletion_3_Boilers	2022	2022	2025	2019

Appendix A

Landfill Depletion Model Output

Landfill Depletion Model Summary Results	17
Table 1: Estimated Population and Solid Waste Generation	18
Table 1A: Permanent and Seasonal Population Growth	19
Table 2: Class 1 Landfill Depletion	20
Table 2A: Class 1 Landfill Depletion -Third Boiler at NCRRRF	21
Table 3: Class 3 Landfill Depletion	22
Table 3A: Class 3 Landfill Depletion - Third Boiler at NCRRRF	23
Table 4: Balanced Landfill Depletion	24
Table 4A: Balanced Landfill Depletion -Third Boiler at NCRRRF	25

Palm Beach County
Landfill Depletion Model Summary Results

		Maximixe Class 1
Total Estimated Volume (Net of 5% Final Cover)		47,618,206
Class 1 (Net of 5% Final Cover)		38,716,850
Class 3 (Net of 5% Final Cover)		8,901,356
Volume Depleted to Date		
Class 1		8,835,794
Class 3		4,839,917
Total		13,675,711
Additional Volume		
None		
		0
Class 1 Allocation	0.00%	0
Class 3 Allocation	0.00%	0
Estimated Acreage		
Class 1		262.00
Class 3		72.00
Total		334.00
Volume Remaining		
Class 1		29,881,056
Class 3		4,061,439
Total		33,942,495
Estimated Depletion		
Class 1		2022
Class 3		2015
Balanced Life		2021
Class 1 w/ Third Boiler in the Year 2012		2023
Class 3 w/ Third Boiler in the Year 2012		2015
Balanced Life w/ Third Boiler in the Year 2012		2022

Assumptions

	Class 1	Class 3
Per Capita Generation Rate	5.72	2.58
Recycling Rate	13%	33%
Cover Material as a Percent of Landfill Volume	5%	5%
Raw Waste Density in Pounds per Cubic Yard	1,200	1,291
Plant Residue Density in Pounds per Cubic Yard	1,735	1,735
Per Capita Generation Growth Rate	1.35%	0.00%

Landfill Configuration Includes Current Configuration

Palm Beach County
Estimated Permanent Population Growth
Table 1A

Year Ended September	Palm Beach County Estimated Permanent Population	BEBR Estimated Permanent Population	
1999	1,042,196	1995	962,802
2000	1,131,184	1996	981,793
2001	1,154,464	1997	1,003,684
2002	1,183,197	1998	1,020,521
2003	1,211,448	1999	1,042,196
2004	1,242,270	2000	1,131,184
2005	1,265,900	2004	1,242,270
2006	1,293,931	2005	1,265,900
2007	1,322,582	2010	1,412,400
2008	1,351,868	2015	1,542,900
2009	1,381,803	2020	1,673,000
2010	1,412,400	2025	1,798,700
2011	1,437,586	2030	1,916,200
2012	1,463,220		
2013	1,489,312	1995-2000	3.22%
2014	1,515,869	2000-2004	2.34%
2015	1,542,900	2004-2005	1.88%
2016	1,568,084	2005-2010	2.19%
2017	1,593,680	2010-2015	1.77%
2018	1,619,693	2015-2020	1.62%
2019	1,646,131	2020-2025	1.45%
2020	1,673,000	2025-2030	1.27%
2021	1,697,417		
2022	1,722,190		
2023	1,747,325		
2024	1,772,826		
2025	1,798,700		
2026	1,821,609		
2027	1,844,810		
2028	1,868,306		
2029	1,892,101		
2030	1,916,200		

(1) Population estimates from Bureau of Economic and Business Research, Florida Population Studies, Bulletin No. 141, February 2005.

(2) Population estimates calculated as follows:

$$r = \ln(p2005/P2000)/5$$

$$r = \ln(1.10406)/5$$

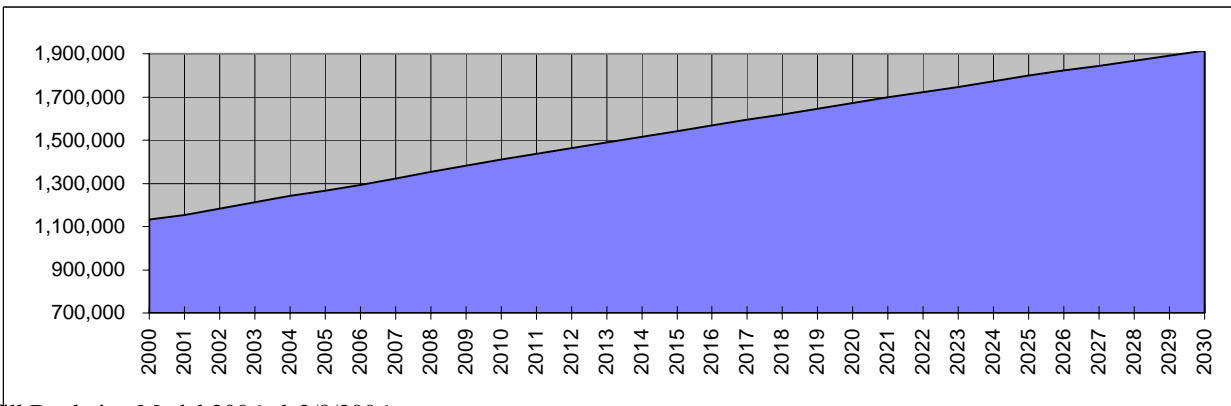
$$r = .0198$$

$$P2001 = P2000 \times (e^{(nr)})$$

$$P2004 = 1,131,184 \times (e^{(4 \times .0198)})$$

$$P2004 = 1,131,184 \times 1.08242$$

$$P2004 = 1,224,417$$



Solid Waste Authority of Palm Beach County
Landfill Depletion Model
Table 1: Estimated Population and Solid Waste Generation

	Palm Beach County Permanent Population	Daily Per Capita Class 3 Generation	Annual Per Capita Class 3 Generation	Annual Estimated Class 3 Generation	Daily Per Capita Class 1 Generation	Annual Per Capita Class 1 Generation	Annual Estimated Class 1 Generation	Daily Per Capita MSW Generation	Annual Per Capita MSW Generation	Annual Estimated MSW Generation
		lbs	lbs	tons	lbs	lbs	tons	lbs	lbs	tons
	(1)									
2006	1,293,931	2.58	942	609,247	5.72	2,088	1,350,734	8.30	3,030	1,959,982
2007	1,322,582	2.58	942	622,738	5.80	2,116	1,399,282	8.38	3,058	2,022,020
2008	1,351,868	2.58	942	636,527	5.88	2,145	1,449,575	8.46	3,086	2,086,103
2009	1,381,803	2.58	942	650,622	5.95	2,174	1,501,676	8.53	3,115	2,152,298
2010	1,412,400	2.58	942	665,029	6.04	2,203	1,555,649	8.62	3,145	2,220,678
2011	1,437,586	2.58	942	676,887	6.12	2,233	1,604,765	8.70	3,174	2,281,652
2012	1,463,220	2.58	942	688,957	6.20	2,263	1,655,431	8.78	3,204	2,344,389
2013	1,489,312	2.58	942	701,243	6.28	2,293	1,707,697	8.86	3,235	2,408,940
2014	1,515,869	2.58	942	713,747	6.37	2,324	1,761,614	8.95	3,266	2,475,361
2015	1,542,900	2.58	942	726,474	6.45	2,356	1,817,232	9.03	3,297	2,543,707
2016	1,568,084	2.58	942	738,333	6.54	2,387	1,871,828	9.12	3,329	2,610,160
2017	1,593,680	2.58	942	750,384	6.63	2,420	1,928,063	9.21	3,361	2,678,447
2018	1,619,693	2.58	942	762,632	6.72	2,452	1,985,988	9.30	3,394	2,748,620
2019	1,646,131	2.58	942	775,081	6.81	2,485	2,045,653	9.39	3,427	2,820,734
2020	1,673,000	2.58	942	787,732	6.90	2,519	2,107,111	9.48	3,461	2,894,843
2021	1,697,417	2.58	942	799,229	6.99	2,553	2,166,724	9.57	3,495	2,965,953
2022	1,722,190	2.58	942	810,893	7.09	2,587	2,228,025	9.67	3,529	3,038,918
2023	1,747,325	2.58	942	822,728	7.18	2,622	2,291,059	9.76	3,564	3,113,787
2024	1,772,826	2.58	942	834,735	7.28	2,658	2,355,877	9.86	3,599	3,190,612
2025	1,798,700	2.58	942	846,918	7.38	2,694	2,422,529	9.96	3,635	3,269,447
2026	1,821,609	2.58	942	857,705	7.48	2,730	2,486,504	10.06	3,672	3,344,208
2027	1,844,810	2.58	942	868,629	7.58	2,767	2,552,168	10.16	3,709	3,420,797
2028	1,868,306	2.58	942	879,692	7.68	2,804	2,619,567	10.26	3,746	3,499,259
2029	1,892,101	2.58	942	890,896	7.79	2,842	2,688,745	10.37	3,784	3,579,641
2030	1,916,200	2.58	942	902,243	7.89	2,880	2,759,750	10.47	3,822	3,661,993
2031	1,916,200	2.58	942	902,243	8.00	2,919	2,797,007	10.58	3,861	3,699,250
2032	1,916,200	2.58	942	902,243	8.11	2,959	2,834,767	10.69	3,900	3,737,009
2033	1,916,200	2.58	942	902,243	8.22	2,999	2,873,036	10.80	3,940	3,775,279
2034	1,916,200	2.58	942	902,243	8.33	3,039	2,911,822	10.91	3,981	3,814,065
2035	1,916,200	2.58	942	902,243	8.44	3,080	2,951,132	11.02	4,022	3,853,374
Annual Growth Rate to 2030	1.65%	0.00%	0.00%	1.65%	1.35%	1.35%	3.02%	0.98%	0.98%	2.64%

Sources and Notes:

- (1) Bureau of Business and Economic Research, University of Florida, Florida Population Studies; As summarized in Table 1A
- (2) Per capita generation rates include commercial generation and thus are not related to the residential household generation rates used in the Assessment Billing Program
- (3) Waste quantity includes only waste received at SWA facilities.

Solid Waste Authority of Palm Beach County

Landfill Depletion Model

Table 2: Estimated Class 1 Landfill Depletion - Current Two Boiler System

Class 1 Waste Generation Tons	Class 1 Waste less Recycling Tons	Class 3 Diverted to Class 1 Tons	NCRRF Unprocessable Waste Tons	Uncombusted Waste Landfilled Tons	Process Residue, Ash, and RDF Landfilled Tons	Class 1 Waste Landfilled Tons	Class 1 Volume Consumed CY	Class 1 Volume Remaining CY
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Total Estimated Volume to +160 NGVD	38,716,850
Volume Depleted Through Fiscal Year 2004/2005	8,835,794
Remaining volume based on 262.00 Acres of Class 1 Landfill	29,881,056

2006	1,350,734	1,175,139	182,774	0	507,757	326,800	834,557	1,222,976	28,658,080
2007	1,399,282	1,217,376	186,821	0	554,041	326,800	880,841	1,300,116	27,357,963
2008	1,449,575	1,261,131	190,958	0	601,933	326,800	928,733	1,379,936	25,978,028
2009	1,501,676	1,306,458	195,187	0	651,488	326,800	978,288	1,462,529	24,515,499
2010	1,555,649	1,353,415	199,509	0	702,767	326,800	1,029,567	1,547,993	22,967,506
2011	1,604,765	1,396,145	203,066	0	749,055	326,800	1,075,855	1,625,140	21,342,365
2012	1,655,431	1,440,225	206,687	0	796,756	326,800	1,123,556	1,704,642	19,637,723
2013	1,707,697	1,485,697	210,373	0	845,913	326,800	1,172,713	1,786,570	17,851,153
2014	1,761,614	1,532,604	214,124	0	896,572	326,800	1,223,372	1,871,001	15,980,151
2015	1,817,232	1,580,992	217,942	0	948,778	326,800	1,275,578	1,958,012	14,022,139
2016	1,871,828	1,628,490	221,500	0	999,834	326,800	1,326,634	2,043,104	11,979,035
2017	1,928,063	1,677,415	225,115	0	1,052,374	326,800	1,379,174	2,130,671	9,848,364
2018	1,985,988	1,727,810	228,790	0	1,106,443	326,800	1,433,243	2,220,787	7,627,577
2019	2,045,653	1,779,718	232,524	0	1,162,086	326,800	1,488,886	2,313,525	5,314,052
2020	2,107,111	1,833,186	236,320	0	1,219,350	326,800	1,546,150	2,408,965	2,905,088
2021	2,166,724	1,885,050	239,769	0	1,274,663	326,800	1,601,463	2,501,153	403,935
2022	2,228,025	1,938,382	243,268	0	1,331,493	326,800	1,658,293	2,595,870	(2,191,935)
2023	2,291,059	1,993,222	246,818	0	1,389,884	326,800	1,716,684	2,693,188	(4,885,123)
2024	2,355,877	2,049,613	250,421	0	1,449,878	326,800	1,776,678	2,793,177	(7,678,300)
2025	2,422,529	2,107,600	254,075	0	1,511,519	326,800	1,838,319	2,895,914	(10,574,214)
2026	2,486,504	2,163,258	257,311	0	1,570,414	326,800	1,897,214	2,994,071	(13,568,285)
2027	2,552,168	2,220,386	260,589	0	1,630,819	326,800	1,957,619	3,094,746	(16,663,031)
2028	2,619,567	2,279,023	263,908	0	1,692,774	326,800	2,019,574	3,198,006	(19,861,036)
2029	2,688,745	2,339,208	267,269	0	1,756,321	326,800	2,083,121	3,303,916	(23,164,952)
2030	2,759,750	2,400,983	270,673	0	1,821,500	326,800	2,148,300	3,412,547	(26,577,500)
2031	2,797,007	2,433,396	270,673	0	1,853,913	326,800	2,180,713	3,466,569	(30,044,069)
2032	2,834,767	2,466,247	270,673	0	1,886,764	326,800	2,213,564	3,521,321	(33,565,390)
2033	2,873,036	2,499,541	270,673	0	1,920,058	326,800	2,246,858	3,576,811	(37,142,202)
2034	2,911,822	2,533,285	270,673	0	1,953,802	326,800	2,280,602	3,633,051	(40,775,253)
2035	2,951,132	2,567,484	270,673	0	1,988,001	326,800	2,314,801	3,690,050	(44,465,303)

Assumptions:	MSW Growth Rate	3.02%
	Recycling Rate (Net of Ferrous)	13.00%
	Recycling Growth Rate	0.00%
	Cover Material	5.00%
	Raw Garbage Density in Lbs per Cubic Yard	1,200
	Process Residue Density in Lbs per Cubic Yard	1,735
	Daily Average Plant Throughput, Design	2,000
	Plant Capacity (Processible Tons)	817,000
	Process Residue, Ash, and RDF to Landfill	40.00%
	Unprocessibles to Landfill (Percent of Delivered)	3.90%
	Percent of Unprocessibles to Class 1	0.00%

Estimated Depletion	
Max. Class 1	2022
Balanced Life	2021

Solid Waste Authority of Palm Beach County
Landfill Depletion Model
Table 2A: Estimated Class 1 Landfill Depletion - Proposed Three Boiler System

	Class 1 Waste Generation Tons	Class 1 Waste less Recycling Tons	Class 3 Diverted to Class 1 Tons	NCRRF Unprocessable Waste Tons	Uncombusted Waste Landfilled Tons	Process Residue, Ash, and RDF Landfilled Tons	Class 1 Waste Landfilled Tons	Class 1 Volume Consumed CY	Class 1 Volume Remaining CY
Total Estimated Volume to +160 NGVD								38,716,850	
Volume Depleted Through Fiscal Year 2004/2005								8,835,794	
Remaining volume based on 262.00 Acres of Class 1 Landfill								29,881,056	
2006	1,350,734	1,175,139	182,774	0	507,757	326,800	834,557	1,222,976	28,658,080
2007	1,399,282	1,217,376	186,821	0	554,041	326,800	880,841	1,300,116	27,357,963
2008	1,449,575	1,261,131	190,958	0	601,933	326,800	928,733	1,379,936	25,978,028
2009	1,501,676	1,306,458	195,187	0	651,488	326,800	978,288	1,462,529	24,515,499
2010	1,555,649	1,353,415	199,509	0	702,767	326,800	1,029,567	1,547,993	22,967,506
2011	1,604,765	1,396,145	203,066	0	749,055	326,800	1,075,855	1,625,140	21,342,365
2012	1,655,431	1,440,225	206,687	0	502,271	440,000	942,271	1,344,324	19,998,042
2013	1,707,697	1,485,697	210,373	0	551,429	440,000	991,429	1,426,252	18,571,789
2014	1,761,614	1,532,604	214,124	0	602,087	440,000	1,042,087	1,510,683	17,061,106
2015	1,817,232	1,580,992	217,942	0	654,293	440,000	1,094,293	1,597,694	15,463,413
2016	1,871,828	1,628,490	221,500	0	705,349	440,000	1,145,349	1,682,786	13,780,627
2017	1,928,063	1,677,415	225,115	0	757,889	440,000	1,197,889	1,770,353	12,010,274
2018	1,985,988	1,727,810	228,790	0	811,958	440,000	1,251,958	1,860,468	10,149,805
2019	2,045,653	1,779,718	232,524	0	867,601	440,000	1,307,601	1,953,207	8,196,598
2020	2,107,111	1,833,186	236,320	0	924,865	440,000	1,364,865	2,048,646	6,147,952
2021	2,166,724	1,885,050	239,769	0	980,178	440,000	1,420,178	2,140,834	4,007,118
2022	2,228,025	1,938,382	243,268	0	1,037,008	440,000	1,477,008	2,235,552	1,771,566
2023	2,291,059	1,993,222	246,818	0	1,095,399	440,000	1,535,399	2,332,869	(561,304)
2024	2,355,877	2,049,613	250,421	0	1,155,393	440,000	1,595,393	2,432,859	(2,994,163)
2025	2,422,529	2,107,600	254,075	0	1,217,034	440,000	1,657,034	2,535,595	(5,529,758)
2026	2,486,504	2,163,258	257,311	0	1,275,929	440,000	1,715,929	2,633,752	(8,163,510)
2027	2,552,168	2,220,386	260,589	0	1,336,334	440,000	1,776,334	2,734,428	(10,897,938)
2028	2,619,567	2,279,023	263,908	0	1,398,290	440,000	1,838,290	2,837,687	(13,735,625)
2029	2,688,745	2,339,208	267,269	0	1,461,836	440,000	1,901,836	2,943,598	(16,679,223)
2030	2,759,750	2,400,983	270,673	0	1,527,015	440,000	1,967,015	3,052,229	(19,731,453)
2031	2,797,007	2,433,396	270,673	0	1,559,428	440,000	1,999,428	3,106,251	(22,837,704)
2032	2,834,767	2,466,247	270,673	0	1,592,279	440,000	2,032,279	3,161,003	(25,998,706)
2033	2,873,036	2,499,541	270,673	0	1,625,573	440,000	2,065,573	3,216,493	(29,215,200)
2034	2,911,822	2,533,285	270,673	0	1,659,317	440,000	2,099,317	3,272,733	(32,487,932)
2035	2,951,132	2,567,484	270,673	0	1,693,516	440,000	2,133,516	3,329,732	(35,817,664)

Assumptions:

MSW Growth Rate	3.02%
Recycling Rate (Net of Ferrous)	13.00%
Recycling Growth Rate	0.00%
Cover Material	5.00%
Raw Garbage Density in Lbs per Cubic Yard	1,200
Process Residue Density in Lbs per Cubic Yard	1,735
Daily Average Plant Throughput	2,000
Plant Capacity (Processible Tons)	817,000
Process Residue, Ash, and RDF to Landfill	40.00%
Unprocessibles to Landfill (Percent of Delivered)	3.90%
Add Third Boiler in Year	2012
New Plant Capacity	1,100,000
Percent of Unprocessibles to Class 1	0.00%

Estimated Depletion	
Max. Class 1	2023
Balanced Life	2022

Solid Waste Authority of Palm Beach County
Landfill Depletion Model
Table 3: Estimated Class 3 Landfill Depletion - Current Two Boiler System

Class 3 Waste Generation Tons	Class 3 Waste Reduction Tons	Class 3 Waste Net Tons	NCRRF Unprocessable Waste Tons	Class 3 Diverted to Class 1 Tons	Class 3 Waste Landfilled Tons	Class 3 Volume Consumed CY	Class 3 Volume Remaining CY
Total Estimated Volume to +160 NGVD							8,901,356
Volume Depleted Through Fiscal Year 2004/2005							4,839,917
Remaining Volume based on 72.00 Acres of Class 3 Landfill							4,061,439

2006	609,247	201,052	408,196	33,156	(182,774)	258,578	400,585	3,660,854
2007	622,738	205,504	417,234	33,156	(186,821)	263,569	408,318	3,252,536
2008	636,527	210,054	426,473	33,156	(190,958)	268,671	416,222	2,836,314
2009	650,622	214,705	435,917	33,156	(195,187)	273,886	424,301	2,412,013
2010	665,029	219,459	445,569	33,156	(199,509)	279,217	432,559	1,979,455
2011	676,887	223,373	453,514	33,156	(203,066)	283,604	439,356	1,540,099
2012	688,957	227,356	461,601	33,156	(206,687)	288,070	446,275	1,093,824
2013	701,243	231,410	469,833	33,156	(210,373)	292,616	453,317	640,507
2014	713,747	235,537	478,211	33,156	(214,124)	297,243	460,484	180,023
2015	726,474	239,737	486,738	33,156	(217,942)	301,952	467,779	(287,756)
2016	738,333	243,650	494,683	33,156	(221,500)	306,339	474,576	(762,333)
2017	750,384	247,627	502,757	33,156	(225,115)	310,798	481,484	(1,243,817)
2018	762,632	251,669	510,964	33,156	(228,790)	315,330	488,505	(1,732,322)
2019	775,081	255,777	519,304	33,156	(232,524)	319,936	495,640	(2,227,963)
2020	787,732	259,952	527,780	33,156	(236,320)	324,617	502,892	(2,730,855)
2021	799,229	263,745	535,483	33,156	(239,769)	328,871	509,482	(3,240,337)
2022	810,893	267,595	543,298	33,156	(243,268)	333,187	516,168	(3,756,505)
2023	822,728	271,500	551,228	33,156	(246,818)	337,565	522,952	(4,279,457)
2024	834,735	275,463	559,273	33,156	(250,421)	342,008	529,834	(4,809,292)
2025	846,918	279,483	567,435	33,156	(254,075)	346,516	536,818	(5,346,109)
2026	857,705	283,043	574,662	33,156	(257,311)	350,507	543,000	(5,889,110)
2027	868,629	286,647	581,981	33,156	(260,589)	354,549	549,262	(6,438,372)
2028	879,692	290,298	589,394	33,156	(263,908)	358,642	555,604	(6,993,975)
2029	890,896	293,996	596,900	33,156	(267,269)	362,788	562,026	(7,556,001)
2030	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(8,124,531)
2031	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(8,693,060)
2032	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(9,261,590)
2033	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(9,830,120)
2034	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(10,398,649)
2035	902,243	297,740	604,503	33,156	(270,673)	366,986	568,530	(10,967,179)

Assumptions:	MSW Growth Rate	1.65%
	Recycling/Reduction Rate	33.00%
	Recycling Growth Rate	0.00%
	Cover Material	5.00%
	Trash Density in Lbs per Cy	1,291
	Percent of NCRRRF Unprocessibles to Class 3	100.00%
	Percent of Class 3 Material Diverted to Class 1	30.00%

Estimated Depletion	
Max. Class 1	2015
Balanced Life	2021

Solid Waste Authority of Palm Beach County

Landfill Depletion Model

Table 3A: Estimated Class 3 Landfill Depletion - Proposed Three Boiler System

Class 3 Waste Generation Tons	Class 3 Waste Reduction Tons	Class 3 Waste Net Tons	NCRRF Unprocessable Waste Tons	Class 3 Diverted to Class 1 Tons	Class 3 Waste Landfilled Tons	Class 3 Volume Consumed CY	Class 3 Volume Remaining CY
Total Estimated Volume to +160 NGVD							8,901,356
Volume Depleted Through Fiscal Year 2004/2005							4,839,917
Remaining Volume based on 72.00 Acres of Class 3 Landfill							4,061,439

2006	609,247	201,052	408,196	33,156	(182,774)	258,578	400,585	3,660,854
2007	622,738	205,504	417,234	33,156	(186,821)	263,569	408,318	3,252,536
2008	636,527	210,054	426,473	33,156	(190,958)	268,671	416,222	2,836,314
2009	650,622	214,705	435,917	33,156	(195,187)	273,886	424,301	2,412,013
2010	665,029	219,459	445,569	33,156	(199,509)	279,217	432,559	1,979,455
2011	676,887	223,373	453,514	33,156	(203,066)	283,604	439,356	1,540,099
2012	688,957	227,356	461,601	44,641	(206,687)	299,555	464,067	1,076,032
2013	701,243	231,410	469,833	44,641	(210,373)	304,101	471,109	604,923
2014	713,747	235,537	478,211	44,641	(214,124)	308,727	478,276	126,646
2015	726,474	239,737	486,738	44,641	(217,942)	313,437	485,572	(358,925)
2016	738,333	243,650	494,683	44,641	(221,500)	317,824	492,369	(851,294)
2017	750,384	247,627	502,757	44,641	(225,115)	322,283	499,277	(1,350,571)
2018	762,632	251,669	510,964	44,641	(228,790)	326,815	506,297	(1,856,868)
2019	775,081	255,777	519,304	44,641	(232,524)	331,421	513,433	(2,370,301)
2020	787,732	259,952	527,780	44,641	(236,320)	336,102	520,685	(2,890,986)
2021	799,229	263,745	535,483	44,641	(239,769)	340,356	527,274	(3,418,260)
2022	810,893	267,595	543,298	44,641	(243,268)	344,671	533,960	(3,952,220)
2023	822,728	271,500	551,228	44,641	(246,818)	349,050	540,744	(4,492,964)
2024	834,735	275,463	559,273	44,641	(250,421)	353,493	547,627	(5,040,591)
2025	846,918	279,483	567,435	44,641	(254,075)	358,001	554,610	(5,595,201)
2026	857,705	283,043	574,662	44,641	(257,311)	361,992	560,793	(6,155,994)
2027	868,629	286,647	581,981	44,641	(260,589)	366,034	567,054	(6,723,048)
2028	879,692	290,298	589,394	44,641	(263,908)	370,127	573,396	(7,296,444)
2029	890,896	293,996	596,900	44,641	(267,269)	374,273	579,818	(7,876,262)
2030	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(8,462,584)
2031	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(9,048,906)
2032	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(9,635,228)
2033	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(10,221,550)
2034	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(10,807,872)
2035	902,243	297,740	604,503	44,641	(270,673)	378,471	586,322	(11,394,194)

Assumptions:	MSW Growth Rate	1.65%
	Recycling/Reduction Rate	33.00%
	Recycling Growth Rate	0.00%
	Cover Material	5.00%
	Trash Density in Lbs per Cy	1,291
	Percent of NCRRF Unprocessibles to Class 3	100.00%
	Percent of Class 3 Material Diverted to Class 1	30.00%

Estimated Depletion

Max. Class 1	2015
Balanced Life	2022

**Solid Waste Authority
Landfill Depletion Model**

Table 4: Estimated Landfill Depletion Assuming Balanced Life - Current Two Boiler System

	Class 1 Landfill Volume Depleted	Class 3 Landfill Volume Depleted	Total Landfill Volume Depleted	Cumulative Class 1 Volume Depleted	Cumulative Class 3 Volume Depleted	Cumulative Class 1 Percentage Volume	Cumulative Class 3 Percentage Volume	Landfill Volume Remaining
Total Estimated Volume to +160 NGVD								47,618,206
Volume Depleted Through Fiscal Year 2004/2005								13,675,711
Remaining Volume								33,942,495
2006	1,222,976	400,585	1,623,561	10,058,770	5,240,502	65.75%	34.25%	32,318,933
2007	1,300,116	408,318	1,708,434	11,358,887	5,648,820	66.79%	33.21%	30,610,499
2008	1,379,936	416,222	1,796,157	12,738,822	6,065,041	67.75%	32.25%	28,814,342
2009	1,462,529	424,301	1,886,830	14,201,351	6,489,342	68.64%	31.36%	26,927,512
2010	1,547,993	432,559	1,980,552	15,749,345	6,921,901	69.47%	30.53%	24,946,960
2011	1,625,140	439,356	2,064,496	17,374,485	7,361,257	70.24%	29.76%	22,882,464
2012	1,704,642	446,275	2,150,917	19,079,127	7,807,532	70.96%	29.04%	20,731,547
2013	1,786,570	453,317	2,239,887	20,865,697	8,260,848	71.64%	28.36%	18,491,660
2014	1,871,001	460,484	2,331,485	22,736,699	8,721,332	72.28%	27.72%	16,160,175
2015	1,958,012	467,779	2,425,791	24,694,711	9,189,112	72.88%	27.12%	13,734,383
2016	2,043,104	474,576	2,517,681	26,737,815	9,663,688	73.45%	26.55%	11,216,703
2017	2,130,671	481,484	2,612,156	28,868,486	10,145,173	74.00%	26.00%	8,604,547
2018	2,220,787	488,505	2,709,292	31,089,273	10,633,678	74.51%	25.49%	5,895,255
2019	2,313,525	495,640	2,809,166	33,402,798	11,129,318	75.01%	24.99%	3,086,089
2020	2,408,965	502,892	2,911,857	35,811,762	11,632,211	75.48%	24.52%	174,232
2021	2,501,153	509,482	3,010,635	38,312,915	12,141,693	75.94%	24.06%	(2,836,402)
2022	2,595,870	516,168	3,112,038	40,908,786	12,657,861	76.37%	23.63%	(5,948,441)
2023	2,693,188	522,952	3,216,139	43,601,973	13,180,813	76.79%	23.21%	(9,164,580)
2024	2,793,177	529,834	3,323,012	46,395,150	13,710,647	77.19%	22.81%	(12,487,592)
2025	2,895,914	536,818	3,432,731	49,291,064	14,247,465	77.58%	22.42%	(15,920,323)
2026	2,994,071	543,000	3,537,071	52,285,135	14,790,465	77.95%	22.05%	(19,457,394)
2027	3,094,746	549,262	3,644,008	55,379,881	15,339,727	78.31%	21.69%	(23,101,402)
2028	3,198,006	555,604	3,753,609	58,577,886	15,895,331	78.66%	21.34%	(26,855,011)
2029	3,303,916	562,026	3,865,942	61,881,802	16,457,357	78.99%	21.01%	(30,720,953)
2030	3,412,547	568,530	3,981,077	65,294,350	17,025,886	79.32%	20.68%	(34,702,030)
2031	3,466,569	568,530	4,035,099	68,760,919	17,594,416	79.63%	20.37%	(38,737,129)
2032	3,521,321	568,530	4,089,851	72,282,240	18,162,946	79.92%	20.08%	(42,826,980)
2033	3,576,811	568,530	4,145,341	75,859,052	18,731,475	80.20%	19.80%	(46,972,321)
2034	3,633,051	568,530	4,201,581	79,492,103	19,300,005	80.46%	19.54%	(51,173,902)
2035	3,690,050	568,530	4,258,580	83,182,153	19,868,535	80.72%	19.28%	(55,432,482)

Assumptions: See Table 1, Table 2, and Table 3.

Solid Waste Authority of Palm Beach County

Landfill Depletion Mode

Table 4A: Estimated Landfill Depletion Assuming Balanced Life - Proposed Three Boiler System

	Class 1 Landfill Volume Depleted	Class 3 Landfill Volume Depleted	Total Landfill Volume Depleted	Cumulative Class 1 Volume Depleted	Cumulative Class 3 Volume Depleted	Cumulative Class 1 Percentage Volume	Cumulative Class 3 Percentage Volume	Landfill Volume Remaining
Total Estimated Volume to +160 NGVD								47,618,206
Volume Depleted Through Fiscal Year 2004/2005								13,675,711
Remaining Volume								33,942,495
2006	1,222,976	400,585	1,623,561	10,058,770	5,240,502	65.75%	34.25%	32,318,933
2007	1,300,116	408,318	1,708,434	11,358,887	5,648,820	66.79%	33.21%	30,610,499
2008	1,379,936	416,222	1,796,157	12,738,822	6,065,041	67.75%	32.25%	28,814,342
2009	1,462,529	424,301	1,886,830	14,201,351	6,489,342	68.64%	31.36%	26,927,512
2010	1,547,993	432,559	1,980,552	15,749,345	6,921,901	69.47%	30.53%	24,946,960
2011	1,625,140	439,356	2,064,496	17,374,485	7,361,257	70.24%	29.76%	22,882,464
2012	1,344,324	464,067	1,808,391	18,718,809	7,825,324	70.52%	29.48%	21,074,073
2013	1,426,252	471,109	1,897,361	20,145,061	8,296,433	70.83%	29.17%	19,176,712
2014	1,510,683	478,276	1,988,959	21,655,744	8,774,709	71.16%	28.84%	17,187,753
2015	1,597,694	485,572	2,083,265	23,253,437	9,260,281	71.52%	28.48%	15,104,487
2016	1,682,786	492,369	2,175,155	24,936,223	9,752,650	71.89%	28.11%	12,929,333
2017	1,770,353	499,277	2,269,630	26,706,576	10,251,926	72.26%	27.74%	10,659,703
2018	1,860,468	506,297	2,366,766	28,567,045	10,758,224	72.64%	27.36%	8,292,937
2019	1,953,207	513,433	2,466,640	30,520,252	11,271,657	73.03%	26.97%	5,826,297
2020	2,048,646	520,685	2,569,331	32,568,898	11,792,341	73.42%	26.58%	3,256,966
2021	2,140,834	527,274	2,668,109	34,709,733	12,319,616	73.80%	26.20%	588,858
2022	2,235,552	533,960	2,769,512	36,945,285	12,853,576	74.19%	25.81%	(2,180,655)
2023	2,332,869	540,744	2,873,613	39,278,154	13,394,320	74.57%	25.43%	(5,054,268)
2024	2,432,859	547,627	2,980,486	41,711,013	13,941,947	74.95%	25.05%	(8,034,754)
2025	2,535,595	554,610	3,090,205	44,246,608	14,496,557	75.32%	24.68%	(11,124,959)
2026	2,633,752	560,793	3,194,545	46,880,360	15,057,349	75.69%	24.31%	(14,319,504)
2027	2,734,428	567,054	3,301,482	49,614,788	15,624,404	76.05%	23.95%	(17,620,986)
2028	2,837,687	573,396	3,411,083	52,452,476	16,197,799	76.41%	23.59%	(21,032,069)
2029	2,943,598	579,818	3,523,416	55,396,074	16,777,617	76.75%	23.25%	(24,555,485)
2030	3,052,229	586,322	3,638,551	58,448,303	17,363,939	77.10%	22.90%	(28,194,036)
2031	3,106,251	586,322	3,692,573	61,554,554	17,950,261	77.42%	22.58%	(31,886,609)
2032	3,161,003	586,322	3,747,325	64,715,556	18,536,583	77.73%	22.27%	(35,633,934)
2033	3,216,493	586,322	3,802,815	67,932,050	19,122,905	78.03%	21.97%	(39,436,749)
2034	3,272,733	586,322	3,859,055	71,204,782	19,709,227	78.32%	21.68%	(43,295,804)
2035	3,329,732	586,322	3,916,054	74,534,514	20,295,549	78.60%	21.40%	(47,211,858)

Assumptions: See Table 1, Table 2, and Table 3.

Appendix B

Historical Incoming Waste Tonnage

**Solid Waste Authority of Palm Beach County
Historical Solid Waste Tonnages
Adjusted for Revised Solid Waste Densities**

85/86	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	32.65	23,716.52	0.00	273.71	23.91	0.00	118.75	0.00	42,504.37	0.00	1.74	329.35	3.75	0.00	22,933.28	3,407.00	93,345.03
	NOV	0.00	0.00	12.24	23,075.80	0.00	473.52	0.00	0.00	141.25	0.00	41,433.41	0.00	12.88	43.04	0.00	0.00	24,610.05	2,415.65	92,217.84
	DEC	0.00	0.00	58.18	27,322.69	0.00	181.56	17.25	0.00	37.50	0.00	45,837.13	0.00	0.18	1,124.52	0.00	0.00	23,147.46	2,041.56	99,768.03
	JAN	0.00	0.00	25.28	26,489.35	0.00	143.27	36.89	0.00	228.75	0.00	46,896.31	0.00	15.15	273.62	4.52	0.00	30,082.72	1,862.85	106,058.71
	FEB	0.00	0.00	25.61	22,411.99	0.00	111.69	4.37	0.00	43.75	0.00	43,533.76	603.38	0.84	209.93	4.25	0.00	21,172.99	2,015.95	90,138.51
	MAR	0.00	0.00	14.89	19,738.94	0.00	108.36	3.22	0.00	63.64	0.00	49,707.50	3,421.84	47.39	360.65	4.30	0.00	20,162.28	2,022.01	95,655.02
	APR	0.00	0.00	25.56	22,019.13	0.00	124.56	4.42	0.00	90.00	0.00	45,560.25	10,059.82	0.66	333.27	0.45	0.00	23,828.78	2,510.97	104,557.87
	MAY	0.00	0.00	57.31	17,657.65	0.00	65.71	0.00	0.00	18.75	0.00	44,131.03	18,623.31	32.85	77.54	3.55	0.00	24,649.83	2,815.36	108,132.89
	JUN	0.00	0.00	21.24	21,010.29	0.00	182.23	4.89	0.00	360.00	0.00	44,881.97	17,375.65	2.36	3,727.63	1.00	0.00	25,140.90	3,172.81	115,880.96
	JUL	0.00	0.00	9.71	18,951.68	0.00	212.54	10.09	0.00	438.75	0.00	45,445.73	11,316.05	2.15	74.82	1.00	0.00	27,363.67	3,076.43	106,902.61
	AUG	0.00	0.00	23.17	19,665.82	0.00	373.49	8.93	0.00	195.00	0.00	42,704.94	12,186.03	16.05	63.36	7.70	0.00	23,020.79	2,809.52	101,074.80
	SEP	0.00	0.00	40.82	25,350.12	0.00	439.80	4.68	0.00	36.92	0.00	44,138.87	13,578.23	19.09	606.22	3.67	0.00	22,406.48	2,573.91	109,198.80
	Total	0.00	0.00	346.66	267,409.95	0.00	2,690.44	118.65	0.00	1,773.06	0.00	536,775.27	87,164.31	151.34	7,223.95	34.19	0.00	288,519.24	30,724.02	1,222,931.09
	Average	0.00	0.00	28.89	22,284.16	0.00	224.20	9.89	0.00	147.76	0.00	44,731.27	7,263.69	12.61	602.00	2.85	0.00	24,043.27	2,560.34	101,910.92
	Percent	0.00%	0.00%	0.03%	21.87%	0.00%	0.22%	0.01%	0.00%	0.14%	0.00%	43.89%	7.13%	0.01%	0.59%	0.00%	0.00%	23.59%	2.51%	100.00%

86/87	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	28.36	33,776.62	0.00	393.77	0.00	0.00	48.75	0.00	45,630.98	16,590.42	4.58	290.22	2.30	0.00	18,833.42	2,699.80	118,299.22
	NOV	0.00	0.00	35.32	28,495.31	0.00	261.49	8.77	0.00	27.50	0.00	45,504.00	13,112.31	2.66	281.09	1.05	0.00	16,581.92	2,186.44	106,497.86
	DEC	0.00	0.00	62.87	31,451.67	0.00	413.85	44.54	0.00	57.32	0.00	55,055.42	11,845.30	1.27	269.71	8.33	0.00	16,425.12	2,097.92	117,733.31
	JAN	0.00	0.00	60.67	30,277.69	0.00	411.70	10.72	0.00	150.62	0.00	51,699.26	8,856.43	0.38	660.98	5.59	0.00	16,772.10	2,270.95	111,177.09
	FEB	0.00	0.00	100.20	29,516.31	0.00	1,078.77	7.71	0.00	85.25	0.00	47,977.67	9,284.64	1.68	117.89	2.50	0.00	18,070.80	2,079.60	108,323.02
	MAR	0.00	0.00	35.46	17,241.63	0.00	363.16	10.84	0.00	998.88	0.00	55,711.68	8,426.25	3.75	44.54	0.95	0.00	17,750.43	2,587.70	103,175.27
	APR	0.00	0.00	42.75	20,831.52	0.00	352.68	11.94	0.00	904.41	0.00	50,328.29	4,609.04	2.18	77.00	0.00	0.00	17,033.33	2,875.57	97,068.72
	MAY	0.00	0.00	77.52	23,435.69	0.00	305.82	0.00	0.00	322.29	0.00	48,960.85	4,957.82	12.12	3.63	3.90	0.00	16,032.65	2,521.97	96,634.27
	JUN	0.00	0.00	23.43	25,624.36	0.00	318.31	6.30	0.00	281.98	0.00	48,957.20	4,176.42	0.14	14.95	0.00	0.00	17,931.40	3,207.66	100,542.15
	JUL	0.00	0.00	33.14	24,345.24	0.00	300.39	0.00	0.00	208.12	0.00	49,564.90	3,889.55	10.04	39.45	1.25	0.00	17,884.48	3,288.51	99,565.06
	AUG	0.00	0.00	47.99	23,557.19	0.00	368.11	7.77	0.00	253.39	0.00	45,242.56	4,685.84	0.47	99.52	3.70	0.00	16,262.77	2,835.51	93,364.81
	SEP	0.00	0.00	96.14	22,885.71	0.00	434.22	3.51	0.00	288.68	0.00	48,129.41	4,062.24	8.01	286.98	0.00	0.00	18,587.31	2,980.59	97,762.80
	Total	0.00	0.00	643.85	311,438.92	0.00	5,002.27	112.10	0.00	3,627.19	0.00	592,762.22	94,496.26	47.28	2,185.96	29.57	0.00	208,165.74	31,632.22	1,250,143.56
	Average	0.00	0.00	53.65	25,953.24	0.00	416.86	9.34	0.00	302.27	0.00	49,396.85	7,874.69	3.94	182.16	2.46	0.00	17,347.14	2,636.02	104,178.63
	Percent	0.00%	0.00%	0.05%	24.91%	0.00%	0.40%	0.01%	0.00%	0.29%	0.00%	47.42%	7.56%	0.00%	0.17%	0.00%	0.00%	16.65%	2.53%	100.00%

SWA scale system output converts volume transactions to tonnage using assumed waste densities. Currently available information allows the retrieval of tonnage information on volume transactions. For 92/93 and on "actuals" are used. For prior years, assumed weights have been replaced with more accurate estimates based on reasonable and reliable density estimates. Animals not included due to inconsistent recording. Animal tonnage is insignificant.

87/88	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	210.76	23,142.60	0.00	203.09	7.83	0.00	307.68	0.00	50,145.73	3,761.04	0.55	216.55	0.00	0.00	18,797.22	3,223.35	100,016.39
	NOV	0.00	0.00	211.58	21,954.85	0.00	75.88	3.82	0.00	899.60	0.00	50,279.05	3,069.62	0.24	162.25	0.00	0.00	17,028.29	2,546.12	96,231.30
	DEC	0.00	0.00	215.23	22,949.80	0.00	93.09	9.50	0.00	318.23	0.00	53,532.36	2,812.24	3.67	1,052.80	1.62	0.00	16,727.68	1,960.80	99,677.01
	JAN	0.00	0.00	45.98	20,303.32	0.00	162.03	35.04	0.00	224.63	0.00	52,228.10	4,137.48	0.74	83.03	1.12	0.00	17,945.73	1,270.15	96,437.34
	FEB	0.00	0.00	71.86	19,236.14	0.00	205.13	14.48	0.00	929.91	0.00	53,829.24	3,425.54	0.80	940.59	0.00	0.00	17,840.77	1,274.36	97,768.82
	MAR	0.00	0.00	124.40	24,563.60	0.00	138.00	8.63	0.00	940.87	0.00	58,845.36	3,345.92	0.55	19.45	7.24	0.00	18,832.27	1,554.55	108,380.83
	APR	0.00	0.00	116.41	21,334.22	0.00	84.34	5.74	0.00	1,460.20	0.00	52,492.48	3,685.82	0.00	22.53	0.00	0.00	18,192.37	1,501.67	98,895.78
	MAY	0.00	0.00	110.49	21,145.85	0.00	136.40	63.25	0.00	786.55	0.00	53,790.68	5,028.27	0.23	22.65	1.00	0.00	19,491.15	1,530.05	102,106.57
	JUN	0.00	0.00	186.33	26,428.47	0.00	259.92	200.65	0.00	394.63	0.00	54,840.00	3,378.51	23.07	0.00	2.65	0.00	20,494.74	1,850.50	108,059.47
	JUL	0.00	0.00	153.27	25,460.82	0.00	125.89	263.15	0.00	677.80	0.00	51,892.97	2,277.22	2.35	207.87	1.40	0.00	19,431.31	1,728.82	102,222.88
	AUG	0.00	0.00	140.45	30,459.67	0.00	168.71	55.92	0.00	122.71	0.00	56,676.19	3,671.20	0.00	320.77	3.92	0.00	20,605.62	2,373.05	114,598.21
	SEP	0.00	0.00	158.48	27,851.54	0.00	195.96	4.21	0.00	165.84	0.00	50,675.04	4,385.25	0.81	66.96	2.42	0.00	19,089.34	2,219.36	104,815.21
	Total	0.00	0.00	1,745.24	284,830.84	0.00	1,848.44	672.22	0.00	7,228.65	0.00	639,227.20	42,978.11	33.01	3,115.45	21.37	0.00	224,476.49	23,032.78	1,229,209.80
	Average	0.00	0.00	145.44	23,735.90	0.00	154.04	56.02	0.00	602.39	0.00	53,268.93	3,581.51	2.75	259.62	1.78	0.00	18,706.37	1,919.40	102,434.15
	Percent	0.00%	0.00%	0.14%	23.17%	0.00%	0.15%	0.05%	0.00%	0.59%	0.00%	52.00%	3.50%	0.00%	0.25%	0.00%	0.00%	18.26%	1.87%	100.00%

88/89	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	87.69	26,181.30	0.00	148.86	3.98	0.00	160.12	0.00	52,270.66	3,934.36	3.99	81.09	7.27	0.00	19,745.70	2,979.17	105,604.20
	NOV	0.00	0.00	115.50	20,594.23	0.00	65.51	3.21	0.00	134.98	0.00	55,707.52	4,168.16	2.84	6.56	3.65	0.00	20,423.35	2,816.71	104,042.22
	DEC	0.00	0.00	22.82	19,791.84	0.00	59.12	36.39	0.00	78.28	0.00	57,471.58	4,655.35	1.51	54.53	2.25	0.00	20,760.60	3,043.60	105,977.87
	JAN	0.00	0.00	36.53	18,400.88	0.00	221.87	4.54	0.00	196.23	0.00	60,790.77	4,118.88	2.24	73.82	2.75	0.00	21,503.73	2,531.37	107,883.60
	FEB	0.00	0.00	10.38	16,629.32	0.00	155.11	0.00	0.00	401.14	0.00	54,998.22	6,719.66	2.12	1.90	0.00	0.00	21,886.88	2,437.62	103,242.34
	MAR	0.00	0.00	18.99	18,682.59	0.00	150.81	0.00	0.00	389.27	0.00	63,944.25	7,583.63	20.20	28.09	2.80	0.00	26,236.49	2,993.14	120,050.26
	APR	0.00	0.00	21.40	19,338.76	0.00	120.56	20.54	0.00	579.52	0.00	57,997.92	4,788.47	5.33	7.79	2.12	0.00	23,904.27	3,076.20	109,862.89
	MAY	0.00	0.00	27.21	17,633.23	0.00	57.52	4.79	0.00	959.36	0.00	62,303.88	5,934.25	6.65	0.16	0.00	0.00	27,354.77	3,292.16	117,573.97
	JUN	0.00	0.00	7.74	18,338.71	0.00	59.44	232.87	0.00	1,156.07	0.00	58,867.27	6,022.51	0.94	14.68	0.00	0.00	26,288.47	3,557.21	114,545.90
	JUL	0.00	0.00	0.00	19,422.48	0.00	104.99	421.12	0.00	870.20	0.00	56,349.08	3,449.17	0.94	3,600.13	0.00	0.00	24,201.07	3,230.77	111,649.95
	AUG	0.00	0.00	44.01	22,220.62	0.00	128.50	391.36	0.00	802.56	0.00	58,738.55	3,791.56	1.18	8.85	3.65	0.00	27,373.20	3,348.82	116,852.85
	SEP	0.00	0.00	54.96	17,290.95	0.00	123.76	123.09	0.00	816.26	0.00	53,969.32	2,401.99	0.28	21.99	1.20	0.00	27,657.25	3,247.14	105,708.20
	Total	0.00	0.00	447.23	234,524.89	0.00	1,396.05	1,241.89	0.00	6,543.99	0.00	693,409.02	57,567.99	48.22	3,899.59	25.69	0.00	287,335.77	36,553.91	1,322,994.25
	Average	0.00	0.00	37.27	19,543.74	0.00	116.34	103.49	0.00	545.33	0.00	57,784.09	4,797.33	4.02	324.97	2.14	0.00	23,944.65	3,046.16	110,249.52
	Percent	0.00%	0.00%	0.03%	17.73%	0.00%	0.11%	0.09%	0.00%	0.49%	0.00%	52.41%	4.35%	0.00%	0.29%	0.00%	0.00%	21.72%	2.76%	100.00%

89/90	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	34.55	15,313.72	0.00	66.78	9.28	0.00	478.88	0.00	56,519.68	2,248.03	0.71	2.55	2.00	0.00	24,348.26	2,919.45	101,943.88
	NOV	0.00	0.00	6.85	14,758.80	0.00	188.91	9.31	0.00	498.72	0.00	57,318.34	1,997.30	0.01	0.00	0.00	0.00	22,957.82	2,555.62	100,291.68
	DEC	0.00	0.00	13.63	13,037.13	0.00	190.40	2.62	0.00	455.70	0.00	56,619.71	1,835.76	0.80	23.66	0.00	0.00	20,140.62	807.94	93,127.97
	JAN	0.00	0.00	63.78	11,003.99	0.00	334.94	5.72	0.00	544.58	0.00	66,560.11	1,929.79	0.00	5.82	3.14	0.00	28,276.96	2,658.09	111,386.91
	FEB	0.00	0.00	107.26	11,903.85	0.00	132.15	5.32	0.00	332.27	0.00	45,456.98	2,467.67	1.82	364.42	1.50	0.00	23,693.25	2,408.02	86,874.51
	MAR	0.00	0.00	121.91	14,178.32	0.00	117.73	13.22	0.00	223.16	0.00	61,876.38	2,280.23	1.15	96.84	5.87	0.00	24,046.59	2,418.85	105,380.24
	APR	0.00	0.00	70.06	8,975.38	0.00	143.65	92.00	0.00	283.16	0.00	59,283.07	1,999.96	1.57	28.23	1.25	0.00	21,566.82	2,035.72	94,480.87
	MAY	0.00	175.80	95.69	9,695.40	0.00	184.30	1.01	0.00	329.18	0.00	59,631.02	1,758.35	0.06	3.38	6.61	0.00	23,251.28	1,920.19	97,052.27
	JUN	0.00	728.91	53.07	9,083.53	0.00	92.51	6.20	0.00	750.67	0.00	56,762.99	2,060.84	0.17	52.03	8.21	0.00	23,143.72	1,720.30	94,463.15
	JUL	0.00	219.05	37.98	9,191.74	0.00	237.13	3.03	0.00	406.45	0.00	56,961.91	2,328.84	0.00	9.94	0.00	0.00	24,150.09	1,915.79	95,461.94
	AUG	0.00	0.00	77.17	8,960.82	0.00	339.17	8.47	0.00	356.32	0.00	57,663.01	1,715.79	0.13	14.82	7.28	0.00	26,692.09	1,814.19	97,649.26
	SEP	0.00	14.29	61.25	7,838.11	0.00	151.48	51.45	0.00	348.85	0.00	51,194.57	1,042.39	0.00	118.67	5.12	0.00	20,909.52	1,605.17	83,340.87
	Total	0.00	1,138.05	743.20	133,940.77	0.00	2,179.15	207.63	0.00	5,007.94	0.00	685,847.77	23,664.95	6.42	720.36	40.98	0.00	283,177.01	24,779.33	1,161,453.56
	Average	0.00	94.84	61.93	11,161.73	0.00	181.60	17.30	0.00	417.33	0.00	57,153.98	1,972.08	0.54	60.03	3.42	0.00	23,598.08	2,064.94	96,787.80
	Percent	0.00%	0.10%	0.06%	11.53%	0.00%	0.19%	0.02%	0.00%	0.43%	0.00%	59.05%	2.04%	0.00%	0.06%	0.00%	0.00%	24.38%	2.13%	100.00%

90/91	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	81.97	47.00	15,023.85	0.00	155.57	2,944.28	2.79	2,282.29	23.19	60,219.29	2,638.54	0.62	97.73	0.00	0.00	16,930.47	2,367.97	102,815.55
	NOV	0.00	152.42	112.59	12,342.72	0.00	123.36	2,921.79	333.82	914.45	20.37	56,903.50	1,195.99	0.54	0.96	1.30	0.00	13,911.55	1,876.25	90,811.61
	DEC	0.00	551.38	88.92	8,354.20	0.00	106.59	3,487.84	18.00	615.22	34.28	58,938.83	1,833.42	1.44	22.60	4.11	0.00	12,264.98	1,548.83	87,870.64
	JAN	0.00	162.13	31.28	9,378.26	0.00	197.17	3,676.14	405.14	619.44	28.88	65,854.11	1,284.45	2.29	27.50	7.10	0.00	14,351.88	1,743.10	97,768.87
	FEB	0.00	110.51	50.75	10,874.66	0.00	173.16	3,591.33	501.01	650.82	19.63	57,626.91	1,519.55	0.89	43.23	0.00	0.00	12,742.73	1,741.77	89,646.95
	MAR	0.00	99.10	120.83	11,729.20	0.00	170.90	19.29	523.50	730.80	18.10	61,303.55	2,064.64	0.51	15.54	2.40	0.00	14,078.65	2,060.76	92,937.77
	APR	0.00	38.37	24.84	10,741.84	0.00	173.18	6,368.85	264.17	480.14	24.89	63,033.24	2,393.04	0.22	6.48	0.00	0.00	14,569.79	2,130.92	100,249.97
	MAY	0.00	18.62	10.70	10,753.04	0.00	513.74	4,164.88	217.91	760.23	25.62	59,583.95	2,370.90	0.25	7.68	0.00	0.00	14,371.58	2,330.96	95,130.05
	JUN	0.00	49.02	55.42	10,355.46	0.00	975.99	3,713.10	85.43	760.24	24.41	52,543.94	748.90	0.07	19.30	0.00	0.00	13,240.29	2,428.46	85,000.03
	JUL	0.00	17.41	75.77	10,986.06	0.00	275.30	2,332.08	858.40	344.48	17.92	57,463.19	1,312.80	107.00	6.70	0.00	0.00	15,384.84	2,501.05	91,683.00
	AUG	0.00	6.31	160.56	9,797.51	0.00	1,365.18	2,732.13	894.21	483.60	8.14	53,990.34	2,419.23	0.13	7.33	0.00	1,612.39	13,291.99	2,652.12	89,421.16
	SEP	0.00	12.34	69.50	9,912.47	0.00	236.89	3,607.27	269.53	551.36	14.34	52,055.03	8,429.70	0.70	20.06	0.00	2,294.24	12,662.70	2,907.03	93,043.16
	Total	0.00	1,299.58	848.16	130,249.25	0.00	4,467.03	39,558.98	4,373.91	9,193.07	259.77	699,515.88	28,211.16	114.66	275.11	14.91	3,906.63	167,801.44	26,289.22	1,116,378.76
	Average	0.00	108.30	70.68	10,854.10	0.00	372.25	3,296.58	364.49	766.09	21.65	58,292.99	2,350.93	9.56	22.93	1.24	325.55	13,983.45	2,190.77	93,031.56
	Percent	0.00%	0.12%	0.08%	11.67%	0.00%	0.40%	3.54%	0.39%	0.82%	0.02%	62.66%	2.53%	0.01%	0.02%	0.00%	0.35%	15.03%	2.35%	100.00%

91/92	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	97.97	60.44	14,291.72	0.00	368.07	5,653.25	126.68	633.89	11.74	59,194.73	5,611.94	0.33	13.20	8.08	3,360.38	17,724.19	3,038.68	110,195.28
	NOV	0.00	50.14	31.27	11,422.61	0.00	203.73	5,882.20	348.30	402.53	5.14	55,735.10	3,220.66	0.46	4.19	0.00	585.82	15,615.25	2,392.27	95,899.67
	DEC	0.00	125.20	207.95	10,238.59	0.00	305.73	4,621.20	93.86	302.03	4.28	61,957.35	1,891.35	0.49	777.78	0.00	39.12	14,068.06	2,606.02	97,239.00
	JAN	0.00	74.80	247.83	10,700.41	0.00	203.96	6,149.55	700.52	556.79	9.76	61,899.91	3,126.39	1.33	42.50	0.00	49.29	15,507.89	2,327.81	101,598.74
	FEB	0.00	47.65	50.30	9,091.28	0.00	261.68	5,901.09	907.57	819.70	8.08	57,714.58	4,371.96	0.57	16.10	6.92	116.04	14,135.61	1,964.27	95,413.40
	MAR	0.00	99.03	88.50	8,953.63	0.00	329.54	5,885.62	787.74	517.66	5.45	62,950.66	1,691.59	1.07	15.87	0.00	140.69	14,994.37	2,391.42	98,852.84
	APR	0.00	172.15	61.54	9,295.16	0.00	342.67	5,403.70	663.97	481.84	3.65	59,248.00	1,754.76	2.12	12.23	0.00	843.81	14,924.16	2,368.89	95,578.65
	MAY	0.00	800.29	77.87	8,078.46	0.00	333.76	6,094.16	565.52	598.91	4.21	53,686.53	1,533.65	0.48	8.81	0.00	827.11	14,408.37	2,337.96	89,356.09
	JUN	0.00	25.81	86.78	8,445.59	0.00	534.43	3,918.78	877.36	1,154.30	5.59	58,559.67	1,040.53	5.71	21.28	0.00	1,177.30	16,482.16	2,717.63	95,052.91
	JUL	0.00	127.42	105.47	10,180.89	0.00	426.52	3,572.38	638.21	616.49	4.36	53,841.19	1,533.45	0.00	29.84	4.94	1,120.77	17,079.69	2,597.87	91,879.49
	AUG	0.00	25.72	30.74	9,716.42	0.00	438.89	3,357.42	631.90	682.15	15.04	53,688.20	1,336.98	0.17	17.20	0.00	983.06	14,844.67	3,157.92	88,926.48
	SEP	0.00	148.34	43.33	9,364.14	0.00	506.17	4,205.66	562.92	783.66	4.54	54,287.71	1,312.58	1.45	40.36	5.49	613.00	16,212.91	3,962.62	92,054.87
	Total	0.00	1,794.52	1,092.02	119,778.89	0.00	4,255.15	60,645.01	6,904.55	7,549.95	81.84	692,763.63	28,425.82	14.18	999.36	25.43	9,856.39	185,997.33	31,863.36	1,152,047.42
	Average	0.00	149.54	91.00	9,981.57	0.00	354.60	5,053.75	575.38	629.16	6.82	57,730.30	2,368.82	1.18	83.28	2.12	821.37	15,499.78	2,655.28	96,003.95
	Percent	0.00%	0.16%	0.09%	10.40%	0.00%	0.37%	5.26%	0.60%	0.66%	0.01%	60.13%	2.47%	0.00%	0.09%	0.00%	0.86%	16.14%	2.77%	100.00%

92/93	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	77.35	14.38	10,903.42	0.00	355.68	3,533.10	321.79	376.56	3.01	52,221.19	901.66	0.12	4.19	8.19	220.34	13,869.03	5,002.03	87,812.04
	NOV	0.00	360.79	27.92	8,825.62	0.00	394.90	2,549.39	428.23	302.53	1.50	55,468.68	561.06	0.45	21.22	0.00	2,157.91	11,487.47	3,756.22	86,343.89
	DEC	0.00	331.07	27.28	9,499.07	0.00	552.32	5,181.17	310.89	444.92	14.05	58,058.88	2,300.00	1.21	19.42	0.00	5,062.81	13,145.16	3,909.95	98,858.20
	JAN	0.00	173.61	40.13	9,114.27	0.00	434.67	6,400.60	186.23	341.62	8.81	60,202.58	1,050.70	0.71	41.92	3.63	4,579.96	12,551.50	4,215.28	99,346.22
	FEB	0.00	14.40	23.15	9,584.71	0.00	478.89	5,723.80	152.05	617.92	2.32	54,269.58	735.62	0.70	0.54	53.51	3,976.35	12,382.16	4,007.23	92,022.93
	MAR	0.00	75.68	110.47	8,841.61	0.00	530.04	6,273.66	121.46	491.57	7.54	66,710.54	2,392.36	0.98	336.72	0.00	7,070.72	16,866.14	8,198.21	118,027.70
	APR	0.00	34.12	76.43	9,944.01	0.00	383.12	5,193.91	79.52	56.98	9.32	60,680.25	2,131.30	1.27	63.35	11.05	5,985.82	16,724.81	6,605.81	107,981.07
	MAY	0.00	227.65	42.26	9,593.94	0.00	486.49	4,664.85	78.87	0.00	3.83	54,408.59	1,060.04	0.35	34.43	0.00	4,944.42	14,048.62	5,107.11	94,701.45
	JUN	0.00	564.37	5.13	9,488.19	0.00	709.25	2,861.08	123.27	0.00	5.47	56,938.35	478.75	0.00	0.86	2.47	4,029.72	17,305.44	5,757.86	98,270.21
	JUL	0.00	0.00	22.51	8,472.31	0.00	495.69	2,499.41	83.05	0.00	11.07	53,867.84	546.89	0.00	6.05	0.00	3,854.97	15,397.63	4,623.59	89,881.01
	AUG	0.00	0.00	14.73	9,564.47	0.00	480.30	2,210.00	73.47	0.00	6.02	55,685.09	1,060.26	0.00	10.20	2.14	3,433.70	16,182.33	6,013.31	94,736.02
	SEP	0.00	0.00	19.50	9,200.25	0.00	1,969.37	1,642.74	125.07	0.00	8.33	54,527.79	1,013.15	0.00	100.88	14.12	4,910.03	15,750.49	6,438.13	95,719.85
	Total	0.00	1,859.04	423.89	113,031.87	0.00	7,270.72	48,733.71	2,083.90	2,632.10	81.27	683,039.36	14,231.79	5.79	639.78	95.11	50,226.75	175,710.78	63,634.73	1,163,700.59
	Average	0.00	154.92	35.32	9,419.32	0.00	605.89	4,061.14	173.66	219.34	6.77	56,919.95	1,185.98	0.48	53.32	7.93	4,185.56	14,642.57	5,302.89	96,975.05
	Percent	0.00%	0.16%	0.04%	9.71%	0.00%	0.62%	4.19%	0.18%	0.23%	0.01%	58.70%	1.22%	0.00%	0.05%	0.01%	4.32%	15.10%	5.47%	100.00%

93/94	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	15.93	10,898.23	0.00	346.29	2,527.73	326.60	0.00	7.53	57,951.42	921.08	0.00	0.00	0.00	36.45	13,920.78	5,952.24	92,904.28
	NOV	0.00	0.00	9.15	9,295.81	0.00	236.24	2,049.64	259.28	0.00	4.24	62,388.65	947.14	1.04	26.25	4.38	126.35	13,600.95	5,691.84	94,640.96
	DEC	0.00	0.00	7.92	8,534.30	0.00	316.63	3,862.78	214.95	0.00	12.35	63,047.82	535.88	0.00	5.46	2.63	36.00	13,519.71	5,135.75	95,232.18
	JAN	0.00	0.00	0.35	6,276.81	0.00	236.84	3,665.13	96.45	2.50	7.75	65,347.52	1,754.17	0.00	1.90	0.00	105.57	14,138.58	5,471.68	97,105.25
	FEB	0.00	0.00	2.00	6,307.13	0.00	253.80	3,296.75	141.71	4.59	5.88	62,027.92	1,343.54	0.00	5.35	0.00	48.83	12,715.75	5,618.47	91,771.72
	MAR	0.00	0.00	2.80	9,042.00	0.00	284.63	4,961.57	270.71	0.00	7.69	67,724.24	1,384.55	0.00	18.64	12.20	104.71	17,727.87	7,680.00	109,221.61
	APR	0.00	0.00	0.00	6,296.71	0.00	423.56	3,881.46	288.96	461.68	7.76	62,891.49	1,738.27	0.00	0.11	0.00	51.21	16,596.09	7,319.86	99,957.16
	MAY	0.00	0.00	0.00	6,896.98	0.00	377.93	4,172.70	190.47	3,080.32	3.12	60,920.42	742.46	0.00	2.22	0.00	67.42	17,328.07	8,672.39	102,454.50
	JUN	0.00	0.00	2.02	5,636.53	0.00	221.16	3,419.74	138.00	3,685.28	6.58	61,485.20	1,400.25	0.00	2.69	5.77	48.30	16,592.79	11,183.68	103,827.99
	JUL	0.00	0.00	0.21	5,197.67	0.00	208.80	3,820.97	132.24	6,616.33	1.12	53,447.76	1,223.95	0.00	5.37	0.00	64.41	14,684.40	9,794.67	95,197.90
	AUG	0.00	0.00	10.50	5,050.35	0.00	494.78	4,393.45	150.32	6,129.79	6.60	60,436.48	2,871.95	0.00	0.88	0.00	33.21	15,023.95	12,306.78	106,909.04
	SEP	0.00	0.00	1.82	4,376.04	0.00	200.69	4,016.09	153.86	6,411.05	7.45	56,355.67	900.89	0.09	0.89	0.92	37.79	15,147.24	11,711.81	99,322.30
	Total	0.00	0.00	52.70	83,808.56	0.00	3,601.35	44,068.01	2,363.55	26,391.54	78.07	734,024.59	15,764.13	1.13	69.76	25.90	760.25	180,996.18	96,539.17	1,188,544.89
	Average	0.00	0.00	4.39	6,984.05	0.00	300.11	3,672.33	196.96	2,199.30	6.51	61,168.72	1,313.68	0.09	5.81	2.16	63.35	15,083.02	8,044.93	99,045.41
	Percent	0.00%	0.00%	0.00%	7.05%	0.00%	0.30%	3.71%	0.20%	2.22%	0.01%	61.76%	1.33%	0.00%	0.01%	0.00%	0.06%	15.23%	8.12%	100.00%

94/95	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furniture	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	0.00	5,613.06	0.00	202.61	4,639.19	214.12	9,027.82	10.12	57,408.68	1,606.69	0.00	8.08	0.00	19.50	13,852.18	12,080.84	104,682.89
	NOV	0.00	0.00	1.97	4,484.08	0.00	164.84	4,102.55	204.08	6,342.22	5.18	63,172.61	1,175.89	0.00	12.21	13.24	29.66	14,143.77	13,141.75	106,994.05
	DEC	0.00	0.00	0.00	5,763.37	0.00	191.33	5,677.96	206.60	833.47	13.07	67,147.84	818.11	0.00	3.14	0.00	11.59	14,621.54	12,004.79	107,292.81
	JAN	0.00	0.00	0.00	7,631.11	0.00	225.85	6,158.41	238.23	1,607.99	2.74	64,057.30	1,579.91	0.00	0.00	0.00	10.81	13,118.35	11,430.76	106,061.46
	FEB	0.00	0.00	4.65	5,355.27	0.00	463.72	5,417.67	181.67	1,416.42	2.85	57,401.18	2,525.08	0.00	7.80	0.00	46.08	10,891.54	10,027.76	93,741.69
	MAR	0.00	0.00	4.10	7,823.84	0.00	800.66	6,077.03	235.31	2,509.41	1.49	64,831.59	7,332.05	0.00	0.00	13.25	23.37	13,259.57	12,993.26	115,904.93
	APR	0.00	0.00	10.51	6,420.77	0.00	323.54	4,883.70	220.77	2,379.72	4.27	57,667.76	2,796.72	0.00	0.00	0.00	23.90	12,583.10	11,631.56	98,946.32
	MAY	0.00	0.00	1.13	7,308.66	0.00	148.32	5,265.93	237.87	3,901.20	2.11	61,356.02	3,000.30	0.00	8.36	0.00	12.43	13,444.69	12,966.37	107,653.39
	JUN	0.00	0.00	1.93	5,473.81	0.00	191.70	4,361.86	179.77	3,357.07	3.09	59,899.47	1,774.45	0.00	1.69	0.00	18.11	13,712.41	13,554.72	102,530.08
	JUL	0.00	0.00	0.73	5,676.56	0.00	122.51	4,679.20	156.66	2,282.42	0.20	56,095.61	1,686.89	0.00	21.63	0.00	22.30	13,850.54	11,846.61	96,441.86
	AUG	0.00	0.00	0.43	6,887.81	0.00	166.29	4,063.45	334.92	2,270.35	2.15	60,087.61	2,989.14	0.19	38.80	1.66	23.92	12,726.66	11,365.38	100,958.76
	SEP	0.00	0.00	2.20	8,365.02	0.00	149.53	4,019.46	503.70	1,171.57	5.50	55,633.63	2,684.50	0.09	0.00	0.00	288.87	11,947.97	12,312.68	97,084.72
	Total	0.00	0.00	27.65	76,803.36	0.00	3,150.90	59,346.41	2,913.70	37,099.66	52.77	724,759.30	29,969.73	0.28	101.71	28.15	530.54	158,152.32	145,356.48	1,238,292.96
	Average	0.00	0.00	2.30	6,400.28	0.00	262.58	4,945.53	242.81	3,091.64	4.40	60,396.61	2,497.48	0.02	8.48	2.35	44.21	13,179.36	12,113.04	103,191.08
	Percent	0.00%	0.00%	0.00%	6.20%	0.00%	0.25%	4.79%	0.24%	3.00%	0.00%	58.53%	2.42%	0.00%	0.01%	0.00%	0.04%	13.17%	12.11%	100.00%

95/96	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	0.00	0.00	5.49	8,306.43	0.00	150.58	3,529.75	639.43	1,103.24	0.30	62,568.40	713.09	0.00	2.48	0.00	109.85	14,031.60	10,258.85	101,419.49
	NOV	0.00	0.00	0.47	7,577.50	0.00	165.44	3,848.98	151.54	1,170.79	5.80	59,920.30	1,236.95	0.00	0.51	0.00	30.75	11,877.69	9,065.06	95,051.78
	DEC	0.00	0.00	0.09	6,486.83	0.00	146.73	4,637.98	196.79	1,110.82	4.64	60,711.75	1,630.56	0.00	6.21	0.00	23.32	11,756.81	6,828.18	93,540.71
	JAN	0.00	0.00	0.00	8,199.45	0.00	164.29	5,781.94	355.70	1,086.16	4.97	67,707.15	30.16	0.00	0.00	0.00	49.41	14,589.86	6,771.91	104,741.00
	FEB	0.00	0.00	0.19	8,921.47	0.00	315.23	6,827.95	216.42	1,240.79	2.55	60,711.78	0.00	0.00	1.75	0.00	6.85	12,744.83	6,960.11	97,949.92
	MAR	0.00	0.00	0.00	9,752.63	0.00	145.62	6,749.53	212.68	1,724.66	5.14	64,177.95	0.00	0.00	1.92	0.00	7.23	12,201.36	7,431.40	102,410.12
	APR	0.00	0.00	0.00	11,704.69	0.00	273.41	6,566.69	285.33	1,489.64	2.62	64,890.16	0.00	0.00	8.26	0.00	21.58	13,827.35	7,629.74	106,699.47
	MAY	0.00	0.00	0.37	9,956.33	0.00	196.96	5,977.02	253.66	1,165.88	2.70	64,875.94	0.00	0.00	0.00	3.41	15.31	14,642.38	11,365.54	108,455.50
	JUN	0.00	0.00	0.22	9,174.17	0.00	65.15	4,261.28	142.95	1,704.25	4.08	58,741.40	0.00	0.00	1.77	0.00	62.75	12,867.57	11,064.11	98,089.70
	JUL	0.00	0.00	0.00	9,420.41	0.00	63.50	3,693.83	166.17	4,162.89	4.62	61,493.70	0.00	0.00	1.11	4.59	9.05	14,742.65	10,223.82	103,986.34
	AUG	0.00	0.00	0.03	9,586.82	0.00	152.44	4,174.49	162.07	3,233.39	6.98	59,474.35	0.00	0.00	0.00	0.00	1.16	13,345.50	10,894.01	101,031.24
	SEP	0.00	0.00	2.35	9,021.73	0.00	83.17	3,486.62	324.63	2,771.44	2.51	57,535.10	0.00	0.00	0.00	0.00	5.58	13,330.75	11,579.33	98,143.21
	Total	0.00	0.00	9.21	108,108.46	0.00	1,922.52	59,536.06	3,107.37	21,963.95	46.91	742,807.98	3,610.76	0.00	24.01	8.00	342.84	159,958.35	110,072.06	1,211,518.48
	Average	0.00	0.00	0.77	9,009.04	0.00	160.21	4,961.34	258.95	1,830.33	3.91	61,900.67	300.90	0.00	2.00	0.67	28.57	13,329.86	9,172.67	100,959.87
	Percent	0.00%	0.00%	0.00%	8.92%	0.00%	0.16%	4.91%	0.26%	1.81%	0.00%	61.31%	0.30%	0.00%	0.00%	0.00%	0.03%	13.20%	9.09%	100.00%

96/97	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pesticide	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	24.08	0.00	0.00	4,899.37	2,604.72	74.95	5,092.65	299.32	3,420.44	9.87	63,684.82	0.00	0.00	0.30	0.00	25.27	12,500.11	12,159.05	104,794.95
	NOV	25.16	0.00	0.00	3,735.92	3,700.11	64.80	4,816.39	251.30	2,871.07	9.65	60,493.45	0.00	0.00	0.00	1.23	74.90	9,107.87	10,911.88	96,063.73
	DEC	32.73	0.00	0.00	3,539.05	3,364.94	121.22	6,343.78	253.38	2,370.37	6.20	68,224.69	0.00	0.00	0.00	0.00	4.25	9,110.56	8,784.40	102,155.57
	JAN	30.40	0.00	0.00	4,926.70	2,674.21	105.04	7,023.80	359.02	1,726.88	5.61	69,890.70	0.00	0.00	0.00	0.00	0.00	11,397.53	9,101.15	107,241.04
	FEB	38.48	0.00	0.18	5,586.94	2,458.25	137.71	5,184.91	143.22	1,943.51	4.82	64,004.73	0.00	0.00	0.91	0.00	18.64	10,277.50	8,723.38	98,523.18
	MAR	25.11	0.00	0.05	3,689.92	2,483.20	66.34	5,759.53	187.09	853.66	5.71	69,172.09	0.00	0.00	0.00	0.00	15.21	10,792.54	10,725.87	103,776.32
	APR	29.80	0.00	0.54	3,868.09	2,559.37	154.13	4,690.37	237.72	1,172.69	4.97	67,967.76	0.00	0.00	0.00	0.00	23.60	11,789.09	10,722.18	103,220.31
	MAY	24.29	0.00	1.29	3,551.83	3,433.44	62.48	4,838.42	154.68	1,295.94	4.71	66,075.02	0.00	0.00	0.00	1.95	32.44	11,359.21	11,390.90	102,226.60
	JUN	24.27	0.00	0.00	4,166.48	3,215.69	109.49	3,227.39	185.34	1,808.05	5.57	65,657.00	0.00	0.00	0.00	11.11	45.31	12,539.44	14,122.95	105,118.09
	JUL	27.17	0.00	6.29	4,738.95	3,393.17	106.50	3,323.82	143.17	779.05	7.73	62,495.40	0.00	0.00	1.97	3.38	268.59	16,303.78	15,178.51	106,777.48
	AUG	24.29	0.00	0.00	5,565.27	3,561.30	174.93	3,555.21	155.23	1,135.23	6.11	61,959.68	0.00	0.00	0.00	0.00	343.32	18,084.09	14,138.26	108,702.92
	SEP	22.07	0.00	0.00	4,599.54	2,210.41	97.91	4,044.28	119.86	174.06	4.63	63,486.23	0.00	0.00	0.00	0.00	337.57	12,813.16	15,228.09	103,137.81
	Total	327.85	0.00	8.35	52,868.06	35,658.81	1,275.50	57,900.55	2,489.33	19,550.95	75.58	783,111.57	0.00	0.00	3.18	17.67	1,189.10	146,074.88	141,186.62	1,241,738.00
	Average	27.32	0.00	0.70	4,405.67	2,971.57	106.29	4,825.05	207.44	1,629.25	6.30	65,259.30	0.00	0.00	0.27	1.47	99.09	12,172.91	11,765.55	103,274.95
	Percent	0.03%	0.00%	0.00%	4.27%	2.88%	0.10%	4.67%	0.20%	1.58%	0.01%	63.19%	0.00%	0.00%	0.00%	0.00%	0.10%	11.79%	11.39%	100.00%

97/98	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	30.03	0.00	3.58	5,117.25	886.16	118.56	4,658.74	125.88	1.16	6.11	63,954.20	0.00	0.00	0.00	4.26	1,371.62	14,388.30	16,310.09	106,975.94
	NOV	29.31	0.00	0.13	3,383.36	1,101.40	106.00	4,756.44	153.59	1,512.54	6.97	61,556.38	0.00	0.00	0.00	5.99	2,867.70	15,056.04	14,171.71	104,707.56
	DEC	29.28	0.00	0.01	3,556.46	3,205.38	210.00	5,623.69	166.24	2,436.99	4.43	76,370.40	0.00	0.00	0.00	0.00	933.89	26,734.87	12,500.23	131,771.87
	JAN	30.08	0.00	0.00	3,846.19	1,777.57	162.35	5,356.55	238.28	1,080.95	9.48	73,860.62	0.00	0.00	1.33	2.91	1,782.50	18,028.13	13,811.48	119,988.42
	FEB	36.99	0.00	0.00	4,012.11	1,358.45	188.23	4,859.63	473.34	549.54	4.75	68,785.89	0.00	0.00	0.00	0.00	404.81	13,510.78	15,576.43	109,760.95
	MAR	36.57	0.00	0.54	4,359.51	1,040.02	148.89	5,910.31	290.97	758.58	8.37	74,819.39	0.00	20.75	0.00	0.00	430.69	13,989.24	15,516.77	117,330.60
	APR	23.67	0.00	0.52	4,552.77	1,130.97	244.69	5,662.41	221.24	985.41	6.69	69,318.43	0.00	14.35	12.05	0.00	249.50	15,335.40	15,697.53	113,455.63
	MAY	28.53	0.00	0.00	5,992.04	1,139.68	131.46	4,937.82	123.83	1,681.89	7.87	65,843.07	0.00	14.34	8.73	0.00	646.33	15,492.87	15,707.62	111,756.08
	JUN	24.76	0.00	0.00	5,364.35	1,013.57	139.84	4,872.86	172.25	3,369.46	4.13	67,419.02	0.00	7.95	0.97	2.42	542.72	13,737.85	16,116.31	112,788.46
	JUL	23.03	0.00	0.18	5,437.23	785.44	133.26	4,153.95	132.06	2,666.90	8.44	67,195.38	0.00	14.52	0.00	0.00	323.20	14,867.14	16,981.46	112,722.19
	AUG	30.00	0.00	0.13	4,747.50	671.25	198.66	3,731.75	245.17	1,373.54	8.10	64,250.48	0.00	12.65	0.00	0.00	434.41	14,174.91	16,781.69	106,660.24
	SEP	26.91	0.00	0.00	4,666.82	935.08	132.80	3,807.38	156.46	1,984.73	8.18	67,366.88	0.00	14.19	0.00	0.00	408.72	14,759.49	17,146.63	111,414.27
	Total	349.16	0.00	5.09	55,035.59	15,044.97	1,914.74	58,331.53	2,499.31	18,401.69	83.52	820,740.14	0.00	98.75	23.08	15.58	10,396.09	190,075.02	186,317.95	1,359,332.21
	Average	29.10	0.00	0.42	4,586.30	1,253.75	159.56	4,860.96	208.28	1,533.47	6.96	68,395.01	0.00	8.23	1.92	1.30	866.34	15,839.59	15,526.50	113,277.68
	Percent	0.03%	0.00%	0.00%	4.05%	1.11%	0.14%	4.29%	0.18%	1.35%	0.01%	60.38%	0.00%	0.01%	0.00%	0.00%	0.76%	13.98%	13.71%	100.00%

98/99	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	28.82	0.00	0.00	7,130.23	1,501.06	343.84	4,015.31	170.98	2,080.61	8.46	67,524.06	0.00	13.70	0.00	2.12	558.47	15,608.93	17,343.25	116,329.84
	NOV	25.19	0.00	0.00	7,455.80	1,149.37	469.40	4,048.61	290.72	3,932.44	11.00	70,550.44	0.00	12.15	0.00	0.00	390.38	13,409.91	15,480.43	117,225.84
	DEC	31.23	0.00	0.00	6,969.96	719.47	586.15	4,701.64	224.02	3,518.02	13.37	76,769.96	0.00	10.29	0.00	0.00	410.43	13,822.50	13,027.89	120,804.93
	JAN	27.84	0.00	0.00	5,406.54	859.03	557.00	4,909.81	224.10	4,895.99	8.08	74,846.18	0.00	13.89	0.00	0.00	498.56	14,330.34	12,688.65	119,266.01
	FEB	30.47	0.00	0.03	6,061.65	886.32	514.29	4,752.49	235.69	6,381.01	4.31	68,363.65	0.00	11.92	0.00	0.00	551.07	13,335.25	13,503.58	114,631.73
	MAR	33.42	0.00	0.82	8,064.36	617.71	551.65	5,617.34	187.52	5,558.88	14.16	78,501.86	0.00	20.93	9.30	3.36	515.21	15,231.18	16,251.54	131,179.24
	APR	26.91	0.00	0.00	7,552.92	394.53	609.04	5,487.50	220.16	4,714.67	4.97	73,092.18	0.00	15.50	0.97	0.00	594.48	16,048.17	16,508.31	125,270.31
	MAY	22.73	0.00	1.31	6,475.69	312.83	504.42	5,536.91	151.28	3,495.96	9.88	70,640.14	0.00	17.29	12.57	0.00	507.36	15,473.88	17,378.65	120,540.90
	JUN	23.94	0.00	0.00	6,216.75	422.97	496.66	4,234.26	239.25	6,203.57	12.90	76,717.83	0.00	20.26	4.14	2.33	588.58	17,126.35	19,451.23	131,761.02
	JUL	28.32	0.00	0.32	5,671.07	263.73	304.57	3,916.79	270.37	6,655.37	12.22	70,472.43	0.00	16.79	0.00	0.00	734.69	16,356.54	18,864.34	123,567.55
	AUG	22.47	0.00	0.00	6,642.06	351.04	284.76	3,709.11	158.15	6,056.03	17.40	73,471.41	0.00	19.18	0.00	14.54	732.43	15,637.78	19,997.93	127,114.29
	SEP	22.92	0.00	0.00	5,673.29	211.39	184.92	3,434.34	197.73	4,820.80	12.40	73,683.91	0.00	13.90	13.91	5.68	681.67	16,322.87	20,778.33	126,058.06
	Total	324.26	0.00	2.48	79,320.32	7,689.45	5,406.70	54,364.11	2,569.97	58,313.35	129.15	874,634.05	0.00	185.80	40.89	28.03	6,763.33	182,703.70	201,274.13	1,473,749.72
	Average	27.02	0.00	0.21	6,610.03	640.79	450.56	4,530.34	214.16	4,859.45	10.76	72,886.17	0.00	15.48	3.41	2.34	563.61	15,225.31	16,772.84	122,812.48
	Percent	0.02%	0.00%	0.00%	5.38%	0.52%	0.37%	3.69%	0.17%	3.96%	0.01%	59.35%	0.00%	0.01%	0.00%	0.00%	0.46%	12.40%	13.66%	100.00%

99/00	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	29.93	0.00	0.00	5,904.09	186.71	147.62	3,316.23	380.88	3,800.94	12.32	75,429.94	0.00	11.39	23.38	0.00	1,030.96	14,666.95	21,885.64	126,826.98
	NOV	22.22	0.00	1.08	5,918.34	143.10	176.30	4,686.77	342.37	4,676.42	13.17	74,895.94	0.00	16.42	0.00	0.00	934.72	14,372.82	21,188.47	127,388.14
	DEC	36.39	0.00	0.00	5,698.34	142.50	265.52	4,775.46	328.46	4,328.21	14.47	76,583.23	0.00	20.89	18.51	3.99	642.11	14,117.24	14,518.76	121,494.08
	JAN	28.13	0.00	0.47	5,730.83	254.78	159.52	4,892.84	368.16	8,255.79	8.48	75,317.43	0.00	15.37	13.40	10.26	572.11	13,904.23	13,061.84	122,593.64
	FEB	28.44	0.00	0.03	5,520.51	395.23	186.74	4,042.63	500.03	4,768.14	16.02	72,963.01	0.00	16.31	23.11	0.00	718.37	13,222.10	13,865.71	116,266.38
	MAR	24.78	0.00	0.00	5,975.37	417.98	220.97	4,654.17	343.40	5,183.96	12.16	79,324.98	0.00	23.11	16.57	0.00	583.42	15,373.44	14,910.71	127,065.02
	APR	24.21	0.00	1.49	6,369.07	680.56	174.98	3,856.13	320.53	4,551.38	13.29	72,516.07	0.00	18.09	0.00	3.16	477.10	14,384.94	14,100.39	117,491.39
	MAY	25.05	0.00	0.00	5,918.17	666.43	181.38	5,099.54	305.16	6,679.88	12.67	75,451.41	0.00	19.60	11.73	2.32	692.61	15,263.85	15,577.80	125,907.60
	JUN	18.82	0.00	0.50	5,521.64	633.82	145.03	4,314.36	253.55	5,659.13	17.62	71,775.00	0.00	18.25	0.00	1.35	681.82	15,272.03	15,696.86	120,009.78
	JUL	25.15	0.00	0.00	5,483.15	289.30	129.49	4,425.77	284.95	5,101.21	21.16	70,910.34	0.00	16.92	9.95	5.77	708.99	15,803.54	15,388.36	118,604.05
	AUG	25.49	0.00	0.00	6,444.41	438.96	231.76	4,798.54	268.68	5,162.53	17.48	74,834.09	0.00	19.58	12.56	16.23	2,543.40	17,746.71	18,723.82	131,284.24
	SEP	26.23	0.00	0.00	5,386.38	503.06	96.84	4,314.51	306.84	5,514.93	24.03	70,273.57	0.00	22.43	0.00	3.49	897.56	14,532.30	16,263.53	118,165.70
	Total	314.84	0.00	3.57	69,870.30	4,752.43	2,116.15	53,176.95	4,003.01	63,682.52	182.87	890,275.01	0.00	218.36	129.21	46.57	10,483.17	178,660.15	195,181.89	1,473,097.00
	Average	26.24	0.00	0.30	5,822.53	396.04	176.35	4,431.41	333.58	5,306.88	15.24	74,189.58	0.00	18.20	10.77	3.88	873.60	14,888.35	16,265.16	122,758.08
	Percent	0.02%	0.00%	0.00%	4.74%	0.32%	0.14%	3.61%	0.27%	4.32%	0.01%	60.44%	0.00%	0.01%	0.01%	0.00%	0.71%	12.13%	13.25%	100.00%

00/01	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	35.41	0.00	0.78	5,361.70	536.81	135.38	4,099.36	274.50	3,886.63	23.44	76,361.31	0.00	40.87	22.68	3.15	728.93	16,527.90	16,388.72	124,427.57
	NOV	25.40	0.00	0.00	5,278.28	88.00	112.47	3,360.84	276.81	5,676.68	25.91	76,844.28	0.00	27.74	0.08	4.37	676.46	14,214.76	13,881.03	120,493.11
	DEC	26.57	0.00	0.00	4,786.04	47.19	251.83	5,379.57	193.25	8,076.91	37.81	77,103.01	0.00	10.96	0.00	0.00	350.24	13,929.38	10,861.61	121,054.37
	JAN	30.55	0.00	0.00	4,333.81	71.21	152.08	6,014.81	466.71	4,614.96	36.32	79,731.75	0.00	16.93	10.90	5.69	502.07	14,741.07	12,215.72	122,944.58
	FEB	30.21	0.00	0.00	4,443.20	44.91	178.36	5,512.18	327.95	4,888.15	41.73	70,793.69	0.00	24.90	0.00	2.81	574.84	13,447.32	12,815.95	113,126.20
	MAR	27.72	0.00	0.00	5,002.41	46.07	210.24	5,513.66	383.54	4,741.50	36.21	81,001.95	0.00	11.99	0.00	0.00	602.72	15,841.51	15,540.83	128,960.35
	APR	31.32	0.00	1.13	4,690.49	55.56	89.37	5,323.18	326.04	3,856.28	33.72	74,681.73	0.00	12.73	0.00	11.44	574.03	15,830.68	14,469.89	119,987.59
	MAY	36.32	0.00	0.21	5,970.43	78.12	112.66	5,301.67	372.14	4,474.77	12.37	77,468.21	0.00	250.78	0.26	6.38	676.77	16,927.00	17,072.76	128,760.85
	JUN	24.03	0.00	0.87	6,018.64	77.29	127.91	3,727.38	499.64	4,339.29	9.59	74,775.70	0.00	18.58	0.00	2.67	770.59	17,175.61	17,514.89	125,082.68
	JUL	27.16	0.00	9.64	6,080.58	119.31	150.68	3,884.75	425.79	5,204.60	14.70	78,090.39	0.00	22.49	0.00	6.15	1,635.36	16,887.58	17,414.84	129,974.02
	AUG	26.85	0.00	0.00	7,141.26	96.20	193.19	4,195.53	346.38	4,318.29	12.91	77,542.10	0.00	19.52	0.00	4.40	1,458.59	16,938.83	18,410.64	130,704.69
	SEP	33.22	0.00	0.00	5,607.28	109.10	69.29	4,075.55	277.57	4,726.00	12.99	70,346.37	0.00	12.75	0.00	0.00	934.04	15,018.43	17,160.18	118,382.77
	Total	354.76	0.00	12.63	64,714.12	1,369.77	1,783.46	56,388.48	4,170.32	58,804.06	297.70	914,740.49	0.00	470.24	33.92	47.06	9,484.64	187,480.07	183,747.06	1,483,898.78
	Average	29.56	0.00	1.05	5,392.84	114.15	148.62	4,699.04	347.53	4,900.34	24.81	76,228.37	0.00	39.19	2.83	3.92	790.39	15,623.34	15,312.26	123,658.23
	Percent	0.02%	0.00%	0.00%	4.36%	0.09%	0.12%	3.80%	0.28%	3.96%	0.02%	61.64%	0.00%	0.03%	0.00%	0.00%	0.64%	12.63%	12.38%	100.00%

01/02	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn.	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	39.36	0.00	3.16	7,538.43	121.88	119.80	4,366.43	149.62	4,887.16	14.52	80,051.97	0.00	17.84	0.00	0.00	1,266.16	17,830.55	19,391.01	135,797.89
	NOV	27.16	0.00	0.00	6,712.73	28.03	79.09	4,899.44	89.69	5,619.19	14.98	77,287.88	0.00	21.13	0.00	6.98	860.12	14,954.28	15,161.21	125,761.91
	DEC	33.94	0.00	0.00	5,969.71	71.04	120.14	5,534.03	193.51	5,253.46	17.90	79,533.80	0.00	25.30	0.00	0.70	604.62	14,342.68	12,332.41	124,033.24
	JAN	29.99	0.00	0.00	5,925.52	3.61	158.99	5,247.15	265.38	6,294.81	14.19	82,873.32	0.00	29.77	11.09	4.60	730.06	15,336.88	14,734.75	131,660.11
	FEB	28.44	0.00	0.00	5,972.42	29.51	100.84	5,142.97	133.72	4,514.17	11.06	77,101.58	0.00	20.91	0.00	3.10	462.26	14,481.86	15,070.55	123,073.39
	MAR	43.84	0.00	0.00	5,586.53	31.82	140.53	6,362.86	99.38	5,054.31	17.59	76,330.01	0.00	19.56	11.29	0.00	606.31	14,536.74	13,562.98	122,403.75
	APR	28.25	0.00	0.00	6,365.51	106.41	204.93	6,289.43	92.74	3,197.34	13.41	82,324.53	0.00	24.95	0.00	0.00	528.30	16,461.67	15,629.01	131,266.48
	MAY	36.52	0.00	0.00	7,525.60	71.01	94.16	5,567.86	3,232.51	12,496.83	15.33	81,580.75	0.00	22.95	0.00	5.05	1,060.18	16,891.76	18,804.57	147,405.08
	JUN	31.68	0.00	0.00	6,227.50	66.93	66.42	5,741.94	3,593.71	3,404.02	11.86	77,740.57	0.00	23.68	0.00	3.21	1,717.47	15,493.66	17,933.31	132,055.96
	JUL	38.92	0.00	4.62	5,876.28	133.85	56.93	5,078.12	4,179.39	3,979.46	9.27	82,982.94	0.00	24.66	0.00	12.21	1,630.43	17,231.18	19,140.43	140,378.69
	AUG	35.03	0.00	0.00	6,298.73	111.59	94.24	3,479.61	1,368.28	4,735.51	15.31	78,707.20	0.00	27.38	0.00	0.00	2,258.45	16,478.85	20,280.77	133,890.95
	SEP	36.53	0.00	0.77	4,869.94	191.27	154.96	4,102.27	3,098.28	11,402.90	13.36	74,171.20	0.00	24.02	0.00	0.86	1,874.88	14,613.66	17,285.02	131,839.92
	Total	409.66	0.00	8.55	74,868.90	966.95	1,391.03	61,812.11	16,496.21	70,839.16	168.78	950,685.75	0.00	282.15	22.38	36.71	13,599.24	188,653.77	199,326.02	1,579,567.37
	Average	34.14	0.00	0.71	6,239.08	80.58	115.92	5,151.01	1,374.68	5,903.26	14.07	79,223.81	0.00	23.51	1.87	3.06	1,133.27	15,721.15	16,610.50	131,630.61
	Percent	0.03%	0.00%	0.00%	4.74%	0.06%	0.09%	3.91%	1.04%	4.48%	0.01%	60.19%	0.00%	0.02%	0.00%	0.00%	0.86%	11.94%	12.62%	100.00%

02/03	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn/App	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	41.83	0.00	0.00	6,004.05	261.27	341.44	5,005.58	752.25	22,889.02	17.84	79,959.99	0.00	20.03	6.76	2.84	1,463.43	15,219.54	16,544.26	148,530.13
	NOV	33.83	0.00	0.00	5,456.46	185.24	392.66	4,846.04	149.83	4,005.34	25.69	78,743.07	0.00	22.30	0.00	8.50	791.07	14,211.79	16,290.02	125,161.84
	DEC	39.06	0.00	0.00	4,202.38	280.94	286.43	5,555.02	164.16	8,220.82	34.64	87,215.24	0.00	23.22	8.79	11.65	1,602.60	14,311.08	13,782.12	135,738.15
	JAN	34.73	0.00	1.58	5,785.14	222.08	419.77	5,702.42	206.75	8,831.75	15.89	84,947.05	0.00	35.60	0.14	7.71	1,431.45	14,778.96	14,614.32	137,035.34
	FEB	31.06	0.00	0.00	5,483.43	142.04	403.10	4,786.56	186.51	7,014.66	19.52	78,843.50	0.00	18.43	0.00	0.00	1,020.31	13,676.44	15,300.88	126,926.44
	MAR	33.67	0.00	0.00	6,136.99	330.64	282.84	6,603.84	136.54	8,093.68	23.85	88,486.37	0.00	20.02	0.00	7.11	1,322.04	16,440.24	20,269.31	148,190.14
	APR	34.12	0.00	0.00	5,888.21	191.16	193.43	6,378.57	335.35	18,668.77	21.97	86,406.08	0.00	24.42	0.00	13.76	1,687.69	17,363.24	19,631.90	156,838.67
	MAY	32.50	0.00	0.00	6,147.44	169.04	195.49	5,550.30	542.42	30,150.47	26.23	86,192.02	0.00	30.10	0.00	11.90	938.95	17,926.73	20,061.39	167,974.98
	JUN	31.72	0.00	2.03	6,483.08	227.18	186.48	4,307.54	699.67	9,332.07	20.54	82,088.83	0.00	21.49	0.00	3.44	2,123.37	17,453.86	21,424.08	144,405.38
	JUL	31.73	0.00	4.66	6,097.76	175.09	193.26	4,731.34	1,391.74	15,885.55	18.75	81,808.35	0.00	31.85	10.33	5.80	2,724.60	17,130.77	22,131.72	152,373.30
	AUG	38.15	0.00	1.06	6,292.26	208.57	131.13	4,938.11	2,460.00	10,986.20	22.37	80,948.25	0.00	44.10	0.00	2.54	3,035.19	15,934.22	22,646.19	147,688.34
	SEP	38.91	0.00	0.00	5,965.53	130.40	105.91	4,546.56	3,428.72	22,975.56	19.90	81,934.74	0.00	30.35	0.05	4.88	1,292.56	16,593.83	22,680.32	159,748.22
	Total	421.31	0.00	9.33	69,942.73	2,523.65	3,131.94	62,951.88	10,453.94	167,053.89	267.19	997,573.49	0.00	324.91	26.07	80.13	19,433.26	191,040.70	225,376.51	1,750,610.93
	Average	35.11	0.00	0.78	5,828.56	210.30	261.00	5,245.99	871.16	13,921.16	22.27	83,131.12	0.00	27.08	2.17	6.68	1,619.44	15,920.06	18,781.38	145,884.24
	Percent	0.02%	0.00%	0.00%	4.00%	0.14%	0.18%	3.60%	0.60%	9.54%	0.02%	56.98%	0.00%	0.02%	0.00%	0.00%	1.11%	10.91%	12.87%	100.00%

03/04	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn/App	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	39.01	0.00	0.00	6,622.89	60.46	172.64	4,966.58	1,054.16	27,266.08	25.10	83,280.46	0.00	21.70	0.00	0.00	950.97	15,244.31	21,501.01	161,205.37
	NOV	29.85	0.00	0.00	5,830.30	1.40	152.24	4,595.21	1,116.85	11,078.83	22.52	80,342.64	0.00	23.25	0.00	14.63	828.81	13,558.66	18,161.62	135,756.81
	DEC	35.16	0.00	0.39	5,627.50	2.06	1,548.45	5,786.22	1,800.70	8,250.81	23.42	93,006.37	0.00	30.95	0.00	7.41	639.99	14,114.57	17,018.84	147,892.84
	JAN	41.85	0.00	1.14	6,208.64	0.00	112.21	5,665.62	628.45	8,364.68	22.30	87,947.47	0.00	34.02	0.85	2.87	752.55	13,969.12	16,825.97	140,577.74
	FEB	37.76	0.00	0.00	6,242.82	19.90	584.40	5,067.48	1,400.81	6,720.63	20.05	82,824.86	0.00	20.70	0.00	5.68	508.22	13,692.18	15,756.28	132,901.77
	MAR	39.71	0.00	2.75	5,500.25	0.00	259.21	6,740.49	1,537.29	9,978.99	50.36	93,969.16	0.00	46.11	0.00	0.74	767.87	16,045.76	20,630.48	155,569.17
	APR	36.50	0.00	0.16	5,702.52	0.00	161.18	7,365.53	1,353.43	7,253.87	15.49	88,504.46	0.00	28.15	0.00	2.34	1,025.76	17,615.31	21,409.11	150,473.81
	MAY	29.90	0.00	2.15	5,761.06	0.00	101.33	5,275.58	135.13	8,684.55	16.91	85,063.42	0.00	21.45	0.00	14.94	694.96	17,421.34	22,872.15	146,094.87
	JUN	44.54	0.00	0.00	17,687.61	0.00	126.94	5,137.44	679.63	16,514.17	21.34	86,558.12	0.00	30.55	0.00	1.07	788.17	18,322.96	24,473.37	170,385.91
	JUL	33.21	0.00	0.00	6,489.77	0.00	212.42	4,783.93	1,130.05	20,717.07	25.32	85,310.33	0.00	32.60	0.00	11.92	820.77	18,926.38	23,347.59	161,841.36
	AUG	39.11	0.00	0.00	6,570.04	0.00	142.02	4,557.97	2,061.44	13,836.83	22.14	88,738.61	0.00	37.05	0.00	16.44	149.60	18,636.74	26,008.31	160,816.30
	SEP	30.93	0.00	0.00	6,972.31	18.94	118.64	4,623.93	759.84	7,488.84	20.34	111,183.74	0.00	22.37	0.00	2.99	1,639.68	13,492.61	22,470.24	168,845.40
	Total	437.53	0.00	6.59	85,215.71	102.76	3,691.68	64,565.98	13,657.78	146,155.35	285.29	1,066,729.64	0.00	348.90	0.85	81.03	9,567.35	191,039.94	250,474.97	1,832,361.35
	Average	36.46	0.00	0.55	7,101.31	8.56	307.64	5,380.50	1,138.15	12,179.61	23.77	88,894.14	0.00	29.08	0.07	6.75	797.28	15,920.00	20,872.91	152,696.78
	Percent	0.02%	0.00%	0.00%	4.65%	0.01%	0.20%	3.52%	0.75%	7.98%	0.02%	58.22%	0.00%	0.02%	0.00%	0.00%	0.52%	10.43%	13.67%	100.00%

Significant impact from Hurricanes Frances and Jeanne

04/05	Month	Animals	Reef	Asbestos	C/D	Residue	Tires	Sludge	Direct	Fill	Furn/App	Garbage	LC	Pest/Paint	Special	Trailers	Mulch	Trash/Other	Vegetation	Total
	OCT	45.11	0.00	0.00	12,590.13	0.00	118.83	5,024.78	219.48	19,906.74	20.29	96,423.44	0.00	23.18	0.00	7.49	528.27	14,551.56	22,079.64	171,538.94
	NOV	41.82	0.00	0.00	12,304.79	0.00	111.32	6,442.78	128.46	21,194.71	23.02	94,856.70	0.00	27.83	0.00	20.44	1,615.77	15,188.93	21,827.72	173,784.29
	DEC	31.44	0.00	0.00	12,500.47	0.00	343.09	6,707.04	681.82	25,375.23	27.02	97,800.29	0.00	39.46	0.00	0.00	259.27	22,197.92	21,320.00	187,283.05
	JAN	39.57	0.00	1.87	12,275.42	3.58	238.04	6,425.29	1,695.23	17,205.22	32.22	96,296.96	0.00	27.52	0.00	8.07	671.27	18,517.96	19,580.85	173,019.07
	FEB	32.89	0.00	0.00	13,802.74	0.73	311.27	6,839.97	1,534.59	18,552.60	31.46	88,239.89	0.00	19.67	0.00	0.00	651.60	16,202.42	16,720.86	162,940.69
	MAR	38.87	0.00	0.00	14,014.56	0.00	385.43	8,729.67	739.67	23,859.19	23.94	104,044.42	0.00	43.49	0.00	5.35	478.83	17,880.00	18,783.71	189,027.13
	APR	34.04	0.00	1.79	12,454.07	3.85	160.04	7,942.95	122.83	23,533.06	16.73	94,732.89	0.00	43.95	0.00	0.00	779.48	17,850.71	19,436.76	177,113.15
	MAY	31.78	0.00	0.11	13,041.44	0.00	133.48	6,940.42	2,517.17	27,104.22	22.61	95,318.14	0.00	34.20	0.00	0.00	937.81	17,359.92	20,311.25	183,752.55
	JUN	25.99	0.00	0.00	11,335.57	0.00	138.97	6,533.94	2,265.49	16,773.65	25.26	97,939.56	0.00	52.55	2.90	3.01	306.89	19,055.56	23,721.09	178,180.43
	JUL	24.91	0.00	0.00	10,423.19	0.00	143.56	5,615.06	625.61	8,864.30	15.57	86,879.16	0.00	32.60	0.00	0.79	848.87	17,389.49	21,978.09	152,841.20
	AUG	27.90	0.00	0.37	11,751.47	0.00	170.78	5,946.68	959.13	9,274.26	15.28	91,187.85	0.00	32.53	0.00	0.70	597.53	16,762.63	24,898.99	161,626.10
	SEP	28.26	0.00	0.00	10,513.70	0.00	182.81	5,697.16	1,788.86	8,577.27	23.84	85,721.65	0.00	29.78	0.00	14.23	657.53	16,496.55	26,511.29	156,242.93
	Total	402.58	0.00	4.14	147,007.55	8.16	2,437.62	78,845.74	13,278.34	220,220.45	277.24	1,129,440.95	0.00	406.76	2.90	60.08	8,333.12	209,453.65	257,170.25	2,067,349.53
	Average	33.55	0.00	0.35	12,250.63	0.68	203.14	6,570.48	1,106.53	18,351.70	23.10	94,120.08	0.00	33.90	0.24	5.01	694.43	17,454.47	21,430.85	172,279.13
	Percent	0.02%	0.00%	0.00%	7.11%	0.00%	0.12%	3.81%	0.64%	10.65%	0.01%	54.63%	0.00%	0.02%	0.00%	0.00%	0.40%	10.13%	12.44%	100.00%