



City of Pompano Beach, Florida

Comprehensive Plan Solid Waste Subelement

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Prepared by:

Development Services Department
City of Pompano Beach, Florida



City of Pompano Beach, Florida

CITY OF POMPANO BEACH

100 West Atlantic Boulevard
Pompano Beach, Florida 33060
Telephone: 954.786.4600
website: www.mypompanobeach.org

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**CITY OF POMPANO BEACH, FLORIDA
 COMPREHENSIVE PLAN
 JANUARY 2010**

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I. INTRODUCTION

Solid Waste is one of the four (4) sub-elements that comprise the Infrastructure Element of the City of Pompano Beach's Comprehensive Plan. The City's Planning Department was responsible for preparing this updated Element. Walter H. Keller, Inc. provided assistance in formatting. The format of the Element varies from the former document in that the City previously adopted the entire document including the Goals, Objectives and Policies and the data and analysis.

The Solid Waste sub-element contains the following sections: Introduction; Goals, Objectives and Policies; Overview; and, Current Conditions.

This document incorporates an entirely new data and analysis section reflecting approximately a 25% increase in City area. Underlines and strike-thru's are provided in the Goals, Objectives and Policies. The new data and analysis, however, fully replaces the former data and analysis without strike-thru's and underlines.

II. GOALS, OBJECTIVES AND POLICIES

Goal

06.00.00D Provide a cost efficient solid waste collection and disposal operation for existing and future residents and businesses and the collection of recyclable materials.

Objective Solid Waste

06.01.00D The City will continue to maintain solid waste collection service adequate to satisfy existing and projected growth consistent with the latest standards and methods acceptable to the City and the County.

Policies

06.01.01D The City shall work with the County or other entities to assure adequate disposal of future waste.

06.01.02D The City will continue to oversee and monitor the performance of the franchise company to ensure adequate services are provided in solid waste collection.

06.01.03D The City shall continue to investigate ways to reduce and dispose of solid waste with the goal of reducing the present level by 30 percent by 2020.

06.01.04D The siting of trash transfer facilities will require the review and approval of the City Commission in order to insure the facilities compatibility with adjacent existing and future land uses.

06.01.05D As a recognized official signee of the U.S. Mayor's Climate Protection Agreement, all solid waste policies will be considered in view of their impacts on the production of greenhouse gases.

Objective Level of Service

06.02.00D The City of Pompano Beach shall set and maintain the level of service standards which shall be the minimum levels of service standards for solid waste as shown below in assessing adequacy of service:

LAND USE - LEVEL OF SERVICE

Residential	8.9 lbs. per unit per day
Industrial/Commercial	
Factory/Warehouse	2 lbs per 100 sq.ft. per day
Office Building	1 lbs per 100 sq.ft. per day
Department Store	4 lbs per 100 sq.ft. per day
Supermarket	9 lbs per 100 sq.ft. per day
Restaurant	2 lbs per meal per day
Drug store	5 lbs per 100 sq.ft. per day
Institution	
Grade School	10 lbs per room per day plus 1/4 lb. per student per day
Middle/High School	8 lbs per room per day plus 1/4 lb. per student per day
Hospital	8 lbs per bed per day
Nursing Home	3 lbs. per person per day

Policies

06.02.01D The above levels of service shall be used to determine adequacy at time of plat and site plan approval.

06.02.02D Capital Improvement projects undertaken to maintain the established levels of service will be implemented in accordance with the schedule provided in the Capital Improvements Element of the Comprehensive Plan.

06.02.03D The projected levels of service shall be the minimum levels of service maintained during the five (5) and ten (10) year planning periods.

06.02.04D The City shall periodically evaluate the projected level of services standards in order to ascertain continued applicability during the ten (10) year planning period.

Objective Recycling

06.03.00D To reduce reuse or recycle materials before they enter the solid waste stream.

Policies

06.03.01D Investigate the potential to reduce, reuse or recycle the following materials:

- a. Yard trimming
- b. Paper or plastic food containers
- c. Newspaper, books and magazines
- d. Mail and office paper
- e. Glass and metal food containers
- f. Aluminum, steel and metal containers
- g. Furniture and textiles
- h. Clothing and foot ware
- i. Electric appliances/white goods
- j. Plastic bags and wraps
- k. Hazardous materials

06.03.02D Encourage residents and businesses to reduce or reuse materials that would have previously entered the solid waste stream.

06.03.03D Enable more residents, particularly multi-family, and businesses to recycle materials.

06.03.04D Identify locations to place additional containers for the collection of recycled materials.

- 06.03.05D Use funds collected from the sale of recycled goods to support recycling
- 06.03.06D Consider ways to allow multi-family developments to participate in recycling at their sites.
- 06.03.07D Utilize the Recycling and Solid Waste Committee as the lead in educating residents and businesses on methods to reduce, reuse and recycle materials before they enter the solid waste stream.

Objective Recycling Revenues

- 06.04.00D Increase the demand for purchase of recycled materials.

Policies

- 06.04.01D Require the City to increase its purchase/use of recycled materials, such as but not limited to:
1. Copy Paper (30% recycled materials);
 2. Business cards (100% recycled materials);
 3. Paper towels and toilet paper (100% recycled materials);
 4. Mulch (100% recycled materials);
 5. Recycle computers and electronics (100% recycled materials); and,
 6. Building materials, recycled plastic lumber.
- 06.04.02D Require City vendors to provide information on percentage of recycled goods and materials used and give preference to vendors using more recycled materials.
- 06.04.03D Encourage residents to check for percent of recycled content when purchasing products.
- 06.04.04D Advocate deposit on glass and aluminum drink containers statewide.

Objective Litter Reduction

06.05.00D Reduce litter.

Policies

06.05.01D Increase the number of trash receptacles along major roads

06.05.02D Identify, which trash receptacles need to be emptied more frequently and adjust schedules for collection.

06.05.03D Encourage or require businesses to put more trash receptacles outside and clean up parking lots more frequently.

06.05.04D Place trash receptacles at all bus stops

06.05.05D Put out separate containers for recyclables

06.05.06D Expand the program in which volunteers collect trash along streets.

06.05.07D Modify illegal dumping laws to maximize catching violators and to increase penalties.

06.05.08D Support ocean clean-up programs by providing free removal of trash collected.

06.05.09D The City of Pompano Beach should enforce the litter laws.

Objective Bulk Pick Up

06.06.00D Bulk Pick Up

Policies

06.06.01D Prohibit residents from placing material out for bulk pickup more than 24 hours in advance of scheduled pick up, except for yard waste. Yard waste shall not be put out before the last weekend before the pickup.

06.06.02D Adjust schedule for bulk pick up to accommodate residents.

06.06.03D Separate out yard wastes from other bulk pick up materials.

Objective Construction Debris

06.07.00D Construction Materials

Policies

06.07.01D Exclude construction or demolition materials from bulk pickup

06.07.02D The City shall modify the franchise agreement with Waste Management, Inc. to allow for other contractors to recycle construction or demolition materials.

06.07.03D Encourage the location of more firms involved in recycling of construction or demolition materials.

06.07.04D The City of Pompano Beach shall recycle construction material from City initiated projects and contracts.

III. OVERVIEW

The City of Pompano Beach is located in Broward County. Broward County operates a system of transfer stations, resource recovery plants, sanitary landfills and hazardous waste collection facilities. Waste Management Inc. also provides solid waste services primarily consisting of a sanitary landfill and a resource recovery plant. Waste Management also provides collections services of solid waste. There are many privately owned facilities engaged in recycling.

Broward County operated a Class 1 sanitary landfill until it ceased operation in December 1987. This facility was converted to a Broward County Regional Park. With the closing of this Class 1 sanitary landfill, the only remaining Class 1 sanitary landfill located in Broward County was privately owned by Waste Management, Inc. This Class 1 sanitary landfill was located at the northeast corner of the intersection Florida's Turnpike and Sample Road, just outside the City of Pompano Beach's city limits.

The imminent closure of the Davie Class 1 sanitary landfill prompted Broward County to construct two Waste to Energy facilities. Both facilities opened in 1991. One facility serves north Broward County and is located next to the Waste Management Inc. Class 1 sanitary landfill; the other facility serves south Broward County and is located on S.R 7, south of I-595. Both facilities burn the solid waste to generate electricity.

Through interlocal agreements with Broward County, 26 municipalities contract to deliver their solid waste to resource and recovery facilities. The City of Pompano Beach is one of five municipalities that do not participate. The other municipalities are Parkland, Dania, Hallandale and Pembroke Pines.

IV. CURRENT CONDITIONS

Pompano Beach is located in Broward County, Florida, along the coast of the Atlantic Ocean just to the north of Fort Lauderdale. In 2008 the City's estimated population was 100,058; Broward County's estimated population is 1,763,603 people. The City contains 25.08 square miles.

Service Area

The City of Pompano Beach contracts with Waste Management, Inc. for the collection and disposal of solid waste and recycling materials. Waste Management, Inc. also covers three of the newest annexation areas such as Cresthaven, Leisureville and Loch Lomond and Pompano Highlands.

The City of Pompano Beach annexed by a state bill effective September 15, 2000 included Cresthaven, a neighborhood of 1.14 square miles with a population of 7,786 people. Leisureville, Kendall Green, and Loch Lomond were annexed by a state bill effective September 15, 2004 adding 1.13 square miles and a population of 7,820. Lastly, Pompano Highlands was annexed by a state bill effective September 15, 2004 adding 1.30 square miles and a population of 6,505.

Land Use for Service Area

Table 1 provides the amount of land use in acres by various categories for residential purposes, non residential purposes and transportation / water services.

Table 1- Existing Land Use (2005) for City of Pompano Beach

Land Use	City *	Annexed Areas			Total City
		1	2	3	
<u>Residential</u>					
Vacant Residential	386.3	1.2	11.0	4.5	402.9
Single-Family	1960.1	359.4	193.5	356.4	2869.4
Multi-Family < 10 Units	525.7	9.4	37.3	13.2	585.6
Multi-Family > 10 Units	997.4	17.4	58.1	5.9	1078.9
Mobile Homes	95.3	15.4		9.0	119.7
Total	3964.8	402.7	299.9	389.0	5056.6
<u>Non-Residential</u>					
Vacant Commercial	344.0	6.0	8.4	1.6	360.0
Commercial	1105.9	87.0	30.2	69.2	1292.3
Vacant Industrial	572.2	1.1	0.3	30.8	604.4
Industrial	1700.4	36.3	2.5	83.5	1822.8
Recreation & Open Space	1164.6	1.5	12.5	24.7	1203.2
Conservation	25.4		24.2	23.1	72.7
Vacant Community Facilities	6.2	1.8	4.2	0.3	12.5
Community Facilities	771.0	27.3	41.2	60.1	899.7
Utilities	187.9	1.6	0.3	14.5	204.4
Total	5877.6	162.6	124.0	307.6	6472.0
Transportation/Water	3738.5	202.0	186.8	164.9	4291.8
Total Vacant	1308.6	10.1	24.0	37.1	1379.9
Total Non-Vacant	8533.8	555.2	399.9	659.5	10148.7
Transportation/Water	3738.5	202.0	186.8	164.9	4291.8
Total	13580.9	767.3	610.7	861.5	15820.4

Source: Walter H. Keller, Inc.

Broward County Property Appraiser

Notes: * - City boundaries prior to annexation of areas 1-3.

Annexation Area 1: Cresthaven (Sept. 15, 2000)

Annexation Area 2: Leisureville Loch Lomond, Kendall Green (Sept 15, 2004)

Annexation Area 3: Pompano Highlands (Sept. 15, 2004)

Current Practices for Solid Waste

Solid waste collection is regulated by City Ordinance Chapter 96 of health and safety. Solid waste collection is divided into three account categories, services for single family, duplex, triplex dwelling units, multi-family and commercial accounts. Solid waste collections rates are adjusted yearly by ordinance.

Description of Services

The City of Pompano Beach entered into a disposal contract with Waste Management to collect garbage at the curbside on a regular schedule twice each week for single family, duplex and triplex dwelling units.

Garbage cans or bulk containers must be approved by the City of Pompano Beach and Waste Management.

All waste materials including handling cooking serving or storage of meats, fish, fowl, or vegetable matter of any nature, plus refuse from bottle, cans, papers and the like.

Horticultural garbage is the accumulation of landscaping, lawn, grass, or shrubbery, cuttings or clippings and dry leaf, ranking, palm fronds, small trees, (which shall not be exceed four feet in length and four inches in diameter).

Bulk pick up is scheduled once a month for single family, duplexes and triplexes. For multi-family it is twice a year. This service collects all household goods such as couch, chair, stove, desk, ironing board, appliances, furniture, mattress, box spring, carpet, draperies and other miscellaneous materials.

The City operates a trash transfer station at 1190 NE 3rd Street. Material from bulk pick-ups are collected here and then reloaded to larger trucks prior to delivery to sanitary landfill. Material from canals are collected here and then reloaded.

Table 2 provides solid waste collection in relation to the City population estimates.

Table 2 - Solid Waste Collection per Person for City of Pompano Beach

Fiscal Year	Solid Waste Collected in tons	City's Population	Collected in daily lbs/day
2000	n/a	78,191	n/a
2001	91,996	85,932	5.86
2002	104,929	86,300	6.66
2003	103,415	86,334	6.56
2004	104,359	101,457	5.63
2005	109,540	101,712	5.90
2006	104,438	101,103	5.66
2007	103,194	101,128	5.59
2008	93,536	100,058	5.12

Sources: City of Pompano Beach Operating Budgets for fiscal years 2000-2001 through 208-2009
 2000 U.S. Census
 State of Florida, University of Florida,
 Estimate of Population, 2001-2008

Single Family, Duplex and Triplex Dwelling Units Service

Residents living in single family, duplex and triplex dwelling units receive solid waste collection service twice a week. Residents shall place their receptacles on the curbside located at points in an area adjacent to driveway. Those receptacles shall not be over five feet from the curb line or ten feet from edge of pavement or edge of travel way.

Residents have no limit as to the number of solid wastes containers that they can place out for collection. Solid waste shall be placed for collection no earlier than 5:00 p.m. on the day prior to the scheduled collection day or later than 7:00 a.m. on the scheduled collection day. Residents shall remove all solid wastes containers from curbside on the day of collection.

Table 3 provides information on single family, duplex and triplex dwelling unit collection.

**Table 3 - Number of Single Family, Duplex and Triplex Dwelling Units
receiving Solid Waste Collection**

Fiscal Year	Residential Units
1998	15,680
1999	16,021
2000	16,141
2001	16,235
2002	19,482
2003	19,042
2004	19,554
2005	19,599
2006	22,382
2007	22,862
2008	23,694
2009	23,794

Source: City of Pompano Beach Operating Budgets for
fiscal year 2000-2001 through 2008-2009

Charge for Services

Single-family, duplex, triplex dwelling units have a set fee listed below. Residents have the choice to receive back door service for an additional fee. This service must be maintained for a minimum of three months. Handicapped and elderly can also request this service, which must be made in writing to the City Manager.

The back door service fee may be waived by the City where all occupants of the dwelling unit are physically incapacitated and are unable to transport their solid waste on the curbside. Proof of physical incapacity or inability must be provided to the City Manager and he may impose such reasonable conditions as may be required for waiver and certification.

Table 4 provides the cost for residential service.

Table 4 - Monthly Charges for Single family, Duplex and Triplex Dwelling units

Category	Monthly Charge
Single Family	\$ 14.42 per unit
Duplex	\$ 13.89 per unit
Triplex	\$ 13.35 per unit
Back Door Residential Garbage Charge	\$ 5.33 per unit

Source: City of Pompano Beach, City Code Section 96.12

Bulk Trash

Single family, duplex and triplex dwelling units receive bulk pickup each month (see Table 5). The charge for bulk trash is included in the fee for the solid waste collection. Residents shall place bulk trash for collection at single, readily accessible location in an area adjacent to a driveway. Bulk trash shall not be over five feet from the curb line or ten feet from the edge of the pavement or edge of travel way. Residents shall place bulk trash for collection no earlier than 5:00 p.m. on day or prior to the scheduled collection day or later than 7:00 a.m. on the scheduled collection day.

Table 5 - Loads of Bulk Waste Picked up from Single Family, Duplex and Triplex Dwelling Units

Fiscal Year	Residential Units
1998	2,300
1999	2,411
2000	2,400
2001	2,730
2002	3,400
2003	3,744
2004	3,996
2005	4,082
2006	4,700
2007	4,700
2008	4,311
2009	4,358

Source: City of Pompano Beach Operating Budgets for fiscal year 2000-2001 through 2008-2009

Recycling

As part of the solid waste service, pickup of all clean scrap paper, including newspaper, glass, aluminum, and steel containers, and plastic containers imprinted with numbers 1 and 2 (for recycling is provided once a week for single family, duplex and triplex dwelling units. Recycling containers are provided by the city. The recycling bins are made of 30% recycled materials

Multi-Family Dwelling Units

Multi-family dwelling units consist of buildings containing four or more dwelling units. Solid waste is collected twice a week for residents in multiple dwelling units.

Charge for Services

Multi-family dwelling units have the choice of using garbage cans or bulk containers. Typically the buildings with fewer dwelling units elect to use individual garbage cans. (In many cases there was no room provided on site to accommodate a dumpster. As a result, they have no choice but to use garbage cans.) Multi-family units using individual garbage cans are charged per unit.

Multi-family dwelling units in larger buildings typically use bulk containers, which are billed to and payable by the owner or lessee of the buildings. In addition to the service charge, a charge for the use of the bulk container is assessed.

In addition, multi-family dwelling units have to choice to provide their own containers by rental or purchase. Multi-family dwelling units have the option of using the larger size of compactor type containers for all their units.

Monthly service fees for multi-family units are provided in Table 6.

Table 6 - Monthly Multi-Family Service Fees

Category	Unit	Cost
Service Fee		\$ 8.99
Maintenance Fees	2 Cubic Yards	\$ 17.62
For Bulk Container Usage:	3 Cubic Yards	\$ 22.08
	4 Cubic Yards	\$ 26.48
	6 Cubic Yards	\$ 30.87
	8 Cubic Yards	\$ 35.29

Source: City of Pompano Beach, City Code Section 96.12

Bulk Trash Pickup

Multi-family dwelling units receive bulk trash pickup twice a year. Table 7 provides information on bulk waste pickup for multi-family units.

**Table 7 - Loads of Bulk Waste Picked up
from Multi- Family Dwelling Units**

Fiscal Year	Multi-Family Units
1998	n/a
1999	n/a
2000	n/a
2001	1,140
2002	1,250
2003	1,300
2004	1,375
2005	1,425
2006	1,475
2007	1,551
2008	1,575
2009	1,613

Source: City of Pompano Beach Operating Budgets for fiscal year 2000-2001 through 2008-2009

Recycling

Multi-family dwelling units are required to have a newspaper and magazine recycling program. They are not mandated to do anything other recycling, but may choose to do so. The City does not know how many multi-family dwelling units are recycling.

Residents of multi-family dwelling units can also take their recyclables to one of three locations, where the City has placed a container for their collection. The three containers are located at:

- City Hall, 100 W. Atlantic Boulevard, rear southwest corner of parking lot
- Fire Station , 2001 NE 10th Street
- Oceanside Parking Lot, 109 North Ocean boulevard

Commercial Establishments

All commercial establishments or location with multiple commercial establishments shall maintain and utilize service from the City contractor for collection of all solid waste. Service collection must be maintaining at a level necessary for removal all solid waste from the premise. However, commercial establishments have the option to purchase their own containers to avoid rental and maintenance fees.

At no time or any event the commercial establishments shall have less than the minimum level of service required in chapter 96.11 and, as force additional required preventing violation of this chapter.

Monthly Rental and Maintenance Fees for Commercial Establishments (B)

2 cubic yards	\$18.70
3 cubic yards	\$23.36
4 cubic yards	\$28.06
6 cubic yards	\$32.69
8. cubic yards	\$37.37

Note: Additional charge for long or inclined rollouts (commercial establishments) size two to four cubic yards one time per week shall increase by the amount \$28.06 per week rollouts. Any casters requiring shall charges an additional \$5.58 per month maintenance per container.

**Monthly Rental and Maintenance Fee for
Compactor-Type Bulk Containers Commercial Establishments (C)**

2 cubic yards	\$56.06
3 cubic yards	\$70.09
4 cubic yards	\$85.04
6 cubic yards	\$98.61
8 cubic yards	\$105.86

Table 8 provides information on right of way pick-ups. Table 9 provides information on material removed from the City canals. Information on special hazardous waste is provided in Table 10.

Table 8 - Number of Right of Way Pick-ups

Fiscal Year	Right of Way Pick-ups
1998	n/a
1999	n/a
2000	n/a
2001	1,000
2002	1,100
2003	1,150
2004	1,200
2005	1,275
2006	1,485
2007	1,500
2008	1,525
2009	1,609

Source: City of Pompano Beach Operating Budgets for fiscal year 2000-2001 through 2008-2009

Table 9 - Number of Loads of Material Removed from Canals

Fiscal Year	Numbers of Loads
1998	n/a
1999	n/a
2000	n/a
2001	n/a
2002	n/a
2003	771
2004	955
2005	1,248
2006	975
2007	1,075
2008	1,100
2009	1,061

Source: City of Pompano Beach Operating Budgets for fiscal year 2000-2001 through 2008-2009

Table 10 - Special Hazardous Wastes Collected by Broward County

Fiscal Year	Special Hazardous Wastes
1998	n/a
1999	387
2000	388
2001	292
2002	433
2003	433
2004	693
2005	1,104
2006	972
2007	1,100
2008	1,253
2009	1,366

Source: City of Pompano Beach Operating Budgets for fiscal year 2000-2001 through 2008-2009

Contracts with Waste Management, Inc.

The City of Pompano Beach has two contracts with the Waste Management, Inc., one for hauling solid waste and another for disposal. City of Pompano Beach and Waste Management, Inc. entered into a hauling contract October 1, 1984. This contract will expire on September 30, 2014. The City of Pompano Beach and Waste Management, Inc entered into a disposal contract also on October 1, 1984. This contract will expire 2022.

Both contracts are subject to increase base on yearly increase of consumer price index up to a maximum of seven (7) percent a year. The contracts enable the City to provide stable and cost effective solid waste services collection to the residents and commercial entities of Pompano Beach throughout the term of the contracts.

Waste Management, Inc.

Waste Management, Inc, 3831 NW 21st Avenue, Pompano Beach, operates a Class 1 Sanitary Landfill, which is authorized to accept all household and commercial solid waste, excluding hazardous waste. The landfill covers 500 acres, of which 400 acres are used to bury solid waste. The sanitary landfill is located north of the City of Pompano Beach city limits. The landfill is bounded by Sample Road on the south, Powerline Road on the east, Green Road (NE 48th Street) on the north and Florida's Turnpike on the west.

Waste Management leases land to Broward County for the Waste to Energy Plant. The Waste to Energy Plant is one of two facilities, Broward County has constructed for the incineration of solid waste. The unburnable materials and the residue ash are place in the sanitary landfill.

Waste Management, Inc. provides collections services for 15 municipalities and disposal services for 5 municipalities in Broward County.

The five municipalities receiving disposal services are:

- Pompano Beach;
- Dania Beach;
- Hallandale Beach;
- Pembroke Pines; and,
- Parkland

The other 26 cities in Broward County are members (signers) of the ILA, Interlocal Agreement to deliver all their municipal solid waste to one of the two Wheelabrator Waste to Energy Plants, owned by Broward County. The ILA agreement is set to expire in 2011. There is no automatic extension in the ILA. There is a five year extension in the contract to operate the Waste To Energy Plants operated by Wheelabrator.

Current Demand

The daily demand on this Sanitary Landfill is 4,500 – 5,000 tons per day. The facility operates 6 days a week (closed on Sunday) and closes at 5:30 pm.

The yearly demand is estimated from the average daily demand as follows: 6 days a week times 52 weeks a year times 4,500 - 5,000 tons per day equals between 1,350,000 and 1,500,000 tons per year.

The daily tonnage delivered is down from the period from 2000 to 2006 when the landfill was receiving almost 9,000 to 10,000 tons per day. Because the average daily demand is less than half, it was five years ago, the expected life of the sanitary landfill is 14 years based on present rates of demand. The expected life of the landfill is based on the permitted height of the sanitary landfill, which is 225 feet. The engineers figure 230 feet, which allows for settling.

The expected life of the sanitary landfill would be lengthened if, nonmembers of the ILA would join the ILA and participate in the Waste to Energy plant. If that happened, all of the household

garbage from the nonmembers would be burned in the incinerator, only the incinerator ash would be disposed in the sanitary landfill.

Approximately 300 trucks enter the facility every day. Trucks arrive via I-95, Florida's Turnpike, Sawgrass Expressway and Powerline Road. Half of the trucks coming to the site are Waste Management trucks and half are other operators. Waste Management weighs all trucks entering the sanitary landfill are weighed and records the type of material contained in the truck.

The yard waste is mulched and used as cover material at the end of each day.
(Some sand, which is purchased, is used as daily cover material.)

A Waste Management, subsidiary, Delta Transfer located on NW 23rd Street in Pompano Beach also processes construction debris. Some of the construction debris is shipped to Okeechobee.

Recycling and Reuse Activities at the Sanitary Landfill

Recycling activities at the landfill involve the collection of methane gas for burning to produce electrical energy. Metals particles are removed from the incinerator ash by a private contractor. Plant material is mulched and used as ground cover.

Decomposition of the solid wastes deposited in the landfill produces methane gas and other byproducts of the decomposition process, which includes hydrogen sulfide. Odor complaints are related to the hydrogen sulfide.

Waste Management, Inc. has a series of underground pipes, which collect the methane gas from many points on the sanitary landfill. Waste Management, Inc cleans the methane gas at an on site facility to remove the hydrogen sulfide. The collection of methane gas and cleansing of the hydrogen sulfide reduces odor problems. WM then burns the cleaned methane gas, which produces enough energy to power 9,000 homes. (9 MW)

At the Waste to Energy Plant, Wheelabrator does not remove metals from the municipal solid waste before incineration. As a result, metal particles remain after incineration. Before the incinerator ash is buried, an independent contractor sifts through the incinerator ash to remove any remaining metal particles.

Loads of plant material wastes are directed to a portion of the sanitary landfill, where they are dumped separate from the solid waste. This plant material is mulched and used as cover material at the end of each day.

Waste to Energy Plants Operated by Wheelabrator

In the mid 1980's Broward County was in the process of closing the Davie Landfill, which was the only publicly owned landfill.

Broward County initiated the Interlocal Agreement with all the municipalities, except Pompano Beach, Dania Beach, Hallandale Beach and Pembroke Pine to handle the disposal of solid waste. The four cities decided to enter into an agreement with Reuter Recycling located in Pembroke Pines at U.S. 27. Reuter Recycling was to build a plant to include all recycling and compost the remaining material. The plant was eventually closed because of odor problems.

Broward County issued revenue bonds to pay for the construction of two Waste to Energy plants, one was constructed on land leased from Waste Management, Inc. at the sanitary landfill, the other was constructed in the Town of Davie on S.R. 7/US 441, south of I-595. The Waste to Energy plants is similar in design and has slightly different electrical generating capacities.

In the spring of 1991, the two resource recovery plants were opened in Broward County. The north resource recovery plant serves the area bounded by Oakland Park Boulevard north to the Broward County line, excluding the municipalities of Pompano Beach and Parkland. This plant has a gross electrical generating capacity of approximately 68.5 megawatts. Because this plant is capable of generating more than fifty megawatts of electricity, the plant was permitted under a consolidated permitting process specified in the Florida Electrical Power Plant Siting Act. In

anticipation of future disposal needs, Broward County received certification for ultimate generating capacity of 83.5 megawatts.

Each of Broward County's resource recovery facilities is expanded by 33 percent from 2,250 tons per day to 2,900 tons per day. Further, a site for third resource recovery plant adjacent to the Broward county BIC landfill is available to meet future needs. Each facility is operating at approximately 73 percent of capacity, which is sufficient to meet long term needs.

Waste to Energy Plant consists of 3 boilers, which have the capacity to burn 750 tons per day or 2,250 tons per day total, or 825,000 tons per year. Natural Gas heats each boiler to 1800[^] F at which point the solid waste is fed into the burn unit. Each boiler is taken apart every 3 months and checked for acid corrosion and repaired. The incinerator reduces the volume of solid waste by 90%. There are two types of ash residue: heavy ash and flue ash. The heavy ash resembles dirt. The ash is treated with chemicals to bond the metals to the ash. The ash is used as a cover material for the landfill.

Energy generated from the steam turbines is approximately 66 mega watts per hour. Of which 6 mega watts is used to run the plant. The remaining energy is fed into the electrical grid. FPL pays for the power generated. Enough power is generated to power 40,000 to 50,000 homes.

The stack is tested 4 times a year to determine the chemicals release to the environment. Lime is added to the stack to precipitate out the harmful chemicals, mainly acids.

Interlocal Agreement

The ILA, Interlocal Agreement, does not include the City of Pompano Beach. The Interlocal Agreement was enacted November 25, 1986 and will expire November 25, 2016. When the ILA expires in 2016, Broward County will ask the member city to renew. Broward County may offer membership to the non member cities.

There is some disenchantment among ILA member cities, particularly Fort Lauderdale and Hollywood over the tipping fee. The tipping fee is \$60.00 per ton plus Broward County charges of \$30.00 per ton. The Broward County charges of \$30.00 ton go to pay the cost of the other solid waste programs, such as the paint recycling, the collection of hazardous household waste and the recycling of electronics, municipal refuse operations and educational programs.

The City of Pompano Beach pays \$95,000 to participate in the Broward County hazardous waste program.

If the City of Pompano Beach generates 100,000 tons per year and was an ILA member, the City would pay \$30.00 per ton, or \$3,000,000 to support Broward County's solid waste programs.

Broward County may renegotiate the tipping fee in order to retain the member cities.

Waste Management owns Wheelabrator and the sanitary landfill. Waste Management could transfer the city's disposal contract, which expires in 2022 to Wheelabrator prior to the expiration of the disposal contract.

Recycling

The 1988 Solid Waste Management Act also required each county over a set population to recycle materials by the end of 1994: newspaper, glass, plastic bottles, aluminum cans and steel cans. As of June 30, 1995, no county in Florida had achieved that goal. Table 11 shows the collection and recycling percentages achieved in Broward County (2003 – 2005).

Table 11 - Tons of Municipal Solid Waste Recycled in Broward County 2003 – 2005

Municipal Solid Waste	Collected (in tons)	Recycled (in tons)	% Recycled
Newspapers	162,222	72,671	45%
Glass	86,086	15,287	18%
Aluminum	10,416	2,073	20%
Plastic Bottles	55,743	9,594	17%
Steel Cans	22,299	10,618	48%
Construction and Demolition Debris	766,202	128,436	18%
Yard Trash	447,467	94,033	21%
White Goods	27,225	19,041	70%
Tires	14,978	4,453	9%
Processes Fuel	n/a	0	0%
Corrugated Paper	299,238	107,696	36%
Office Paper	55,236	25,995	47%
Other Plastics	112,626	1,144	1%
Ferrous Metals	177,652	99,967	56%
Non-Ferrous Metals	16,746	4,668	28%
Other Paper	285,153	21,982	8%
Textiles	40,969	206	1%
Miscellaneous	227,004	580	0%
Total Recycling Rate			20%

Sources: Broward County Solid Waste Element, Table 6-4.
 Florida Department of Environmental Protection, Solid Waste Management in Florida (March 1996) and Broward County WRS, 2004. Broward County Waste and Recycling Services (May 1996), Broward County Environmental.

The Florida State legislature has declared recycling as one of the high-priority goals of the state. By the year 2020, the goal of state and local governmental entities, private companies and organizations, and the general public is to reduce the amount of recyclable solid waste disposed of in waste management facilities, landfills or incineration facilities by a statewide average of at least 75 percent.

Yard Waste/ Plant Trimming

The present practice is to put out yard waste or plant trimming in the garbage cans for pickup, or to wait for bulk pick up days to put out bigger items. Yard waste placed in garbage cans or dumpster is buried in sanitary landfill. Waste Management has no procedures to separate yard waste from household garbage.

Options for recycling yard waste include composting or mulching, which could occur on site, city wide, or countywide. Yard waste, including seaweed, could be processed into mulch, which could be given back to residents.

Effort to reduce yard waste could include better selection of landscaping materials, such as using more native plants which may be slow growing when compared to faster growing plants exotic plants, such as ficus. Substitute ground cover for grass, which doesn't need mowing. More frequent pruning of trees would yield less debris, as the limbs are smaller, than waiting until the limbs are larger. Promote the advantages of using mulching lawnmowers, rather than bagging lawnmowers

Food Scraps and Paper or Plastic Food Containers

Food scraps and paper or plastic food containers are generally thrown out with household garbage and enter into the solid waste stream. Clear plastic food containers and Styrofoam from grocery stores and restaurants are non recyclable

Plastic food and beverage containers are classified by a numbering system of 1-through 7. Plastic food and beverage containers number 1 (Polyethylene Terephthalate) and number 2 (High Density Polyethylene) is most frequently recycled. Number 3 (Polyvinyl Chloride) produces dioxin when burned. Plastics with numbers 4 through 7 are not recycled. Recyclers of plastics commonly collect all plastic containers and then discard numbers 3 through 7, recycling only numbers 1 and 2. Limited options exist for recycling plastics with numbers 3 through 7.

Roughly 20% of plastics food and beverage containers are recycled. Only one of every five plastic water bottles is recycled, the remainder is never recycled.

Efforts to reduce plastic food containers could be to encourage consumers on buying less prepackaged food. Consumers should be encouraged to reduce usage of plastic food containers (primarily styrofoam), which are non recyclable. Farmers markets, like the City of Pompano Beach’s green market should be encouraged, where food is purchased without a lot of packaging.

Coated Paper Containers

Coated paper containers are not recyclable.

Newspaper, Books and Magazines

The City of Pompano Beach recycles newspaper, paper and books and magazines. All single family, two family and three family housing units are eligible to recycle these materials, which are picked up weekly. Multi-family housing units are required to recycle. However, many large multi-family buildings do have contracts with paper recyclers to pick up these materials. Individuals living in multi-family housing may drop off materials at four dumpsters located throughout the City. However, many multi-family housing units continue to place materials in the dumpster as part of the solid waste stream.

Glass and Metal Food Containers

The City of Pompano Beach recycles glass and metal food and beverage containers. All single family, two family and three family housing units are eligible to recycle these materials, which are picked up weekly. Multi-family housing units are not required to recycle. However, many large multi-family buildings do have contracts with glass and metal recyclers to pick up these materials. Individuals living in multi-family housing may drop off materials at four dumpsters located throughout the City. However, many multi-family housing units continue to place materials in the dumpster as part of the solid waste stream.

Aluminum Containers

The City of Pompano Beach recycles aluminum containers. All single family, two family and three family housing units are eligible to recycle these materials, which are picked up weekly. Multi-family housing units are not required to recycle. However, many large multi-family buildings do have contracts with glass and metal recyclers to pick up these materials. Individuals living in multi-family housing may drop off materials at four dumpsters located throughout the City. However, many multi-family housing units continue to place materials in the dumpster as part of the solid waste stream.

Furniture and Furnishings

Residents of single family, two family and three family housing units can place unusable, worn or broken furniture and household furnishings out for bulk pick up.

Other options for reuse also include, donating items to thrift stores, selling in the private market and yard sales. Many items can be repaired or refurbished by others, which can make them useable again.

Mail and Paper

Mail and office paper are recyclable.

Clothing and Foot ware

Presently residents throw away used clothing and foot ware. Other options for reuse also include, donating items to thrift stores, selling in the private market and yard sales. Many items can be repaired or refurbished by others, which can make them useable again.

Electric Appliances/White Goods

Electric appliances, computers, and white goods are presently put out for bulk pickup. White goods, such as refrigerators and hot water heaters can be salvaged for their metal content.

Computers, televisions contain many recyclable materials and small amounts of toxic materials. They should be taken to a hazardous waste collection center

Other options for reuse also include, donating items to thrift stores, selling in the private market and yard sales. Many items can be repaired or refurbished by others, which can make them useable again.

Plastic Bags and Wraps

Several grocery stores and department stores sell cloth bags as a substitute for plastic bags. If people purchase and use cloth bags, the stores can reduce the amount of plastic bags they provide for the purpose of carrying out the merchandise sold. Plastic bags for individual food items may be recycled if they are clean.

Hazardous Materials

Residents of the City of Pompano Beach may drop off their hazardous wastes at the Broward County facility at 1701 North Powerline Road. Hazardous materials include chemical, paint, electronic products including computers, tires and containers that held hazardous chemicals. There are now on the market cleaning products, which are biodegradable, which may reduce the number of containers, which held hazardous chemicals.

Litter and Illegal Dumping

Litter

Much of what hits the ground, as litter is recyclable, such as aluminum cans, plastic bottles, plastic bags, paper and newspaper. However, a lot of material is not, cigarette butts, yard waste, food and beverage containers and food waste. Because there is no mechanism or process to separate out the recyclable materials, very little litter is recycled and eventually is either buried in the sanitary landfill or burned in the Waste to Energy Plant.

However, litter from any source degrades the environment and reduces the attractiveness or appeal of any environment, whether natural or man made.

Efforts to collect litter are expensive. The expense ranging from regular pickup of litter disposed of litter receptacles to picking up litter on the ground.

Litter can clog storm drains, resulting in backup of stormwater and flooding on public and private property. Litter can get blown into waterways, canals and the ocean degrading wildlife habitats and water quality and impeding water flow.

In order to develop a sense of place, the regular pickup of litter can make the City of Pompano Beach more attractive to residents and prospective residents and visitors.

Illegal Dumping

Like many cities, illegal dumping is a problem for the City of Pompano Beach. People with loads of debris, who do not want to pay the disposal fees associated with proper disposal at the sanitary landfill often, dump the debris on vacant lots. It is unlawful for a person to “illegally dump” their debris on private or public property. Because it is difficult to apprehend a person doing “illegal dumping”, the property owner is cited by a Code Enforcement Officer.

The person doing the dumping may be a contractor working in the City, a person hired to dispose of debris, a resident or non resident, or even the property owner who is temporarily placing the material on the property until further disposal. Violators can be charged with violations of municipal code concerning littering, or state statutes depending upon the amount of material.

Contracts for Removal of Hurricane Debris

The City of Pompano Beach maintains two contracts with Ash-Britt and Crowder-Gulf to supply equipment to pick up primarily tree debris as a result of hurricane activity. FEMA does reimburse the City for acceptably documented expenses.

Because Success Doesn't Just Happen...



Walter H. Keller, Inc.
Consulting Engineers & Planners

Coral Springs Office

3300 University Drive, Suite 406
Coral Springs, FL 33065
(954) 755-3822 FAX: (954) 755-3866

Sewall's Point Office

3727 SE Ocean Boulevard, Suite 200A
Sewall's Point, FL 34996
(772) 219-9079 FAX: (772) 219-9279