



Solid Waste System

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MIAMI-DADE COUNTY, FLORIDA Solid Waste System Revenue Bonds

SECURITY FOR THE BONDS

Pledged Revenues

The Solid Waste System Bonds (the "Bonds"), and the interest on the Bonds, are payable solely from and are secured by a pledge of the Pledged Revenues of the Solid Waste System under the provisions of Ordinance No 96-168 (the "Ordinance"). Pledged Revenues are defined as the Net Operating Revenues of the Solid Waste System (Operating Revenues minus Operating Expenses as such terms are defined in the Ordinance) and all moneys and investments on deposit to the credit of the funds and accounts other than the Rebate Fund established pursuant to the Ordinance. The Ordinance does not convey or mortgage all or any part of the Solid Waste System as a pledge or security for the Bonds.

Limited Obligations

The Bonds are special, limited obligations of the County payable solely from the Pledged Revenues, as defined in the Ordinance, pledged to the Bonds. Neither the faith and credit of the State of Florida nor the faith and credit of any agency or political subdivision thereof or of the County are pledged to the payment of the principal of or the interest or premium, if any, on the Bonds. The issuance of the Bonds shall not directly or indirectly or contingently obligate the State of Florida or any agency or political subdivision thereof or the County to levy any taxes whatever therefor or to make any appropriation for their payment except from the Pledged Revenues pledged to and provided for the payment of the Bonds under the Ordinance.

THE WASTE MANAGEMENT ENTERPRISE FUND ("WMEF") OF THE DEPARTMENT OF SOLID WASTE MANAGEMENT ("DSWM")

The Waste Management Enterprise Fund

In January 1989, the Board passed Administrative Order 9-1 creating the Metropolitan Dade County Department of Solid Waste Management, by merging the Department of Solid Waste Collection and the Solid Waste Disposal Division of the Public Works Department into a single agency. On September 22, 2011, the Miami-Dade County Board of County Commissioners approved the County's fiscal year 2012 budget. The Solid Waste and Public Works departments were consolidated and considered an area where consolidation should bring savings to the County.

On January 20, 2016, the Miami-Dade County Board of County Commissioners approved and adopted fiscal year 2016 mid-year supplemental budget adjustments and amendments for various departments and funds. This mid-year supplemental budget introduced a plan to create the Department of Transportation and Public Works and the Department of Solid Waste Management and to eliminate the former Public Works and Waste Management and Transit departments. This reorganization was implemented retroactively to the period commencing on October 1, 2015. As a result, the Department of Solid Waste Management ("DSWM") proceeded to separate its activities from those of Public Works with the Mosquito Control Division (formerly included in Public Works' Road, Bridge, Canal and Mosquito Division) remaining with DSWM. However, the Mosquito Control Division is not part of the Waste Management Enterprise Fund.

The activities of the Miami-Dade County Department of Solid Waste Management have been carried out by the Waste Management Enterprise Fund ("Waste Management"). Waste Management's principal responsibilities may be categorized as: (1) collection, (2) transfer, (3) disposal and (4) recycling of municipal solid waste.

Waste Management provides solid waste collection and disposal services to single-family residential units (including certain multi-family units such as duplexes) and a small number of commercial and multi-family

accounts in the unincorporated portions of the County. It also provides solid waste collection and disposal services to the Village of Pinecrest, the City of Sunny Isles Beach, the City of Aventura, the Town of Miami Lakes, the Village of Palmetto Bay, the City of Miami Gardens, the City of Doral, the Town of Cutler Bay and the City of Opa-Locka and it has entered into long-term interlocal agreements with 15 municipalities (including Sweetwater) to provide solid waste disposal services and 9 municipalities to provide curbside recycling. Waste Management operates a variety of facilities, including Resource Recovery (waste-to-energy facility), landfills, transfer stations and neighborhood trash and recycling centers. The Department's waste reduction and recycling programs are designed to meet the requirements of the State of Florida's Energy, Climate Change and Economic Security Act of 2008.

The Solid Waste System

The System comprises (a) the County's solid waste collection and disposal facilities and all improvements including additional transfer stations, landfills or other related facilities, and all buildings, fixtures, equipment and all property, real and personal now or in the future owned, leased (as lessor or lessee), operated or used by the County in conducting and operating its solid waste collection and disposal facilities and providing services of collecting and disposing of solid waste and (b) contracts entered into by the County for the collection, transportation, storage, treatment, disposal and recycling of solid waste. The System does not include, at the option of the County, any solid waste system, facility or equipment which may be acquired by the County subsequent to the date of the Original Ordinance and designated by the County as a "Separate System" on or prior to the date of acquisition.

Solid Waste Collection System

Waste Management provides solid waste collection services mainly for single family and small multifamily residential units in unincorporated Miami-Dade County, municipalities that have contracted for such services, newly incorporated municipalities as provided for by Ordinance No. 96-30 and the City of Aventura. While the County offers collection services to commercial and multifamily waste generators in the unincorporated area, such services are generally provided by private waste haulers. The County provided waste collection to approximately 348,600 (average number of household units) residential units for the Fiscal Year ended September 30, 2022, which contributed approximately 46.28% of the total tonnage going to the System disposal facilities.

Solid Waste Disposal System

The County's integrated solid waste management system provides for the transfer and disposal of solid waste generated in both incorporated and unincorporated areas of the County, and consists of transfer stations, disposal facilities, the Resource Recovery Facility and County landfills. A portion of solid waste generated in the County is delivered to the County's transfer stations by County, municipal and private collection vehicles. At the transfer stations, solid waste is reloaded into large transfer trailers for transport to one of the County's three disposal sites or contracted private disposal facilities.

Resource Recovery Facility

The County has an agreement for the operation of the County owned resource recovery facility (the "Facility"). The Fourth Amended and Restated Operations and Management Agreement (the "O&M Agreement," "Agreement") was executed on July 27, 2012 (but is effective as of October 1, 2009) by and between the County and Covanta Dade Renewable Energy LLC (formerly Covanta Dade Renewable Energy, Ltd.) (the "Operator"), a Florida limited partnership, for the purpose of amending and restating in its entirety that certain Third Amended and Restated Operations and Management Agreement dated as of September 1, 1996 between the County and the Company. The Agreement expires on October 31, 2023. The term of the Agreement can be automatically extended for up to four additional five-year renewal terms that would expire on October 31, 2043. Solid waste is delivered to the Facility from the County's transfer stations and directly from municipal customers and private haulers. The garbage and trash are processed into refuse derived fuel and then burned in four boilers that produce steam to turn two turbine generators.

Responsibilities of the Operator: Under the Management Agreement, the Operator is responsible for operating and maintaining the Resource Recovery Facility in compliance with all applicable laws, including environmental laws. The Operator is thus responsible for the payment of all operating costs of the Resource Recovery Facility, including all utility charges. However, the County has agreed to limit rate increases payable by the Operator in water and wastewater utilities provided by the County to the Resource Recovery Facility (other than increases attributable to changes in quality or quantity of water used or wastewater treated) to an amount not exceeding the Consumer Price Index (“CPI”). In addition, the Operator may use any electricity generated at the Resource Recovery Facility for operation of the Resource Recovery Facility.

The following cities have signed an interlocal long term disposal delivery agreement:

Bal Harbour Village	Miami Beach	North Miami Beach
Bay Harbor Islands	Miami Shores	South Miami
Coral Gables	Miami Springs	Surfside
Homestead	North Bay Village	Sweetwater
Miami	North Miami	West Miami

SOURCE: Waste Management Enterprise Fund of Miami-Dade County's Department of Solid Waste Management

The following chart reflects the return to stability in revenue tons after a period of decline from fiscal years 2018 through 2022. It also reflects the County's estimate of revenue tons diverted in the spot market:

Summary of Revenue Tons Disposed and Diverted
Fiscal Years 2018-2022

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Clean Yard Trash	14,739	10,133	9,692	8,971	9,335
Garbage	1,065,015	1,096,245	1,147,963	1,209,931	1,291,353
Trash	555,229	553,537	580,230	643,144	618,875
Storm Related Waste	227,235	-	-	-	-
White Goods	-	-	-	-	-
Construction & Demolition Debris	-	-	-	-	-
Whole Tires	6,295	6,989	6,940	11,049	14,005
Special Waste	1,018	1,523	977	948	1,198
Reduced Fee Cover Material	-	17,728	6,499	190,950	515,731
Non Profit Tonnage	<u>11,069</u>	<u>10,837</u>	<u>9,664</u>	<u>10,967</u>	<u>10,674</u>
Total Revenue Tons	<u>1,880,600</u>	<u>1,696,992</u>	<u>1,761,965</u>	<u>2,075,960</u>	<u>2,461,171</u>
Equivalent Revenue Tons	<u>1,869,531</u>	<u>1,671,256</u>	<u>1,746,828</u>	<u>1,877,136</u>	<u>1,942,566</u>
Estimated Spot Market Diversions	448,236	433,849	436,628	457,584	437,662
Average Annual Number of Household Units Served	337,800	339,500	341,800	343,700	348,600

SOURCE: Waste Management Enterprise Fund of Miami-Dade County's Department of Solid Waste Management

The following table summarizes the total solid waste tonnage received at each of the regional transfer stations over the past five Fiscal Years.

**Summary of Solid Waste Quantities Received at County Transfer Stations
Fiscal Year 2018-2022
(Net Received Tons)**

Facility:	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Central Transfer Station	160,475	164,533	154,089	134,842	52,783
West Transfer Station	224,535	224,983	243,035	266,355	243,308
Northeast Transfer Station	<u>217,462</u>	<u>213,059</u>	<u>213,584</u>	<u>225,898</u>	<u>195,957</u>
Total	<u>602,472</u>	<u>602,575</u>	<u>610,708</u>	<u>627,095</u>	<u>492,048</u>

SOURCE: Waste Management Enterprise Fund of Miami-Dade County's Department of Solid Waste Management

The following table summarizes the total quantity of solid waste disposed at each disposal facility from Fiscal Year 2018 through Fiscal Year 2022, taking into account the various inter-facility transfers that occur within the System. During Fiscal Year 2022, the County continued to utilize private regional disposal facilities thereby preserving existing landfill capacity.

**Summary of Solid Waste Quantities Disposed at County Disposal Facilities
Fiscal Year 2018-2022
(Net Disposed Tons)**

Facility:	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
South Miami-Dade Landfill	488,796	394,537	448,452	535,596	556,925
North Miami-Dade Landfill	290,594	197,491	227,540	248,438	200,532
Resource Recovery Net Incinerated	727,772	675,056	684,159	756,846	645,835
Resource Recovery Ashfill	146,745	154,632	138,752	125,317	110,154
Contract Disposal to Waste Management	<u>374,259</u>	<u>438,621</u>	<u>414,332</u>	<u>354,316</u>	<u>531,243</u>
Total	<u>2,028,166</u>	<u>1,860,337</u>	<u>1,913,235</u>	<u>2,020,513</u>	<u>2,044,689</u>

SOURCE: Waste Management Enterprise Fund of Miami-Dade County's Department of Solid Waste Management

Waste Management Enterprise Fund
Department of Solid Waste Management
Actual Results of Revenue, Expenses and Debt Service Coverage
Fiscal Years Ended September 30th
(in \$000s)

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>UNAUDITED</u> <u>2022</u>
<u>Operating Revenues for Coverage:</u>					
Disposal Facility Fees	\$ 14,276	\$ 16,470	\$ 15,429	\$ 17,339	\$ 20,200
Utility Service Fee	18,924	17,679	18,085	19,424	21,042
Garbage and Trash Disposal Tipping Fees	72,263	60,283	60,264	66,143	77,473
Electric Sales	10,043	10,400	8,210	10,911	17,390
Medley Surcharge	2,434	2,127	2,110	2,510	2,518
Collection Revenues	157,373	158,703	166,081	167,935	169,703
Other Operating Revenues	<u>3,877</u>	<u>4,017</u>	<u>8,787</u>	<u>2,990</u>	<u>3,430</u>
Total ⁽¹⁾	\$ 279,190	\$ 269,679	\$ 278,966	\$ 287,252	\$ 311,756
<u>Operating Expenses for Coverage:</u>					
Landfill Operations	\$ 30,290	\$ 31,891	\$ 27,026	\$ 23,414	\$ 21,485
Transfer Operations	29,136	28,436	28,801	32,416	51,342
Waste-to-Energy	60,348	62,385	56,277	62,203	71,319
Garbage Collections	45,964	43,766	43,847	44,583	51,418
Trash Collections	21,067	24,959	21,856	23,855	24,784
Recycling	9,210	9,612	9,583	9,682	6,991
Other Operating	<u>46,447</u>	<u>48,426</u>	<u>67,324</u>	<u>47,145</u>	<u>46,058</u>
Total ⁽¹⁾⁽²⁾	\$ 242,462	\$ 249,475	\$ 254,714	\$ 243,298	\$ 273,397
Net Operating Revenues for Coverage	\$ 36,728	\$ 20,204	\$ 24,252	\$ 43,954	\$ 38,359
<u>Adjustments:</u>					
Interest Income eligible for Debt Service Coverage ⁽³⁾	3,104	5,998	4,380	150	(2,614)
Main Landfill's Closure and Post Closure Care Expense	-	-	-	-	-
Contribution from Rate Stabilization Fund (RSF) ⁽⁴⁾	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Adjusted Net Operating Revenues	\$ 39,832	\$ 26,202	\$ 28,632	\$ 44,104	\$ 35,745
Debt Service Requirement (TDS) ⁽⁵⁾	\$ 11,795	\$ 11,725	\$ 11,727	\$ 4,133	\$ 4,139
<u>Debt Service Coverage Ratio</u>	338%	223%	244%	1067%	864%

Source: Waste Management Enterprise Fund of Miami-Dade County's Department of Solid Waste Management

NOTE: Revenues and expenses for disposal fees paid by the Collection System to the Disposal System have been eliminated in this presentation.

⁽¹⁾ Excludes intrafund transactions.

⁽²⁾ Total operating expenses herein are reflected prior to depreciation and expense for assumption of liability of closure and postclosure care costs for inactive landfills.

⁽³⁾ Interest income figures herein excludes interest on restricted construction cash and investment.

⁽⁴⁾ The contribution from RSF - figure (if any) is calculated based on a 20% of prior year net operating revenues (NOR)

⁽⁵⁾ FY 2018, FY 2019, FY 2020, FY 2021, and FY 2022 include debt service for Refunding Series 2015, on an accrual basis.



Delivering Excellence Every Day

\$83,755,000
Miami-Dade County, Florida
Solid Waste System Revenue Refunding Bonds
Series 2015

Dated: December 17, 2015

Final Maturity: October 1, 2030

Purpose:

The Series 2015 Bonds were issued pursuant to Ordinance No. 96-168 and Resolution No. R-972-15 to: (i) refund or redeem the Series 1998, Series 2001 and Series 2005 Bonds; and (ii) pay for costs of issuance.

Security:

The Series 2015 Bonds are special limited obligations of the County, payable solely from and secured by a prior lien and pledge of the Pledged Revenues of the System, as provided in the Bond Ordinance.

Form:

The Series 2015 Bonds were issued as fully registered bonds in denominations of \$5,000 or any integral multiple of \$5,000. The Series 2015 Bonds are in book-entry only form and are registered initially to Cede & Co., as nominee of the Depository Trust Company, New York, New York. Interest on the bonds is payable semi-annually on each April 1 and October 1, commencing on April 1, 2016. The principal is payable on October 1 for each maturity, commencing October 1, 2016.

Agents:

Registrar:	U.S. Bank Trust Company, National Association, Fort Lauderdale, Florida
Paying Agent:	U.S. Bank Trust Company, National Association, Fort Lauderdale, Florida
Bond Counsel:	Hogan Lovells US LLP, Miami, Florida Law Offices of Steve E. Bullock, P.A., Miami, Florida
Disclosure Counsel:	Nabors, Giblin & Nickerson, P.A., Tampa, Florida Liebler, Gonzalez & Portuondo, P.A., Miami, Florida

Current Underlying Ratings:

Standard & Poor's:	AA
Fitch:	AA-

Optional Redemption:

The Series 2015 Bonds maturing on or prior to October 1, 2025 are not subject to optional redemption. The 2015 Current Interest Bonds maturing on or after October 1, 2026 are subject to optional redemption prior to maturity, at the option of the County, in whole or in part at any time, on or after October 1, 2025, and if in part, in maturities determined by the County and by lot within a maturity, at a redemption price equal to the principal amount to be redeemed, without premium, plus accrued interest to the date of redemption.

Projects Funded with Proceeds:

Not applicable

Refunded Bonds:

Series 1998, Series 2001 and Series 2005

Refunded Bonds Call Date:

The Series 1998, Series 2001 and Series 2005 Bonds were all redeemed on January 19, 2016.



Delivering Excellence Every Day

\$83,755,000
Miami-Dade County, Florida
Solid Waste System Revenue Refunding Bonds
Series 2015

Debt Service Schedule

Fiscal Year							
Ending		CUSIP	Interest				Total Debt
Sept. 30,	Type	Number	Rate	Principal	Interest		Service
2023	Serial	593339AG9	5.000%	\$ 2,815,000	\$ 1,254,000	\$	4,069,000
2024	Serial	593339AH7	5.000	2,955,000	1,109,750		4,064,750
2025	Serial	593339AJ3	5.000	3,110,000	958,125		4,068,125
2026	Serial	593339AK0	5.000	3,270,000	798,625		4,068,625
2027	Serial	593339AL8	5.000	3,435,000	631,000		4,066,000
2028	Serial	593339AM6	5.000	3,615,000	454,750		4,069,750
2029	Serial	593339AN4	3.000	3,760,000	307,975		4,067,975
2030	Serial	593339AP9	3.125	3,880,000	190,950		4,070,950
2031	Serial	593339AQ7	3.250	4,010,000	65,163		4,075,163
Totals				\$ 30,850,000	\$ 5,770,338	\$	36,620,338