

- To: Honorable Mayor Carlos A. Gimenez Honorable Chairwoman Rebeca Sosa and Members, Board of County Commissioners, Miami-Dade County
- From: Mary T. Cagle, Inspector General

Date: February 13, 2014

Subject: Transmittal and Abstract of the OIG's Final Report Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation and Disposal of Class AA Sludge and Contract No. 7122-2/13 OTR for the Hauling and Disposal of Class B Sludge; Ref. IG13-18

Attached please find the above-captioned final audit report issued by the Office of the Inspector General (OIG). This report, as a draft, was provided to the Water and Sewer Department (WASD) and to the Internal Services Department in January 2014 for their review and comment.

Overall, the OIG has no findings to report. However, as described in more detail in the attached abstract, we did determine that there is one issue that may require management's attention and have included a recommendation to address the issue. WASD provided a written response, which is included in report Appendix A.

The OIG is pleased with WASD's response to our recommendation and, consequently, the OIG considers this audit closed. However, we note that a new Class B contract is scheduled for hearing by the Board of County Commissions on March 4, 2014. <u>Therefore, the OIG adds a recommendation that WASD not wait for a future solicitation to require these records (as stated in its response), but should require the selected vendors for this new contract be notified of the requirements and be required to submit the necessary documents prior to being issued a Notice to Proceed.</u>

Lastly, the OIG would like to thank WASD personnel for making available their records and time during the course of its review. For reading convenience, a one-page abstract of the report follows.

#### Attachment

cc: Alina T. Hudak, Deputy Mayor, Office of the Mayor John Renfrow, Director, Water and Sewer Department Lester Sola, Director, Internal Services Department Cathy Jackson, Director, Audit and Management Services Department Charles Anderson, Commission Auditor WASD's wastewater treatment plants produce two types of biosolids, i.e., sludge, as part of their normal operations. This material must be periodically removed to keep the plant operating properly. One type of sludge is labeled "Class AA" and the other is labeled "Class B." Class AA sludge is a marketable byproduct that WASD sells, at \$12 per ton, to a vendor, under its Contract No. 9681-0/17. It is estimated that over this contract's five-year term (December 2012 – November 2017), WASD will earn an estimated \$420,000 in revenue. Class B sludge, however, must be hauled away and disposed of, in accordance with regulatory requirements. During our audit period, three vendors had been selected to perform the required services under WASD's Contract No. 7122-2/13 OTR.

For the Class AA sludge contract, we reviewed 100% of the invoices from October 1, 2012 to July 31, 2013. These invoices totaled \$30,453 in generated revenues to WASD. We observed that WASD timely prepared its invoices and that the vendor timely remitted payments to WASD.

For the Class B sludge contract, our audit scope included 452 invoices totaling \$17,352,149, for 365,973 tons of sludge hauled. As part of our review, we verified that the contract's allocation process for Class B Group A sludge was used to calculate a weekly allocation that was applied to available sludge and that WASD verified the accuracy of and timely paid invoiced amounts for all groups. The reviewed invoices were for the period of October 1, 2010 to July 31, 2013. The 452 invoices are comprised as follows:

Vendor	Group <sup>a</sup>	Invoices Reviewed	Total Tons Hauled	Total Amount Invoiced
H&H Liquid Sludge Disposal Inc.	A	137	123,647	\$4,988,595
HAH Liquid Sludge Disposal Inc.	С	28	17,516	\$735,684
Synagro South LLC.	A	119	85,985	\$4,471,250
Waste Management	D	168	129,975	\$7,162,925
TOTAL		452	357,122	\$17,358,453

Class B Vendor Invoices October 1, 2010 to July 31, 2013

<sup>a</sup> During our audit period, there were no Group B pick-ups.

In addition, we reviewed and verified that required licenses/certifications were up-to-date and on file at WASD, including plant operating permits; dumpsite permits; and vendor licenses. During our field inspections at both plants, we took photos of the loading areas, scales, sludge processing and storage facilities, and we took video of the truck loading process at the South District Wastewater Treatment Plant.

This OIG audit report contains one observation and accompanying recommendation relating to a contract requirement requiring vendors to have records showing that they are qualified and possess the necessary equipment to handle and dispose of the sludge. We observed, however, that the contract does not describe what these records might be, in particular, those that may be required by local, state, or federal authorities. In addition, the contract requires that these records shall be delivered to WASD. OIG auditors questioned WASD personnel about this requirement but they were unable to clarify what the stated requirements encompassed. As such, when OIG auditors requested records that would presumably fit this third grouping, WASD informed us that it did not have any records from the vendor that would meet these requirements.

There is no evidence that the vendors are not qualified to do the job; in fact, during all the years that the contracts have been in effect, there have been no complaints regarding vendor non-performance. Vendor competence on handling the sludge was observed during our visual review of the process. The OIG's observation here, however, lies with contract compliance with record-keeping requirements, not with contractor performance. Our recommendation is for WASD to formalize a list of all records, including licenses/permits, that are required of its sludge hauling vendors. WASD should consider revising future contracts to include this list and require its vendors to forward those documents to WASD.

# Miami-Dade County Office of the Inspector General



### **Final Audit Report**

Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

IG13-18

February 13, 2014

#### TABLE OF CONTENTS

I.	INTRODUCTION		1
11.	TERMS USED IN THIS REPORT		
[]].	OIG JURISDICTIONAL AUTHORITY		
IV.	RESULTS SUMMARY		
V.	AUDITEE RESPONSE AND OIG REJOINDER		
VI.	BACKGROUND 2		
	Table 1 Table 2 Table 3	Class B Groups, Vendors, and Bid Prices - Old Contract Group Differences Between Old and New Contracts Class B Groups, Vendors, and Bid Prices - New Contract	3 4 5
VII.	OBJECT	VES, SCOPE, AND METHODOLOGY	5
	Table 4	Class B Vendor Invoices October 1, 2010 to July 31, 2013	6
VIII.	OIG OBS	ERVATION AND RECOMMENDATION	6

APPENDIX A Water and Sewer Department Response

#### I. INTRODUCTION

The Miami-Dade County Office of the Inspector General (OIG) conducted an audit of the Miami-Dade County Water and Sewer Department (WASD) that focused on WASD's administration of two contracts for the hauling and disposal, and sale of wastewater sludge. Contract No. 9681-0/17 is for the sale, transportation, and disposal of Class AA sludge. Contract No. 7122-2/13-OTR is for the purchase of hauling and disposal services of Class B sludge. Our audit period extended from October 1, 2010 through July 31, 2013.

#### II. TERMS USED IN THIS REPORT

BCC	Board of County Commissioners
County	Miami-Dade County
OIG	Office of the Inspector General
WASD	Water and Sewer Department

#### III. OIG JURISDICTIONAL AUTHORITY

In accordance with Section 2-1076 of the Code of Miami-Dade County, the Inspector General has the authority to make investigations of County affairs; audit, inspect and review past, present and proposed County programs, accounts, records, contracts, and transactions; conduct reviews and audits of County departments, offices, agencies, and boards; and require reports from County officials and employees, including the Mayor, regarding any matter within the jurisdiction of the Inspector General.

#### IV. RESULTS SUMMARY

For the Class AA contract, we reviewed 100% of the invoices from October 1, 2012 to July 31, 2013. These invoices totaled \$30,453 in generated revenues to WASD. We observed that WASD timely prepared its invoices and that the vendor timely remitted payments to WASD. For the Class B sludge contract, our audit scope included 452 invoices, totaling \$17,352,149, for 365,973 tons of sludge hauled. As part of our review, we verified that the contract's allocation process for Class B Group A sludge was used to calculate a weekly allocation that was applied to available sludge and that WASD verified the accuracy of and timely paid invoiced amounts for all groups. The reviewed invoices were for the period of October 1, 2010 to July 31, 2013.

Based on invoice review, interviews, and site visits, the OIG has determined that there are no findings to report. However, as will be discussed, we found one issue that

may require management's attention and have included a recommendation to address the issue.

#### V. AUDITEE RESPONSE AND OIG REJOINDER

We provided copies of this report, as a draft, to WASD and the Miami-Dade County Internal Services Department for their discretionary written responses to our audit. WASD responded that it "will ensure that future solicitations contain the specific licenses and permits required to haul and transport both Class A and Class B Sludge."

The OIG is pleased with WASD's response to our recommendation; however, we note that a new Class B contract is scheduled for hearing by the Board of County Commissioners (BCC) on March 4, 2014. <u>Accordingly, the OIG adds a recommendation that WASD not wait for a future solicitation to require these records, but should require the selected vendors for this new contract be notified of the requirements and be required to submit the necessary documents prior to being issued a Notice to Proceed.</u>

#### VI. BACKGROUND

When domestic wastewater is treated, a solid by-product accumulates in the wastewater treatment plant that must be removed periodically to keep the plant operating properly. The collected material, called biosolids or more commonly "sewage sludge" (sludge), is high in organic content and contains moderate amounts of nutrients that make sludge valuable as a soil conditioner and fertilizer. There are two types of sludge: Class AA and Class B.

#### <u>Class AA</u>

To achieve Class AA certification, biosolids must undergo heating, composting, or digestion that reduces bacteria to below detectable levels. Once these goals are achieved, Class AA sludge can be land applied without any bacteria-related restrictions at the site. Class AA sludge can be bagged and marketed to the public for application on lawns and gardens.

Contract No. 9681-0/17 is a revenue-generating contract for the sale, transportation, and disposal of Class AA sludge. WASD produces approximately 4,000 to 8,000 tons of Class AA sludge each year at the South District Wastewater Treatment Plant. Production generally occurs during the dry season, which extends from October thru May. For this contract, only one bid was received and that was from the incumbent vendor (South Dade Soil & Water Conservation District). Negotiations resulted in an increase in payment to the County from the vendor's bid

#### MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL FINAL AUDIT REPORT Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

price of \$10 per ton to \$12 per ton. The contract will generate an estimated \$420,000 in revenues during its five-year term (December 1, 2012 – November 30, 2017).

#### Class B

Class B sludge has less strict standards for its treatment and may contain small but compliant amounts of bacteria. Processing requirements ensure that the bacteria in the sludge have been reduced to levels that protect public health and the environment. Class B sludge is first treated in a wastewater treatment plant. This semi-solid material can receive further treatment when exposed to the natural environment where heat, wind, and soil naturally stabilize the biosolids. Annually, WASD must legally dispose of over 100,000 tons of Class B sludge cake and/or partially dried sewage sludge and 25,000 tons of sludge, mixed grit, and screenings.

Contract No. 7122-2/13-OTR is used to purchase hauling and disposal services for Class B sludge. The sludge is transported by trucks with suitable covers or watertight tailgates and trailer bodies from WASD's Central and South District Wastewater Treatment Plants to the designated places set forth in the vendor permits. There are four Class B groups and three vendors:

Table 1 Class B Groups, Vendors, and Bid Prices - Old Contract			
Group	Description	Vendor	Rate/Ton
GROUP A <sup>a</sup>	Transportation of sludge cake from the Central District Wastewater	H & H Liquid Sludge Disposal, Inc. <sup><i>b</i></sup>	\$40.30
	Treatment Plant and disposal via land application.	Synagro South, LLC <sup><i>b</i></sup>	\$52.00
GROUP B	Transportation of any type of sludge from both Central District and South	Synagro South, LLC	
	District Wastewater Treatment Plants refused by Group A, C, or D haulers and disposal via any legal method.	Waste Management of Florida, Inc.	Quotes
GROUP C	Transportation of partially dried sewage sludge from the South District Wastewater Treatment Plant and disposal via land application.	H & H Liquid Sludge Disposal, Inc.	\$42.00
GROUP D	Transportation of mixed screenings and/or grit from the South District Wastewater Treatment Plant and disposal via land filling.	Waste Management of Florida, Inc.	\$55.11

#### Table 1 Class B Groups, Vendors, and Bid Prices - Old Contract

<sup>a</sup> Pursuant to the contract, WASD selected multiple vendors to provide the required services; WASD uses a contract-specified formula to calculate weekly allocations of Group A sludge among the selected vendors.

<sup>b</sup> H & H was low bidder; Synagro was second low bidder.

#### MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL FINAL AUDIT REPORT Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

Contract No. 7122-2/13 was awarded in July 2008 for a three-year period with two one-year options to renew (OTR), the last of which expired on October 31, 2013. Currently, operations are continuing under this contract on a month-to-month basis. A new contract, Contract No. 7122-1/23, was recommended for approval to award on December 24, 2013. The new contract is scheduled for hearing by the BCC on March 4, 2014.

The new contract will be for a period of five years, with fiscal impact of \$42,542,000. The contract also includes one OTR, for an additional five years, for a cumulative contract value of \$85,084,000. The new contract redefines the tasks that the vendors will be performing under each group. The following table illustrates the group differences between the old and new contracts:

Table 2	Group Differences Between Old and New Contracts		
Group	Old Contract	New Contract	
А	Transportation of sludge cake from the Central District Wastewater Treatment Plant and disposal via land application.	Transportation and Disposal of Class B Biosolids in the form of sludge cake from Central District Wastewater Treatment Plant.	
В	Transportation of any type of sludge from both Central District and South District Wastewater Treatment Plants refused by Group A, C, or D haulers and disposal via any legal method.	Transportation and Disposal Class B Biosolids in the form of partially dried sewage sludge from the South District Wastewater Treatment Plant.	
С	Transportation of partially dried sewage sludge from the South District Wastewater Treatment Plant and disposal via land application.	Transportation and Disposal of Mixed Biosolids, Screenings and/or Grit from the North, Central, or South District Wastewater Treatment Plants.	
D	Transportation of mixed screenings and/or grit from the South District Wastewater Treatment Plant and disposal via land filling.	Transportation and Disposal of Biosolids—Pre-qualification Pool. <sup>a</sup>	

#### Table 2 Group Differences Between Old and New Contracts

<sup>a</sup> Group D will be made available to all vendors who submit a responsive, responsible bid for Groups A, B, or C, and meet the minimum qualifications set forth in this solicitation. Vendors meeting the minimum qualifications shall be deemed to be pre-qualified to participate in subsequent spot market purchases, as required by the County, on an as-needed basis (e.g., when a vendor awarded another group is unable to provide the services required of that group).

The new contract was awarded to four vendors and distributed among the four newly modified groups. The following table shows the four groups, the four vendors and their bid prices:

#### MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL

FINAL AUDIT REPORT

Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

Table 3	Class B Groups, Vendors, and Bid Pr	ices - New Contract
Group	Vendor	Rate/Ton
Aª	Biosolids Distribution Services, LLC	\$57.75
	H & H liquid Sludge Disposal, Inc.	\$49.23
	Synagro South, LLC	\$52.00
В	Synagro South, LLC \$52.00	
С	Waste Management Inc. Of Florida \$57.11	
	Biosolids Distribution Services, LLC	N/A <sup>b</sup>
D	H & H liquid Sludge Disposal, Inc.	N/A <sup>b</sup>
	Synagro South, LLC	N/A <sup>b</sup>
	Waste Management Inc. Of Florida	N/A <sup>b</sup>

<sup>a</sup> Pursuant to the contract, WASD selected multiple vendors to provide the required services; WASD will use a contract-specified formula to calculate weekly allocations of Group A sludge among the selected vendors.

<sup>b</sup> Group D amounts will be subject to competitive spot market purchases, as needed (i.e., if vendors awarded other groups are unable to provide the services required of that group).

#### VII. OBJECTIVES, SCOPE, AND METHODOLOGY

The audit has three objectives: (1) verify WASD revenues produced by the sale of Class AA sludge; (2) review WASD's process to verify and approve vendor invoices; and (3) review payments made for the hauling and disposal of Class B sludge.

To accomplish our objectives, we obtained and reviewed copies of the two contracts and supporting documentation such as invoices, weigh tickets, and delivery receipts. We also performed site inspections at WASD's Central District and South District Wastewater Treatment Plants.

To understand WASD's internal procedures for reviewing and approving invoices, we interviewed WASD personnel in charge of processing the invoices. We also prepared various spreadsheets so that we could display and analyze related accounting data. During our field inspections, we took photos of the loading areas, scales, sludge processing and storage facilities, and video of the truck loading process at the South District Wastewater Treatment Plant.

For the Class AA contract, we reviewed 100% of the invoices from October 1, 2012 to July 31, 2013. These invoices totaled \$30,453 in generated revenues to

#### MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL FINAL AUDIT REPORT Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

WASD. We examined these invoices for compliance with Section 2.15 of the Class AA contract, *Methods of Payment: Monthly Invoices*. This section lists the minimal requirements that an invoice should have for WASD to consider it a proper invoice.

For the Class B sludge contract, our audit scope included 452 invoices, totaling \$17,352,149, for 365,973 tons of sludge hauled. As part of our review, we verified that the contract's allocation process for Class B Group A sludge was used to calculate a weekly allocation that was applied to available sludge. The reviewed invoices were for the period of October 1, 2010 to July 31, 2013. The 452 invoices are comprised as follows:

Vendor	Group <sup>a</sup>	Invoices Reviewed	Total Tons Hauled	Total Amount Invoiced
H&H Liquid Sludge	Α	137	123,647	\$4,988,595
Disposal Inc.	С	28	17,516	\$735,684
Synagro South LLC.	A	119	85,985	\$4,471,250
Waste Management	D	168	129,975	\$7,162,925
TOTAL		452	357,122	\$17,358,453

#### Table 4Class B Vendor Invoices October 1, 2010 to July 31, 2013

<sup>a</sup> During our audit period, there were no Group B pick-ups.

In addition, we reviewed and verified that required licenses/certifications were current and on file at WASD, including plant operating permits, dumpsite permits, and vendor licenses.

This audit was conducted in accordance with the Principles and Standards for Offices of Inspector General promulgated by the Association of Inspectors General. The AIG Principles and Standard are in conformity with the Government Auditing Standards issued by the Comptroller General of the United States (2011 Revision).

#### VIII. OIG OBSERVATION AND RECOMMENDATION

As mentioned earlier, the OIG did not find any reportable weaknesses; therefore, there are no audit findings to report. However, the OIG has one observation relating to permit and licensure requirements that we believe should be shared with management to avoid any possible future complications.

#### Licensing and Permits

We reviewed the different types of permits/licenses (permits) that are mentioned in the contract. One such permit is a plant operational permit (for the Central District and South District Wastewater Treatment Plants) that is issued by the State of Florida to WASD and is renewable every five years. This permit allows the plant to operate and process wastewater. In order for the permit to be issued, the plant needs to have certain security and quality control procedures.

Another contract mentioned permit is the required "dump" site permit for each location that accepts WASD sludge. Each vendor must acquire this permit from its dump-site locations and provide a copy to WASD before dumping any material at the site. Section 2.27<sup>1</sup> of the Class B contract states, in part:

Vendor shall obtain all permits for the applicable plants and by all other applicable laws, regulations, rules and permits. Required permits shall be obtained before land application of material, before placement in a landfill, and before other disposal operations ... Vendor shall prepare and submit all reports required by all applicable laws, regulations, rules and permits, Vendor shall deliver to M.D.W.A.S.D. one copy of all applications, permits, reports, records and correspondence, within 30 calendar days of submission or receipt. Vendor shall also maintain a file of the above items and make this file available for inspection by the County and others authorized by it. Vendor shall maintain these files and make them available for inspection for the duration of the contract, plus five (5) years.

In addition, the contract requires vendors to have certain records that show that they are qualified and possess the necessary equipment to handle and dispose of the sludge. The aforementioned contract section states that these records shall be delivered to WASD, but it does not describe what these records might be (in particular, those that may be required by local, state, or federal authorities). Furthermore, Section  $3.2^2$  of the Class B contract's Technical Specifications states, in part:

The work and services to be performed under this contract is the transportation and disposal of anaerobically digested Class B sewage sludge. It shall be the responsibility of the successful

<sup>&</sup>lt;sup>1</sup> Contract 9681-0/17, which is for the Sale, Transportation, and Disposal of Class AA Sludge, has the same requirements in contract Section 2.32.

<sup>&</sup>lt;sup>2</sup> Contract 9681-0/17, which is for the Sale, Transportation, and Disposal of Class AA Sludge, has the same requirements in contract Section 3.1.

#### MIAMI-DADE COUNTY OFFICE OF THE INSPECTOR GENERAL FINAL AUDIT REPORT

Audit of WASD Contract No. 9681-0/17 for the Sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR for the Hauling and Disposal of Class B Sludge

bidder(s) to furnish all vehicles with suitable liners/covers/watertight tailgates and trailer bodies, drivers, fuel, maintenance, repairs, insurance, license tags, permits, licenses and all incidentals necessary for the legal operation of transporting and disposing of Class B sewage sludge.

While conducting the audit we were able to see and confirm that the first two types of permits exist and are current. However, as to the third grouping of requirements, WASD personnel were unable to clarify what the stated requirements encompassed. As such, when OIG auditors requested records that would presumably fit this third grouping, WASD informed us that it did not have any records from the vendor that would meet these requirements.

The OIG did not find any evidence that the vendors are not qualified to do the job; in fact, during all the years that the contracts have been in effect, there are no complaints that indicate that the vendors are inadequate to perform the work. Vendor competence on handling the sludge was observed during our visual review of the process. The OIG's observation here, however, lies with contract compliance with record-keeping requirements, not with contractor performance.

#### Recommendation

WASD should formalize a list of all records, including licenses/permits, that are required of its sludge hauling vendors and transmit the list to the vendors, so that they can provide WASD with the records. WASD should consider revising future contracts to include this list.

# Miami-Dade County Office of the Inspector General



### **OIG Final Audit Report**

## **Appendix A**

Water and Sewer Department Response

Audit of WASD Contract No. 9681-0/17 for the sale, Transportation, and Disposal of Class AA Sludge and Contract No. 7122-2/13-OTR foe the Hauling and Disposal of Class B Sludge.

IG13-18

Memorandum



Date: February 7, 2014

To:	Mary Cagle, Esq.,
	Inspector General

From:

John W. Renfrow, P.E., Director Miami-Dade Water and Sewer Department

Subject: OIG Draft Audit Report, IG-13-18

In response to the recommendations contained in the subject draft report, the Miami-Dade Water and Sewer Department (WASD) will ensure that future solicitations contain the specific licenses and permits required to haul and transport both Class A and Class B Sludge. By including these requirements in the solicitations, bidding firms will need to include a copy of the license or permit at the time they submit their proposals. This will ensure that WASD only contracts with vendors already holding the required licenses and permits.

Additional information on the licenses and permits can be found on the County's website in two separate locations:

http://www.miamidade.gov/permits/transporter-liquid-waste.asp and http://www.miamidade.gov/publicworks/general-hauler.asp.

The forms are accessible through the links provided and are included in this correspondence as attachments. These requirements will be forwarded to all awarded vendors on both Contracts 7122-2/13 and 9681-0/17, as well as being included in all future solicitations involving the hauling and transporting of both Class A and Class B Sludge.

Should you require any additional information or clarification, please contact me.

C: Alina T. Hudak, Deputy Mayor Joseph Ruiz, Deputy Director, WASD Lestor Sola, Director, Internal Services Department Gregory Hicks, Chief, Stores & Procurement, WASD