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Office of the Inspector General Miami-Dade County

Memorandum

To:	Mr. George Burgess, County Manager	21472000	
	,	Received by	Date
	/		

From: Christopher R. Mazzella, Inspector General

Date October 14, 2005

Re:

OIG Final Audit Report on WASD Plug Valves and Operators

Contract No. 5057-2/02-OTR-SW

Attached please find a copy of the above-captioned audit report. This report was issued as a "draft" on July 1, 2005 to Mr. William Brant, Director of the Miami-Dade Water and Sewer Department, and Ms. Miriam Singer, Director of the Department of Procurement Management. Appended to the OIG's Final Audit Report are the responses received from Mr. Brant and Ms. Singer.

The OIG is satisfied in the overall responses to the audit findings and considers this matter as **RESOLVED-OPEN**. The OIG requests to be provided a 90-day status update report on any actions taken, including an update on the status of the replacement contract and an update on the implementation status of the new ERP inventory module. We would appreciate this 90-day report by February 1, 2006. The OIG appreciates the cooperation and courtesies extended by WASD and DPM staff who were involved in our review of the subject contract.

cc: The Honorable Joe A. Martinez, Chair, Board of County Commissioners The Honorable Dennis C. Moss, Vice Chair, Board of County Commissioners The Honorable Natacha Seijas, Chair, Infrastructure and Land Use Committee Joe Ruiz, Assistant County Manager Alina Hudak, Assistant County Manager William Brant, Director, Water and Sewer Department Miriam Singer, Director, Department of Procurement Management Cathy Jackson, Director, Audit and Management Department Charles Anderson, Commission Auditor, Board of County Commissioners Clerk of the Board (copy filed)

Miami-Dade County Water and Sewer Department Contract for Plug Valves and Operators Contract No. 5057-2/02-OTR-SW

INTRODUCTION

The Miami-Dade County Office of the Inspector General reviewed the Miami-Dade County Water and Sewer Department's Contract for Plug Valves and Operators, Contract No. 5057-2/02-OTR-SW. Our review focused on contract usage and whether WASD's automated systems ensured accurate, complete and timely record keeping of plug valves and operators purchased under the Contract, and actual receipts and issues of items from WASD storage facilities. In addition, we examined ancillary item purchases to determine whether they were in accordance with County and departmental policies and procedures and contract specifications.

This report was issued as a "draft" on July 1, 2005 to the Miami-Dade County Water and Sewer Department and the Department of Procurement Management. Their responses are attached as OIG Appendices A and B, respectively. The OIG's rejoinder is labeled as Appendix C. Other than the addition of a footnote on page 10 (Finding 3), no materials changes were made to the report.

This report has four (4) findings regarding WASD's inventory and procurement management process:

- WASD's automated inventory system does not adequately account for stock items purchased under the Contract. WASD personnel assigned the same stock code number to different kinds of valves purchased under the Contract leading to inaccurate quantity and price records for these inventory items.
- WASD's record keeping process does not provide current, complete and accurate records of item receipts and usages for division items. These items totaled over \$769,000 (76%) of total contract purchases made during the audit period.
- 3. WASD "split" purchased an item six (6) times over an eight (8) week period, for a total purchase amount of \$27,727. WASD's actions contravened County and departmental procedures that would have required the Department to obtain price quotations for the entire order. Moreover, the purchased items are not covered by the Contract and WASD obtained them off this Contract from an ineligible vendor.
- 4. WASD uses Group O to purchase items not meeting the Contract specification for this Group.

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As detailed in this report, WASD's inventory and purchasing system allows users to override certain fields. This resulted in discrepancies regarding inventory stockcode numbers, descriptions and unit prices for stock and division items. Inaccurate recording and reporting of inventory may lead to outages of those items critical to the success of WASD's operations, which include making timely repairs to vital systems. Furthermore, this practice prevents WASD from reconciling inventory items (i.e, stockcode number, description and unit price) with the contract bid items, which further impacts WASD'S ability to compile reliable historical data required for procurement forecasting.

GOVERNING 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 and the power to review past, present and proposed County and Public Health Trust programs, accounts, records, contracts and transactions. The Inspector General has the power to analyze the need for, and the reasonableness of, proposed change orders. The Inspector General is authorized to conduct any reviews, audits, inspections, investigations or analyses relating to departments, offices, boards, activities, programs and agencies of the County and the Public Health Trust.

The Inspector General may, on a random basis, perform audits, inspections and reviews of all County contracts. The Inspector General shall have the power to audit, investigate, monitor, oversee, inspect and review the operations, activities and performance and procurement process including, but not limited to, project design, establishment of bid specifications, bid submittals, activities of the contractor and its officers, agents and employees, lobbyists, and of County staff and elected officials in order to ensure compliance with contract specifications and detect corruption and fraud.

The Inspector General shall have the power to review and investigate any citizen's complaints regarding County or Public Health Trust projects, programs, contracts or transactions. The Inspector General may exercise any of the powers contained in Section 2-1076, upon his or her own initiative.

The Inspector General shall have the power to require reports from the Mayor, County Commissioners, County Manager, County agencies and instrumentalities, County officers and employees and the Public Health Trust and its officers and employees regarding any matter within the jurisdiction of the Inspector General.

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TERMS USED IN THIS REPORT

County

Miami-Dade County

Contract

Contract No. 5057-2/02-OTR-SW: Plug Valves and Operators

DPM

Miami-Dade County Department of Procurement Management

OIG

Miami-Dade County Office of the Inspector General

RFI

Request for Issue

WASD

Miami-Dade County Water and Sewer Department

BACKGROUND

WASD uses the 5057 Contract for its purchases of plug valves, operators and ancillary items. Plug valves, a.k.a. system valves, control and redirect wastewater flows during routine maintenance and emergency repairs, and can be used for transmission system adjustments during high flow periods. Ancillary items are repair and/or replacement parts and/or accessories for the valves purchased under the Contract.

The Contract's initial period was one year beginning August 1, 2001 and extending through July 31, 2002. The Contract contained both a "Minority Business Enterprise" and a "Local Preference" provision. In addition, the Contract contained an "Option to Renew" clause allowing the County, at its sole prerogative, the option to renew the contract for an additional two (2) years, on a year-to-year basis. During these periods, the contractor was obligated to maintain its same prices, under which the award had been made.

The County exercised its option to renew both in 2002 and in 2003, thereby extending the contract period through July 31, 2004. The County then extended the Contract for an additional six (6) month period (through January 31, 2005) because of extenuating circumstances. The County was legally obligated to terminate its Minority Business Enterprise program during the Contract's last option period and had not yet established a replacement program, under which it could have awarded a new contract, when the current Contract expired.

As of the date of this Final Report, a new plug valves and operators contract has been awarded. This contract only contains a local preference provision. WASD awarded this contract for a six-month period, June 1, 2005 to November 30, 2005. WASD and DPM are jointly developing another contract that will contain both a local preference provision and a revamped set-aside provision, and will consolidate WASD's two major valve contracts (Contract 5057 and Contract 7269) into one contract.

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WASD should award the new consolidated contract as soon as it is finalized and coincidental with its terminating for convenience both the "new" 5057 contract and the current 7269 contract.

The audited Contract contained fourteen (14) groups that are lettered A through N, comprised of anywhere from one (1) to eight (8) valves of varying sizes, pressures and attachments and one (1) group (lettered O) for ancillary items. Contract awards were made to the two (2) lowest, responsive and responsible bidders, on a group-by-group basis, for the first fourteen groups (A - N). Each group, with the exception of group O, has a "primary" vendor that will have the first opportunity to perform and a "secondary" vendor that may be called on, in the event that the primary vendor cannot perform. This means that there were twenty-eight (28) possible awards, under this Contract. The Contract requires the bidders to offer prices for all items comprising the group or groups for which they are submitting their bids. TABLE 1 shows the winning firms as "primary" or "secondary" vendors for the Contract groups.

TABLE 1 Contract 5057 Vendors and Awarded Groups

TABLE 1 Contract 5057 Vendors and Awarded Groups						
Vendor Name	Primary Vendor	Secondary Vendor				
Corcel Corporation	A, B, D, I, K, M	C, E, F, G, H, J, L, N				
DeZurik Corporation	J	A, B, D, I, K, M				
Metro Equipment	C, N					
Olson Technologies	E, F, G, H, L					
"GROUP O"	an as-needed, when-neede	WASD will solicit prices, on ed basis, from the successful who supply the specific valves				

AUDIT APPROACH

This audit focused on the contract's usage and whether WASD's automated systems ensure accurate, complete and timely record keeping of plug valve and operator purchases, receipts and issues of items from WASD storage facilities. In addition, we examined ancillary item purchases to determine whether they were in accordance with County and departmental policies and procedures. Our examination of WASD's inventory and record keeping practices for plug valves included a review of WASD's different inventory and record keeping practices for "stock" items versus those used for "division" items.

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OIG auditors did not test the accuracy of the automated inventory system used for stock items. For example, we did not conduct a physical count of the inventory. OIG auditors compiled the data received from WASD on Contract purchases and prepared a spreadsheet of the data. We conducted a limited reviewed comprised mostly of discussions with WASD personnel and an examination of some of the reports generated by the system for selected items purchased under the Contract and of other data provided to us by WASD.

We reviewed a sample of WASD purchase orders for both stock and division items purchased under this Contract. The initial sample was selected based on the (large) dollar values of the individual purchase amounts. All other item purchases as shown on the WASD purchase requisition containing the large dollar value item, regardless of dollar value, were added to our sample.

Our examination included a review to check whether the purchase requisitions were completed properly, including having the appropriate approval signatures. We also examined vendor invoices to determine that the invoiced item descriptions, quantities and prices matched contract terms, purchase requisition information and were mathematically correct. Additionally, we sighted delivery receipts for the purchased items.

Throughout our audit, we met with WASD personnel from its Procurement, Engineering and Accounts Payable divisions to discuss the contract purchases, WASD's automated systems and inventory accounting practices to gain a general understanding of the transactions and systems. In addition, we discussed, among other issues, this Contract's solicitation and award with personnel from Miami-Dade County's Department of Procurement Management (DPM). DPM is responsible for soliciting and awarding WASD valve contracts and serves as the liaison between WASD and prospective vendors during these activities, pursuant to County Administrative Order 3-38.

WASD purchased a little over \$1 million dollars of plug valves, operators and ancillary items between August 2001 and July 2004 under this contract. These purchases were comprised of stock and division items as summarized in TABLE 2, which follows on the next page.

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TABLE 2 Purchase Order Population and Sample Data

Inventory Type	Population Amounts	Sample Amounts	Sample % of Population
Stock Item Amounts	\$245,561	\$165,168	67%
Division Item Amounts	\$769,352	\$745,667	97%
Total	\$1,014,913	\$910,835	90%

Individual items (both stock and division) purchased during this period had unit prices ranging from \$355 to \$88,500, although some contract items have unit prices as high as \$109,345.

FINDINGS AND RECOMMENDATIONS

FINDING NO. 1 WASD's automated inventory system does not adequately account for stock items purchased under the contract.

Stock items are "on-hand" inventory items ready for immediate issue to meet an operational need. Stock items have order lead times of least 70 days and remain in inventory until requested. WASD has an automated record keeping system for stock items that tracks and reports on individual items and their on-hand quantities, including purchases and "min/max" levels. The system has the capability of "real time" recording of item purchases and issues, and can generate reports of actual, on-hand inventory quantities, on an as-needed basis.

This type of information is useful for analyzing usages to identify slow-moving and obsolete items and as an aid in helping WASD to prevent outages of those items critical to the success of its operations. A significant problem with this system, however, is that it lacks the checks and balances required to ensure that only complete and accurate information is entered into the system.

Each stock item should have its own system-defined field reflecting its stockcode number, description and unit price. Stock item purchases are generally part of an awarded contract group (A-N). WASD purchased \$244,925 of stock items during the audit period, of which \$163,724 (67%) were reviewed by the OIG. During the course of this review, discrepancies were found in one or more of these fields due to the fact that WASD's current inventory system allows users to manually override these fields when making purchases.

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WASD personnel often assigned the same stock code number to different kinds of valves when entering purchase data into the system. This mis-identification of parts results in inaccurate reporting of inventory quantities in both the valve "as ordered" and "as recorded" records. The "as ordered" inventory on-hand and purchased item quantities would be understated and the "as recorded" inventory on-hand and purchased item quantities would be overstated. Besides increasing the risk of inventory shortages, inaccurate record keeping of inventory item purchases may lead WASD to order additional and unnecessary items because the inventory records show an item quantity shortage (or outage) when, in fact, there is no such condition.

As discussed in the next finding, WASD is implementing a new inventory system later this year. Notwithstanding, any system may be compromised if users have the ability to override the system or otherwise not entering data completely and accurately. These are conditions impacting the current system that WASD must eliminate when using its new system.

Recommendation

WASD should ensure its new system has checks and balances and protective devices that limit a user's ability to manipulate system data descriptions and fields to allow otherwise nonconforming data to be improperly entered.

FINDING NO. 2 WASD's record keeping process does not provide current, complete and accurate records of item receipts and usages for division items.

Division items are "as-needed, when-needed" items that must be ordered well in advance of their need, by as many as 175 days, depending on the contract's specification. Orders for division items comprised over \$769,000 (76%) of the total contract purchases during the audit period. WASD typically procures division items to satisfy job-specific orders. WASD guidelines require that division items be picked up by their requestors within 24 hours of receiving notice that the items have been received at a stores location. Thus, they should have short-lived stays in an inventory stores area.

WASD's record keeping for the non-inventory or "division" items is a manual process that collects data on an item-by-item basis but cannot provide, for example, summary reports of item purchases, receipts and issues similar to those available for stock items. This information, for instance, would be valuable to procurement and

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operations personnel when planning for future contracts and for ensuring the accountability for and safeguarding of such items.

The OIG reviewed division item purchases totaling \$746,867 (74%) of the total contract purchases during the audit period. These items had unit prices ranging from \$6 to \$88,500, with some unit prices as high as \$109,345. Based on reviewing the inventory records and as acknowledged by WASD staff, records of non-inventory ("divisional") items are not maintained by WASD's inventory management using bar coding or similar methods. WASD records (i.e, internal staff memos) show that this has been an issue for at least two (2) years and has yet to be addressed. Due to the large dollar amount of divisional items ordered by the Engineering Division through WASD's procurement division, this should be a major priority.

The lack of adequate record keeping of these items precludes WASD from efficiently compiling current, complete and accurate records of item receipts and usages. This aforementioned information is required in order to accurately forecast WASD's procurement needs. In addition, these practices may allow opportunities for abuse or fraud to occur at the County's expense.

Moreover, OIG auditors were unable to track division purchases from the user department's request to the actual job site. Currently, the best way to accomplish this objective would be to review project "as built" drawings to check what items were actually installed. To the extent that there are discrepancies between what was shown on a purchase order and what is shown as installed, WASD would have a difficult, if not impossible, time tracking the discrepant items. The overall lack of accountability raises serious concerns to the OIG. Furthermore, the OIG questions how WASD is able to ensure the accuracy of requests, purchases and issuance of divisional orders.

During the audit, the OIG discussed WASD practices with staff. WASD advised the OIG of the following initiatives that once fully implemented will address the two (2) noted conditions:

- 1. The bar coding system for stock inventory items was recently upgraded to a Web-Based design. This new upgrade will also have the capability to track issues of divisional parts by several methods within the next (6) six months.
- 2. WASD is in the process of replacing its current inventory system, Millennium (M3LL) with a PeopleSoft product. In PeopleSoft's Purchasing module, a user has several choices when searching for a stockcode number that will be used to place an order. For example, the stockcode description is a user choice. The system will supply a list of items, which match the criteria provided in the

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search request. The user will then select the description, with its accompanying stockcode number that fits the item. As such, they would not be entering the stockcode number itself. The planned launch for PeopleSoft at this time is November 2005.

The OIG stresses the importance of complete and accurate data for the following reasons:

- 1. This information becomes part of WASD's historical data which is used in procurement forecasting for future contracts.
- 2. Vendors with the knowledge of this system flaw can structure their bids thereby receiving an unfair advantage. For example, one vendor received the group award in <u>all</u> contract groups as either the primary or secondary vendor. Furthermore, this vendor supplied WASD with nearly 100% of group "O" items as well (see Attachment 1).
- 3. Furthermore, the PeopleSoft program should ensure that users will not be able to mix and match stockcode numbers, descriptions and unit prices.

Recommendation

WASD should maintain records for all contract items regardless of whether or note these items are stocked or non-stocked (Divisional) inventory items. These records should include inventory receipts, issues and usages. This recommendation ensures that accurate records are maintained in addition to providing a reliable source of reference when future purchases of these items become necessary.

FINDING NO. 3 WASD "split" purchased an item six (6) times over an eight (8) week period, for a total purchase amount of \$27,727. The purchased items were not covered by contract group O and were obtained from an ineligible contract vendor.

This finding describes circumstances wherein WASD "split" purchased an item six (6) times over an eight (8) week period, for a total purchase amount of \$27,727. Each of the six purchases totaled \$4,621. WASD obtained 36 items, in total. Each item cost \$770.

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TABLE 3 Schedule of Split Purchases¹

Vendor Name	WASD Req. #	Req. Date	Item Description	Qty.	Unit Price	Totals
Hughes Supply, Inc.	Y49957	02/19/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Hughes Supply, Inc.	Y50375	02/25/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Hughes Supply, Inc.	Y50980	03/04/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Hughes Supply, Inc.	Y52193	03/20/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Hughes Supply, Inc.	Y53917	04/10/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Hughes Supply, Inc.	Y53918	04/10/02	Valve, 12" Gate, M.J.	6	\$770.20	\$4,621.20
Totals				36		\$27,727.20

The items purchased would usually be available under another valve contract but, at the time of the purchases, that contract was not active. The subject Contract was active; however, the purchased valves were not the type awarded in the Contract. Additionally, WASD obtained the valves off this Contract from an ineligible vendor.

WASD purchased the valves as "Group O" items—Valve Parts and/or Accessories. However, such purchases should relate to the type of valves awarded under this Contract. In this case, the purchased item was a "gate" valve, not a "plug" valve. The vendor was ineligible because it had not participated in the solicitation phase for the 5057 Contract and, thus, was not a successful bidder that had won a group award (or placed second). Contract 5057, Section 2.0—Special Conditions, Subsection 2.39—Valve Parts And/Or Accessories states:

The County is providing funding on this contract for the purchase of repair/replacement parts and/or accessories for valves on an as needed, when needed basis. This fund shall not be awarded to a particular vendor at this time. When a part and/or accessory need is identified, prices shall be solicited [from] the successful bidders of this [Contract's] Invitation to Bid who supply the specific valves awarded. (Emphasis added.)

Moreover, WASD own departmental procurement procedures that would have required WASD to obtain price quotations for the entire order (36 valves). WASD's

WASD relies on the authorization granted to it by the former DPM director, who stated: "Your request is granted on the condition that the aggregate value of SPOs awarded by WASAD for any one commodity in this fiscal year shall not exceed \$25,000." WASD did exceed the aggregate amount as the identified six purchases totaled \$27,727. Moreover, the DPM authorization was dated March 21, 2000, thus referencing Fiscal Year 1999/2000. These six split purchases were made two years later from February 2002 to April 2002. Accordingly, the OIG disagrees with WASD's justification and reaffirms its original position.

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Stores, Procurement and Materials Management User Manual (Revised January 2003), page 7, Processing time frame for requisitions, states:

If there is an existing contract in place, or if the request is under \$5,000.00 and the vendor is an approved vendor, the order will be placed within five business days. If the amount is over \$5,000 and there is no active contract, the requisition must be processed by the Department of Procurement Management. Depending on the request, it may take several months to process.

The \$5,000 "small purchase order" limit and processing requirements mirror the guidance contained in the County's Administrative Order 3-38, Master Procurement Administrative Order (May 6, 2003). The small purchase limit set by this version is \$10,000; however, the preceding version had set a \$5,000 limit. Regardless, the collective value of the subject purchases totaled almost \$28,000, which far exceeds the amount allowed in the more recent and more liberal guidelines.

Recommendation

WASD should train its employees to educate them about County and WASD procurement guidelines. During the training, WASD should emphasize to its employees the need for them to comply with the purchasing guidelines and the reasons why shortcuts and procedural circumvention are unwise practices.

FINDING NO. 4 WASD uses Group O to purchase items not meeting the Contract specification for this Group.

The total purchases for group "O" items amounted to \$154,902, which includes the valves described in Finding No. 3 above. Also included in the \$154,902 are other valve types totaling \$110,631. The OIG questions these additional valve purchases because they do not meet the contract-specified description for allowable Group O purchases. (See earlier reference of Contract Subsection 2.39.) Valves are not "repair/replacement parts and/or accessories for valves" Many of the valves purchased under this Contract as Group O items were plug valves, but of the kind not covered by a bid item. WASD obtained 119 other non-bid item plug valves, valued at almost \$82,000, in this manner. This amounts to over 21 percent of the total number of valves purchased under this contract. In total, WASD purchased over 28 percent of the valves ordered under this contract as Group O items. We believe that such frequent usage

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would mean that these items would merit standing as separate bid items, under this or another valve contract.

Recommendation

WASD should evaluate the propriety of using group "O" funding for purchases of valves. If these other valves are consistently required, WASD should consider including them as part of their procurement forecasting in future contracts.

The OIG appreciates the cooperation and courtesies extended by WASD and DPM staff who were involved in our review of the subject contract.