



# **Internal Audit Report**



## **Geotechnical, Material Testing and Environmental Services Contract**



**Improvements Needed In Procedures For  
Ordering and Approving Payments For  
Geotechnical Services.**

**June 2009**

## **THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA**

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Mr. Alberto M. Carvalho  
Superintendent of Schools

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# Miami-Dade County Public Schools

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## Superintendent of Schools

Alberto M. Carvalho

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June 15, 2009

Members of The School Board of Miami-Dade County, Florida

Members of the School Board Audit Committee

Mr. Alberto M. Carvalho, Superintendent of Schools

At the request of the Superintendent of Schools, we have audited the Geotechnical, Materials Testing and Environmental Assessment Services contract and the internal controls over these services. The objective of this audit was to assess the billing and payment practices in place over the Geotechnical Services Contracts. The audit covered the 358 work orders valued at \$6.7 million that were issued between July 1, 2006 and June 30, 2008 and the associated expenditures.

The audit found overbillings/overpayments of \$81,712 (3.70% of value sampled) for Geotechnical Services involving 29 work orders, or 37% of the 79 work orders tested. When projected over to the \$6.7 million of geotechnical services expenditures incurred during the audit period, total overpayments could approximate \$186,000 (2.77%). The overpayments were caused by practices, which occurred due to various weaknesses in internal controls. As of the date of this report, amounts recovered totaled \$5,588.

Our findings and recommendations were discussed with management. We have recommended that management pursue recovery of all overpayments. Their response is included in the report.

Sincerely,

Jose F. Montes de Oca, CPA

Interim Chief Auditor

Office of Management and Compliance Audits

Office of Management & Compliance Audits

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## EXECUTIVE SUMMARY

This audit was requested by the Superintendent of Schools based on a recommendation contained in an investigation conducted by the M-DCPS Inspector General, entitled ***Miami-Dade County Public Schools Contract Overpayment to Professional Engineering & Inspection Company, Inc. (PEICO)***. That investigation found that PEICO had over billed and M-DCPS had overpaid \$18,000 for certain Geotechnical, Materials Testing and Environmental Assessment Services (Geotechnical Services).

The objective of this audit was to assess the billing and payment practices in place over the Geotechnical Services Contracts. The audit covered work orders and associated expenditures that were issued between July 1, 2006 and June 30, 2008. During that period the District had such contracts in place with six firms. Total Geotechnical Services expenditures during the audit period were \$6.7 million, which comprised 358 work orders.

The audit found overbillings/overpayments of \$81,712<sup>1</sup> (3.70% of value sampled) for Geotechnical Services involving 29 work orders, or 37% of the 79 work orders tested. When extrapolating the evidence from our statistical sample to the entire population, we concluded that total Geotechnical Services expenditures of \$6.7 million during the audit period have included estimated overpayments approximating \$186,000 (2.77%). This was caused by practices or procedures in place that did not clearly identify the staff responsible for comparing the rates, fees and terms of the contract to that of the work orders and invoices prior to approving them. As of the date of this report, amounts recovered totaled \$5,588.

Based on our audit, we made seven recommendations. The detailed findings and recommendations start on page 6 of this report and provide additional information that is integral to understanding the substance and context of the conditions noted above.

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<sup>1</sup> The amount overpaid includes \$27,299 representing a variance in the contract unit price versus the unit price invoiced to M-DCPS, which management asserted was known in advance and authorized by staff. The value of this overpayment was also projected over the work order population and is included in the estimated overpayment of \$186,000.

## INTERNAL CONTROLS

Our overall evaluation of internal controls for the Geotechnical, Materials Testing and Environmental Assessment Services Contracts is summarized in the table below.

INTERNAL CONTROLS RATING			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls		X	
Policy & Procedures Compliance		X	
Effect		X	
Information Risk	X		
External Risk		X	

INTERNAL CONTROLS LEGEND			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls	Effective	Opportunities exist to improve effectiveness.	Do not exist or are not reliable.
Policy & Procedures Compliance	In compliance	Non-Compliance Issues exist.	Non-compliance issues are pervasive, significant, or have severe consequences.
Effect	Not likely to impact operations or program outcomes.	Impact on outcomes contained.	Negative impact on outcomes.
Information Risk	Information systems are reliable.	Data systems are mostly accurate but can be improved.	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions.
External Risk	None or low.	Potential for damage.	Severe risk of damage.

## **BACKGROUND**

Various M-DCPS departments within the Office of School Facilities have a need to use contracted Geotechnical, Materials Testing and Environmental Assessment Services (Geotechnical Services) as part of the processes of constructing and maintaining the District's facilities. Through a Request For Qualification (RFQ) process, the District requested and received proposals from professional engineering firms, licensed by the State of Florida, and contracted with those most qualified firms. The contracts are unit price agreements and specify, in two fee schedules, the scope of services that may be required, the rates and fees for those services, and other requirements and terms. During the two-year audit period of July 1, 2006 through June 30, 2008, the District had such Geotechnical Services Contracts in place with five firms as follows:

- Bureau Veritas North America, Inc. (formerly PEICO)
- Evans Environmental & Geosciences (EE&G)
- Professional Service Industries (PSI)
- Mactec Engineering and Consulting, Inc. (formerly Law Engineering and Environmental Services, Inc.)
- Nutting Engineering of Florida, Inc.

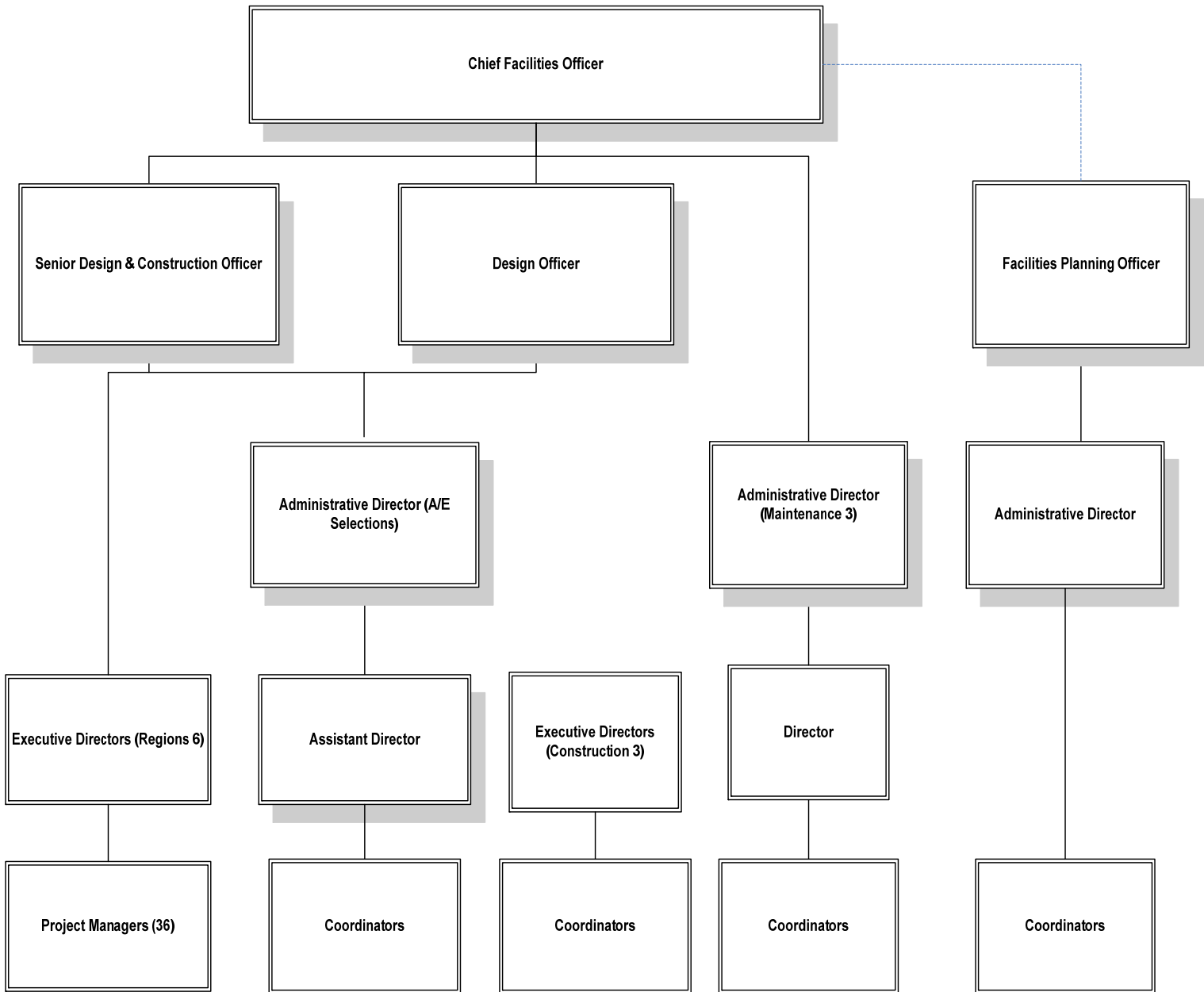
Effective July 15, 2008, Geotechnical Services Contracts were again awarded to four of the above-listed firms, except for EE&G (contract ended in 2007). EE&G was replaced with Nordarse and Associates, Inc. The Contracts were for one year terms with three optional years.

Although the Contracts do not guarantee awarding any minimum amount of work to the firms, District staff stated that attempts are made to assign work to each firm equitably and based on the firm's workload, qualifications for the task, and performance on previous assignments. Total Geotechnical Services expenditures during the audit period were \$6.7 million, which comprised 358 work orders.

Specific user departments of Geotechnical Services included:

- Facilities Construction
- Maintenance Operations
- Government Affairs and Land Use (Facilities Planning)

# Office of School Facilities Partial Organization Chart (Geotechnical Contract function)





## OBJECTIVES, SCOPE AND METHODOLOGY

This audit was requested by the Superintendent of Schools based on a recommendation contained in an investigative final report entitled ***Miami-Dade County Public Schools Contract Overpayment to Professional Engineering & Inspection Company, Inc. (PEICO)***, published by the M-DCPS Office of the Inspector General. That investigation found that PEICO had over billed and M-DCPS had overpaid \$18,000 for certain Geotechnical, Materials Testing and Environmental Assessment Services (Geotechnical Services). The objective of this audit was to assess the billing and payment practices in place over the Geotechnical Services Contracts. We have also evaluated the propriety of payments made under these service contracts.

The scope of our audit covered Geotechnical Services work orders and associated expenditures that were issued between July 1, 2006 and June 30, 2008. Procedures performed to satisfy the audit objective were as follows:

- Interviewed District staff;
- Reviewed operating policies and procedures, applicable Florida Statutes, Requests For Qualifications, and related Geotechnical Services Contracts;
- Obtained an understanding of the processes and practices in place for assigning and approving work orders, and processing payments for services invoiced;
- Examined on a sample basis, documentation, including work orders, vendors' proposals, invoices, contracts, payment records and accompanying fee schedules for work orders issued during the audit period;
- Performed various other audit procedures as deemed necessary.

We conducted this performance audit in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States of America. Those standards required that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit also included an assessment of applicable internal controls and compliance with the requirements of policies, procedures and rules to satisfy our audit objectives.

## FINDING AND RECOMMENDATIONS

### 1. IMPROVEMENT NEEDED IN PROCEDURES FOR ORDERING AND APPROVING PAYMENTS FOR GEOTECHNICAL SERVICES

#### ◆ Work Order Over Invoicing and Overpayment ◆

We found actual over billings/overpayments of \$81,712<sup>2</sup> (3.70% of the value sampled) for Geotechnical Services involving 29 work orders, or 37% of the 79 work orders tested. (Please refer to Table 1.) When extrapolating the evidence from our statistical sample to the entire population, we concluded that total Geotechnical Services expenditures of \$6.7 million during the audit period included estimated overpayments approximating \$186,000 (2.77%). This was caused by practices or procedures in place that do not contain sufficient controls to mitigate the risk of overpayment.

An analysis of the over billings/overpayments found in our sample disclosed that the same vendor essentially repeated the same billing patterns. Consequently, the same or similar errors were repeated when invoicing M-DCPS. Our analysis also disclosed that the magnitude and frequency of errors varied among vendors.

There was a total of 358 work orders issued during the audit period, from which we statistically sampled 79 work orders comprising \$2.2 million of expenditures. The 29 sampled work orders with overpayments are detailed in the following Tables 1 through 6, which summarize the sample errors for each vendor. We have also noted where M-DCPS has recovered any amounts upon staff being notified of the over billings/overpayments. As of the date of this report, amounts recovered totaled \$5,588.

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<sup>2</sup> The amount overpaid includes \$27,299 representing a variance in the contract unit price and the unit price invoiced to M-DCPS, which management asserted was known in advance and authorized by staff. The value of this overpayment was also projected over the work order population and is included in the estimated overpayment of \$186,000.

VENDOR PAYMENT SAMPLE RESULTS – ALL VENDORS						
Vendor	Number of Work Orders Issued	Number of Work Orders Sampled	Value of Work Orders Issued	Value of Work Orders Sampled	Value of Errors	Projected Value of Errors
Bureau Veritas North America, Inc. <sup>3</sup>	54	12	\$1,694,533	\$1,067,697	\$54,260	\$86,115
Evans Environmental & Geosciences <sup>4</sup>	26	10	\$96,032	\$34,772	\$2,395	\$6,614
Mactec Engineering & Consulting, Inc. <sup>5</sup>	147	27	\$2,777,444	\$392,132	\$7,847	\$55,580
Nutting Engineering of Florida, Inc. <sup>6</sup>	47	10	\$756,099	\$68,619	\$40	\$441
Professional Services Industries <sup>7</sup>	84	20	\$1,398,956	\$642,571	\$17,170	\$37,381
Total	358	79	\$6,723,064	\$2,205,791	\$81,712	\$186,131

**Table 1**

<sup>3</sup> The amount overpaid includes \$27,299 representing a variance in the unit cost invoiced to M-DCPS versus the contract unit cost, which management asserted was known in advance and authorized by staff.

<sup>4</sup> Subsequent to our exit conference, this vendor reimbursed M-DCPS the \$2,395 identified as error/overpayments.

<sup>5</sup> This vendor reimbursed the District a total \$1,050 of the amount identified as error/overpayments.

<sup>6</sup> This vendor reimbursed the District the total \$40 of the amount identified as error/overpayments.

<sup>7</sup> The District recovered a total \$1,938 of the amount identified as error/overpayments by back charging the Construction Manager via two Board-approved change orders. Also, this vendor reimbursed the district a total \$165 of the amount identified as error/overpayments.

VENDOR PAYMENT SAMPLE RESULTS – Bureau Veritas North America, Inc.				
Work Order Number	Work Orders Amount	Value of Errors	Description of Error	User Department
00223100PE5	\$431,305	\$9,811	PM's hours (227) billed at incorrect rate = \$3,405; Equipment rental and operator/field foreman hours duplicated = \$3,735; backfill billed at incorrect rate = \$1,184; Miscellaneous over billings = \$1,487	Facilities Construction
00223101PE	\$329,982	\$41,019	Waste disposal invoiced at a rate of \$80 per ton versus the contract allowed rate of \$60 per ton = \$27,299 <sup>8</sup> . The contract is a firm fixed-price contract and does not provide for the negotiated unit price to be adjusted for escalations or decreases in cost. The vendor is allowed to use any appropriate disposal site of its choosing and is not restricted by contract. Equipment rental and operator/field foreman hours duplicated = \$13,720.	Facilities Construction
00223100PE8	\$181,719	\$3,430	Equipment rental and operator/field foreman hours duplicated = \$3,430.	Facilities Construction
Various (8)	\$124,691	-	None	Various
Total	\$1,067,697	\$54,260		

Table 2

<sup>8</sup> Management has asserted that the variance in the contract rate was known in advance and agreed to by staff, and was authorized.

VENDOR PAYMENT SAMPLE RESULTS – Evans Environmental & Geosciences				
Work Order Number	Work Orders Amount	Value of Errors	Description of Error	User Department
7241EV	\$3,430	\$1,130	The contract price for this test is \$2,300, but M-DCPS paid work order amount.	Maintenance Operations
0461EV	\$2,695	\$395	The contract price for this test is \$2,300, but M-DCPS paid work order amount.	Maintenance Operations
1121EV	\$2,695	\$395	The contract price for this test is \$2,300, but M-DCPS paid work order amount.	Maintenance Operations
2911EV	\$2,695	\$395	The contract price for this test is \$2,300, but M-DCPS paid work order amount.	Maintenance Operations
00177200EV	\$5,778	\$80	80 Soil Test Borings billed at incorrect rate.	Facilities Construction
Various (5)	\$17,479	-	None	Various
Total	\$34,772	\$2,395		

**Table 3**

Note: Subsequent to our exit conference, the District received, from this vendor, three checks totaling \$2,395 to reimburse M-DCPS for the full amount identified as error/overpayments.

VENDOR PAYMENT SAMPLE RESULTS – Mactec Engineering & Consulting, Inc.				
Work Order Number	Work Orders Amount	Value of Errors	Description of Error	User Department
A01032L4	\$38,227	\$2,441	Senior project manager and senior geologist hours (163) billed at incorrect rates.	Facilities Construction
A01015L5	\$34,453	\$874	Senior project manager and geologist hours (58) billed at incorrect rates.	Facilities Construction
00253000L4	\$31,683	\$787	Senior project manager and senior geologist hours (52) billed at incorrect rates.	Facilities Construction
00367600L2	\$9,403	\$705	Project Manager hours (47) billed at incorrect rates.	Maintenance Operations
00362800L	\$4,134	\$584	The amount M-DCPS paid exceeded the contract price for this test.	Facilities Construction
L04-PTS1318	\$4,134	\$584	The amount M-DCPS paid exceeded the contract price for this test.	Facilities Construction
00254800L3	\$5,914	\$500	Mathematical error on invoice.	Facilities Construction
A0798L7	\$20,000	\$462	Senior technician and engineer hours (13) billed at incorrect rates = \$270; Standby fee = \$192.	Facilities Construction
A0110601L5	\$37,400	\$412	Project Manager hours (34) billed at incorrect rates.	Facilities Construction
00367600L	\$8,019	\$345	Project Manager hours (23) billed at incorrect rates.	Maintenance Operations
00368000L	\$1,418	\$58	Senior technician hours (3) billed at incorrect rates.	Facilities Construction
00335500L	\$1,418	\$42	Senior technician hours (2) billed at incorrect rates.	Facilities Construction
A01089L4	\$2,660	\$32	Senior technician hours (2) billed at incorrect rates.	Facilities Construction
00335900L	\$1,418	\$21	Senior technician hour (1) billed at incorrect rates.	Facilities Construction
Various (13)	\$191,851	-	None	Various
Total	\$392,132	\$7,847		

**Table 4**

Note: This vendor reimbursed the District a total \$1,050 of the amount identified as error/overpayments.



VENDOR PAYMENT SAMPLE RESULTS – Nutting Engineering of Florida, Inc.				
Work Order Number	Work Orders Amount	Value of Errors	Description of Error	User Department
00254300NE2	\$5,269	\$40	Environmental Specialist hours billed at incorrect rates.	Facilities Construction
Various (9)	\$63,350	-	None	Various
Total	\$68,619	\$40		

### Table 5

Note: This vendor reimbursed the District the total \$40 of the amount identified as error/overpayments.

VENDOR PAYMENT SAMPLE RESULTS – Professional Services Industries				
Work Order Number	Work Orders Amount	Value of Errors	Description of Error	User Department
A01112PS3	\$176,582	\$6,043	Roofing inspector hours (233) billed at incorrect rates = \$4,660; Standby and cancellation fees = \$1,383.	Facilities Construction
A0823PS	\$122,033	\$5,036	Roofing inspector hours (202) billed at incorrect rates = \$4,040; Standby and cancellation fees = \$996.	Facilities Construction
A0820PS	\$122,033	\$4,942	Roofing inspector hours (200) billed at incorrect rates = \$4,000; Standby and cancellation fees = \$942.	Facilities Construction
A01018001PS	\$29,800	\$984	Senior technician hours (36) billed at incorrect rates = \$720; Cancellation fees = \$264.	Facilities Construction
00261700PS	\$8,626	\$99	Lump sum invoice paid without itemized support and incorrect rate for project engineer was used in proposal.	Facilities Construction
PS01-0863	\$10,784	\$66	Cancellation fees not allowed in contract	Facilities Construction
Various (11)	\$172,713	-	None	Various
Total	\$642,571	\$17,170		

Table 6

Note: The District recovered a total \$1,938 of the standby and cancellations fees identified as error/overpayments by back charging the Construction Manager via two Board-approved change orders. In addition, this vendor reimbursed the District, via check, \$165 for amounts identified as error/overpayments.

◆ Internal Control and Procedural Deficiencies ◆

- Staff provided us “final draft” procedures for the various capital construction functions, dated November 2000. However, those procedures as well as current practices do not adequately establish controls for processing and approving payments for Geotechnical Services.
  - Documented process controls to ensure that the work invoiced comports with the rates, fees and other terms of the contract in force are lacking.
  - A copy of the related contract price/rate schedule does not accompany the invoice nor is the contract price/rate schedule necessarily consulted when approving invoices for payment. Not having the contract price/rate schedule accompanying the invoice increases the risk of overpayment, as evidenced by the following example.

The invoices presented by the geotechnical consultant for roof pull tests performed at State School V-1, Okeechobee and Perimeter Road indicated 202 pull tests, referencing Line 9.0 of Fee Schedule A, at the rate of \$65 per test performed by a senior engineering technician. The contract rate allowed for such test is \$45 each (the hourly rate for a senior engineering technician). However, the \$65 rate was paid, resulting in a \$4,040 overpayment. Furthermore, the district has a separate term contract for purchasing professional services, including roof pull test. That contract reflects a rate of \$45 per hour for each roof pull test. Moreover, staff did not present to us any documentation of the negotiations resulting in the higher rate.

- The staff responsible for comparing the rates, fees and terms of the contract to that of the work orders and invoices prior to approving them is not clearly identified. Accountability is not fixed to any person or position.
- There appear to be many cases where multiple approvers (signers) of a work order or invoice are relying on the others to verify that the prices charged are in accordance with the contract.
- Through a series of work orders, totaling \$1.2 million, one firm was hired to perform testing, monitoring, and remediation services at a

contaminated site. Therefore, the firm ostensibly was responsible for monitoring its own work. This created an apparent conflict of interest.

- Work orders and invoices are not always prepared in sufficient detail to satisfactorily determine the quantity or value of services provided.
  - In addition to the 29 overpayments identified, 12 of the remaining 50 sampled work orders/invoices contained lump sum prices that did not delineate the detailed rates, fees or hours billed. Although those 12 invoices had an associated detailed proposal, we were not able to determine the actual work performed and the related rates, fees and hours charged.
  - Work orders for Geotechnical Services that include a direct labor component (i.e., number of hours times an hourly rate(s)) were sometimes issued with a “not-to-exceed” lump sum limit. When approving and processing payment on such work orders, details of the actual hours/effort worked were not available and reviewed to ensure that the consultant is paid for actual hours or effort worked. Typically, the lump sum amount invoiced is simply paid, without adjustment. Furthermore, based on interviews of various staff, there is a general presumption that it is proper to pay the consultant any amounts invoiced, to the extent of the “not-to-exceed” limit, regardless of the actual hours or effort worked.
  - Geotechnical Services Contract allows for the consultant to be compensated the direct cost (reimbursable) for certain items, including equipment rental cost. The prices listed in the contract are not-to-exceed limits. We noted that one vendor routinely invoiced M-DCPS, and was paid, the not-to-exceed unit prices for rented equipments, even though the actual rental rates were less than the not-to-exceed limits. A better understanding of the contract and a careful review of the work order and invoice would eliminate processing these erroneous invoices.
- The development of Geotechnical Services Contracts could be enhanced.
  - To their credit, staff indicated that when developing the Geotechnical Services Contracts, they verbally seek input from the users of the services. Responses from some users of the services suggest that they may not have provided substantive input into the development

of the past Geotechnical Services Contracts. These users are better able to determine the type and level of services customarily used.

The contract allows for four levels of services in testing for radon. The first level of testing requires up to 35 samples at a cost of \$2,300. However, the user who typically uses that service indicated that the average number of samples ordered is 20 and maximum of 25. Establishing a lower level of service that aligns with the typical number of samples ordered may result in economy of scale.

## **RECOMMENDATIONS**

### **1.1 Pursue recovery of all overpayments identified in this report, to the extent possible.**

**Responsible Department:**                      **The Office of School Facilities**

**Management Response:**        As of this date, Management has recovered the full value of the amounts listed as errors under Evans Environmental & Geosciences and Nutting Engineering of Florida, Inc., totaling \$2,395 and \$40, respectively, as well as \$1,050 from MACTEC, and \$165 from PSI. Additionally, a total of \$1,938 in “standby and cancellation fees” billed by Professional Services Industries (PSI) were processed as back-charges to the contractor and approved by the School Board as a change order (Board Items F-36 and F-37) at the April 22, 2009 meeting.

The finding that the District authorized a price per ton of \$80 for excavation and disposal of non-hazardous contaminated material, v. the contract amount for that work of \$60/ton, is accurate. However, there are a number of extenuating circumstances that should be considered and explain the reasons for the increase. Most salient among them is the fact that the contaminated material could not be taken to the dump site under contract, and instead had to be transported to an alternate dump site which charged an additional \$20/per ton. This emergency action was required to prevent any contaminated soil from potentially leaching into other portions of the site or into adjacent non-Board owned property. As acknowledged in the Audit Report, the price per ton of \$80 also reflected a higher cost to the vendor for disposal of the materials, which was in turn passed on the District; i.e. the vendor’s direct cost also increased as a result of a change in dump sites from \$36/ton to \$52/ton (the percent increase over direct cost is roughly the same for both instances). Management does agree that in the future, these types of occurrences need to be better documented; as part of the revised internal procedures, a set of guidelines will be

developed identifying the steps and documentation that must be kept in out of the ordinary circumstances, such as this one, including the authority for management to negotiate certain prices.

- 1.2 Develop and put in place detail comprehensive written policies and procedures to provide specific guidance for processing payments for contracted Geotechnical Services. Such policies and procedures should clearly delineate the type of documentation required and the need to compare the work order and invoice to the contract to ensure the rates, fees and other terms are consistent.**

**Responsible Department:**                      **The Office of School Facilities**

**Management Response:**     The work order initiator and immediate supervisor are to ensure that the proposal submitted by the consultant tracks the specific task line items in their contractual agreement with the District, and that the personnel to be involved is listed and labeled in accordance with the previously agreed to titles included in the agreement, to avoid confusion and prevent disagreements at the time of billing (this practice will eliminate several of the concerns expressed in the Audit Report). Additionally, the existing Geotechnical, Materials Testing and Environmental Assessment services contracts will be further clarified to include all applicable personnel, titles, rates and specific tasks.

In the future, any new items not in contract but needing to be performed, will be negotiated by the appropriate work order initiator along with the supervisor and a staff member from the department of A/E selections, to ensure the negotiated fee is competitively priced. The results of such negotiation will be documented and executed by the participants, and a copy of the negotiated amounts will be kept in the project file by the project manager.

- 1.3 Ensure applicable staff is properly trained in the terms of the contracts and in how to review and process vendor invoices.**

**Responsible Department:**                      **The Office of School Facilities**

**Management Response:**     The District will conduct periodic training and refresher sessions for all applicable personnel, to ensure continued compliance and awareness of any changes to the contractual agreements with these consultants.



- 1.4 Reject invoices received from firms that are insufficiently detailed to allow staff the ability to compare the rates, fees and hours, etc., billed with the terms of the contracts.**

**Responsible Department:** The Office of School Facilities

**Management Response:** The work order initiator and their supervisor are to thoroughly check the work orders and invoices based on the above review criteria prior to signing off on the work order itself and on any subsequent invoices. This will ensure that there is easy and accurate correlation between proposal, work order and invoice. Where incomplete or insufficiently detailed invoices are received from the vendors, the respective project managers will reject said invoices or those portions thereof which need to be resubmitted with sufficient detail and back-up.

- 1.5 Prohibit geotechnical contractors from monitoring and assessing their own work.**

**Responsible Department:** The Office of School Facilities

**Management Response:** The specific circumstance to which this recommendation applies is unique. The project in question refers to site remediation work required in connection with the conversion of the Ruth K. Broad/Bay Harbor Elementary School to a K-8 center. Initially, site remediation was to have been carried out by the contractor originally selected to perform the building construction work and whose services were discontinued. In the interim, the geotechnical consultant had been on the project since the inception and was thoroughly familiar with all aspects of the site remediation and with the regulatory agencies. Retention of the geotechnical consultant for the actual remediation work was based on the highly specialized nature of the work, the need to have someone fully familiar with the project's requirements on board, and the quick rate at which decisions on the remediation process had to be made to satisfy the governing regulatory agencies (primarily Health Department and DERM). In the future, best efforts will be made to assign the responsibility for implementation of remediation work to a vendor that is different from the one responsible for the initial assessment and monitoring of actual work to avoid any appearance of conflict.

- 1.6 Ensure that vendors are paid for actual value of services provided and the actual cost incurred for reimbursable expenses, and not the not-to-exceed limits.**

**Responsible Department:**                      **The Office of School Facilities**

**Management Response:**      Management concurs that payment for services provided should reflect the cost of services rendered. To this end, current contracts have already been revised so that reimbursable expenses are billed at actual cost.

**1.7      Formally solicit written input from the District's Geotechnical Services end-users on the various services and levels required when developing the Geotechnical Services Contracts.**

**Responsible Department:**      **The Office of School Facilities**

**Management Response:**      The Department of A/E Selection, Negotiations and Design Management (A/E Selection), as a matter of practice secures input from the end-users on the firms' performance, as the selection process ensues. That notwithstanding, the recommendation to strengthen that process by establishing a more formal process through which the end users of these services can provide constructive feedback on the contracts and how they are structured, is viable and will be implemented by A/E Selection when new contracts are negotiated.

## **Appendix A – MANAGEMENT’S RESPONSE**

## Appendix A – MANAGEMENT’S RESPONSE

### MEMORANDUM

June 11, 2009

TO: Mr. Jose F. Montes de Oca, CPA, Interim Chief Auditor  
Office of Management and Compliance Audits

FROM:   
Jaime G. Torrens, Chief Facilities Officer  
Office of School Facilities

**SUBJECT: RESPONSE TO THE INTERNAL AUDIT REPORT ON  
GEOTECHNICAL, MATERIALS TESTING AND  
ENVIRONMENTAL ASSESSMENT SERVICES CONTRACT**

I would first like to thank you and your staff for the professional way in which work on the above referenced audit was conducted and completed. We especially appreciate their willingness to consider our explanations and to accept additional information in support of our initial responses to some of the audit findings.

Following is our response to the final Audit Report.

#### Cover Letter/Executive Summary:

As it relates to the extrapolation of the reported errors in the Audit Report, Management understands that this is an allowed practice, as the sampling used was based on a statistically random selection; however, this is only a projection and as such, there should not be an expectation that the “approximate” overpayment amount can or will be recovered.

#### Findings and Recommendations:

- “1. Improvement Needed in Procedures for Ordering and Approving Payments for Geotechnical Services

#### Work Order Over Invoicing and Overpayment

Out of a universe of 358 work orders issued over the audit period, with a collective value of \$6,723,064, the audit sampled 79 or 22%, with a value of \$2,205,791; of the 79, the audit team opined that 29, or 37%, included overpayment for geotechnical services and ascribed it to “various weaknesses in internal control.” Some of the amounts labeled as overpayments result from changes in the classification of personnel by the geotechnical firms subsequent to execution of their contract; others reflect the completion of additional work required as a result of new environmental requirements instituted after the 2003

contract with the environmental consultants was approved, or tasks that needed to be carried out but were not clearly identified as in-contract and were as a result individually negotiated as to cost. Attachment 1 provides a more detailed explanation of the items labeled as errors in Tables 2 through 6 of the Audit Report. Specifically as it relates to the labeling and billing of personnel, Management agrees that changes or deviations from the current contracts should be requested and authorized by the District prior to payment being processed. Management will notify the vendors that they must submit any internal personnel reclassifications potentially impacting contractual billing rates for District review and action; this will ensure that there is a clear correlation between the contract, the scope of work proposals, and subsequent invoices.

Management has recovered \$5,588 through either direct reimbursements from the firms or back-charges to the contractor for the overpaid amounts (see Attachment 1).

### **Response to Recommendations contained in Audit Report**

In addition to the analysis and responses to the general conclusions included in the Audit Report, there were several recommendations made, all of which are addressed below.

#### *"1.1 Pursue recovery of all overpayments...to the extent possible."*

As of this date, Management has recovered the full value of the amounts listed as errors under Evans Environmental & Geosciences and Nutting Engineering of Florida, Inc., totaling \$2,395 and \$40, respectively, as well as \$1,050 from MACTEC, and \$165 from PSI. Additionally, a total of \$1,938 in "standby and cancellation fees" billed by Professional Services Industries (PSI) were processed as back-charges to the contractor and approved by the School Board as a change order (Board Items F-36 and F-37) at the April 22, 2009 meeting.

The finding that the District authorized a price per ton of \$80 for excavation and disposal of non-hazardous contaminated material, v. the contract amount for that work of \$60/ton, is accurate. However, there are a number of extenuating circumstances that should be considered and explain the reasons for the increase. Most salient among them is the fact that the contaminated material could not be taken to the dump site under contract, and instead had to be transported to an alternate dump site which charged an additional \$20/per ton. This emergency action was required to prevent any contaminated soil from potentially leaching into other portions of the site or into adjacent non-Board owned property. As acknowledged in the Audit Report, the price per ton of \$80 also reflected a higher cost to the vendor for disposal of the materials, which was in turn passed on the District; i.e. the vendor's direct cost also increased as a result of a change in dump sites from \$36/ton to \$52/ton (the percent increase over direct cost is roughly the same for both instances). Management does agree that in the future, these types of occurrences need to be better documented; as part of the revised internal procedures, a set of guidelines will be developed identifying the steps and

documentation that must be kept in out of the ordinary circumstances, such as this one, including the authority for management to negotiate certain prices.

*"1.2 Develop and put in place detailed comprehensive written policies and procedures to provide specific guidance for processing payments for contracted geotechnical services. Such policies and procedures should clearly delineate the type of documentation required and the need to compare the work order invoice to the contract to ensure the rates, fees and other terms are consistent,"*

*"1.3 Ensure applicable staff is properly trained in the terms of the contract and in how to review and process vendor invoices."*

*"1.4 Reject invoices received from firms that are insufficiently detailed to allow staff the ability to compare rates, fees and hours, etc., billed with the terms of the contracts."*

Management is implementing additional steps to improve upon the process of issuing work orders and subsequently reviewing invoices for payment, as follows:

1. The work order initiator and immediate supervisor are to ensure that the proposal submitted by the consultant tracks the specific task line items in their contractual agreement with the District, and that the personnel to be involved is listed and labeled in accordance with the previously agreed to titles included in the agreement, to avoid confusion and prevent disagreements at the time of billing (this practice will eliminate several of the concerns expressed in the Audit Report). Additionally, the existing Geotechnical, Materials Testing and Environmental Assessment services contracts will be further clarified to include all applicable personnel, titles, rates and specific tasks;
2. The work order initiator and their supervisor are to thoroughly check the work orders and invoices based on the above review criteria prior to signing off on the work order itself and on any subsequent invoices. This will ensure that there is easy and accurate correlation between proposal, work order and invoice. Where incomplete or insufficiently detailed invoices are received from the vendors, the respective project managers will reject said invoices or those portions thereof which need to be resubmitted with sufficient detail and back-up;
3. The District will conduct periodic training and refresher sessions for all applicable personnel, to ensure continued compliance and awareness of any changes to the contractual agreements with these consultants;
4. In the future, any new items not in contract but needing to be performed, will be negotiated by the appropriate work order initiator along with the supervisor and a staff member from the department of A/E selections, to ensure the negotiated fee is competitively priced. The results of such negotiation will be documented and



executed by the participants, and a copy of the negotiated amounts will be kept in the project file by the project manager.

*“1.5 Prohibit geotechnical contractors from monitoring and assessing their own work.”*

The specific circumstance to which this recommendation applies is unique. The project in question refers to site remediation work required in connection with the conversion of the Ruth K. Broad/Bay Harbor Elementary School to a K-8 center. Initially, site remediation was to have been carried out by the contractor originally selected to perform the building construction work and whose services were discontinued. In the interim, the geotechnical consultant had been on the project since the inception and was thoroughly familiar with all aspects of the site remediation and with the regulatory agencies. Retention of the geotechnical consultant for the actual remediation work was based on the highly specialized nature of the work, the need to have someone fully familiar with the project's requirements on board, and the quick rate at which decisions on the remediation process had to be made to satisfy the governing regulatory agencies (primarily Health Department and DERM). In the future, best efforts will be made to assign the responsibility for implementation of remediation work to a vendor that is different from the one responsible for the initial assessment and monitoring of actual work to avoid any appearance of conflict.

*“1.6 Ensure that vendors are paid for actual value of services provided and the actual cost incurred for reimbursable expenses, and not the not-to-exceed limits.”*

Management concurs that payment for services provided should reflect the cost of services rendered. To this end, current contracts have already been revised so that reimbursable expenses are billed at actual cost.

*“1.7 Formally solicit written input from the District's geotechnical services and end-users of the various services and levels required when developing the geotechnical services contracts.”*

The Department of A/E Selection, Negotiations and Design Management (A/E Selection), as a matter of practice secures input from the end-users on the firms' performance, as the selection process ensues. That notwithstanding, the recommendation to strengthen that process by establishing a more formal process through which the end users of these services can provide constructive feedback on the contracts and how they are structured, is viable and will be implemented by A/E Selection when new contracts are negotiated.

The above will be captured and memorialized in a set of procedures to be approved by the Chief Facilities Officer and shared with the Internal Audits Department.

JGT:arc

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Attachments

cc: Mr. Alberto M. Carvalho  
Mr. Trevor Williams  
Direct Reports

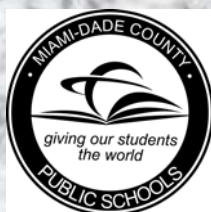
**Attachment 1**

<b>VENDOR</b>	<b>AMOUNT LABELED AS ERROR</b>	<b>RESPONSE</b>
Bureau Veritas	\$9,811	This project is still open and Management is in the process of reconciling the expenses; any unsubstantiated or erroneous charges will be backed-out of the final payment.
	\$41,019 (comprised of \$27,299 for waste disposal, and \$13,270 for equipment rental and labor)	As it relates to the \$27,299 amount, the finding that the District authorized a price per ton of \$80 for excavation and disposal of non-hazardous contaminated material, v. the contract amount for that work of \$60/ton, is accurate. However, there are a number of extenuating circumstances that should be considered and explain the reasons for the increase. Most salient among them is the fact that the contaminated material could not be taken to the dump site under contract, and instead had to be transported to an alternate dump site which charged an additional \$20/per ton. This emergency action was required to prevent any contaminated soil from potentially leaching into other portions of the site or into adjacent non-Board owned property. As acknowledged in the Audit Report, the price per ton of \$80 also reflected a higher cost to the vendor for disposal of the materials, which was in turn passed on the District; i.e. the vendor's direct cost also increased as a result of a change in dump sites from \$36/ton to \$52/ton (the percent increase over direct cost is roughly the same for both instances). The amount relating to equipment rental and labor in the process of being reconciled and any unsubstantiated or erroneous charges will be backed-out of the final payment.
	\$3,430	This project is still open and Management is in the process of reconciling the expenses; any unsubstantiated or erroneous charges will be backed-out of the final payment.
Evans Environmental & Geosciences	\$1,130; \$395; \$395; \$395; \$80 (Total of \$2,395)	The audit is correct; the vendor was advised and has issued a full reimbursement to District.
MACTEC	\$2,441; \$874; \$787; \$462; \$412; \$58; \$42; \$32; \$21	Management agrees that there is a need to refine procedures so that there is clearer correlation between the line items or personnel title descriptions in contract, and how they are listed in the scope of work proposals and subsequent invoices. Management will notify the vendors that they must submit any internal personnel reclassifications potentially impacting contractual billing rates for District review and action; additionally this will be reiterated in the next set of negotiations with the firms.

**Attachment 1**

<b>VENDOR</b>	<b>AMOUNT LABELED AS ERROR</b>	<b>RESPONSE</b>
MACTEC	\$584; \$584	These amounts are fees for additional work required by the regulatory agencies in Phase I environmental assessments (i.e. the requirements/standards increased after the 2003 contract became effective; the new requirements/standards are now in the 2008 contract).
	\$705; \$345	The \$705 amount is an error but was reconciled by Management prior to the audit and the District had already been reimbursed by vendor; the \$345 amount is also an error discovered at the time of the audit and the vendor has already reimbursed the District.
	\$500	This amount resulted from inaccurate addition in the proposal as opposed to the invoice.
Nutting Engineering of Florida, Inc.	\$40	This amount was incorrectly billed and a reimbursement from the vendor has been received.
PSI	\$4,660; \$4,040; \$4,000	These charges were for roof pull tests, an item not specifically listed in this contract, and which was negotiated separately. Management agrees that in the future, better records of separately negotiated items need to be kept, and that requirement will be included in the department's revised procedures. The 2008 contract now includes this specific service and a fee.
	\$1,383 standby and cancellation fee	These cancellation fees may be the responsibility of the CM and if after research that is found to be so, the contractors will be back-charged.
	\$996; \$942 standby and cancellation fees	These amounts were back-charged to the contractor and approved at the April 22, '09 School Board meeting.
	\$99; \$66	These amounts were incorrectly billed and a reimbursement from the vendor has been received.

## ***INTERNAL AUDIT REPORT***



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