

# DISTRICT FUEL INVENTORY CONTROLS



**FUEL INVENTORY LEVELS ARE  
ADEQUATE, BUT INTERNAL CONTROLS  
NEED TO BE STRENGTHENED**

**APRIL 2007**



Miami-Dade County Public Schools

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# Miami-Dade County Public Schools

*giving our students the world*

**Superintendent of Schools**  
Rudolph F. Crew, Ed.D.

**Chief Auditor**  
Allen M. Vann, CPA

April 17, 2007

**Miami-Dade County School Board**  
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Members of The School Board of Miami-Dade County, Florida  
Members of the School Board Audit Committee  
Dr. Rudolph F. Crew, Superintendent of Schools

Ladies and Gentlemen:

In accordance with the Audit Plan for the 2006-07 Fiscal Year, we have performed an audit of the District's Fuel Inventory Controls for the period of July 1, 2005 through September 30, 2006. The objectives of the audit were to determine whether internal controls over vehicle fuel inventories are adequate to protect the assets and that inventories are maintained at effective and cost efficient levels. Additional objectives of our audit were to determine if the pricing of inventories were appropriate, if the system in place for dispensing fuel is adequate, and if adequate controls are in place that ensure accurate quantities of fuel are delivered and billed. We also benchmarked Miami-Dade County Public Schools fuel management processes and controls with Miami-Dade County's.

Our audit concluded that the Department of Transportation appears to maintain safe and relatively compliant fueling islands. Physical access controls to the fuel storage tanks were evident at all but one of the sites inspected. Fuel inventory levels maintained at the various sites are proper for the operations. Fuel quantities invoiced and paid did not agree with quantities received according to the fuel tank readings. Several small errors in pricing were noted and fuel tax rebates were not always filed.

Our findings and recommendations were discussed with management. Their responses along with explanations are included herein. As always, we would like to thank the management for their cooperation and courtesies extended to our staff during the audit.

Sincerely,

Allen Vann, CPA, Chief Auditor  
Office of Management and Compliance Audits

## TABLE OF CONTENTS

	Page Number
EXECUTIVE SUMMARY .....	1
INTERNAL CONTROLS .....	2
BACKGROUND .....	3
ORGANIZATIONAL CHART .....	4
OBJECTIVES, SCOPE AND METHODOLOGY .....	5
FINDINGS AND RECOMMENDATIONS .....	6
1. Strengthen Controls and Reconciliation Over Fuel Inventory Received.....	7
2. Comply With Bid Requirements and Improve on the Completeness of Fuel Tax Rebate Filings.....	9
3. Adequate Staff Training is Needed to Rectify Poor Cost Accounting Practices .....	14
4. Improve Recordkeeping Over Fuel Management.....	16
5. Better Monitoring of Fuel Usage and System Data is Needed.....	19
Appendix I – Management’s Response .....	21

## EXECUTIVE SUMMARY

Based on the audit procedures and tests performed, and evidence obtained and examined, our audit conclude the following:

- The Department of Transportation appears to maintain safe and relatively compliant fueling islands. Physical access controls to the fuel storage tanks were evident at all but one of the sites inspected. Fuel inventory levels maintained at the various sites are proper for the operations.
- Fuel quantities invoiced and paid did not agree with quantities received according to the Veeder Root fuel tank report readings. The net variances in our sample were 23,582 more gallons invoiced than received based on the fuel tank report readings and \$43,843 paid for than received, based on the Veeder Root reports, but could be as much as 78,880 gallons and \$182,000 if our sample results are extended to the entire quantity of fuel purchased.
- Several small errors in pricing and fuel tax rebate filings were noted. The net result of the pricing errors noted was \$7,156. Also, M-DCPS did not file for \$63,435 in fuel tax rebates for which it was entitled.
- The year-end inventory balance of diesel fuel reported on hand by Transportation was materially different from the balance record in the general ledger. The difference was \$280,810.
- Fuel override transactions were not logged and DOT does not have an accurate accounting of all employees having custody of fuel cards.

Based on our observations, we made 10 recommendations. Management's responses along with implementation schedules are included herein. Our detailed findings and recommendations start on page 6. We would like to thank the administration and Miami-Dade County for their assistance, cooperation and courtesies extended to our staff during the audit.

## INTERNAL CONTROLS

Our overall evaluation of internal controls over the fuel inventories 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**

The Department of Transportation's (DOT) primary function is to provide administrative oversight and management for the school district pupil transportation services. Among its other functions, is the oversight of the District's fuel inventory. During FY 2005-06, DOT procured nearly 4 million gallons of unleaded and diesel fuel with representative values of approximately \$7.7 million dollars for diesel fuel and \$1.7 million dollars for unleaded gasoline fuel. The fuel is stored and dispensed from nine (9) Miami-Dade County Public Schools owned transportation sites located throughout the district. The fuel storage capacities at the nine (9) sites are maintained through seven (7) unleaded gasoline tanks with a combined capacity of 81,000 gallons and eight (8) diesel tanks with a combined capacity of 153,000 gallons.

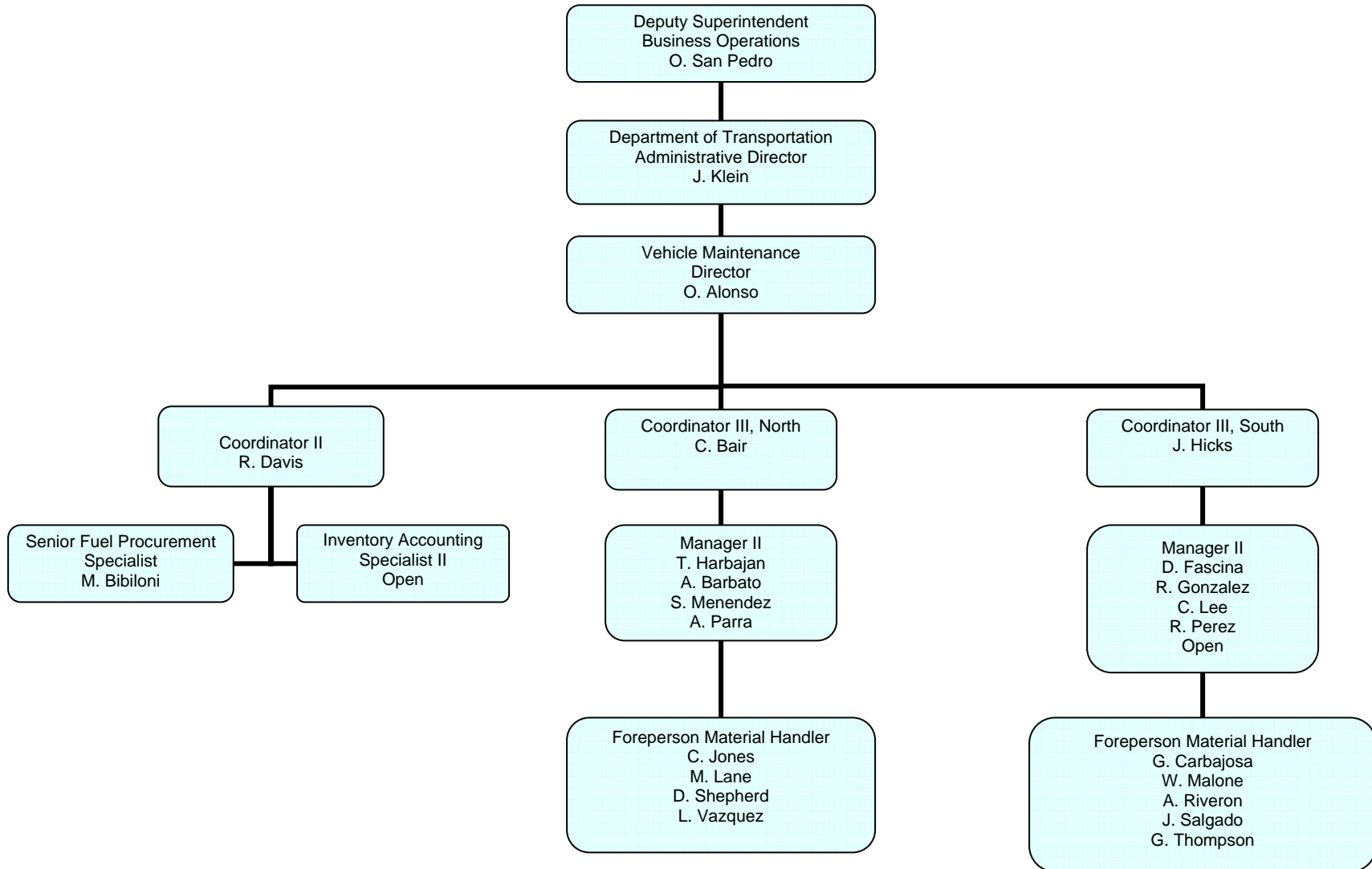
Fuel is procured from three local fuel brokers using three District bids. The bids include the types of fuel to be procured and the proposed delivery surcharge; and are differentiated by the fuel delivery location. According to the bid, the fuel invoiced cost billable to the district is the Oil Price Information Service (OPIS) average rack price for Miami plus a fixed service charge, which varies based on delivery locations and all applicable sales taxes.

Once the bid process is finalized, Procurement Management issues the necessary purchase orders to the fuel vendors and monitors contract compliance. Administrative staff at DOT then takes over the responsibilities for purchasing and controlling the fuel inventories.

The department's fuel administrative function is supervised by the Director of Vehicle Maintenance, who reports to the Administrative Director of the Department of Transportation. The current director is in this position as of June 15, 2006. DOT's administrative and clerical staffs are responsible for maintaining accurate inventory records, timely scheduling and accepting fuel deliveries, timely submitting fuel invoice for payment, filing fuel tax rebate applications, and confirming inventory quantities in the accounting records. These responsibilities are accomplished in part, by reviewing the daily fuel receipt and usage reports received from the various DOT fueling sites, taking daily measurements of fuel levels, and visually inspecting the sites.

To manage their petroleum products inventories, the Department of Transportation currently uses an automatic tank gauge system (Veeder-Root) and the E.J. Ward automated Vehicle Information Transmitter (VIT) and card systems. The Veeder-Root system allows the site personnel to obtain fuel tank inventory information such as fuel and water level readings, line leak monitoring, and tank temperature on a continuous basis. The E.J. Ward VIT system allows for fuel to be dispensed without a card or interaction with the terminals. The E.J. Ward card system acts as a manual override to the automated VIT system. The card system also allows for the fueling of off-road equipment, such as lawn movers, generators, heavy equipment, etc., and portable fuel storage containers. Additionally the card system allows vehicles without the VIT device installed, such as driver's education vehicles to be fueled. The system also tracks fuel usage and mileage information by vehicle.

**THE DEPARTMENT OF TRANSPORTATION – FUEL INVENTORY  
PARTIAL ORGANIZATIONAL CHART**





## **OBJECTIVES, SCOPE AND METHODOLOGY**

In accordance with the FY 2006-07 approved audit plan, we performed an audit of the District's Fuel Inventory Controls. The objectives of the audit were to determine whether the District('s):

- Internal controls over vehicle fuel inventories are adequate to protect the assets;
- Fuel inventories are maintained at effective and cost efficient levels;
- Is receiving the appropriate price for fuel purchases and does the system for dispensing fuel have adequate controls;
- Has adequate controls in place to ensure that accurate quantities of fuels are received;
- Compares favorably with Miami-Dade County in relations to fuel management practices, internal controls, and pricing.

The scope of our audit covered operations during the period of July 1, 2005 to September 30, 2006. Procedures performed to satisfy the audit objectives were as follow:

- Interviewed District staff;
- Reviewed operating policies and procedures and applicable Florida Statutes;
- Benchmarked operations to Miami-Dade County;
- Examined on a sample basis, documentation of fuel invoices and fuel refunds applications;
- Made several site observations of actual fuel deliveries; and
- Performed various other audit procedures as deemed necessary.

Our audit was conducted in accordance with generally accepted governmental auditing standards applicable to performance audits obtained in Government Auditing Standards issued by the Comptroller General of the United States of America. This audit included an assessment of applicable internal controls and compliance with requirements of policies, procedures and School Board Rules to satisfy our audit objectives.

## **FINDINGS AND RECOMMENDATIONS**

### **GENERAL OBSERVATIONS**

The Department of Transportation appears to maintain safe and relatively compliant fueling islands. For example, all seven of the fueling sites inspected were equipped with automatic shut-off switches and recently inspected charged fire extinguishers. All seven of the fueling sites displayed current inspection stickers on their fuel pumps indicating that the necessary regulatory inspections were completed. Notwithstanding, one of the sites inspected did not have the required Florida Department of Environmental Protection (FDEP) Registration Placard displayed, while another site displayed an expired certificate. Pursuant to Chapter 62-761, Florida Administrative Code, the FDEP require that among other documents, a current FDEP Registration Placard be displayed where everyone can see it. Please refer to Recommendation 4.3 for the appropriate corrective active.

Physical access controls to the fuel storage tanks were evident at all but two of the sites inspected. The tanks were locked. For those other sites where the storage tanks were not locked during our inspections, Transportation staff subsequently provided the appropriate locks on the tanks after we communicated our observation results.

Fuel inventory levels maintained at the various sites are proper for the operations. We saw no evidence of stock-outs or shortages. The methodology used to replenish the fuel inventory adequately minimizes the number of deliveries and the associated surcharge.

A comparison of M-DCPS' fuel inventory management practices with Miami-Dade County's suggest that both agencies' practices are for the most part similar. Similarities include the use of the same fuel dispensation system, fuel cards for dispensing fuel, procedures for receiving fuel deliveries, etc. Dissimilar practices include the manner in which the fuel budget is developed and managed, certain verification procedures followed at the County, and limit caps placed on the fuel cards. For example, each County department has its own fuel budget, which is developed based on amounts received from the County's General Services Administration (GSA) department. GSA purchases all fuel but subsequently charges each department for its use of fuel. At M-DCPS, chargeback for fuel use does not occur. Further, when fuel deliveries are received, a County employee visually verifies and records on the bill of lading the actual quantity received, which is verified when processing payment. This is not done at M-DCPS. Additionally, the County's fuel cards each allow a limit of 20 gallons per use. M-DCPS' fuel cards contain no such limit. A significant difference between the two operations is that M-DCPS has implemented a more advanced version of the fuel management systems used by both operations. Also, M-DCPS is not as dependant upon the use of fuel cards for fuel dispensation as the County is. Nevertheless, some of these improved controls are included in our recommendations contained in our detailed findings which follow.

## 1. STRENGTHEN CONTROLS AND RECONCILIATION OVER FUEL INVENTORY RECEIVED

The Department of Transportation procured approximately \$7.7 million of diesel fuel and \$1.7 million dollars of unleaded fuel during fiscal year 2005-06. We analyzed the supporting documentation (i.e., daily fuel reports, Veeder Root fuel tank reports, invoices and bill of ladings) for 88 fuel purchases and payments, corresponding to 661,165 gallons. Additionally, we performed multiple onsite observations of fuel deliveries at seven (7) of the nine (9) Transportation managed fueling sites. There were various inconsistencies and internal control weaknesses noted. For example, fuel quantities invoiced and paid did not agree with quantities received according to the Veeder Root fuel tank report readings. The net variances in our sample were 23,582 gallons and \$43,843 paid for than received, based on the Veeder Root reports. When extrapolated across the entire population of fuel purchases, the net variances is estimated to be 78,880 gallons and \$182,676.<sup>1</sup> Individual variances ranged between (337) and 5,458 gallons. The median variance was 203 gallons. On average, each delivery is 7,700 gallons.

For 17 invoices sampled, we were unable to verify that the amount invoiced agrees with the quantity received because the Veeder Root fuel tank report reading could not be located. Furthermore, the Veeder Root report showing the quantity of fuel received in the storage tank upon delivery is not reviewed and compare to the invoiced quantity when approving the invoice for payment. A summary of our findings is presented in the table below.

Criteria	Number of Invoices Meeting the Criteria	Total Errors in Gallons	Total Errors in Dollars	Percent of Sampled
Fuel quantity received per Veeder Root report is less than quantity invoiced.	57	24,856	\$46,785	65%
Fuel quantity received per Veeder Root report is more than quantity invoiced.	14	(1,274)	(\$2,942)	16%
Veeder Root fuel receipt information was not forwarded to Transportation Administration Offices where invoices are processed for payment.	17	N/A*	N/A *	19%
Total invoices sampled and net results of sample	88	23,582	\$43,843	100%

\*Could not be determined based on information received from auditee.

In addition to the errors noted above, we also found that at one location no Transportation staff was present to observe and monitor the accuracy of fuel delivery.

<sup>1</sup> This estimate is based on 750,500 and 3,206,082 gallons of unleaded and diesel fuel M-DCPS purchased at an average price of \$2.29 and \$2.32 per gallon, respectively.

However, the bill of lading that corresponds to that day's delivery was signed by an M-DCPS employee verifying that the delivery was correct and that the fuel was received in good order. Additionally, even though the District receives and is invoiced the net quantity of fuel delivered, as a practice, Transportation site personnel reports the gross amount of fuel delivered on the daily fuel report. The bill of lading received from the vendor lists both the gross and net gallons purchased. For example, Transportation's Weekly Fuel Reports of June 14, 2006 and July 18, 2006 recorded 8,070 and 8,000 gallons of fuel received, respectively. However, the bills of lading showed the net volume of fuel delivered to be 7,955 and 7,878 gallons, respectively. Additionally, the Veeder Root report showing the increase in fuel volume immediately after delivery is not always sent to Transportation's administrative offices.

## **RECOMMENDATION**

- 1.1 Transportation staff should observe fuel delivery, document the actual quantities received, and reconcile quantities received to the bill of lading and invoice, and pay for only the verified quantities delivered. The proper receiving and reconciling procedure should be documented in the department's standard operation procedures manual.**

**Responsible Department: Department of Transportation.**

### **Management Response:**

DOT management concurs with the findings and the recommendations of the auditors and has already implemented this suggestion. While many of these procedures had been longstanding, DOT management already has taken the necessary steps to improve security and reliability in their fuel inventory controls. A directive has been issued to all site supervisors to ensure that a staff member monitors the fuel delivery process. This includes the printing of Veeder-Root fuel inventory in-tank levels, before and after a fuel delivery, and the shutting down of fuel dispensing during the fuel delivery process. This minimizes any discrepancies in the inventory. Minimal differences may still exist because of time of day the fuel delivery is received, atmospheric temperature and settling time after fuel delivery.

**2. COMPLY WITH BID REQUIREMENTS AND IMPROVE ON THE COMPLETENESS OF FUEL TAX REBATE FILINGS**

During the period under audit the District purchased unleaded and diesel fuel through School Board Bid Nos. 030-FF07, 013-FF07 and 137-BB07. The bid price is based on the Oil Price Information Service (OPIS) average rack price plus a firm service charge. We analyzed a sample of 87 unleaded invoices and 215 diesel invoices and found several errors in pricing and fuel tax rebate filings. With respect to pricing errors, 39 errors or 18% were found for diesel fuel. There were 63 errors or 72% for unleaded fuel. Principally, the errors noted were differences between the OPIS average rack price plus the firm service charge and the unit price invoiced between September and October 2005. The resulting net effect is that the district overpaid various invoices in the amount of \$7,156 (\$16,875 for unleaded and (\$9,719) for diesel fuel). The individual price variances included both overcharges and undercharges. We also noted that for one vendor, M-DCPS was charged different prices for deliveries made on the same day. A sample of our findings is noted in the table below.

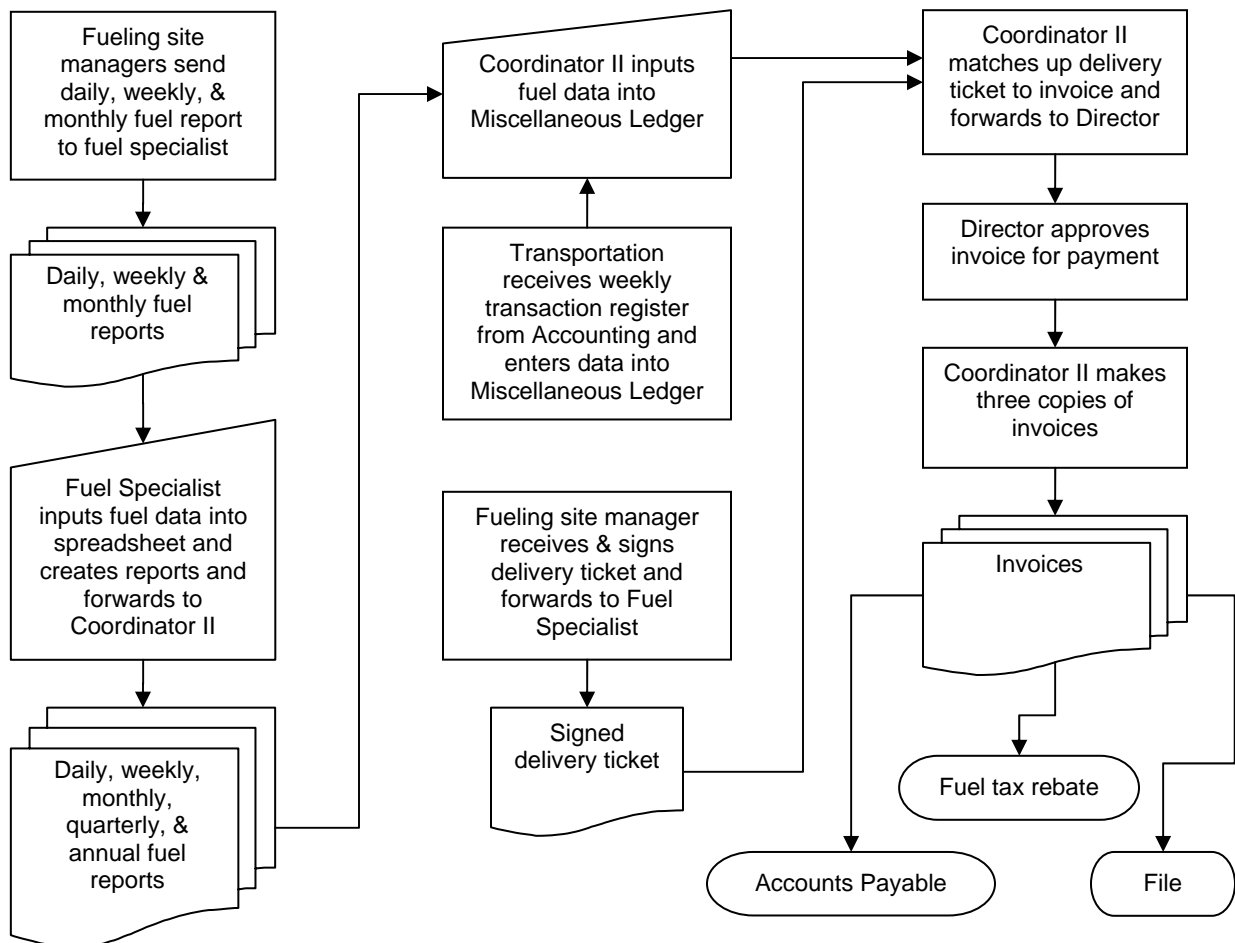
<b>SAMPLE OF VARIANCES IN FUEL PRICES INVOICED</b>				
<b>Delivery Date</b>	<b>Total Cost Per Invoice</b>	<b>Total Invoice Cost Based Bid</b>	<b>Variances</b>	<b>Fuel Type</b>
08/22/2005	\$14,787	\$13,769	\$1,018	Diesel
08/31/2005	\$15,450	\$13,805	\$1,645	Diesel
09/12/2005	\$14,419	\$15,590	(\$1,171)	Diesel
09/21/2005	\$15,942	\$14,801	\$1,141	Diesel
09/27/2005	\$16,811	\$16,208	\$ 603	Diesel
09/30/2005	\$18,329	\$16,193	\$2,136	Diesel
10/04/2005	\$20,218	\$21,631	(\$1,413)	Diesel
01/19/2006	\$14,487	\$14,130	\$ 357	Unleaded
01/20/2006	\$14,420	\$14,141	\$ 279	Unleaded
03/10/2006	\$14,824	\$13,872	\$ 952	Unleaded
03/15/2006	\$16,315	\$14,593	\$1,722	Unleaded

M-DCPS' fuel bids state that the OPIS weekly average rack price should be used for invoicing purposes. OPIS generates daily and weekly fuel prices. As a practice, it appears that each Friday, M-DCPS obtains the OPIS fuel price report of the Thursday of each week and uses the average rack prices (unleaded and diesel) contained therein to cost out deliveries received during the following week, (in effect, from Friday to Thursday). However, this practice was not consistently followed. During September and November 2005, the vendor invoiced M-DCPS prices other than the Thursday price. Moreover, during that same period, as a result of Hurricanes Katrina and Rita, the



prices charged by one of the fuel vendors were not indexed to the OPIS weekly average rack price required by the bids. Three separate memoranda from the administration acknowledged and authorized the departure from the bids. The memorandum addressed to MacMillian Oil Company of Florida, Inc., stated that, "Due to the emergency situation caused by Hurricane Katrina,...specifically the day-to-day increases in the OPIS price, the District will accept the daily average price, with appropriate documentation." However, the two remaining memoranda addressed to Truman Arnold Companies stated that, "Due to the emergency situation caused by Hurricane Katrina,...specifically the day-to-day increases, the District will accept Truman Arnold's delivery fuel cost, plus the increased service charge of \$.015 per gallon." The service charge awarded to this company under the bid in effect at the time was \$.0075 per gallon. We also noted that during this period, only a limited number of the weekly OPIS pricing reports were available for audit. A representative from the vendor that normally provides the District these reports stated that due to Hurricanes Katrina and Rita, the prices were not available. We have subsequently received daily prices for the entire months of September and November 2005 directly from OPIS. A third fuel vendor invoiced M-DCPS at the OPIS average rack price published on the Monday following the bid-required OPIS weekly average rack price published on the previous Thursday, thus affecting the price charged.

**Fuel Invoice Approval and Payment Process**

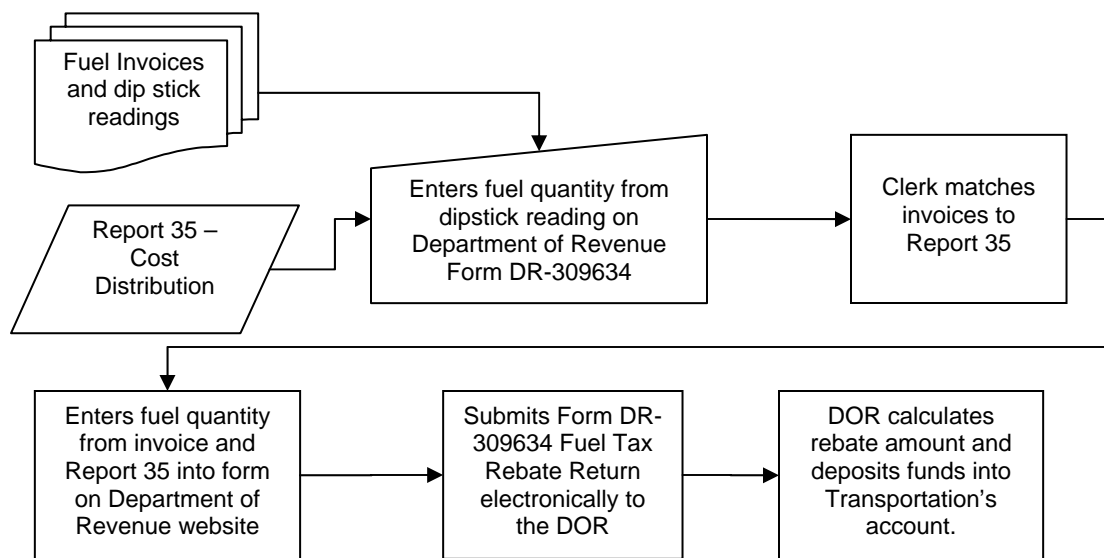


Further, of the invoices sampled, we found that 25% of the unleaded invoices and 13% of the diesel invoices that qualified for a fuel tax rebate were not submitted for reimbursement of taxes paid. The total value of the applicable rebate not applied for in our sample was \$29,037. Because of the rate of error detected, we expanded our test to a larger population of known fuel purchases and found that the value of the total variance increased to \$63,425. During the same period, M-DCPS received total fuel rebate of \$504,644. The error resulted due to inadequate internal controls, whereby the total fuel purchases are not reconciled to the general ledger.

Pursuant to Florida Statutes 206.625, municipalities, counties and school districts are entitled to a rebate of taxes paid on fuel used. Historically, the rebate is equivalent to \$0.119 for each gallon of unleaded and diesel fuel purchased. The reported total unleaded and diesel fuel purchased during FY05-06 were 750,500 and 3,206,082 gallons, respectively. Given the volume of fuel the District purchased during the last fiscal year and the error rates noted, the amount of forfeited rebate dollars could be meaningful.<sup>2</sup>

The fuel tax rebate process begins when Transportation administration submits fuel invoices for the month to the Accounting Specialist at Transportation. The Accounting Specialist then completes the fuel rebate online using Florida Department of Revenue (FDOR) form DR-309634. Adequate internal controls to ensure that all monthly invoices are processed for fuel tax rebate are not in place. Additionally, it was not evident that proper follow-up to ensure that the correct amount of fuel tax is refunded is done.

**Fuel Rebate Processing Flow Diagram**



<sup>2</sup> Extrapolating the sample error rates (25% for unleaded and 13% diesel fuel) over the population of reported fuel quantities purchased (750,500 gallons of unleaded and 3,206,082 gallons of diesel fuel) and applying the historical rate of \$0.119 per gallon purchased, yields a possible estimated forfeiture of fuel rebate of \$71,925.

## **RECOMMENDATIONS**

- 2.1 Transportation staff responsible for processing vendor's fuel invoices should enforce the pricing terms of the fuel bids. Staff should validate the price invoiced by comparing the invoiced price to the appropriate OPIS average rack price and bid price increment prior to approving payment of the invoice and where differences are noted, require the vendor to correct the invoice.**

**Responsible Department: Department of Transportation.**

**Management Response:**

As summarized in the audit report, during the latter part of 2005, Miami-Dade County was hit by 3 hurricanes which affected the awarded vendor's capabilities to supply the district with much needed fuel at the contracted bid price. As a result, an emergency was declared and the decision to accept the increase in price was made and approved by the Office of Procurement Management.

With regard to the samples used in the audit report, the first invoice dated 08/22/2005 was as a result of an overcharge by the fuel supplier, by charging us for unleaded instead of diesel fuel. A credit was requested by staff and a new invoice was issued by 08/30/2005. As noted in 2.2 below, procedures have been established to ensure invoiced prices are accurate before payments are made.

- 2.2 Revise fuel bids to clearly specify which OPIS price should be used for invoicing purposes and require adherence by fuel vendors.**

**Responsible Department: Department of Transportation.**

**Management Response:**

As a requirement of the bid, the vendors are required to provide the district with the weekly Oil Price Information Service (OPIS) for verification of pricing. One of the vendors on bid was providing DOT with daily OPIS reports and sending the procurement department a weekly OPIS report. This discrepancy in OPIS pricing resulted in the difference for the overpayment. DOT staff is seeking reimbursement from the fuel supplier. Additionally, DOT has subscribed to the OPIS fuel reports (Port of Miami) and closely monitors the changes in fuel prices from all fuel suppliers.

- 2.3 Ensure that all fuel purchases are reconciled to control reports and are included in the monthly fuel tax rebate application filed with the Florida Department of Revenue. The invoice listing for the month should agree to the total amount applied for on the fuel tax return.**

**Responsible Department:** Department of Transportation.

**Management Response:**

With regard to the recommendation to submit timely tax rebate claims, DOT staff agrees and the Vehicle Maintenance Division has assumed the responsibility for this process to expedite the filing of these returns. Additionally, DOT staff has contacted the Florida Department of Revenue and has initiated procedures to recover the tax rebates not previously filed.

### **3. ADEQUATE STAFF TRAINING IS NEEDED TO RECTIFY POOR COST ACCOUNTING PRACTICES**

Our analysis and reconciliation of the fuel inventory account identified material weaknesses over fuel inventory controls. One of the major flaws noted is that while vendors invoice M-DCPS for fuel purchased based on the net gallons delivered,<sup>3</sup> the quantities recorded in inventory is the gross gallons ordered. The resulting consequence is that the year-end fuel inventories balances reported on hand by Transportation were different from the balances record in the general ledger. As of June 30, 2006, the difference was material for diesel fuel. That difference was \$280,810.

Staff at Transportation's administrative offices receives daily fuel reports from each of the nine (9) Transportation managed sites. The report lists the daily gross fuel receipts, dispensation and ending inventory balances for each site. The staff uses this information to prepare daily, weekly, monthly, quarterly and year-end fuel reconciliation reports. The reconciliation reports, however, did not show any variances between the general ledger and on-hand inventory balances. In fact, we were not presented with any documented evidence that staff compares the reconciled balances to the general ledger. Moreover, Transportation staff does not consider the beginning inventory balance in it reconciliation. Consequently, the reconciliation Transportation performs is ineffective. Good internal controls require that the amount of fuel on hand be reconciled to not only subsidiary records, but to the general ledger also. In addition, the inventory at the beginning of each period being reconciled should be considered in the reconciliation.

Our analysis also showed discrepancies in the unit prices at which fuel usage is charged out. The unit prices charged against the inventory asset accounts for fuel usage do not reconcile to the average unit costs based on fuel purchased. This result from the questionable methodology used to determine the average cost of inventory. To calculate the average cost per gallon, Transportation first establishes the "perpetual inventory" value by multiplying the measured on-hand quantity of fuel by the invoiced price of the last fuel receipt. This amount is then subtracted from the total purchase orders posted to the general ledger and unpaid invoices. The resulting amount is then divided by the total number of gallons pumped for the week. The resulting dividend is the average cost per gallon. During this calculation, no consideration is given to inventory layers that may result from quantities of fuel purchased at different prices. Furthermore, staff informed us that the cost allocation information is prepared on a monthly basis but they are unsure how and if it is charged to the user's general ledger accounts.

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<sup>3</sup> The net gallons amount is a factor of the gross gallons delivered if the fuel is dispensed at 60 degrees Fahrenheit. In our case, it is determined at the time fuel is picked up at Port Everglades. This amount is reported to typically be roughly 1% or less of the gross gallons.



## RECOMMENDATIONS

- 3.1 Discontinue the practice of increasing the fuel inventory account balances by the gross gallons of fuel ordered. The inventories should be increased by the actual quantities delivered.**

**Responsible Department: Department of Transportation.**

**Management Response:**

The longstanding practice of using the gross amount as the fuel received has been discontinued. It is important to note that payments continue to be made based on net amount received only.

- 3.2 Transportation's administration should ensure that fuel staff members are trained on proper reconciliation of the fuel inventory accounts. The reconciliation of fuel inventory accounts should be properly documented and procedures should be established to compare reconciled fuel information to the general ledger. Any differences in the reporting of fuel receipts, purchases, usages or ending inventory on hand should be addressed, in a timely manner.**

**Responsible Department: Department of Transportation.**

**Management Response:**

DOT staff, in cooperation with the Controllers Office has been developing procedures to ensure that this process is accomplished on a monthly basis. Revisions to the calculations to determine the average fuel cost are being made to ensure the appropriate reconciliation with the general ledger.

#### 4. IMPROVE RECORDKEEPING OVER FUEL MANAGEMENT

The Department of Transportation provides fuel for approximately 3,800 district-owned vehicles and various other off-road equipments, (i.e. lawn movers and generators). Fuel is dispensed from nine (9) district-owned sites managed by the Transportation department. In an effort to safeguard fuel inventory, the Department of Transportation has installed safety locks on most fuel tanks; installed VIT transmitters in most district vehicles and issued approximately 232 fuel cards to custodians of off-road vehicles and vehicles not equipped with the VIT systems.

During the course of our audit, we made site observations at seven (7) of the nine (9) fueling site and surveyed 34 of the 232 cardholders and noted the following:

- Transportation's administrative staff could not identify the specific person having possession of 13 or 38% of the 34 fuel cards. Fourteen (14) or 41% of the listed cardholders responded to the survey. Of these, 10 or 29% of the cardholder's information (card number and cardholder's name) did not agree with the information provided by DOT; three (3) or 9% stated that they do not have an E.J. Ward card; and only one (1) or 3% of the cardholder information agreed with the information provided by DOT. Further discussion with DOT staff members who are responsible for the issuance and maintenance of the fuel cards disclosed that they are not completely sure exactly how many actual fuel cards were issued.
- One of the sites inspected did not have the required Florida Department of Environmental Protection (FDEP) Registration Placard displayed and one site displayed an expired certificate. Pursuant to Chapter 62-761, Florida Administrative Code, the FDEP require that among other documents, a current FDEP Registration Placard be displayed where everyone can see it.
- Additionally, we noted that the fuel tanks at one of the locations did not have security locks and one of the pump nozzle was broken and hanging.



The site manager was notified about the situation and he informed us that locks

were placed on the tanks and that a repair order was called in for the broken nozzle. We visited the site the following day and noted that the tank was not locked and the broken nozzle was secured to the fuel dispensing unit, but it was not repaired. Management informed us that someone removed the locks on the tank and that the tank cover appears to have been tampered with. We were also



informed that Florida Metro was called to repair the nozzle but that their response time is usually two to three days. Subsequent visits to the site confirmed that the fuel tank covers were locked and secured.

In addition to the fuel cards issued to individuals in various departments, DOT also issues some cards to its fuel site managers. These cards are used primarily for emergency system overrides where fuel has to be dispensed because of not being able to do so using the VIT system. Our inspection of the fueling sites found that none of the seven sites maintains a transaction log to document fuel dispensed using the override card. This increases the risks that fuel inventory could be misused and such misuse go undetected. Further, this typically results in differences in the fuel inventory information and diminishes the usefulness of fuel usage information.

**4.1 Maintain a transaction log to record the amount of fuel and pertinent information when dispensing fuel using an override fuel card and incorporate this information in the reconciliation process.**

**Responsible Department:** Department of Transportation.

**Management Response:**

DOT staff has provided transaction logs to be used for all non-id pieces of maintenance equipment such as lawnmowers, weed-eaters etc. DOT recommends this transaction log be maintained by the supervisor who has control of override cards.

**4.2 Inventory the E.J. Ward fuel cards and ensure that all cards are accounted for and the inventory record accurately reflects the card inventory.**

**Responsible Department:** Department of Transportation.

**Management Response:**

DOT staff has disabled all override fuel cards for all user departments, and has received a list of employees required to have override fuel cards. These fuel cards have been issued to selected employees and such assignment has been carefully recorded in the E.J. Ward system. Any changes in the custody of fuel cards must be reported to DOT to properly document these changes in the fuel management system.

**4.3 Ensure that the required certificates and postings are present and current.**

**Responsible Department: Department of Transportation.**

**Management Response:**

The required Florida Department of Environmental Protection (FDEP) Registration Placard that was missing from one of the fueling sites has been posted. DOT staff will share these findings with the Regulatory Compliance office in an attempt to expedite the annual registration process and to ensure compliance with this recommendation.

**4.4 Daily monitor the fuel tank locks and pumps for suspected acts of vandalism and introduce measures of deterrence as deemed necessary.**

**Responsible Department: Department of Transportation.**

**Management Response:**

Staff has been instructed to regularly monitor security devices installed on tanks and dispensing pumps and report to authorities any suspicious activities. DOT staff is developing a plan for video surveillance equipment to be installed at problem sites.

## **5. BETTER MONITORING OF FUEL USAGE AND SYSTEM DATA IS NEEDED**

We reviewed fueling information for 331 vehicles at 29 locations to determine the reasonableness of the transaction amounts and found that 17 or 5% of the vehicles received a volume of fuel that exceeded the vehicle's manufactured suggested fuel capacity reported to us by DOT on at least one occasion. In some cases, the variance was as inconsequentially small as less than one (1) gallon, while in other cases the variance was significant, as was the case where a 1995 Chevy Cavalier with a 15-gallon tank capacity receiving 30 gallons of unleaded fuel. Because vehicle fueling information is not adequately reviewed and reconciled, the reason for the variances is not known. In effect, the District's assets could have been misappropriated without timely proper intervention from management. Additionally, 11 or 38% of the 29 locations tested were not charged for their fuel usage.

Each department is responsible for monitoring its fuel usage. The tools to perform this monitoring function are already in place, as monthly fuel usage reports are generated in DOT. The DOT's standard operating procedures require that these reports be reviewed to identify unusual transactions and trends.

The DOT is responsible for ensuring that all departments are charged the appropriated amount for the fuel they consume. If the fuel usage is not charged to the proper location, then management's ability to properly manage their department's fuel usage is limited. In order for management to be effective, management must have reliable information. Transportation Administration needs to ensure that information on vehicle's fuel tank capacities is accurate.

### **RECOMMENDATIONS**

#### **5.1 Diligently review fuel usage reports to ensure that unusual transactions are identified and timely investigated.**

**Responsible Department:** Department of Transportation.

**Management Response:**

DOT staff monitors fuel reports on a daily basis in search of unusual activities. It is important to note that the E.J. Ward system requires that a tank capacity and usage limits are linked to the vehicle when acquired. However, the system will allow for some minor over dispensing of fuel, usually less than one (1) gallon of fuel. If this limit is exceeded, a message will be recorded as exceeding tank capacity which will prompt DOT staff to investigate such transactions. DOT is currently revisiting tank capacity of small pieces of equipment as well as limiting the amount of fuel allotment for miscellaneous fuel cards.



This information is being reviewed against the data in the E.J. Ward system and corrections will be made accordingly.

**5.2 Ensure that each department is charged for fuel usage both in gallons and dollars.**

**Responsible Department: Department of Transportation.**

**Management Response:**


DOT has provided a list of annual fuel usage, by department, to the Office of the Controller. A request has been made for each department to provide in its budget, projected fuel expenditures for 07/08 fiscal year. Effective July 1, 2007, each fueling transaction will be charged to the respective user.

## Appendix I – Management’s Response

### MEMORANDUM

April 12, 2007  
JK# 07- 14862  
(305) 234-3365

**TO:** Mr. Allen Vann, Chief Auditor  
Office of Management and Compliance Audits

**FROM:**  Jerry Klein, Administrative Director  
Department of Transportation

**SUBJECT: RESPONSE TO AUDIT ON FUEL INVENTORY CONTROLS**

In response to the Audit of Fuel Inventory Controls conducted by the Office of Management and Compliance Audits, the Department of Transportation (DOT) has summarized its responses to all of the finding outlined in this report. Most of the findings have already been addressed and corrective actions have been established.

#### RECOMMENDATIONS:

##### 1.1 Strengthen controls and reconciliation over fuel inventory received.

DOT management concurs with the findings and the recommendations of the auditors and has already implemented this suggestion. While many of these procedures had been longstanding, DOT management already has taken the necessary steps to improve security and reliability in their fuel inventory controls. A directive has been issued to all site supervisors to ensure that a staff member monitors the fuel delivery process. This includes the printing of Veeder-Root fuel inventory in-tank levels, before and after a fuel delivery, and the shutting down of fuel dispensing during the fuel delivery process. This minimizes any discrepancies in the inventory. Minimal differences may still exist because of time of day the fuel delivery is received, atmospheric temperature and settling time after fuel delivery.

##### 2.1 Transportation staff responsible for processing vendor’s fuel invoices should enforce the pricing terms of the fuel bids.

As summarized in the audit report, during the latter part of 2005, Miami-Dade County was hit by 3 hurricanes which affected the awarded vendor’s capabilities to supply the district with much needed fuel at the contracted bid price. As a result, an emergency was declared and the decision to accept the increase in price was made and approved by the Office of Procurement Management.

With regard to the samples used in the audit report, the first invoice dated 08/22/2005 was as a result of an overcharge by the fuel supplier, by charging us for unleaded instead of diesel fuel. A credit was requested by staff and a new invoice was issued by 08/30/2005. As noted in 2.2 below, procedures have been established to ensure invoiced prices are accurate before payments are made.

2.2 Revise fuel bids to specify which OPIS price should be used for invoicing purposes and require adherence by fuel vendors.

As a requirement of the bid, the vendors are required to provide the district with the weekly Oil Price Information Service (OPIS) for verification of pricing. One of the vendors on bid was providing DOT with daily OPIS reports and sending the procurement department a weekly OPIS report. This discrepancy in OPIS pricing resulted in the difference for the overpayment. DOT staff is seeking reimbursement from the fuel supplier. Additionally, DOT has subscribed to the OPIS fuel reports (Port of Miami) and closely monitors the changes in fuel prices from all fuel suppliers.

2.3 Ensure that all fuel purchases are reconciled to control reports and are included in the monthly fuel tax rebate application filed with the Florida Department of Revenue.

With regard to the recommendation to submit timely tax rebate claims, DOT staff agrees and the Vehicle Maintenance Division has assumed the responsibility for this process to expedite the filing of these returns. Additionally, DOT staff has contacted the Florida Department of Revenue and has initiated procedures to recover the tax rebates not previously filed.

3.1 Discontinue the practice of increasing the fuel inventory account balance by the gross gallons of fuel ordered.

The longstanding practice of using the gross amount as the fuel received has been discontinued. It is important to note that payments continue to be made based on net amount received only.

3.2 Transportation administration should ensure that fuel staff members are trained on proper reconciliation of the fuel inventory accounts against the general ledger.

DOT staff, in cooperation with the Controllers Office has been developing procedures to ensure that this process is accomplished on a monthly basis. Revisions to the calculations to determine the average fuel cost are being made to ensure the appropriate reconciliation with the general ledger.

4.1 Maintain a transaction log to record the amount of fuel and pertinent information when dispensing fuel using override fuel cards.

DOT staff has provided transaction logs to be used for all non-id pieces of maintenance equipment such as lawnmowers, weed-eaters etc. DOT recommends this transaction log be maintained by the supervisor who has control of override cards.

4.2 Inventory the E. J. Ward fuel cards and ensure that all cards are accounted for and the inventory record accurately reflects the card inventory.

DOT staff has disabled all override fuel cards for all user departments, and has received a list of employees required to have override fuel cards. These fuel cards have been issued to selected employees and such assignment has been carefully recorded in the E.J. Ward system. Any changes in the custody of fuel cards must be reported to DOT to properly document these changes in the fuel management system.

4.3 Ensure that the required certificates and posting are present and current.

The required Florida Department of Environmental Protection (FDEP) Registration Placard that was missing from one of the fueling sites has been posted. DOT staff will share these findings with the Regulatory Compliance office in an attempt to expedite the annual registration process and to ensure compliance with this recommendation.

4.4 Daily monitor the fuel tank locks and pumps for suspected acts of vandalism and introduce measures of deterrence as deemed necessary.

Staff has been instructed to regularly monitor security devices installed on tanks and dispensing pumps and report to authorities any suspicious activities. DOT staff is developing a plan for video surveillance equipment to be installed at problem sites.

5.1 Diligently review fuel usage reports to ensure that unusual transactions are identified and timely investigated.

DOT staff monitors fuel reports on a daily basis in search of unusual activities. It is important to note that the E.J. Ward system requires that a tank capacity and usage limits are linked to the vehicle when acquired. However, the system will allow for some minor over dispensing of fuel, usually less than one (1) gallon of fuel. If this limit is exceeded, a message will be recorded as exceeding tank capacity which will prompt DOT staff to investigate such transactions. DOT is currently revisiting tank capacity of small pieces of equipment as well as limiting the amount of fuel allotment for miscellaneous fuel cards.

Page 4  
JK#07-14862

This information is being reviewed against the data in the E.J. Ward system and corrections will be made accordingly.

5.2 Ensure that each department is being charged for fuel usage both in gallons and dollars.

DOT has provided a list of annual fuel usage, by department, to the Office of the Controller. A request has been made for each department to provide in its budget, projected fuel expenditures for 07/08 fiscal year. Effective July1, 2007, each fueling transaction will be charged to the respective user.

JK:slg

cc: Ms. Ofelia San Pedro  
Mr. Orlando Alonso



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**Title VII of the Civil Rights Act of 1964**, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

**Title IX of the Education Amendments of 1972** - prohibits discrimination on the basis of gender.

**Age Discrimination in Employment Act of 1967 (ADEA)**, as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

**The Equal Pay Act of 1963**, as amended - prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

**Section 504 of the Rehabilitation Act of 1973** - prohibits discrimination against the disabled.

**Americans with Disabilities Act of 1990 (ADA)** - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

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