

Office of Inspector General

City of New Orleans

Inspection of City of New Orleans Fuel Receiving Controls

**E. R. Quatrevaux
Inspector General**

Final Report

July 2, 2013

OFFICE OF INSPECTOR GENERAL
CITY OF NEW ORLEANS



ED QUATREVAUX
INSPECTOR GENERAL

May 20, 2013

RE: Inspection of City of New Orleans Fuel Receiving Controls

I certify that the inspector general personnel assigned to this project are free of personal or other external impairments to independence.

A handwritten signature in blue ink, appearing to read 'E.R. Quatrevaux', is positioned above the printed name.

E.R. Quatrevaux
Inspector General

Inspection of City of New Orleans Fuel Receiving Controls

OIG-I&E-12-006

Statement of Independence	i.
Executive Summary	v.
I. Objectives, Scope, and Methodology.....	1
II. Introduction.....	2
III. Findings.....	5
Finding 1. The City’s fuel contracts did not include procedures to verify fuel volume for deliveries made to facilities with electronic monitoring devices..	5
Finding 2. The City did not verify receipt of approximately 48,000 gallons of fuel delivered to facilities without electronic monitoring devices between January 2012 and October 2012.	8
Finding 3. As a result of billing errors, the City overpaid approximately \$36,000 in federal excise taxes for diesel fuel.....	9
Finding 4. The City did not require vendors to submit documentation that verified how much fuel was loaded onto delivery vehicles.	10
Finding 5. The City did not independently verify that it paid the correct price for fuel.....	12
IV. Conclusion and Recommendations	14
Conclusion.....	14
Recommendations.....	14
Recommendation 1. The City should establish official receiving procedures for facilities with electronic monitoring devices	14
Recommendation 2. The City should install electronic monitoring devices at all fuel facilities	15

Recommendation 3. The City should review all invoices before issuing payment 15

Recommendation 4. The City should require all fuel vendors to submit bills of lading with invoices 15

Recommendation 5. The City should independently verify fuel prices before issuing payments to vendors 16

V. Official Comments from City of New Orleans 17

LIST OF FIGURES

Figure 1. City of New Orleans Fuel Facilities with Electronic Monitoring Devices 3
Figure 2. City of New Orleans Fuel Facilities without Electronic Monitoring Devices 4
Figure 3. Excerpt of Fuel Inventory Reconciliation Report Completed by MMG 6
Figure 4. Analysis of Sample BOLs Provided by Retif Oil & Fuel..... 11
Figure 5. Percentage Difference in Gross/Net Gallons based on BOLs Received 12
Figure 6. Estimated Overpayments to Retif Oil & Fuel (Jan. 2012 – Sept. 2012)... 12

EXECUTIVE SUMMARY

The Office of Inspector General (OIG) conducted an inspection of the City's policies and procedures related to fuel receiving.

The primary objective of the inspection was to determine if there were adequate safeguards in place to ensure that the amount of fuel purchased by the City was delivered to designated facilities at the correct price per gallon. The scope of this inspection included the City's fuel receiving procedures between January 2012 and October 2012, a period during which the City received fuel from three different vendors.

The inspection includes the following major findings:

- The City did not have a system in place to verify upon delivery how much fuel was received at its primary fueling locations.
- The City did not manually verify receipt of approximately 48,000 gallons of fuel delivered to facilities without electronic monitoring devices, as required by the City's fuel contracts.
- The City did not independently verify that it was paying the correct price per gallon for fuel.
- The City paid approximately \$36,000 in federal fuel excise taxes it did not owe.

Based on these findings, we recommended that:

- The City establish receiving procedures for facilities with electronic monitoring devices.
- The City install electronic monitoring devices at all fuel facilities.
- The City independently verify fuel prices before issuing payments to vendors.

A draft of this report was provided to the Chief Administrative Office for review and comment prior to publication. The City comments are attached.

I. OBJECTIVES, SCOPE, AND METHODOLOGY

The Office of Inspector General of the City of New Orleans (OIG) conducted an inspection of the City's policies and practices related to fuel receiving. The objective of the inspection was to determine whether there were adequate safeguards in place to ensure that the amount of fuel purchased by the City was delivered to designated facilities at the correct cost.

The scope of this inspection included the City's management and oversight of fuel deliveries and payments made between January 2012 and October 2012, a period that included purchases from three different fuel providers. Our scope excluded practices related to fuel dispensed during this period, because the City was in the process of soliciting bids for a replacement automated fuel dispensing system.

To conduct this inspection, we interviewed personnel from the Equipment Maintenance Division, the Bureau of Purchasing, the Fire Department, Materials Management Group, Inc., Department of Parks and Parkways, Retif Fuel & Oil, Petroleum Traders Corporation, and Henry Consulting. Inspectors obtained and reviewed the following documents provided by the aforementioned parties:

- Bulk fuel contracts and amendments (2008-2012);
- Records related to the City's bid solicitations (ITBs) of bulk fuel (2006 and 2011);
- Vendor invoices, delivery tickets, and bills of lading submitted to the City between January 2012 and October 2012;
- Fuel pricing reports published by the Oil Price Information Service between January 2012 and October 2012; and
- Fuel reconciliations performed by Materials Management Group, Inc. between 2008 and 2012.

The inspection was conducted in accordance with the *Principles and Standards for Offices of Inspector General for Inspections, Evaluations, and Reviews*.¹ This report includes findings and recommendations to improve the management of the City's fuel receiving procedures.

¹ "Quality Standards for Inspections, Evaluations, and Reviews by Offices of Inspector General," *Principles and Standards for Offices of Inspector General* (Association of Inspectors General, 2004).

II. INTRODUCTION

The Office of Inspector General of the City of New Orleans (OIG) conducted an inspection of the City's policies and practices related to receipt of fuel. The objective of the inspection was to determine whether there were adequate safeguards in place to ensure that the amount of fuel purchased by the City was delivered to designated facilities at the correct cost.

The City's fuel supply is managed by the Equipment Maintenance Division (EMD) within the Chief Administrative Office (CAO). According to the City's 2013 budget document, EMD is responsible for providing "comprehensive fuel services for the City's fleet of vehicles and equipment as required by City departments to meet their operational needs and program goals." The City budgeted approximately \$6.1 million for fuel purchases in 2013.

The City purchases gasoline and diesel from vendors who obtain fuel wholesale from local refineries. At the time of our inspection, the City's fuel providers were Petroleum Traders, Inc. (gasoline) and Henry Consulting (diesel). These vendors began providing fuel to the City in 2012 at the conclusion of a formal procurement process.² Prior to selection of these vendors, Retif Oil & Fuel provided both gasoline and diesel to the City.³

The City has fifteen facilities that receive deliveries from its fuel vendors. According to EMD personnel, four of the City's fuel facilities have electronic monitoring devices in place.⁴ These devices alert vendors when fuel inventory falls below 65% of capacity and initiates the delivery process. The locations of these four facilities and their respective fuel storage capacities are listed in Figure 1.

² Petroleum Traders, Inc. began providing gasoline in April 2012 and Henry Consulting began providing diesel in September 2012.

³ According to the City's purchasing system, BuySpeed, Retif Oil & Fuel was the City's sole fuel provider since at least 2006.

⁴ The City uses an automatic tank gauge device manufactured by Gilbarco Veeder-Root.

Figure 1: City of New Orleans Fuel Facilities with Electronic Monitoring Devices

Location	Storage Capacity
Broad Street Fuel Facility (506 North Broad St.)	72,000 gallons gasoline (6 tanks) 36,000 gallons diesel (3 tanks)
New Orleans East Facility (10200 Old Gentilly Rd.)	10,000 gallons gasoline 10,000 gallons diesel
Parkway Fuel Facility ⁵ (2829 Gentilly Blvd.)	12,000 gallons gasoline (2 tanks) 6,000 gallons diesel
Algiers Fuel Facility (2341 Wall Blvd.)	5,000 gallons gasoline 5,000 gallons diesel

In addition to the locations listed in Figure 1, the City has eleven fuel facilities without electronic monitoring devices in place, which require EMD personnel to make arrangements for fuel deliveries with vendors. These facilities are listed in Figure 2.

⁵ According to EMD personnel, the gasoline tanks at this facility are not currently in operation. The City is working to repair these tanks.

Figure 2: City of New Orleans Fuel Facilities without Electronic Monitoring Devices⁶

Location	Storage Capacity
NOFD Engine 1 (2920 Magazine Street)	2,500 gallons diesel
NOFD Engine 6 (4550 Old Gentilly Road)	500 gallons diesel
NOFD Engine 14 (200 South Robertson Street)	500 gallons diesel
NOFD Engine 16 (2000 MLK Boulevard)	500 gallons diesel
NOFD Engine 17 (4115 Woodland Drive)	500 gallons diesel
NOFD Engine 20 (424 Opelousas Avenue)	500 gallons diesel
NOFD Engine 24 (1040 Poland Avenue)	500 gallons diesel
NOFD Engine 25 (4230 South Carrollton Avenue)	500 gallons diesel
NOFD Engine 37 (13400 Chef Menteur Highway)	500 gallons diesel
Joseph M. Bartholomew Golf Course (6514 Congress Drive)	1,000 gallons gasoline
Central Maintenance Garage ⁷ (3800 Alvar Street)	3,000 gallons gasoline 1,000 gallons diesel

⁶ Retif Oil & Fuel previously installed electronic monitoring devices at all NOFD locations except Engine 1. These devices were removed and not replaced after the diesel fuel contract was awarded to Henry Consulting 2012.

⁷ According to EMD personnel, this facility did not regularly receive fuel deliveries.

III. FINDINGS

The City spends approximately \$6 million per year on gasoline and diesel fuel. To safeguard this investment, effective controls are necessary to ensure that the amount of fuel purchased by the City is delivered to designated facilities at the correct cost. Inspectors found several deficiencies in the City's fuel receiving controls during the course of this review.

Finding 1: The City's fuel contracts did not include procedures to verify fuel volume for deliveries made to facilities with electronic monitoring devices.

Inspectors reviewed the City's policy memoranda and fuel contracts to determine whether City employees were required to verify the amount of fuel received upon delivery to facilities with electronic monitoring devices. The fuel contracts that the inspectors reviewed included the following provision:

All metered deliveries will be verified, at the time of delivery by a City employee, by stick (ruled) measurement. Any discrepancies must be documented and immediately submitted to the Equipment Maintenance Division Fuel Services Supervisor. In any event, the stick (ruled) measurement will be used to determine the volume delivered.⁸

This procedure was not relevant to the City's facilities with electronic monitoring devices, because these facilities were unmanned. The contracts did not include any additional receiving procedures. EMD personnel stated that they had the ability to confirm how much fuel was delivered to these facilities using the electronic monitoring devices, but this process was not required before invoices were approved for payment.⁹

The Director of Fleet Operations told inspectors that, although the City did not verify the volume of fuel received upon delivery to facilities with electronic monitoring devices, it had a system in place to reconcile its fuel inventory at these locations. Materials Management Group, Inc. (MMG), the City's environmental services consultant, provided a reconciliation of the City's

⁸ ITB #2298-00147 and ITB #2297-01191

⁹ EMD personnel informed inspectors that they were not able to access electronic monitoring devices at Old Gentilly Road, Gentilly Blvd., and Wall Blvd. using their computers at City Hall because of technical difficulties with the modem. They made several requests to the City's ITI Department, but the problem was not resolved as of April 2013. Instead, they used a personal laptop computer at City Hall to access the electronic monitoring devices.

fuel inventory from July 2008 until the present.¹⁰ According to MMG, the City typically requested an updated version of the reconciliation report every six months.

To perform the reconciliation, MMG calculated the number of gallons on hand at the end of the month (after accounting for fuel delivered and fuel dispensed) and compared that calculation to the actual number of gallons on hand according to the electronic monitoring device inside of the fuel tank. A positive variance indicated surplus fuel, while a negative balance indicated a fuel shortage. According to the City’s Director of Fleet Operations, there was not an official variance threshold in place that would compel corrective action, but he believed the industry standard was 3 percent. An excerpt of this reconciliation report is shown in Figure 3.¹¹

Figure 3: Excerpt of Fuel Inventory Reconciliation Report Completed by MMG

Month	Fuel Inventory (gallons)			Fuel Usage (gallons)			Balance	End Readings	Variance	% Variance
	Begin Readings	Fuel Delivered	Total Inventory	Auto Fueling	Manual Fueling	Total Fuel Usage				
Jan-12	62,583	102,345	164,928	122,917	0	122,917	42,011	43,740	1,729	1.0%
Feb-12	43,740	106,439	150,179	124,140	0	124,140	26,039	28,114	2,075	1.4%
Mar-12	28,114	144,723	172,837	132,223	0	132,223	40,614	43,878	3,264	1.9%

According to MMG, Retif Oil & Fuel (the City’s sole fuel supplier until April 2012) provided all of the data related to fuel inventory and fuel usage in Figure 3, except for manual fueling.¹² MMG used the data to complete the reconciliation report.

This reconciliation process met the City’s needs until Retif Oil & Fuel was replaced by Petroleum Traders, Inc. (April 2012) and Henry Consulting (September 2012). According to MMG, the variance in the reconciliation report increased sharply after the transition to new vendors, because they were no longer receiving all of the required data (beginning inventory, fuel delivered, and ending inventory) electronically from a single vendor.¹³ MMG attempted to compile these data manually using hard copies of fuel inventory receipts collected for DEQ requirements and hard copies of fuel delivery tickets.¹⁴ Their initial attempt to reconcile the

¹⁰ In addition to performing the fuel inventory reconciliation, MMG oversees the City’s fuel facilities by ensuring they are in compliance with Louisiana Department of Environmental Quality (DEQ) regulations, performs maintenance, and oversees manual fueling operations in the event of power outages or technical difficulties.

¹¹ This excerpt only includes the City’s gasoline inventory. A similar reconciliation was also performed for diesel fuel delivered to these facilities.

¹² Data related to non-manual fuel usage were tracked by automated fuel dispensing software provided by Retif Oil & Fuel.

¹³ The variance increases were positive, an indicator that the actual amount of fuel on hand was greater than the calculated value.

¹⁴ MMG personnel routinely visited CNO fuel facilities and printed inventory receipts to satisfy DEQ requirements.

fuel inventory using this method was unsuccessful because of incomplete data and documentation.

Although the reconciliation approach shown in Figure 3 allowed the City to reconcile its overall fuel inventory until changing vendors in 2012, it was ineffective as a receiving mechanism for the following reasons:

1. The reconciliation report was typically submitted to the City every six months. The infrequency of reporting decreased the likelihood of identifying a specific delivery that did not match the amount ordered.
2. The City made payments to vendors before verifying the number of gallons delivered.
3. The fuel vendor (Retif Oil & Fuel) provided most of the data used for the reconciliation report and the information was not independently verified by MMG or City personnel.

MMG and the City took several steps to correct deficiencies in the reconciliation process during the course of this inspection:

1. *Fuel deliveries*: MMG purchased Veeder-Root software that enabled it to access data relating to the City's fuel inventory and confirm how much fuel was delivered to each location.¹⁵ MMG offered to work with EMD to confirm the volume of each fuel delivery electronically and sign off before the vendor invoice was submitted to accounts payable for payment.
2. *Beginning/Ending Readings*: MMG agreed to provide data related to the beginning and end readings using the electronic monitoring software and documentation already generated for DEQ compliance.
3. *Fuel usage*: This process remained unchanged; MMG agreed to provide information about manual fueling operations, and EMD agreed to provide data related to automatic fueling from the automated fuel dispensing software system.

¹⁵ According to MMG, the Veeder-Root software measures the volume of fuel present at regular intervals. This data can be queried for up to two weeks before it is automatically erased.

According to MMG, these steps will be applied to the reconciliation process moving forward. If implemented correctly, this approach will enable the City to verify the amount of fuel received before issuing payments to vendors.

Finding 2: The City did not verify receipt of approximately 48,000 gallons of fuel delivered to facilities without electronic monitoring devices between January 2012 and October 2012.

As stated in the previous finding, the City's fuel contracts included a provision that required verification of the amount of fuel delivered using a fuel measurement stick. Inspectors interviewed officials overseeing fuel facilities without electronic monitoring devices to determine whether City personnel complied with this requirement and learned that none of the deliveries made to these locations was actually verified.

NOFD Facilities: Vendors delivered approximately 40,000 gallons of diesel fuel to NOFD facilities between January 2012 and October 2012. NOFD policy states that the Company Officer on duty was responsible for logging fuel deliveries in a daily log. The number of gallons listed on the delivery ticket issued by the shipper was used to calculate the amount of fuel on hand.¹⁶ However, this approach was entirely dependent on the accuracy of the number of gallons listed on the delivery ticket. For example, if the delivery ticket listed 500 gallons but only 200 gallons were delivered, NOFD officials would not be able to detect the discrepancy until they ran out of fuel more quickly than anticipated.

The NOFD Acting Director for Administration informed inspectors that fuel deliveries were not manually verified upon delivery by inserting a fuel measurement stick into the tank.¹⁷ This increased the likelihood of paying for fuel that was not received and/or miscalculating the number of gallons on hand.

NOFD policy also required the Company Officer to measure fuel inventory manually every Monday morning and measure the water content of the fuel tank on the last Monday of each month.¹⁸ These processes are critical to tracking NOFD fuel inventory and protecting the integrity of its fuel tanks and vehicles.¹⁹ According to the NOFD Acting Director for

¹⁶ NOFD Standard Operating Procedure A&E-10-09, Section 8.3.

¹⁷ The NOFD Acting Director for Administration informed inspectors that Retif Oil & Fuel had previously provided electronic monitoring devices for eight of the nine NOFD facilities with fuel tanks, but the devices were removed shortly after the diesel contract was awarded to Henry Consulting. These electronic devices were used to monitor inventory and initiate fuel orders, but they were not used to verify the volume of fuel delivered.

¹⁸ NOFD Standard Operating Procedure A&E-10-09, Section 8.4.

¹⁹ Excessive amounts of water in fuel tanks can promote corrosion and damage vehicles.

Administration, these processes had not been occurring regularly at all facilities due to a lack of functional equipment and supplies. Specifically, the following items were needed:

- Fuel measurement sticks for Engine 1 (2,500 gallons) and Engine 14 (500 gallons);
- Fuel chart conversion sheets; and
- Specialized paste to measure the amount of water contained in fuel storage tanks at all nine NOFD fuel facilities

According to the NOFD Acting Director for Administration, NOFD contacted EMD four times since December 2012 to obtain these items. EMD personnel did not respond until May 2013.

Joseph M. Bartholomew Golf Course: Vendors delivered approximately 6,000 gallons of gasoline to the Joseph M. Bartholomew Golf Course between January 2012 and September 2012. The Department of Parks and Parkways manages and operates the golf course. According to the Chief of Operations, there was no formal process in place to verify upon delivery how much fuel was received. There was a fuel measurement stick onsite, but it was only used to track inventory.

Central Maintenance Garage: Vendors delivered approximately 2,000 gallons of diesel fuel to the Central Maintenance Garage between January 2012 and October 2012. EMD personnel informed inspectors that the Central Maintenance Garage did not receive fuel on a regular basis and did not confirm fuel volume when it was delivered.

Finding 3: As a result of billing errors, the City overpaid approximately \$36,000 in federal excise taxes for diesel fuel.

According to Internal Revenue Service (IRS) Publication 510, federal law provides a fuel excise tax exemption for fuel purchased by a state or political subdivision for its own exclusive use.²⁰ However, municipalities are not exempt from paying the Leaking Underground Storage Tank Tax (LUST Tax).²¹

During a review of vendor invoices, inspectors discovered that Henry Consulting charged the City \$0.244 in federal taxes for each gallon of diesel fuel purchased since the inception of the contract. This amount was equivalent to the federal excise tax (from which the City is exempt)

²⁰ The federal excise tax on diesel fuel is \$0.244 per gallon.

²¹ The federal LUST tax on diesel fuel is \$0.001 per gallon.

but did not include the LUST tax. As a result, the City unnecessarily paid an additional \$0.243 per gallon of diesel fuel purchased from Henry Consulting.²²

Inspectors notified the Chief Administrative Officer and Director of Fleet Operations about these overpayments via letter on January 30, 2013. The letter referred to approximately \$22,500 in federal excise tax overpayments made between September 2012 and December 2012. In addition, the City paid \$14,000 in federal excise taxes it did not owe in early 2013. According to the Director of Fleet Operations, the City is working with the vendor to obtain a refund of approximately \$36,000.

Inspectors reviewed recent invoices submitted by the vendor and confirmed that the City was no longer paying federal excise taxes (\$0.244/gallon) on diesel fuel, however, these invoices did not include federal LUST taxes (\$0.001/gallon) that the City is required to pay.

Finding 4: The City did not require vendors to submit documentation that verified how much fuel was loaded onto delivery vehicles.

Fuel expands or contracts depending on temperature and API gravity of the fuel.²³ The fuel industry uses a formula established by the American Petroleum Institute (API) to account for these fluctuations.²⁴ The number of gallons dispensed at the refinery (the “gross” gallons) is adjusted to account for the expansion or contraction of fuel above or below 60 degrees Fahrenheit and differences in API gravity. That calculation results in the number of “net” gallons corrected for temperature and API gravity. Bulk fuel customers are typically charged for net gallons received, because the number of net gallons represents the amount of fuel that was actually delivered by the vendor.

Louisiana state law requires refiners to provide fuel vendors with a receipt, invoice, or meter ticket specifying the petroleum product received and the following information: (a) gross gallons received; (b) temperature at the time of loading; (c) API gravity; and (d) net gallons.²⁵ This document is typically referred to as a bill of lading (BOL). BOLs are standard industry practice, although the City’s fuel contracts did not require vendors to submit BOLs along with invoices.

²² The additional \$0.243 amount represents the difference between the federal excise tax and the LUST tax.

²³ Developed by the American Petroleum Institute, API gravity is a measure of how heavy or light a petroleum-based liquid is compared to water.

²⁴ American Petroleum Institute, Table 6B – *Generalized Products, Correction of Volume to 60°F Against API Gravity at 60°F*.

²⁵ La. R.S. 3:4690(B)(2).

Inspectors requested copies of BOLs and corresponding invoices from all three fuel vendors to verify that vendors charged the City the correct amount for fuel delivered. Henry Consulting and Petroleum Traders, Inc. provided BOLs that corresponded with each of their invoices. A review of these documents showed that the City was charged for the net gallons listed on the BOL. Each BOL provided by Henry Consulting and Petroleum Traders Inc. indicated that the net number of gallons was lower than the gross.

To date, Retif Oil & Fuel has provided inspectors only three sample BOLs. A comparison of these documents to invoices showed that the company charged the City for gross gallons, a higher amount than the charge for net gallons listed on the BOL. The fuel amounts and charges are summarized in Figure 4.

Figure 4: Analysis of Sample BOLs Provided by Retif Oil & Fuel

Date	BOL #	Gross Gallons (from BOL)	Net Gallons (from BOL)	Invoice #	Gallons (from Invoice)	Difference (Invoice-BOL)	Per Gallon Cost (Invoice)	Overpayment
7/20/2012	232100	8,000	7,894	690600	8,000	106	\$3.0659	\$324.99
8/2/2012	234995	8,000	7,881	693534	8,000	119	\$3.0490	\$362.83
8/24/2012	239547	6,000	5,918	697983	6,000	82	\$3.2951	\$270.20
Total						307		\$958.01

As shown in Figure 4, based on these three invoices, the City paid an additional \$958, because Retif Oil & Fuel charged for 307 gallons that were never delivered.

Inspectors contacted Retif Oil & Fuel after discovering these discrepancies and requested BOLs corresponding to the invoices previously provided (January 2012 through September 2012). According to Retif Oil & Fuel, they did not generate BOLs for most of the City's fuel purchases, because the fuel originated from their Harvey facility rather than a refinery. However, 130 of the 181 invoices provided by Retif Oil & Fuel listed a BOL number in the same field as the three samples listed above. The presence of a BOL number appeared to indicate that, for these deliveries, the fuel originated from a refinery. Inspectors again asked Retif Oil & Fuel for these BOLs and told the vendor that we had documented BOL numbers listed on invoices. Despite repeated requests for these BOLs, inspectors did not receive these documents.

To estimate the difference between the gross amount and net amount delivered to the City from Retif Oil & Fuel, inspectors calculated the percentage difference in gross and net gallons based on the BOLs provided by Petroleum Traders, Inc. (gasoline) and Henry Consulting (diesel). This calculation is shown in Figure 5.

Figure 5: Percentage Difference in Gross/Net Gallons based on BOLs Received

Vendor/Fuel Type	Gross Gallons	Net Gallons	Difference (Gallons)	Variance (%)
Petroleum Traders, Inc./Gasoline	897,023	883,868	13,155	1.48%
Henry Consulting/Diesel	56,796	56,098	698	1.24%

As shown in Figure 5, the net gallons were approximately 1.48% lower for gasoline and 1.24% lower for diesel than the gross gallons based on amounts listed on the BOLs.

Inspectors then applied the variance rates calculated in Figure 6 (1.48% and 1.24%) to the number of gallons listed on each of the 130 invoices from Retif Oil & Fuel that included a BOL identification number. Figure 6 shows the difference between the gallons listed on invoices and the estimated net gallons was multiplied by the average per gallon cost of fuel during the sample period.

Figure 6: Estimated Overpayments to Retif Oil & Fuel (January 2012 – September 2012)

Fuel Type	Gross Gallons (from Invoice)	Estimated Net Gallons	Variance	Average Per-Gallon Cost (Jan 2012 - Sept 2012)	Estimated Overpayments
Gasoline	358,121	352,821	5,300	\$3.1606	\$16,751.78
Diesel	238,495	235,538	2,957	\$3.1897	\$9,433.02
Total			8,258		\$26,184.80

Inspectors estimated that 8,258 gallons were not delivered to City facilities at a cost of \$26,184.80, because Retif Oil & Fuel charged the City for gross gallons instead of temperature and API gravity adjusted net gallons.

Finding 5: The City did not independently verify that it paid the correct price for fuel.

The City purchased fuel based on a per gallon markup fee above the weekly average rack price published by the Oil Price Information Service (OPIS). The rack price represents the wholesale price at which refineries sell various types of fuel to suppliers at specific locations throughout the country. OPIS electronically publishes the weekly average rack price on Thursdays for the following week.

The bid solicitation (ITB #2297-01191) for bulk fuel issued by the City in September 2011 stipulated that fuel vendors were required to submit copies of the weekly OPIS report that

served as the basis for billing.²⁶ According to the fuel services administrator, neither of the current fuel vendors (Petroleum Traders Corporation, Inc. and Henry Consulting) provided the City with these reports. The fuel services administrator stated that the City's previous fuel vendor, Retif Oil & Fuel, had provided copies of OPIS reports, but discontinued the practice sometime in 2010.

Inspectors obtained copies of invoices submitted by the three suppliers between January 2012 and October 2012 to determine whether vendors charged the City the correct per-gallon rate as published by OPIS. We found several minor errors during this analysis; however, the dollar variances for each vendor did not exceed 1 percent.

In addition to the average weekly rate listed on the OPIS reports, the City paid vendors a per-gallon markup fee.²⁷ Both the 2006 and 2011 bid solicitations required vendors to delineate these markup fees as a separate line item on invoices submitted to the City.²⁸ However, invoices submitted to the City by all three vendors combined the OPIS price and vendor markup fee on the same line.

Although inspectors did not find any significant errors, the City's failure to check OPIS reports prevented it from verifying it was paying the correct price for fuel.

²⁶ The previous bid solicitation (ITB #2298-00147), issued in October 2006, stated that the selected vendor "may" be required to furnish a copy of the applicable OPIS report.

²⁷ The vendor markup fees were as follows for the period covered by this inspection: Retif Oil & Fuel, \$0.0695/gallon; Petroleum Traders Corp., \$0.0227/gallon; Henry Consulting, \$0.0600/gallon.

²⁸ This requirement was also outlined in Addendum No. 1 of the 2011 ITB.

IV. CONCLUSION AND RECOMMENDATIONS

CONCLUSION

Inspectors found several weaknesses in the City's fuel receiving process. The City did not confirm receipt of all fuel deliveries, made payments for taxes it did not owe, and did not independently verify it was paying the correct per-gallon price for fuel.

EMD personnel have worked to correct some of these problems during the course of this review, but further steps are necessary to ensure that the fuel purchased by the City is delivered to its facilities at the correct cost. The following recommendations are practical and cost effective solutions that can be achieved with current staffing levels.

RECOMMENDATIONS

Recommendation 1. The City should establish official fuel receiving procedures for facilities with electronic monitoring devices.

The City's reconciliation process has undergone several significant changes during the last year. MMG offered to make changes to its reconciliation process that would enable the City to verify the amount of fuel received upon delivery to facilities with electronic monitoring devices. The City should adopt these changes and (1) develop a detailed protocol that clearly assigns responsibilities to EMD and MMG personnel, (2) develop the necessary forms for documenting these procedures, and (3) establish official variance thresholds that would trigger follow-up actions with the vendor. The revised protocol should be attached as an amendment to the City's fuel contracts and should be sufficiently robust to endure changes in vendors (both fuel providers and the environmental services consultant) and City staff.

In addition, the City's ITI Department should make it a priority to provide EMD personnel with the necessary hardware upgrades required to access the electronic monitoring devices located at Old Gentilly Road, Gentilly Blvd., and Wall Blvd.

Recommendation 2. The City should install electronic monitoring devices at all fuel facilities.

Inspectors found that City personnel did not confirm receipt of almost 48,000 gallons of fuel made to NOFD facilities, the Joseph M. Bartholomew Golf Course, and the Central Maintenance Garage. Manually verifying all fuel deliveries at these facilities may not be feasible since employees, particularly firefighters, could be offsite when the fuel is delivered. Instead of requiring manual verification using a fuel measurement stick, the City should install electronic monitoring devices at these facilities. Doing so would enable the City to monitor its fuel inventory reliably and integrate these facilities into its revised receiving process.

Recommendation 3: The City should review all invoices prior to issuing payment.

Inspectors found that the City overpaid approximately \$36,000 because the diesel fuel vendor erroneously charged the City federal taxes that it did not owe. The federal taxes were listed as a line item on the invoices and should have been detected by the fuel services administrator. In the future, the City should ensure that invoices are reviewed in detail before they are forwarded to accounts payable.

The Director of Fleet Administration informed inspectors that the City is working with Henry Consulting to recover the federal tax overpayments made after the inception of the contract. The City should review additional invoices from Henry Consulting & Petroleum Traders, Inc. to determine if any additional federal or state tax overpayments were made.

In addition, the City should instruct Henry Consulting to adjust its invoices to ensure that it is paying the federal LUST tax (\$0.001/gallon) for diesel fuel.

Recommendation 4: The City should require all fuel vendors to submit bills of lading with invoices.

Inspectors found that the City paid for fuel it did not receive because it did not require Retif Oil & Fuel to submit bills of lading that listed temperature- and API gravity-adjusted net gallons. Moving forward, the City should amend its fuel contracts to require all vendors to submit BOLs with invoices and clearly state that it will only pay for the net gallons delivered. In addition, the City should require that copies of delivery tickets are provided with invoices.

Inspectors estimated that the City made \$26,000 in overpayments to Retif Oil & Fuel, because it charged for gross gallons instead of net gallons. The City should obtain copies of BOLs from Retif Oil & Fuel and compare the number of net gallons listed on the BOLs to the number of gallons listed on the corresponding invoices. The City should make a concerted effort to recover all monies paid for fuel that was not received.

Recommendation 5: The City should independently verify fuel prices before issuing payments to vendors.

The City did not have the ability to verify whether it was paying the correct price for fuel, because vendors did not submit OPIS reports or delineate markup costs on invoices as required by contract. The City did not require vendors to abide by this provision, and two of the three vendors we interviewed expressed concerns about transmitting OPIS reports, because the information is copyright protected. To address this issue, the City should purchase its own subscription to the weekly OPIS report and require EMD personnel to verify the cost per gallon before the invoice is submitted to accounts payable for payment. In addition, the City should work with vendors to develop a new invoice format that delineates the per gallon markup fee.

V. OFFICIAL COMMENTS FROM CITY OF NEW ORLEANS

City Ordinance section 2-1120(8)(b) provides that a person or entity who is the subject of a report shall have 30 working days to submit a written explanation or rebuttal of the findings before the report is finalized, and that such timely submitted written explanation or rebuttal shall be attached to the finalized report.

An Internal Review Copy of this report was distributed on May 20, 2013 to the entities who were the subject of the inspection in order that they would have an opportunity to comment on the report prior to the public release of this Final Report. Comments were received from the CAO's Office; these comments are attached.

OIG Response to the City's comments:

The City's comments on Finding No. 1 stated that the quarterly reconciliation audit conducted by MMG was an adequate receiving procedure, because the variance between fuel received and fuel dispensed was insignificant. However, the receiving procedure was ineffective, because the City made payments to vendors before verifying the number of gallons delivered. In addition, the fuel vendor provided most of the data used for the reconciliation report and the information was not independently verified by MMG or City personnel.

CHIEF ADMINISTRATIVE OFFICE
CITY OF NEW ORLEANS

MITCHELL J. LANDRIEU
MAYOR

ANDREW D. KOPPLIN
FIRST DEPUTY MAYOR & CAO

June 27, 2013

Edouard Quatrevaux
Inspector General
Office of Inspector General
525 St. Charles Avenue
New Orleans, LA 70130

RE: RESPONSE TO THE OFFICE OF THE INSPECTOR GENERAL'S REPORT OF THE CITY
OF NEW ORLEANS'S FUEL RECEIVING CONTROLS

Dear Mr. Quatrevaux:

Thank you for giving the City of New Orleans the opportunity to review and comment on your report of the City of New Orleans's Fuel Receiving Controls, which covered the period between January and October 2012. We appreciate your careful look at our processes and are in agreement with nearly all of your recommendations.

As background information, it may be useful to understand that the City's Equipment Maintenance Division's ("EMD") fuel services are in compliance with current Louisiana Department of Environmental Quality ("LDEQ") and U.S. Environmental Protection Agency ("EPA") regulations and guidelines. From 1994 through 2002, EMD formulated and implemented a comprehensive fuel services infrastructure and operations improvement program, at a total cost of \$4,430,000.00 as mandated by LDEQ and EPA. This program included the closure of forty-five fuel sites, the removal of eighty-nine underground storage tanks ("UST"), the necessary remediation required at each site, and the upgrade of facilities and equipment. During this program, tank-monitoring systems were installed. EMD has maintained a contract with a third-party environmental consultant, Materials Management Group, Inc. ("MMG" or the "environmental consultant"), which has provided the necessary expertise to plan and implement this program as well as ongoing guidance and related services.

Prior to Hurricane Katrina, there were four EMD employees dedicated to fuel services. Their responsibilities included all aspects of fuel services operations other than those which required the environmental consultant. After Hurricane Katrina, there were significant reductions in City personnel. As a result, only one EMD employee was available for fuel services management. EMD took this challenge as an opportunity and determined that the most cost effective way to manage fuel services was to delegate many of tasks previously performed by City employees to the environmental consultant, including fuel delivery and dispensing auditing.

1300 PERDIDO STREET | SUITE 9E06 | NEW ORLEANS, LOUISIANA | 70112
PHONE 504.658.8600 | FAX 504.658.8648

Page 1 of 5



In 2008, concurrent with the restoration of automated fuel dispensing services at the primary fuel dispensing facilities, the environmental consultant reestablished fuel delivery and dispensing internal auditing. Annual completed audits (2009 - 2011) have shown that the fuel delivery and dispensing variances (averaging less than 0.39%), which are acceptable to EMD, are also well below the range of acceptable variance (3.0%) as stated in your report.

The City deeply appreciates the importance of assuring that we receive all the fuel we purchase. EMD's procedures and due diligence demonstrate that fuel receiving control is an important matter. EMD has been working diligently with MMG and its fuel vendors to improve controls.

Following is a detailed response to the OIG's findings and recommendations in your report.

Finding No.1. The City's fuel contracts did not include procedures to verify fuel volume for deliveries made to facilities with electronic monitoring devices.

First, it is important to note that the fuel delivery contracts are separate from the automated fuel dispensing contract.

Second, and more importantly, the City does have a procedure for reviewing deliveries of fuel at facilities with electronic monitoring devices and does review them.

Before the selection of new vendors in 2012 (Petroleum Traders, Inc. for gasoline, and Henry Consulting for diesel fuel), which was done to reduce fuel costs by obtaining a lower price through a competitive bid process, Retif Oil & Fuel provided fuel delivery information to the City. Retif Oil & Fuel utilized highly sophisticated ATG reader software that EMD and MMG could review. Fuel delivered to automated fuel sites was verified by comparing the City-owned automatic tank gauge ("ATG") equipment information with the Retif Oil & Fuel's fleet wide automated fuel delivery system information ("reconciliation process"). This reconciliation process has been conducted by MMG and reported on a quarterly basis. This practice provided the information for the 2009 - 2011 audits. The average variances for 2009 through 2011 are acceptable by any standard. However, the reconciliation process has been rendered more difficult in 2012 because MMG was not receiving all data from a single vendor. As noted in your report, EMD and MMG implemented actions to improve the reconciliation process. EMD and MMG will continue improving the existing procedures to verify fuel volume for deliveries made to facilities with electronic monitoring devices.

Finding No. 2. The City did not verify receipt of approximately 48,000 gallons of fuel delivered to facilities without electronic monitoring devices between January 2012 and October 2012.

The process of manually verifying fuel deliveries at eleven facilities without electronic monitoring (NOFD facilities, Joseph Bartholomew Golf Course, and Central Maintenance Garage) has been in place for over twenty years. The City has policies and procedures in place to verify fuel deliveries manually, and the City will ensure that its policies and

procedures are being adhered to at these facilities. EMD finds that it is not cost effective to install electronic monitoring devices at those facilities at this time.

Finding No. 3. As a result of billing errors, the City overpaid approximately \$36,000 in federal excise taxes for diesel fuel.

The federal excise tax overcharge was inadvertently paid to Henry Consulting by the City. Once aware of this billing error, EMD contacted Henry Consulting to obtain a refund. The City has addressed this issue with the employee via counseling and a letter of reprimand and has provided additional training to employees to ensure that every line item on every bill is reviewed carefully for accuracy. Additionally, as noted in your report, this billing error has not reoccurred.

Finding No. 4. The City did not require vendors to submit documentation that verified how much fuel was loaded onto delivery vehicles.

The City pays for fuel delivered to its sites; not fuel loaded into fuel delivery trucks. As the OIG is aware, the fuel delivery vendors may deliver fuel to non-City sites. What is most important is that the internal fuel delivered/dispensed auditing process has consistently resulted in a variance that is well below the range of acceptable variance (3.0%) as stated in the OIG report. We do not believe it is necessary to validate fuel loaded onto delivery vehicles which may go to multiple locations, but believe validating fuel delivered to city sites is sufficient.

Finding No. 5. The City did not independently verify that it paid the correct price for fuel.

To ensure the City was able to independently verify that it paid the correct fuel price, the City historically requested that vendors submit Oil Price Information Service ("OPIS") weekly reports with invoices. When OPIS discovered that fuel vendors provided proprietary weekly publications to non-members, OPIS notified the fuel vendor to stop this practice. Even though weekly publication reports have stopped being submitted with invoices, the City notes that your report does not reveal any significant errors. Nonetheless, EMD agrees that an OPIS membership provides a cost effective practical solution to independently verifying that we paid the correct price, and we are in the process of obtaining a membership.

Recommendation No. 1. The City should establish official fuel receiving procedures for facilities with electronic monitoring devices.

We agree with your recommendation. The City will implement this recommendation with the following plan of action: (1) EMD will use Poll Veeder Root weekly to review and justify fuel invoices received from vendors; (2) EMD will utilize reports taken from Poll Veeder Root "Inform" as part of a documenting process; and (3) EMD will work with MMG to identify drop variances that will warrant further analysis. The first two action items will be in place by July 2013, and the third action item has been on-going since the beginning of June 2013.

Recommendation No. 2. The City should install electronic monitoring devices at fuel facilities.

We agree with your recommendation in theory, but believe that until the cost of such devices drops substantially, it would not be cost effective to implement at this time. Presently, EMD believes the return on investment to install electronic monitoring devices at all fuel facilities does not justify the additional expenditure.

There are eleven unmonitored ASTs. Those ASTs consist of: nine NOFD station tanks totaling 6,500 gallons of diesel fuel, one 1,000 gallon gasoline tank at Joe Bartholomew Park, and one 4,000 gallon split tank (3,000 gallon of gasoline and 1,000 gallon of diesel) at the EMD repair facility. These tanks dispense less than 3.4% of the total annual fuel dispensed (approximately 65,000 gallons). EMD estimates that it would cost between \$80,000.00 and \$100,000.00 to install tank monitoring equipment at these locations.

Currently, there is no automated fuel dispensing at these sites. The cost to automate these sites is at least an additional cost in the range of \$125,000.00 to \$150,000.00. Otherwise dispensing at these sites remains manual. The average variance (00.39%) of the total annual fuel dispensed fuel at these locations (65,000 gallons) is 254 gallons or approximately \$761.00.

Therefore, the costs of adding devices compared to the average variance appear not to justify the installation of electronic monitoring devices at fuel facilities at this time. Instead, the City will ensure that its policies and procedures currently in place to verify fuel deliveries manually are being adhered to.

Recommendation No. 3. The City should review all invoices prior to issuing payment.

We agree with your recommendation. EMD has been reviewing all invoices prior to issuing payment and will continue to do so. As noted in Finding #3, however, EMD has taken additional steps with employees and supervisors to ensure that every line item on an invoice is reviewed carefully. Additionally, from July 2013 and after, the City will verify drop information with the Veeder Root data prior to receiving invoices from vendor and it will compare the Veeder Root data against bills of lading.

Recommendation No. 4. The City should require all fuel vendors to submit bills of lading with invoices.

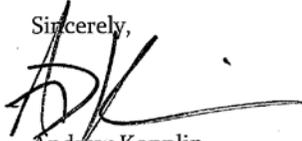
We agree with this recommendation and the City currently requires vendors delivering bulk fuel to present bills of ladings with their invoices. The City does not submit payment to any fuel vendor until all information is received, which includes the bills of lading.

Recommendation No. 5. The City should independently verify fuel prices before making payments to vendors.

We agree with your recommendation. For a number of years, the City has requested vendors to submit OPIS information for fuel prices with their invoices to allow the City to

verify those prices before making payments. Only recently did OPIS ask our vendors not to share this information with the City, which interrupted this practice. Now, the City will make arrangements to subscribe to OPIS in order to access pricing information from them directly so that we may continue our practice of independently verifying fuel prices before making payments to the vendors.

Sincerely,



Andrew Kopplin
First Deputy Mayor and Chief Administrative Officer
City of New Orleans

Cc: Lt. Col. Jerry Sneed, Deputy Mayor of Public Safety
Jeff Cashill, Fleet Manager, City of New Orleans
Sharonda Williams, City Attorney, City of New Orleans
EMD File