

**Performance Audit 15-06:
Bulk Fuel Trucks Audit**

December 2015

City Auditor

Stan Sewell, CPA, CGFM, CFE

Senior Auditor

Lisa Culver, CFE





OFFICE OF INTERNAL AUDIT

Stan Sewell, City Auditor

December 16, 2015

To: Mayor Andy Berke
City Council Members

Subject: Bulk Fuel Trucks Audit (15-06)

Dear Mayor Berke and City Council Members:

The attached report contains the results of our audit of Fleet Services. Our audit found that the controls over the City's bulk fuel are not adequate and data from bulk fuel transactions are not always accurate. In order to address the noted areas for improvement, we recommended actions to implement an automated fueling system and to ensure an accurate perpetual fuel inventory is maintained.

We thank the management and staff of the Fleet Services and various city-wide departments for their cooperation and assistance during this audit.

Sincerely,

Stan Sewell, CPA, CGFM, CFE
City Auditor

Attachment

cc: Audit Committee Members
Stacy Richardson, Chief of Staff
David Carmody, Chief Operating Officer
Cary Bohannon, Director of General Services

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AUDIT PURPOSE

This audit was conducted in accordance with the Office of Internal Audit's 2015 Audit Agenda. The objectives of this audit were to determine if:

- Fleet has strong internal controls over the City's bulk fuel; and
- Fleet's RTA bulk fuel data is accurate, complete and reliable.

BACKGROUND

The City's Fleet Services Division is responsible for two maintenance facilities and three service stations. Fleet Services uses the computerized fleet maintenance package, Ron Turely and Associates (RTA), to inventory fleet vehicles, fuel and parts, manage maintenance, track fuel usage, and generate department billing and management reports.

City fuel can be obtained at one of the three service stations or from the mobile fuel trucks. Fleet has two mobile trucks that are used to fuel heavy duty commercial trucks, equipment, storage tanks and small gas cans on a daily basis. The trucks have assigned fueling schedules for vehicles and equipment as well as fuel storage containers at City facilities. In addition to dispensing fuel, the drivers provide mobile repair assistance.

The Fire Department has two mobile trucks which provide fuel to equipment located at the fire stations. These trucks visit the fire stations on a weekly basis to fuel the fire engines, chainsaws, lawnmowers and other equipment.

The City's fuel purchases for the last three years total \$10,973,190. Out of the City's total fuel purchases, the fuel used in the mobile bulk trucks totaled \$2,794,774 for the same time period. The fuel dispensed from the mobile bulk trucks represents 25% of the total fuel used by the City.

FINDINGS AND RECOMMENDATIONS

Improvements in the manual inventory process would enhance internal controls.

Fleet has the responsibility of assigning RTA numbers to City equipment and vehicles. When vehicles are purchased by Fleet, the division will automatically assign a vehicle number. All other RTA numbers are typically assigned after requested by a department

manager. The RTA number is commonly referred to as a vehicle number¹. The numbers are used to identify city equipment and monitor maintenance and fuel usage. Departments receive monthly fuel bills that report the amount of fuel dispensed to each of their vehicle numbers.

Our audit identified areas Fleet could improve the use of RTA by developing unique vehicle identifiers, standards for issuing vehicle numbers and written policies and procedures to ensure an accurate perpetual inventory of fuel is maintained.

Develop unique identifiers and standards for issuing vehicle numbers

Our review of the vehicle numbers and usage reports found 5% of the vehicle numbers assigned were classified under the miscellaneous class code. Those coded miscellaneous were not assigned to specific vehicles or equipment but typically assigned to generators, small gas cans, or a general location (e.g. Brush/Recycle, or Garbage Pick Up).

During fiscal year 2015, the City dispensed approximately twenty-nine thousand gallons of fuel, costing \$78,000, into miscellaneous vehicle numbers. The majority of miscellaneous vehicle numbers were assigned to Public Works. Our discussion with several Public Works' divisions indicated some were unaware of the specific usage of the fuel. With the current numbering system, department managers cannot easily identify equipment type. To effectively monitor fuel usage, we suggest Fleet develop unique identifiers for each type of equipment. The unique identifiers should be consistently applied and vehicle numbers should never be assigned to a general location.

The Internal Control and Compliance Manual for Tennessee Municipalities states municipal officials should adopt policies and procedures that provide safeguards for inventories of materials and supplies. Currently, the division has no standards or specific criteria for assigning vehicle numbers. The standards should include developing a system to identify department needs, authorizations for adding new property, criteria for assigning vehicle numbers, and procedures to notify Fleet of surplus property disposal.

Recommendation 1:

We recommend Fleet Services develop written procedures for the process of adding and deleting vehicle numbers, and issuing keys in

¹ Although called a vehicle number, the number could be assigned to vehicles, equipment, gas cans, generators, rental equipment, or storage tanks.

the RTA system. New procedures should be implemented to coordinate with Purchasing and Finance when a vehicle or piece of equipment needs to be removed from RTA.

***Auditee Response:** We concur with the audit finding and recommendation.*

Recommendation 2:

We recommend Fleet develop a system to identify the type of equipment using a vehicle number.

***Auditee Response:** We concur with the audit finding and recommendation.*

Implement procedures to accurately maintain the perpetual inventory of bulk fuel.

City Code Section 2-5 requires each department to keep a perpetual inventory of city property under its control. Fleet is responsible for maintaining the perpetual inventory of fuel. The fuel management system at the gas stations is an automated process, whereas the bulk fuel inventory uses a manual process. Overall, the fuel dispensed by the gas stations has adequate controls to effectively monitor fuel inventory levels.

Tracking the fuel inventory in bulk fuel trucks requires manual input of purchases and gallons dispensed. Our review of the manual process found issues in the following areas:

- *Fire Department does not provide bulk fuel daily logs to Fleet.* The Fire Department's daily logs that record fuel dispensed are not forwarded to Fleet. Without this detail fuel usage, the RTA system doesn't reflect an actual fuel inventory.
- *All fuel purchases were not recorded accurately.* We compared the fuel invoices to the RTA data and found some purchases were missing. We also found duplicate entries in RTA for some fuel purchases.
- *Stick readings are not performed on Fleet's mobile trucks.* Unlike the Fire Department, Fleet's drivers don't take daily measurements of fuel remaining in their tanks. This measurement verifies the ending inventory is accurate.

The manual bulk fuel process is more prone to errors. Adequate policies and procedures are necessary to address control issues. These policies should include procedures to maintain, monitor, and reconcile

the fuel inventory. In addition to the written policies and procedures, automating the process could alleviate many errors.

Recommendation 3:

We recommend Fleet Services require the Fire Department remit their daily bulk fuel logs to the Fleet Services Inventory Coordinator.

***Auditee Response:** We concur with the audit finding and recommendation.*

Recommendation 4:

We recommend Fleet Services develop written policies and procedures for the bulk fuel process. We further recommend the written policy require all bulk fuel trucks, including Fire Department, follow the same procedures.

***Auditee Response:** We concur with the audit finding and recommendation.*

Recommendation 5:

We recommend Fleet Services reconcile fuel purchases recorded in the RTA system to the fuel invoices to ensure accuracy and completeness.

***Auditee Response:** We concur with the audit finding and recommendation.*

Recommendation 6:

We recommend Fleet Services implement an automated system, such as radio frequency identification (RFID)², to monitor fuel usage and reporting.

***Auditee Response:** We concur with the audit finding and recommendation.*

² The RFID system uses radio communication for automatic fuel authorization. The fuel will only be dispensed into authorized pieces of equipment. The system electronically captures the data and ensures accurate recording of each transaction.

APPENDIX A: SCOPE, METHODOLOGY AND STANDARDS

Based on the work performed during the preliminary survey and the assessment of risk, the audit covers Fleet Services operations from July 1, 2014 to June 30, 2015. When appropriate, the scope was expanded to meet the audit objectives. Source documentation was obtained from Fleet Services and the Finance Department. Original records as well as copies were used as evidence and verified through physical examination.

To achieve the audit's objectives, we observed the daily routine of the bulk drivers, and we interviewed staff from Fleet Services and the Fire Department. This provided an understanding of the work flow and systems used in the bulk fuel process.

We assessed the reliability of the data contained in the RTA system. We conducted data reliability tests on the bulk fuel purchased and dispensed. Based on these assessments and tests, we concluded the data was not sufficiently reliable to be used in meeting the audit's objectives.

We conducted this performance audit from July 2015 to November 30, 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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