

Audit of Orange County Fire Rescue Services Department's Fuel Usage

**Report by the
Office of County Comptroller**

**Martha O. Haynie, CPA
County Comptroller**

County Audit Division

J. Carl Smith, CPA
Director

Christopher J. Dawkins, CPA, CIA
Deputy Director

Wendy D. Kittleson, CISA, CIA
IT Audit Manager

Audit Team:
Deborah W. Owens, CPA,
Audit Supervisor

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TABLE OF CONTENTS

Transmittal Letter	1
Executive Summary	2
Action Plan.....	4
Introduction	6
Background	7
Scope, Objectives, and Methodology	7
Overall Evaluation.....	8
Recommendations for Improvement.....	9
1. Weekly Fuel Dispensing Reports Should be Complete, Accurate, and Reconciled	10

January 21, 2015

Teresa Jacobs, County Mayor
And
Board of County Commissioners

We have conducted an audit of the Orange County Fire Rescue Services Department's fuel usage. The audit was limited to a review of the controls over the usage of fuel at the Orange County Fire Stations. The period audited was October 1, 2012 through December 31, 2013.

We conducted this audit 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.

Responses to our Recommendations for Improvement were received from the Director of Fire Rescue Services and are incorporated herein.

We appreciate the cooperation of the personnel of the Fire Rescue Services Department during the course of the audit.

Martha O. Haynie, CPA
County Comptroller

c: Ajit Lalchandani, County Administrator
Dr. George Ralls, Deputy County Administrator for Public Safety and Health
Services
Otto Drozd III, Chief, Fire Rescue Services

EXECUTIVE SUMMARY

Executive Summary

The Fire Rescue Services Department (Department) protects the citizens of Orange County by providing fire prevention and control, emergency medical response, and post-fire services to save lives while reducing property loss and interruption of private and public services. The Department provides these services through 41 fire stations that are located throughout unincorporated Orange County. All but six of these stations are equipped with fuel dispensing facilities to fuel the Department's fire trucks and vehicles. All 35 of these stations have diesel fuel and eight of the stations have unleaded gasoline tanks and pumps. Tracking of the fuel is performed using a manual system of Weekly Fuel Dispensing Reports which are maintained for each fuel pump.

The audit was limited to the controls over the usage of fuel at the Orange County Fire Stations with fuel dispensing facilities. The period audited was October 1, 2012 through December 31, 2013. The audit objective was to determine whether there were sufficient controls over the use of the fuel in the Department. In our opinion, internal controls over the use of the fuel in the Department were not adequate. Opportunities for improvement were noted and are described herein.

During our review of the Fuel Reports for a three-month consecutive period, we noted numerous errors on the reports; including, fuel deliveries incorrectly or not recorded, and tank dipstick readings not being performed or recorded. In addition, shortages greater than 100 gallons of fuel per week were noted for some stations when comparing usage recorded on the Fuel Report to the calculated usage (ending meter reading minus beginning meter reading for the week). A comparison for the three-month period of the difference between fuel reported as pumped and the fuel used based on the meter readings on each pump noted that over 4,300 gallons of diesel fuel and 288 gallons of unleaded fuel were not accounted for on the reports.

Further, differences between the calculated fuel on-hand based on the entries recorded on the Fuel Report, beginning and ending meter readings, and the dipstick readings are not reviewed or reconciled by the Department.

A Recommendation for Improvement was developed and discussed with Management. Management concurred and steps to implement the recommendation are underway. A Response to the Recommendation for Improvement is included herein.

ACTION PLAN

**ORANGE COUNTY FIRE RESCUE SERVICES DEPARTMENT'S FUEL USAGE
ACTION PLAN**

NO.	RECOMMENDATIONS	MANAGEMENT RESPONSE			IMPLEMENTATION STATUS	
		CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED
1.	We recommend the Department reviews each Fuel Report to ensure fuel reported as pumped equals the calculated fuel pumped and all fuel deliveries and usages were recorded. Differences between any of these numbers should be investigated and reconciled. In addition, the computed ending balance should be compared to the dipstick reading and significant variances should be investigated.	✓				✓

INTRODUCTION

Background

The Fire Rescue Services Department (Department) protects the citizens of Orange County by providing fire prevention and control, emergency medical response, and post-fire services to save lives while reducing property loss and interruption of private and public services. The Department provides these services through the use of 40 fire engines, 30 rescue vehicles, four truck companies, 12 wood trucks, and ten rescue boats. These vehicles are assigned to the 41 fire stations that are located throughout unincorporated Orange County. All but six of these stations are equipped with fuel dispensing facilities to allow easy access to fuel the Department's vehicles. Each station (equipped with fuel) maintains diesel fuel and eight stations are also equipped with unleaded gasoline. Tracking of the fuel is performed using a manual system of Weekly Fuel Dispensing Reports which are maintained for each fuel tank at the fire stations with fuel dispensing facilities. For Fiscal Year 2013, the Department had 1,158 authorized positions and an adopted budget of \$151 million with \$1.57 million allocated for the purchase of fuel. Fiscal Year 2014 included 1,132 authorized positions and a budget of \$159 million including \$1.5 million for fuel.

**Scope, Objectives,
and Methodology**

The audit was limited to the controls over the usage of fuel at the Orange County Fire Stations with fuel dispensing facilities. The period audited was October 1, 2012 through December 31, 2013. The audit objective was to determine whether there were sufficient controls over the use of the fuel in the Department.

To determine whether there were sufficient controls over the use of the fuel in the Department we performed the following:

- Prepared a questionnaire on fuel pump security and conducted surprise visits at each station. During these visits we interviewed the CO (company officer) and observed fuel pump security.

INTRODUCTION



- Obtained Weekly Fuel Dispensing Reports for all fuel tanks for a three-month consecutive period and calculated the ending fuel tank balance for each fuel tank. We compared our balance to the ending balance listed on the final dispensing report for the period reviewed.
- Analyzed fuel usage based on the meter readings for each fuel pump and compared gallons used with the total gallons pumped for the period based on the Weekly Fuel Dispensing Reports.

Overall Evaluation

In our opinion, internal controls over the use of the fuel in the Department were not adequate. Opportunities for improvement were noted and are described herein.

RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATIONS FOR IMPROVEMENT



1. Weekly Fuel Dispensing Reports Should be Complete, Accurate, and Reconciled

Each of the 35 Fire Rescue Services Department (Department) stations with fuel dispensing facilities are required to maintain a Weekly Fuel Dispensing Report (Fuel Report). The Fuel Report contains notations of each dispensing of fuel including the quantity, date, and vehicle number as well as each delivery of fuel (including date and quantity) during the week. The weekly reporting period begins on Monday and ends on Sunday. In addition, the report calculates a running total of fuel on-hand based on recorded usage and deliveries. At the end of each period, a manual dipstick reading of fuel in the tank is taken and the actual fuel in the tank based on the dipstick reading is also noted on the Fuel Report. During our review of the Fuel Reports for a three-month consecutive period, we had the following concerns:

- A) Eighteen fuel deliveries were incorrectly or not recorded on the Fuel Reports for several stations. These errors resulted in 4,352.9 gallons not recorded on various stations' Fuel Reports as follows:

Date	Station No.	Fuel Type	Difference Between The Quantity of Fuel Delivered and Fuel Recorded (In Gallons)
09/25/2013	35	DIESEL	188.1
09/12/2013	40	DIESEL	(50.0)
08/04/2013	41	DIESEL	1010.0
08/08/2013	41	DIESEL	172.0
08/11/2013	41	DIESEL	(1139.9)
09/26/2013	41	DIESEL	563.5
09/17/2013	42	DIESEL	118.0
10/03/2013	42	DIESEL	500.0
09/17/2013	50	DIESEL	210.0
09/27/2013	50	DIESEL	602.9
10/04/2013	50	DIESEL	412.1
08/29/2013	51	DIESEL	142.0
08/04/2013	58	DIESEL	345.0
08/30/2013	65	DIESEL	466.0
10/22/2013	72	DIESEL	(165.9)
09/19/2013	83	DIESEL	218.3
08/30/2014	85	DIESEL	(35.0)
09/19/2013	83	UNLEADED	795.8
		TOTAL	4,352.9

RECOMMENDATIONS FOR IMPROVEMENT



- B) Fuel tank dipstick readings were not recorded on Fuel Reports for 21 of the 43 fuel tanks more than twice during the three-month period reviewed. As a result, the Department did not have sufficient records available to ascertain if the reported fuel on-hand was available for at least two weeks during the three-month period for 15 of the fuel tanks.
- C) Differences between the calculated fuel on-hand based on the entries recorded on the Fuel Report, beginning and ending meter readings, and the dipstick reading are not reviewed or reconciled by the Department. During our review, we noted most of the Fire Stations with fuel dispensing facilities had shortages noted on the Fuel Reports between:
- The fuel pumped (based on the meter readings) and the fuel reported as used; and
 - The computed balance of fuel on-hand and the dipstick reading.

Shortages greater than 100 gallons per week were noted when comparing recorded usage for the period to the calculated usage (ending meter reading minus beginning meter reading). A comparison for the three-month period of the difference between fuel reported as pumped and fuel pumped when comparing the beginning and ending meter readings in excess of 100 gallons were noted as follows:

RECOMMENDATIONS FOR IMPROVEMENT



STATION NO.	SHORTAGE PER METER READING DIESEL FUEL	SHORTAGE PER METER READING UNLEADED FUEL
33	(195.5)	
41	N/D	
42	(782.2)	
43	N/D	
50	(405.8)	(106.8)
51	(304.5)	
54	(927.5)	
56	(145.3)	
63	N/D	
65	(193.6)	
71	(159.7)	
80	(215.9)	
81	(360.2)	
82	(198.1)	
83	(418.7)	(181.9)
Total Shortage for Period	(4,307.0)	(288.7)

- D) Numerous inconsistencies and errors were noted in the data reported on the Fuel Reports. Specifically, we noted:
- Instances where the ending balances reported for one period were not the same as the beginning balance reported for the subsequent period;
 - Data for entire weeks or numerous days were not recorded on forms; and,
 - Incorrect dates or station numbers recorded on the forms.
- E) Two Fuel Reports from two fire stations could not be located for our review. Another station indicated a report contained data for a specific period of time, but five days of data could not be located.

The Department's Standard Operating Procedures require personnel assigned to a location equipped with a manual dispensing system to accurately maintain the Fuel Report and dip the tank upon closing out the previous Fuel Report.

RECOMMENDATIONS FOR IMPROVEMENT



Without accurate reporting and timely reconciliation, unexplained shortages (due to theft or leakage) could go undetected. In addition, inaccurate data and ineffective reconciliation procedures could result in fuel not being available when needed.

We Recommend the Department reviews each Fuel Report to ensure fuel reported as pumped equals the calculated fuel pumped and all fuel deliveries and usages were recorded. Differences between any of these numbers should be investigated and reconciled. In addition, the computed ending balance should be compared to the dipstick reading and significant variances should be investigated.

Management's Response:

Concur. The Orange County Fire Rescue Department has completed its review of the Fuel Usage Report from the Orange County's Comptroller Audit Division. The scope of the audit reviewed standards related to Fire Rescue's internal record management of existing fuel dispensing measures. The Orange County Fire Rescue Department concurs with the determinations outlined in the report and will evaluate its internal documentation practices for continuous improvement.