Lexington-Fayette Urban County Government
Division of Internal Audit

INTERNAL AUDIT REPORT

DATE   September 23, 2005

TO: Teresa Ann Isaac, Mayor

CC: Milton Dohoney, Chief Administrative Officer
              Kathy DeBoer, Commissioner of General Services
              Richard Murray, Director of Fleet Services
              DeWitt Hisle, Audit Board Chairman
              Dr. David Stevens, Council Budget & Finance Committee Chairman

FROM: Bruce Sahli, Director of Internal Audit

RE: Fuel Card Purchases Internal Audit

Background

LFUCG has contracted with SpeedwaySuperAmerica LLC (SSA) and Riley Oil, Inc. to provide gasoline and diesel for all LFUCG fleet vehicles. Purchases from these two companies are made via fuel cards assigned to specific LFUCG vehicles, with the cards being activated by Personal Identification Numbers (PINs) assigned to authorized users. When a fuel purchase occurs, an odometer reading must also be entered on the fuel pump keypad for usage tracking purposes. The purchases are then processed in the respective vendor's automated purchasing system. Purchase costs are assigned to the various Divisions based upon the vehicle number associated with the specific fuel card assigned to that vehicle. The audit examined fuel purchases and related activity occurring during FY 2005 and the first week of July 2005. Fuel purchases for FY 2005 totaled $2,160,737.

Scope and Objectives

The general control objectives of the audit were to determine that:

- Vendor billings for LFUCG purchases of diesel and gasoline are accurate and properly supported

- Fleet card purchases are effectively monitored by management to ensure compliance with LFUCG policies and procedures
- Fleet card purchases are reasonable in nature
- LFUCG requests to discontinue fleet cards are processed in a timely manner by vendors

Statement of Auditing Standards

We conducted our audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws and regulations when necessary to satisfy the audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

Audit Opinion

In our opinion, the controls and procedures provided reasonable assurance that the general control objectives were being met. Opportunities to enhance controls are included in the Summary of Audit Findings.

SUMMARY OF AUDIT FINDINGS

Significant Inaccurate Odometer Entries

Odometer entries made at the point of purchase provide a significant source of information from which various analyses can be performed to determine that LFUCG fuel purchase activity is appropriate and fuel consumption is reasonable (e.g., MPG). We performed a detailed review of LFUCG diesel purchase activity for the period July 26, 2004 through June 23, 2005 to evaluate the reliability of diesel purchase odometer readings. From a total population of 8,052 transactions, 557 transactions had a calculated MPG between 50 and 163,731, while 812 transactions had a calculated MPG of 0 to -83,954. Therefore, 1,369 out of 8,052 diesel transactions (17%) report MPG completely outside of any reasonable range.

We also performed a detailed review of LFUCG gasoline purchase activity for the period July 1, 2004 through July 4, 2005 (excluding data for the months of August, November, and December 2004 that were not available at the time of the audit) to evaluate the reliability of gasoline purchase odometer readings. From a total population of 56,092 transactions, 2,659 transactions had a calculated MPG between 100 and 674,811, while 3,736 transactions had a calculated MPG of 0 to -712,559. Therefore, 6,395 out of 56,092 gasoline transactions (11.4%) report MPG completely outside of any reasonable range. We were informed by Fleet Services management that fuel pumps operated by the LFUCG diesel and gasoline vendors are programmed to require odometer readings before fuel can be purchased, but does not provide any reasonability checks, and such checks could

not be performed on the Fleet Tracker System in place at the time of the audit. The absence of reliable odometer readings limits management's ability to effectively monitor fuel purchases for reasonable and appropriate activity.

It is recommended that all employees responsible for purchasing fuel for LFUCG vehicles be instructed in writing to provide accurate odometer readings on a consistent basis. It is also recommended that MPG reasonability checks be incorporated into the new Fleet Wave System currently being installed at Fleet Services to determine that gasoline purchases are appropriate, and any MPG calculations deemed outside the reasonable range should be communicated to the responsible Division for investigation.

<u>Division of Fleet Services Management Response:</u> We agree that good odometer entries are crucial to performing various analyses of the LFUCG fuel usage. During the period in question Fleet Services was unable to import the commercial fuel transactions into our fleet management system, Fleettracker. Consequently we were unable to perform the analyses that we would normally have performed.

Perhaps a little history of our efforts at obtaining good odometer entries would be useful. When we were still operating a fuel site we employed odometer reasonability at the pump. This worked by storing the most recent odometer entry and comparing the next odometer entry for that vehicle to the one being stored and checking the new entry for reasonability based on a set of criteria such as "must be greater than the last meter reading but no more than X miles greater". This encouraged the driver to input a correct odometer entry and allowed the driver a chance to correct any input error. After three tries the system allowed the driver to obtain fuel, even if the driver did not enter a reasonable odometer entry. We have had extensive experience with this type of odometer reasonability system at the pump and can report that for a variety of reasons we still experienced a large number of incorrect odometer entries. When the LFUCG expanded the use of commercial fuel vendors this only decreased our success since the reasonability level had to be increased at our site to take into account the possibility that a vehicle might travel further between visits at our site. At that time our commercial fuel sites did not provide an odometer reasonability check at the pump.

The presence of incorrect odometer entries on fuel transactions makes it essential that the fleet management system also employ a reasonability check on the odometer entries as the transactions are being processed. Fleettracker did this with all fuel transactions. The odometer entry on the fuel transaction was compared with the last good odometer entry for the vehicle and if the entry was unreasonable it would not be posted to the vehicle although it would be recorded as part of the fuel transaction. Only good (reasonable) fuel transactions would be posted and only these transactions would be used to calculate usage. The key here is that you don't need every odometer entry to be correct. The next good odometer entry will make up for the previous bad entry. You can get very good information even if one of four odometer entries are bad. At the end of each month we examined the odometer entries (by looking at those vehicles that had not updated during the month, comparing the last odometer recorded against the odometer entries in fuel transactions, looking at large increases in odometer entries, etc.) in an effort to correct bad updates.

In summary, the bad odometer entries at the pump, that you have noted in your report, would not have been an impediment to conducting analyses but the inability to import these commercial fuel

transactions into Fleettracker made analyses very difficult. Had we been able to import these transactions Fleettracker would have employed a reasonability check on the odometer entries and we would have obtained much good information. The good news is that beginning with the new fiscal year we have switched over to a new fleet management system, FleetWave, and we are now able to import these commercial fuel transactions. In response to our earlier conversation with your office we also discovered that Speedway/SuperAmerica is able to employ an odometer reasonability check at the pump similar to that described above and we asked them to implement this check in July. Our other commercial fuel provided, Riley, is unable to perform this check.

PIN Controls Need Enhanced

Four digit Personal Identification Numbers (PINs) are issued to employees when they receive authorization to use LFUCG fuel cards. A detailed review of PIN activity noted that some PINs are used by multiple Divisions to purchase fuel, indicating the likelihood they are either shared (in violation of Fleet Services verbal instructions given to all employees issued PINs), or are insufficiently complex to prevent the guessing of the PIN. Of particular note was that PIN #1 was used a total of 732 times by six different Divisions to purchase fuel, and PIN #0 was used a total of nine times by four different Divisions to purchase fuel. A list of current PINs provided near the completion of audit field work contained 1,897 active PINs, indicating 19% of possible PINs available in a four digit population were in use. From this list we noted the existence of simple (and therefore easily guessed) PINs such as two, three, four, nine, and ten. It was also noted that 55 PINs are only two digit numbers, while 200 additional PINs were three digit numbers. We also noted that Human Resources did not communicate employee terminations to Fleet Services to ensure that terminated employees' PINs were deactivated on a timely basis.

Discussions with SSA personnel indicate that PINs for gasoline fuel cards can be reprogrammed to be six digits in length to provide greater security over fuel purchases. It is recommended Fleet Services consult with SSA to incorporate this additional control feature. Fleet Services should also contact Riley Oil to determine if a six digit PIN is available for diesel purchases. It is recommended that all LFUCG employees assigned a PIN be provided with written instructions regarding its responsible use. The employees should be required to sign the document indicating they have read and understood its contents, and a copy should be kept on file at Fleet Services as proof of instruction. It is also recommended that Fleet Services contact Computer Services to obtain a copy of a periodic report of terminated employees to expedite deactivation of any related PINs.

Division of Fleet Services Management Response: When we moved from our previous commercial fuel vendor (Fleetone) to Speedway/SuperAmerica and Riley we tried to keep as many of the existing PIN's as possible just to make it easier for our drivers. These PIN's were all four digits. Speedway/SuperAmerica drops the leading zeros in these PIN's. We will begin the process of changing to six digit PIN's with Speedway as soon as possible, however Riley is unable to accommodate a PIN longer than four digits. We also agree with your other recommendations and will take steps to implement these changes.

Weekend Fuel Charges Need Price Verification

Fleet Services management has price contracts with Riley Oil and Speedway to provide fuel based upon the Lexington OPIS price plus various taxes and markup. (OPIS is a comprehensive database of petroleum product prices). Fleet Services personnel periodically review the prices for purchases occurring on weekdays (Monday through Friday) to ensure agreement with the contractual arrangement. However, prices charged LFUCG for weekend diesel and gasoline purchases are not examined for accurate billing as weekend OPIS prices are currently not being obtained. Our review of FY 2005 activity noted that 1,875 of 8,252 gasoline transactions (23%) examined in our price testing occurred on weekends. This indicates substantial purchase activity was not being subjected to independent verification of accurate pricing. It is therefore recommended that OPIS prices be obtained to verify the accuracy of gasoline and diesel purchases occurring on weekend dates.

<u>Division of Fleet Services Management Response:</u> We began to receive the Saturday Oil Price Indexing Service (OPIS) prices for fuel in July.

Purchase Activity Analyses Needed

Beginning in July 2004, Fleet Services began using SSA and Riley Oil as new fuel vendors. (Prior to that time, the vendor has been Fleet One). When this switch occurred, it was discovered that the then active fleet management system (Fleet Tracker) was unable to accept the purchase data in the format provided by these two new vendors. This resulted in an inability to sufficiently analyze fuel purchase activity to ensure reasonable and appropriate activity. This situation had not yet been remedied as of the completion of audit field work, although management had indicated their expectation that the new fleet management system (Fleet Wave) would be able to perform significant analytical functions.

In order to ensure that fuel purchases are reasonable, certain analyses of purchase data should be performed on a regular basis. At a minimum, it is recommended that analysis of vehicle over/under usage, reasonable MPG, and purchases in excess of fuel tank capacity be performed. (The validity of such analyses will be directly related to the accuracy of odometer readings entered at the point of purchase, elevating the importance of entering accurate odometer readings). It is also recommended that a reconciliation of retired vehicles to fuel purchases be performed periodically to ensure retired vehicle cards are not used subsequent to the vehicle's retirement. Any anomalies arising from such analyses should be forwarded to the responsible Division's senior management for timely resolution. Per CAO Policy #3R, Division directors are then responsible for ensuring compliance with established policies and procedures concerning the use of LFUCG vehicles, and all complaints or allegations of misuse of government vehicles must be logged and investigated by the Division director with notification of results forwarded to the respective Department Commissioner and the Commissioner of General Services.

<u>Division of Fleet Services Management Response:</u> When we were able to input the commercial fuel transactions into Fleettracker we routinely conducted analyses covering low MPG and high MPG vehicles and forwarded lists of the fuel transactions for the vehicles in question to the divisions operating the vehicles. However, during the past year we have been unable to input these fuel transactions and so we could not conduct MPG analyses. We continued to make divisions

aware of exceptionally low and high vehicle usage. Beginning this past July we have been able to load the commercial fuel transactions into our new fleet management system, FleetWave, and are once again able to investigate low and high MPG as well as abnormal usage, fuel purchase quantities in excess of tank capacity, incorrect fuel type purchases, bad odometer entries and other abnormalities

Also, if at all possible we obtain the vehicle fuel card when a vehicle is retired. Regardless, we also deactivate the card in the particular commercial fuel system when the vehicle is turned in. If a vehicle is subsequently returned to service a new fuel card is issued. However, we will begin to regularly check fuel transactions against vehicles that have been turned in to Fleet Services and placed out of service to guard against an oversight.

Potential Increased Fuel Costs from Idling Engines

An examination of gasoline purchases noted that 23,050 transactions (41%) indicated between 1 and 10 MPG. An examination of diesel purchases noted that 5,726 transactions (71%) indicated between 1 and 5 MPG. While recognizing that odometer readings are not subject to reasonability checks and that many are questionable, if 50% of these transactions include accurate odometer readings, this would indicate that 20.5% of gasoline transactions accurately identified gasoline consumption of 1 to 10 MPG and 35.5% of diesel transactions accurately identified diesel consumption of 1 to 5 MPG. The Division of Internal Audit has on occasion observed both gasoline and diesel vehicles left idling for significant periods of time. If the practice of leaving vehicles idling is prevalent within LFUCG, this could be partially reflected in the very low gas mileages mentioned above. With the cost of fuel demonstrating a definite upward trend (as of September 19, 2005 the U. S. average was $2.79 per gallon for regular gasoline and $2.73 per gallon for diesel fuel), any practices of unnecessary engine idling should be discontinued in all LFUCG vehicles. It is recommended the Division of Fleet Services promptly communicate this directorate to all LFUCG vehicle users.

Division of Fleet Services Management Response: Excessive idling could very well be a problem. Divisions have mentioned this on occasion when an instance of low MPG was brought to their attention. Fleet Services will communicate via e-mail and a newsletter instructing employees to refrain from unnecessary engine idling.

Potential Fleet Underutilization Identified by Fuel Purchase Data

An examination of fuel purchase activity noted 45 vehicles six or more years old (1999 models or older) having five or fewer gasoline purchases for the period July 1, 2004 through July 4, 2005 (excluding data for the months of August, November, and December 2004 that were not available at the time of the audit). Such lack of use could indicate opportunities exist to sell off some of the older vehicles that are underused, producing an influx of cash and a reduction of fleet maintenance costs. A list of these vehicles will be provided to Fleet Services. The Director of Fleet Services is responsible for the replacement of vehicles based upon age and mileage criteria, but can only encourage the actual removal of older vehicles from the fleet. It is therefore recommended Fleet

Services management evaluate the circumstances surrounding these vehicles' underutilization and provide appropriate recommendations to the various Divisions regarding their use, including the retirement of vehicles if warranted.

<u>Division of Fleet Services Management Response:</u> We have historically monitored the use of vehicles and equipment very closely with an eye towards disposing of any under utililized assets. The inability to import commercial fuel transactions did not impact our ability to monitor use of vehicles and equipment since we record an odometer reading each time we service or work on a vehicle. We report low use vehicles to divisions and encourage divisions to eliminate unneeded vehicles and equipment. We also encourage pooling and sharing of vehicles. We will review the list of vehicles provided to us by the Division of Internal Audit and will communicate the results of our review to the various Divisions as appropriate.