Mecklenburg County
Department of Internal Audit

Asset and Facility Management
Fuelman Gas Card Program
Report 1667

May 2, 2017

MECKLENBURG COUNTY
Department of Internal Audit

To: Mark Hahn, Director, Asset and Facility Management

From: Joanne Prakapas, Director, Department of Internal Audit

Date: May 2, 2017

Subject: Asset and Facility Management Fuelman Gas Card Program Report 1667

The Department of Internal Audit has completed its audit of the Fuelman gas card program to determine whether processes were designed to effectively manage key business risks inherent to the activity.

Internal Audit interviewed key personnel, reviewed policies and procedures, and performed data analytics on gas card transactions from the period of July 1, 2012 through June 30, 2016.

This audit was conducted in conformance with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing. These 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.

OVERALL EVALUATION

Overall, Fuelman gas card processes were designed to effectively manage key business risks to an acceptable level; however, opportunities exist to improve the design of some control activities.

RISK OBSERVATION SUMMARY

The table below summarizes the risk observations identified during the course of the audit, grouped by the associated risk factor, and defined in Appendix A. The criticality or significance of each risk factor, as well as Internal Audit's assessment of the design of key controls to effectively mitigate the risks, are indicated by the color codes described in Appendix B.

RISK OBSERVATION SUMMARY			
Risk Factors and Observations	**Criticality**	**Design**	**Operation**
1. Process Execution Risk	🔴	🟡	N/A[1]
1.1 County Operator's Permit (COP) Validation 1.2 Exception Reporting			
2. Segregation of Duties Risk	🔴	🔴	N/A
2.1 Gas Card Administration			
3. Policies and Procedures Risk	🔴	🟢	N/A
No risk observations noted			
4. Compliance Risk	🔴	🟢	N/A
No risk observations noted			
5. Human Resources Risk	🟡	🟢	N/A
No risk observations noted			

The risk observations and management's risk mitigation strategies defined in Appendix C are discussed in detail in the attached document. Internal Audit will conduct a follow-up review to verify management's action plans have been implemented and are working as expected.

We appreciate the cooperation you and your staff provided during this audit. Please feel free to contact me at 980-314-2889 if you have any questions or concerns.

c: County Manager
    Deputy County Manager/Chief of Staff
    Assistant County Managers
    Deputy County Attorney
    Senior County Attorney
    Board of County Commissioners
    Audit Review Committee

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[1] Not applicable (N/A); this audit was limited to an evaluation of process design.

BACKGROUND

The Department of Asset and Facility Management (AFM) provides master and space planning; architectural design and construction project management; facility maintenance and operations; security services; and real estate management. In addition, AFM has oversight of the County's fleet operations.

The AFM Fleet and Courier Services Division is responsible for County vehicle purchases, fleet management, vehicle maintenance, as well as County gas card program administration.

Fuelman Gas Card Program

The County gas card program managed by Fuelman, a third-party vendor, allows employees to purchase fuel for County-owned vehicles and small engine equipment at any participating gas station located throughout the nation and at two County fueling sites.

The AFM gas card administrator (administrator) oversees the Fuelman gas card program, performing the following activities:

- Recording and managing key gas card information in the Fuelman system, e.g., transaction activity, PINs, and gas card purchasing limits
- Conducting employee training
- Issuing gas cards and personal identification numbers (PINs)
- Deactivating PINs and gas cards assigned to terminated employees
- Preparing and submitting invoices for payment

To participate in the gas card program, an employee must first obtain a County Operator's Permit (COP), and the Human Resources Department (Human Resources) administers this process. Human Resources staff ensures an employee has a valid driver's license and a satisfactory driving history before issuing him or her a COP.

After obtaining a COP, an employee must first complete a Driver Fuel Agreement to verify his or her understanding of the responsibilities and policies regarding gas card use. After receipt of the employee's Driver Fuel Agreement, the administrator reviews the agreement to ensure it is complete, including the COP number, and issues the employee a personal identification number (PIN).

Vehicle Gas Cards

Each County vehicle is assigned a specific gas card to purchase fuel for that vehicle only. When purchasing fuel, the employee must swipe the gas card at the pump and enter his or her PIN, as well as the vehicle's current odometer reading.

Miscellaneous Gas Cards

The miscellaneous gas card is assigned to a specific employee and is used to purchase fuel for small engine equipment by that employee only. To obtain a miscellaneous gas card, the employee's supervisor must submit a request to the administrator. To purchase fuel, the employee follows the same process used to purchase fuel for vehicles except he or she enters a zero when prompted for the odometer reading.

County Fuel Consumption

As of October 2016, Mecklenburg County had a total of 1,333 vehicle gas cards and 69 miscellaneous gas cards. The following tables summarize annual and department gas card purchases.

Fuelman Gas Card Purchases by Year				
Volume (Gallons)				
Fuel Type	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**
Unleaded	596,098	586,032	538,820	569,333
Unleaded Plus	1,456	1,404	1,848	2,956
Premium	5,844	3,926	3,428	4,797
Diesel	66,522	68,678	61,420	61,779
Natural Gas	1,811	11,370	4,678	0
Kerosene and Race Fuel	1	2	24	0
Total Volume	671,732	671,412	610,218	638,865
Cost & Transaction Totals				
Total Cost	$1,987,567	$1,943,005	$1,364,453	$992,706
Number of Transactions	45,957	47,632	44,618	47,649

Source: Auditor analysis of Fuelman system data, unaudited

Fuelman Gas Card Purchases by Department				
Volume (Gallons)				
Department	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**
Sheriff	199,384	179,951	173,955	174,291
Land, Use and Environmental Services Agency	148,190	167,167	148,777	158,993
Social Services	131,698	128,356	112,993	116,687
Park and Recreation	127,303	125,484	122,941	133,403
All Other Departments	65,157	70,454	51,552	55,491
Total Volume	671,732	671,412	610,218	638,865

Source: Auditor analysis of Fuelman system data, unaudited

PIN/Gas Card Deactivation

Human Resources staff notifies the administrator when an employee terminates County employment. If the terminated employee had a PIN, the gas card administrator deactivates the former employee's PIN in the Fuelman system. If the former employee was a miscellaneous gas cardholder, the administrator receives the card from the department liaison, and deactivates and destroys the card.

Gas Card Limits

The administrator can set gas card usage parameters in the Fuelman system to meet each department's fuel need. For example, one department or division may only need employees to obtain fuel during regular work hours whereas another may need certain staff to obtain fuel on weekends or after regular work hours. Gas card usage parameters include:

- The number of gas card charges allowed in a 24-hour period
- The maximum transaction amount
- Daily and weekly purchase amounts
- After-hours and weekend purchases

Gas Card Billing

The administrator extracts gas card billing information from the Fuelman system and forwards it to the Financial Services Department staff who uploads the data into Advantage, the County's financial system, and approves Fuelman invoices for payment.

COUNTY MANAGER'S OVERALL RESPONSE

The County Manager concurs with all action plans and implementation timeframes.

RISK OBSERVATIONS AND MITIGATION STRATEGIES

Risk Factor	Criticality	Design	Operation
1. Process Execution Risk	🔴	🟡	N/A

Risk Observations

1.1 County Operator's Permit (COP) Validation—Employee's COPs were not validated before issuing a PIN. Nor were active employees' COPs periodically validated after issuance to ensure no changes had occurred. For example, a motor vehicle violation would make an employee no longer eligible for a COP. As a result, employees could continue to use the gas card in violation of County policy.

1.2 Exception Reporting—Following recommendations from prior Internal Audit reports, Business Financial Management (BFM) Division staff previously monitored Fuelman gas card activity for compliance with policies and procedures.[2] Prior to the transfer of BFM's fleet management responsibilities, management ceased Fuelman gas card exception reporting because monitoring resulted in a high frequency of anomalies that, after research, did not represent true exceptions. Without monitoring, errors or fraud could go undetected. Fuelman gas card data analytics performed by Internal Audit identified several anomalies that could be indicators of potential errors and/or fraud.

- There were 7,170 instances of employees with multiple fuel transactions on the same day with the same gas card. Twelve of these transactions were made within 52 seconds to 26 minutes of each other. In the example below, there were three instances where the same employee made multiple fuel charges for the same vehicle within minutes of each other.

Vehicle	Fueling #1	Date/Time	Fueling #2	Date/Time	Time Between Purchases
A	12 gals. unleaded	Sunday 12/29/2013 11:37 am	22.7 gals. diesel	Sunday 12/29/2013 11:38 am	1 minute
B	21.5 gals. unleaded	Sunday 12/29/2013 1:13 pm	14.6 gals. unleaded	Sunday 12/29/2013 1:31 pm	18 minutes
B	30.5 gals. unleaded	Sunday 3/2/2014 12:29 pm	17.4 gals. diesel	Sunday 3/2/2014 12:30 pm	1 minute

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[2] Prior to dissolution of the Business Support Services Agency (BSSA), the BSSA-BFM Division had administrative responsibilities for the gas card program.

- There were 52 fuel charges over 90 gallons each, and 42 of them were purchased with miscellaneous gas cards, which are intended for small engine equipment fuel purchases only. The average miscellaneous gas card quantity per transaction was 14 gallons.
- One employee charged 400 gallons of fuel in one day to a gas card assigned to a motorcycle.
- There were 63 duplicate fuel charges totaling $1,777.
- There were 367 purchases for premium fuel in vehicles that did not require premium fuel.
- There were ten instances of duplicate employee numbers in the Fuelman system with six employees set up twice using the same or similar names. All ten had different PINs. Twelve transactions did not identify the name of the employee charging the fuel.
- Thirty miscellaneous gas cards were assigned to a department instead of an individual as required by policy.

Recommendations

1.1 Internal Audit recommends management ensure AFM staff validates employees' COPs prior to issuing gas card PINs and on an ongoing basis after PINs have been issued.

1.2 Internal Audit recommends management develop, regularly review, and follow up on routine exception reports to help detect anomalies or trends that are not compliant with the objectives and other requirements of the gas card program. Potential data analytics may include:

- Multiple fuel purchases per vehicle per day
- After-hour purchases
- Weekend purchases
- Large quantity purchases
- Non-gas related purchases
- Duplicate transactions
- Premium or diesel fuel purchases
- Low odometer readings
- Low miles per gallon
- Large miscellaneous card purchases

We further recommend management follow up on anomalies identified during this audit and seek available resolution. Results of this follow-up and resolution should be documented.

Management's Response

1.1 **Risk Mitigation Strategy:** Reduce   **Implementation Date:** April 2017

Action Plan: AFM is currently receiving monthly reports from Human Resources (started in December 2016) that are used to verify valid COPs prior to issuing PINs. To make this more manageable AFM will request a monthly list of only the changes made to this list. The list of all COP's will be audited annually.

AFM is currently receiving PeopleSoft notifications and deactivating PINs of employees who have either been terminated or retired. AFM started receiving PeopleSoft notifications from HR in 2015.

AFM will request from Insurance and Risk Management immediate notification of employees whose driving privileges have been terminated and deactivate those PINs as well.

1.2 **Risk Mitigation Strategy:** Reduce   **Implementation Date:** May 2017

Action Plan: AFM will work with Internal Audit and Fuelman on creating monthly exception reports for four of the ten most critical data analytics listed above **(multiple fuel purchases per vehicle per day, large quantity purchases, duplicate transactions and large miscellaneous card purchases).** AFM deems that these are critical in identifying potential misappropriation of fuel. All exceptions will be reviewed and any exceptions deemed questionable will be forwarded to the proper fleet liaison for investigation and a follow up response. An Administrative Assistant III will review the exception reports and follow up, and their Supervisor will review exception reports monthly.

AFM does not believe that monitoring of **after-hour purchases, weekend purchases, low odometer reading and low miles per gallon** are as beneficial to manage fuel risk, because there are numerous instances of these metrics with valid explanations, i.e., Park and Recreation and Youth and Family Services employees work regularly after hours and on weekends.

AFM believes that **non-gas related purchases** can only be car washes that an employee may have selected at the pump. This cannot be controlled because it is a service offered at the fuel pump and the system is unable to catch this. AFM has tested the use of fuel cards to make in store purchases and they were disallowed by the system.

Risk Factor	Criticality	Design	Operation
2. Segregation of Duties Risk	🔴	🟡	N/A

Risk Observation

2.1   Gas Card Administration—A single AFM staff issues and deactivates gas cards and PINs, maintains custody of gas cards, and records and manages key gas card data in the Fuelman system. Duties that are insufficiently separated increase the likelihood of fraudulent, improper, or abusive gas card purchases.

Recommendation

2.1   Internal Audit recommends management develop and implement processes for appropriate gas card program oversight to mitigate the risk resulting from the lack of separated duties.

Management's Response

2.1   **Risk Mitigation Strategy:** Reduce   **Implementation Date:** May 2017

      Action Plan: AFM will have the supervisor review monthly exception reports developed based on management's response to recommendation 1.2 to ensure gas cards and PIN numbers are being handled appropriately. In addition, a monthly transaction report by employee has been requested from Fuelman.

APPENDIX A—Risk Factor Definitions

Risk Factor	Definition
Compliance Risk	Failure to comply with established policies, procedures, and/or statutory requirements may result in unacceptable performance that impacts financial, operational, or customer objectives.
Human Resources Risk	Failure to attract, train, develop, deploy, and/or empower competent personnel may inhibit the organization's ability to execute, manage, and monitor key business activities.
Policies and Procedures Risk	Failure to have formal, documented, clearly stated, and updated policies and procedures may result in poorly executed processes and/or increased operating costs.
Process Execution Risk	Failure to consistently execute established, consistent processes may result in unacceptable financial, operational, or other impacts.
Segregation of Duties Risk	Failure to adequately segregate duties may allow an employee or group of employees to perpetrate and conceal errors or irregularities without timely detection.

APPENDIX B—Color Code Definitions

The criticality of a risk factor represents the level of potential exposure to the organization and/or to the achievement of process-level objectives before consideration of any controls in place (inherent risk).

Criticality	Significance and Priority of Action
🔴	The inherent risk poses or could pose a significant level of exposure to the organization and/or to the achievement of process level objectives. Therefore, management should take immediate action to address risk observations related to this risk factor.
🟡	The inherent risk poses or could pose a moderate level of exposure to the organization and/or to the achievement of process level objectives. Therefore, management should take prompt action to address risk observations related to this risk factor.
🟢	The inherent risk poses or could pose a minimal level of exposure to the organization and/or to the achievement of process level objectives. Risk observations related to this risk factor, however, may provide opportunities to further reduce the risk to a more desirable level.

The assessment of the design and operation of key controls indicates Internal Audit's judgment of the process and system design to mitigate risks to an acceptable level.

Assessment	Design of Key Controls	Operation of Key Controls
🔴	The process and system design does not appear to be adequate to manage the risk to an acceptable level.	The operation of the process' risk management capabilities is not consistently effective to manage the risk to an acceptable level.
🟡	The process and system design appear to be adequate to manage the risk to an acceptable level. Failure to consistently perform key risk management activities may, however, result in some exposure even if other tasks are completed as designed.	The operation of the process' risk management capabilities is only partially sufficient to manage the risk to an acceptable level.
🟢	The process and system design appear to be adequate to manage the risk to an acceptable level.	The operation of the process' risk management capabilities appears to be sufficient to manage the risk to an acceptable level.

APPENDIX C—Risk Mitigation Strategy Definitions

Risk Mitigation Strategy	Definition
Reduce	Risk response where actions are taken to reduce a risk or its consequences.
Accept	Risk response where no action is taken to affect the risk.
Transfer	Risk response where a portion of the risk is transferred to other parties.
Avoid	Risk response to eliminate the risk by avoiding or withdrawing from the activity giving rise to the risk.