

INTERNAL AUDIT OFFICE
CHARLES COUNTY GOVERNMENT

AUDIT REPORT



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Fuel Inventory Audit

DEPARTMENT/DIVISION:
Department of Public Works,
Fleet and Inventory Management

REPORT NUMBER:
2023-DPW-006

REPORT DATE:
04/15/2024



Charles County Internal Audit Office

AUDIT OF DEPARTMENT OF PUBLIC WORKS - FLEET & INVENTORY MANAGEMENT: FUEL INVENTORY

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Director of Department of Public Works, Internal Audit Oversight Committee, County Administrator & Deputy County Administrator:

In accordance with the Internal Audit Charter, SOP# CP.CAD.04.001, the Internal Audit Office (IAO) performed an audit of the Department of Public Works – Fleet & Inventory Management: Fuel Inventory. This audit was conducted as part of the IAO’s risk-based Annual Audit Plan approved by the Internal Audit Oversight Committee for FY24. Internal Audits are designed to provide assurance, add value, and improve operations.

The audit’s objectives were to: 1. Verify the physical existence of recorded inventory; 2. Ensure inventory transactions are accurately recorded and traceable; 3. Verify that inventory is adequately and appropriately stored and secured; 4. Identify discrepancies or inefficiencies in the inventory management process; 5. Assess the effectiveness of existing internal controls of inventory management; and 6. Determine if a consistent process exists between the multiple divisions in DPW for inventory and capital assets.

The results of the audit, findings and recommendations for improvement are detailed in this report. We would like to thank the members of management for their teamwork and cooperation during the audit. Management was provided with an opportunity to respond to this report and their response is included.

Sincerely,

Johnnie Coleman, Senior Internal Auditor

CONCLUSIONS

The IAO’s conclusion, based on the evidence obtained, is that the Department of Public Works – Fleet and Inventory Management: fuel inventory systems are ***Ineffective***ⁱ. This assessment is based on the strengths and weaknesses of the entities’ business operations as they relate to the audit objectives.

BACKGROUND & SCOPE

Background

The Department of Public Works (DPW) provides crucial services that improve the quality of life for the residents of Charles County and ensures County infrastructure and assets are safe and reliable. DPW is comprised of two main divisions, Facilities and Utilities, each of which is further divided into 4 subdivisions.

As a subdivision of Facilities, Fleet and Inventory Management (FIM) is responsible for ordering, receiving, tracking, and issuance of a wide range of supplies and materials. Under management of FIM, a warehouse contains roughly 450K in auto parts and general supplies, field storage contains about 250K in road pipe, two salt domes contain about 700K in road salt, and 7 commercial fuel tanks across 4 sites. Other duties of FIM include providing registration, titling, and maintenance for 646 tagged and 682 non tagged vehicles (excluding 43 VanGo vehicles and 55 Landfill vehicles over 1 Ton).

In 2023, approximately 760,000 gallons of fuel were dispensed across the 4 fueling sites. Fuel is used by all Charles County Government departments and other agencies such as the Sherriff's Office (uses approximately half of total fuel), Town of La Plata, Spring Dell Center, Sagepoint Senior Living Services, Health Department, College of Southern Maryland, and others. Agencies that are not part of Charles County Government (CCG) reimburse CCG for their fuel usage.

Potential risks as it relates to fuel inventory include operational risks such as processing errors, efficiency risks, and fraud risks such as theft. Based on the November 2022 risk assessment, the Internal Audit Oversight Committee agreed, as part of the FY 2023 Audit Plan, that it was prudent to conduct an internal audit of fuel inventory.

Scope

The scope of this audit primarily centered on evaluating fuel inventory systems and processes, encompassing a review of fuel usage analysis from October 2023 to January 2024.

Audit objectives included:

- Verify the physical existence of recorded inventory.
- Ensure inventory transactions are accurately recorded and traceable.
- Verify that inventory is adequately and appropriately stored and secured.
- Identify discrepancies or inefficiencies in the inventory management process.
- Assess the effectiveness of existing internal controls of inventory management.
- Determine if a consistent process exists between the divisions in DPW for inventory and assets.

The Internal Audit Office's approach involved testing audit objectives through evidence-analysis techniques, including reviewing department SOPs, interviewing personnel, conducting site visits, and data analysis. Detailed audit methods and procedures can be found in the methodology section of this report.

DISCUSSION, FINDINGS & RECOMMENDATIONS

Traceability of Transactions - Fuel Usage Reports

Discussion

Fuel access controls consist of staff entering their authorized employee ID# while in possession of a 'Prokee' assigned to a specific vehicle. This enables FIM to generate fuel usage reports by division, employee, and vehicle.

Beyond employee authorization and use of the 'Prokee', there are limitations to monitoring fuel usage for fraud detection or overall fuel efficiency. Miles per gallon (MPG) could potentially be evaluated to identify anomalies; however, manual calculations, inconsistent odometer readings, and highly variable vehicle use can significantly impact the reliability of MPG calculations for detecting fraud or inefficiencies.

Finding #1: Analysis of the fuel reports sampled revealed many input errors for vehicle mileage/odometer information. FIM staff indicated that fuel usage reports are provided monthly to division management; however, there is no formal procedure/control in place to ensure the reports are reviewed.

Based on initial review of fuel usage report discrepancies, the IAO provided management with information for additional analysis. The IAO also reached out to the Sheriff's Office and the Town of La Plata for them to research discrepancies in odometer readings. Respective responses to this analysis can be found in the "management responses" section of this report.

Recommendation #1: Implement additional controls to ensure divisional management provides review of the monthly fuel report. Ensure all county departments and other facilities utilizing fuel stations are aware of the importance of inputting correct information by including reminders with the monthly fuel reports. Determine if the Fuel Master system could be upgraded to require accurate input of odometer information based on prior input. Incorporate any updated procedures in the Inventory Control Operating Manual.

Traceability of Transactions - Fuel Pump Access

Discussion

During the audit, the process of employees obtaining access and utilizing fuel pumps was examined. FIM administers this process by assigning a unique Prokee to most vehicles and equipment. In addition to the vehicle Prokee, individual employees require explicit access approval. This integrated system empowers FIM to monitor and report fuel usage, while also capturing odometer readings for monitoring preventive maintenance. Currently, FIM facilitates the granting or removal of pump access for employees based on supervisor requests.

Finding #2: There are no written procedures on fuel pump access and removal for employees. It is also noted that there is limited training for staff on fuel pump usage, evident in a sample of 35 vehicles, where 6 vehicles had errors in the manual entry of odometer readings. Such discrepancies can undermine effective monitoring and preventative maintenance.

Recommendation #2: Establish written procedure to formalize fuel pump access and removal of employees. To ensure proper authorization and approval in this process, request written/email documentation from employee's supervisor or Human Resources. Provide staff with written rules, requirements and actions related to misuse of County fuel stations.

MANAGEMENT RESPONSE

Management is provided with the opportunity to respond to recommendations and their responses are summarized below. It is important to note that auditors don't implement recommendations as their role is investigative and advisory, lacking the managerial authority to enforce change. Management, on the other hand, holds the responsibility for implementation due to their authority over resources, decision-making, and strategic direction toward goals and objectives, making them accountable for addressing identified issues. As such, management may also have a valid rationale for existing processes or alternatives to audit recommendations.

Recommendation 1: Input Errors for Vehicle Mileage/Odometer Information

Sheriff's Office Response:

Email correspondence stated that the Sheriff's Office Fleet Manager investigated the matter and stated that there were issues due to employees forgetting or borrowing their Prokee for refueling due to round-the-clock shifts, potentially affecting odometer readings. It was also found that a Sheriff's Office employee was using an incorrect number, which coincidentally matched a county employee's number.

The Sheriff's Office responded to the Internal Audit's review and findings by issuing the following email to all Sheriff's Office personnel from the Commander of Property Management.

"As a result of an Internal Audit of the fuel system, a number of issues have been identified that need to be addressed when fueling department vehicles.

PLEASE DO NOT share individual PIN numbers. If you are having an issue, contact the Fleet Manager to get it resolved.

PLEASE DO NOT share Pro-Keys. Embedded in the programming are budget identifiers as well a vehicle identifier. If you use someone else's key, it causes the data in the fuel reports to be inaccurate.

Exercise care when inputting mileage. The reports that are generated monthly list every mileage input and it is readily apparent that some figures are inaccurate.

If a circumstance arises that you need to utilize a Pro-kee other than the one issue to you and your assigned vehicle or the assigned spare, please email the Fleet Manager with the circumstances.

This should not be a common occurrence; however, we understand things happen. This will allow us to explain the reason during future audits."

Town of La Plata Response:

Email correspondence from the Director of Operations stated that the matter would be reviewed and suggested that reminding staff members of the importance of entering the correct odometer information when fueling is in order.

The IAO is seeking additional response to determine further findings or actions taken.

Department of Public Works - F&IM Response:

In response to preliminary audit findings, the Chief of F&IM issued an email on April 12, 2024, to all Charles County Staff addressing the importance of accurate mileage and proper Prokee usage. The email also emphasized the significance of divisional management reviewing Monthly Fuel and Inventory Reports to ensure thorough and timely assessments. The email stated:

"Below are reminders for utilizing the County fueling locations and DPW Facilities inventory warehouse. Also provided are guidelines to recipients of the monthly reports for fuel and inventory transactions.

FUELING COUNTY VEHICLES/EQUIPMENT WITH A PROKEE

- PLEASE DO NOT SHARE EMPLOYEE NUMBERS. Employees fueling county vehicles/equipment MUST USE THEIR COUNTY ISSUED EMPLOYEE NUMBER.
- PLEASE DO NOT SHARE PROKEES. Prokees are linked to fuel account numbers and vehicles/equipment.
- ACCURATELY INPUT MILEAGE OR HOURS. Preventative maintenance is based on mileage/hours, so accurate data entry is important.
- If you experience an issue with obtaining fuel, please contact your supervisor.

REQUESTING SUPPLIES FROM DPW FACILITIES INVENTORY WAREHOUSE

- PLEASE DO NOT SHARE EMPLOYEE NUMBERS. Employees requesting/receiving supplies MUST USE THEIR COUNTY ISSUED EMPLOYEE NUMBER.

RECIPIENTS OF MONTHLY FUEL AND INVENTORY REPORTS

- Review reports ASAP to confirm transactions are accurate and employee numbers are valid.
- Email the Inventory Program Manager with any concerns regarding the reports or to remove users from the fuel and inventory systems. Please note that some concerns regarding transactions may need to be addressed to/coordinated with DFAS/Accounting to resolve.”

Additionally, the Deputy Director of Public Works noted that FuelMaster has the capability to require an odometer reading entered by the customer be within a specific range prior to dispensing fuel; however, based on F&IM prior experiences, this feature does not ensure accuracy. In addition, this feature allows multiple invalid entries to ultimately disable the fuel dispenser causing severe negative impacts on operations.

Human errors are unavoidable. Fortunately, an incorrect entry at the fuel dispenser has minimal impact and associated risk as F&IM has multiple processes in place to ensure preventative maintenance for vehicles and equipment is performed timely. In addition, the departments/divisions are responsible for reviewing fuel transactions for their department/division.

Recommendation 2:

The Deputy Director of Public Works responded: F&IM plans to work with the Department of Fiscal & Administrative Services, Department of Human Resources, and Charles County Sheriff’s Office to enhance the current practices for adding and removing customers, both internal and external to Charles County Government. The enhanced practices will be communicated to customers prior to implementation.

METHODOLOGY

Audit objectives were selected by the Internal Audit Office to evaluate FIM’s general business functions as it relates to fuel inventory management. The audit approach included procedures to test audit objectives. The IAO audit procedures included evidence-analysis techniques based on reviewing department SOP’s, interviewing personnel, conducting site visits, and data analysis. The table below connects the general auditing procedures used to evaluate the audit objectives.

Business Function: Inventory Management	
Audit Objectives	Audit Procedure(s) / Testing
Verify the physical existence of recorded inventory.	<ul style="list-style-type: none"> • Conduct physical inspection of fuel stations.
Ensure inventory transactions are accurately recorded and traceable.	<ul style="list-style-type: none"> • Review and evaluate procedures for fuel pump access. • Evaluate fuel usage reports to gain insights into fuel usage.
Verify that inventory is adequately and appropriately stored and secured.	<ul style="list-style-type: none"> • Conduct onsite visits and interviews to identify security adequacy.
Identify discrepancies or inefficiencies in the inventory management process.	<ul style="list-style-type: none"> • Systematic review and analysis of unit procedures and observations through the audit process.
Assess the effectiveness of existing internal controls of inventory management.	<ul style="list-style-type: none"> • Systematic review and analysis of unit procedures and observations through the audit process.
Determine if a consistent process exists between the multiple divisions in DPW for inventory and assets.	<ul style="list-style-type: none"> • Assess monthly fuel reports for this design and effectiveness as a control. • Interview key staff and document how FIM interacts with other Divisions.

Internal Controls

Internal controls can be defined as any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Implementation of recommendations noted in this report will strengthen controls. In all elements of the audit procedures, the auditor evaluates the design and effectiveness of controls. If deficiencies in design or effectiveness are noted, it is reported as a finding in this report.

Conformance

The audit was conducted in accordance with the 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 does provide a reasonable basis for our findings and conclusions. Internal audits are designed to provide assurance, add value and improve operations.

Report Distribution:**Audit Team:**

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ⁱ Definitions:

Effective: The design and effectiveness of the internal control environment address key risks. The business unit complies with external laws and regulations, and internal policies, procedures, and guidelines. Business processes are managed effectively resulting in reliable achievement of expected outcomes.

Generally Effective: The design and effectiveness of the internal control environment generally address key risks; however, findings indicate that some minor areas of weakness in the control environment need to be addressed. Isolated instances of non-compliance with external laws and regulations, and internal policies, procedures and guidelines may exist. Business processes may lack effectiveness or not be managed effectively in all areas resulting in reduced achievement of expected outcomes.

Ineffective: The design and effectiveness of the internal control environment does not address key risks or does not exist. Non-compliance or historical patterns of non-compliance with key regulatory requirements and internal policies, procedures and guidelines exist which expose the audited entity to financial, reputational, and operational risks. Business processes are not managed effectively and expected outcomes are not achieved.