



# Fuel Management Audit

Audit Committee  
June 10, 2025





# Agenda

1. Audit Objectives
2. Scope and Methodology
3. Audit Observations
4. **Management Action Plans**
5. Next Steps
6. Questions



## **Audit Objectives**

- Evaluate whether appropriate policies and procedures are in place to ensure effective, consistent, and accountable fuel management.
- Determine whether fuel inventory levels are properly monitored and replenished in a timely and controlled manner.
- Assess whether access to on-site diesel fuelling is appropriately restricted and fuel activity is adequately monitored.



## **Audit Objectives (Con't)**

- Examine whether commercial fuel cards are properly issued, managed, and monitored to prevent unauthorized use and ensure accountability.
- Verify whether off-site fuel activity is effectively monitored and related payments are accurate, properly reviewed, and approved.



## **Scope and Methodology**

Our audit scope covered fuel activity for the period of January 1, 2022 to December 31, 2024.

The audit methodology included:

- Review of policies and SOPs guiding fuel management.
- Interviews with staff involved in the fuel management process.
- Sample testing and data analysis to assess efficiency, effectiveness and compliance of fuel management activities.
- Site visits to observe fuelling practices and system functionality.



## **Audit Observation 1: Strengthen Monitoring Process for On-site Fuel Use**

Internal Audit identified repeated short-interval fuel-ups for the same vehicles. There is also an inconsistent use of jerry can key fobs when filling jerry cans. These and the absence of exception-based monitoring reduce Fleet's ability to detect and address irregularities and or anomalies.

The Director, Road Maintenance, Operations and Fleet should implement an exception-based monitoring process to flag irregular fuel usage, enabling the timely detection of potential misuse and supporting greater accountability.



## **Audit Observation 2: Enhance Vehicle Mileage Capture and Fuel Analysis**

We observed several data limitations that affect the accuracy and completeness of fuel consumption monitoring:

- At the time of the audit, 48 Vehicle Data Units (VDUs) were found to be non-operational, limiting the automated capture of odometer readings during on-site fuelling.
- Automatic Vehicle Location (AVL) is not integrated with M5 and is not currently utilized to support fuel consumption analysis.
- Odometer readings for off-site fuelling are manually entered at pumps and re-entered into M5, increasing the risk of errors.
- Fleet does not currently conduct annual litres-per-100 km analysis, a common fuel efficiency metric in Canada, limiting insight into fuel efficiency trends.



## **Audit Observation 2: Enhance Vehicle Mileage Capture and Fuel Analysis (Con't)**

The Director, Road Maintenance, Operations and Fleet should enhance the fuel analysis process by:

- Optimizing mileage data capture by prioritizing the repair of non-functional VDUs, exploring integration of AVL data with M5, and reducing reliance on manual data entry.
- Implementing annual vehicle-level fuel efficiency analyses to identify and investigate vehicles with poor fuel efficiency and proactively detect mechanical issues or potential fuel misuse.





## **Audit Observation 3: Enhance Oversight of the Off-site Fuel Card Program**

A review of the Off-site fuel card monitoring process noted the following:

- There is no formal process to follow up with business units on potential fuelling exceptions, including out-of-town or premium fuel transactions, limiting accountability.
- Business units do not receive off-site purchase activity reports and must rely on manual receipt submissions or ad hoc calls from Fleet, resulting in inconsistent fuel monitoring.
- Off-site reports are only available in PDF format and limited to 24 months, restricting Fleet's ability to conduct detailed analysis or identify long-term fuelling trends.
- Off-site transactions do not capture employee IDs at the pump, making it difficult to link fuel purchases to specific individuals and enforce accountability.



## **Audit Observation 3: Enhance Oversight of the Off-site Fuel Card Program (Con't)**

The Director, Road Maintenance, Operations and Fleet should strengthen the Off-site fuel card program by:

- Establishing a formal procedure for following up on fuelling exceptions, including out-of-town transactions and use of premium fuel types, with documented communication to support inquiries and responses.
- Providing business units with regular access to fuel purchase activity reports to support operation level monitoring and shared accountability.
- Working with the vendor to obtain fuel transaction data in an analyzable format to facilitate fuel review and analysis.
- Exploring enhancements to capture operator-specific information such as employee ID at the time of fuelling to improve traceability and support effective monitoring of fuel transactions.



## **Audit Observation 4: Establish A Standardized Fuel Inventory Reconciliation Process**

A review of the reconciliation process for on-site fuel inventory noted the following:

- For Coencorp managed sites, inventory reconciliations are not being performed or reviewed.
- For AssetWorks managed sites, Fleet is not fully utilizing the system's reporting capabilities to perform fuel inventory reconciliations.
- While manual dip readings are conducted, they are not centrally stored or consistently documented against system data, which may limit traceability.
- A formal SOP outlining roles, responsibilities, and reconciliation procedures has not yet been developed, which may impact consistency across fuelling sites.



## **Audit Observation 4: Establish A Standardized Fuel Inventory Reconciliation Process (Con't)**

The Director, Road Maintenance, Operations and Fleet should implement a standardized monthly fuel inventory reconciliation process across all fuelling sites that includes:

- Generating and reviewing monthly reconciliation reports.
- Establishing defined variance thresholds that trigger follow-up actions and investigations to address potential issues such as unrecorded withdrawals, or gauging errors.
- Centralizing the collection and storage of manual dip readings and formally documenting comparisons between manual measurements and system recorded inventory levels.
- Developing a formal SOP that outlines staff roles, responsibilities, reconciliation steps, documentation requirements, and investigation protocols.



## Conclusion

Overall, several foundational controls are in place to support effective fuel management across City operations. This audit identified key areas where oversight, data accuracy, and accountability can be strengthened. Specifically, the lack of exception-based monitoring and regular fuel consumption analysis, limited oversight of off-site fuel card usage, and the absence of routine fuel inventory reconciliations present risks to operational efficiency and fuel accountability.

Implementing the recommendations outlined in this report will enhance Fleet's ability to detect anomalies, improve the reliability of fuel data, and streamline fuel management processes. These improvements will support stronger accountability across user departments and provide more accurate information to guide operational and financial decision-making.



## **Management Action Plans**

### **1. Enhancements to Fuel System Monitoring and Access Controls**

- A. Implement a report that identifies fueling exceptions and irregularities and follow up with user groups when required.
- B. Fleet is also working with Business Systems (IT) to implement system controls at the pump that will not allow consecutive fuel ups under the same FOB in a restricted time frame. This will prevent short interval fuel ups.

Timeline: Item A - Q4, 2025, Item B - Q1, 2026





## Management Action Plans

### 2. Odometer Data Accuracy and System Enhancement Initiative

- Track and repair the non-functional VDUs on an ongoing basis.
- Work with Business Systems (IT) and AVL team to find an alternative and robust system to capture accurate mileage for all COB fleet vehicles.
- Fleet is also currently running a small pilot on 10 licensed vehicles to extract mileage and ensure it is compatible with M5 and Coencorp.

Timeline: Q3, 2026



## Management Action Plans

### 3. Annual Vehicle Fuel Efficiency Analysis and Exception Review

- Implement an annual fuel consumption report based on the current usage report.
- The analysis will be based on L/100 km and any high or low consumption will be investigated as necessary.

Timeline: Q4, 2025





## Management Action Plans

### 4. Enhancing Oversight and Accountability of Off-Site Fuel Transactions

- Implement a formal process to review and follow up on all exceptions, such as out of town fueling and premium fuel types. User groups to provide explanations for the transactions.
- Explore options available to provide monthly off-site fuel reports to the respective user groups to enable the review of offsite fuel transactions at the operational level.
- Work with current off site fuel provider to generate reports in excel.
- Implement additional tracking of offsite fueling to enable user identification such as employee ID.

Timeline: Q4, 2025



## Management Action Plans

### 5. Formalization of Fuel Reconciliation Process

- Formalize the fuel reconciliation process, including the review of monthly reconciliation reports from both Coencorp and AssetWorks fuel systems.
- Define variance thresholds that trigger follow ups of potential fuel tank and recording issues.
- Centralize the collection of the monthly manual dip reading and document the comparison between the manual and fuel system inventory levels.
- Develop a formal SOP that addresses all areas of the fueling reconciliation process.

Timeline: Q4, 2025



## **Next Steps**

- ✓ Action plans have been developed
- ✓ Implementation is underway or completed
- ✓ Internal Audit will follow up and report on the status of these action plans



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**Questions?**



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**Thank You**

