



Audit of Fleet Services Operations

Fuel Management

The City of Denton purchases and distributes bulk fuel products to departments for economy. Access to fuel has historically been loosely controlled, increasing risk of inappropriate usage. Additionally, user odometer reading entry and billing practices impede transaction monitoring.

Fuel stations generally have appropriate onsite security and safety equipment; however, additional oversight of fuel deliveries and invoice review procedures would reduce risk of paying for fuel not received.

Implemented fuel monitoring system facilitates tank level tracking; however, this system could be better utilized. Compliance with some regulations is unclear.

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Audit at a Glance

Why we did this Audit:

Fuel is a costly commodity that is at high risk of misuse or fraud and is heavily regulated by State & federal entities. Over the last three fiscal years, the City has spent almost \$10 million on fuel and plans to spend more than half this amount in during 2023. This audit was included on the City's fiscal year 2022-23 Audit Plan as approved by the City Council.

What we Recommend:

Recommendations 1, 2, 3, 7, & 9

Establish written guidance for fuel ordering, invoice management, departmental billing, & flagged fuel transaction review.

Recommendations 4 & 10

Improve fuel tank monitoring and maintenance processes.

Recommendations 5 & 6

Establish procedures for granting, changing, removing, and reviewing access to bulk fuel.

Recommendation 8

Provide transaction details to departments monthly.

Recommendation 11 & 12

Develop written procedures for regulatory activities and verify tank release detection method compliance.

What we Found:

This audit generally evaluated management of the City's bulk fuel inventory, including ordering, delivery, employee access, cost allocation – or Department billing, – and safety & environmental regulation compliance. Audit findings are summarized below:

Fuel Delivery Oversight. A fuel monitoring system is used to track tank levels; however, Fleet does not periodically verify the accuracy of this system. Fuel appears to be ordered and delivered timely. Additional oversight of fuel deliveries & further invoice review procedures would reduce risk of paying for fuel not received.

Fuel Access Management. Historically, access to bulk fuel has been loosely controlled & reviewed, increasing the risk that fuel is used inappropriately; lack of guidance regarding authorizing fuel access impedes proper control. Further, needed manual entry stations allow technical access controls to be overridden, increasing the need for increased restrictions.

Transaction Monitoring & Billing. Fleet recently changed fuel cost allocation – or Department billing – practices to be more efficient. User odometer reading entry practices impede fuel transaction monitoring. Further, only summary fuel transaction bills are provided to departments, prohibiting detailed review. Guidance for reviewing transactions & creating bills have not been developed.

Safety Standards & Environmental Regulations. Fuel stations generally have appropriate onsite security & safety equipment. Some tank water sensors need repair and leak detection methods could be improved. Required monthly inspections adequately documented; compliance with some regulations is unclear.

Introduction

The Internal Audit Department is responsible for providing: (a) an independent appraisal¹ of City operations to ensure policies and procedures are in place and complied with, inclusive of purchasing and contracting; (b) information that is accurate and reliable; (c) assurance that assets are properly recorded and safeguarded; (d) assurance that risks are identified and minimized; and (e) assurance that resources are used economically and efficiently and that the City's objectives are being achieved.

The Internal Audit Department has completed a performance audit of the City's fuel management processes. We conducted this performance 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.

Management Responsibility

City management is responsible for ensuring that resources are managed properly and used in compliance with laws and regulations; programs are achieving their objectives; and services are being provided efficiently, effectively, and economically.

Audit Objectives, Scope, and Methodology

The Internal Audit Department has completed an audit of the City's fuel management processes including ordering, delivery, employee access, billing, and safety & environmental regulation compliance. This report is intended to provide assurance that the City has adequate controls to ensure fuel is purchased, maintained, and safeguarded by Fleet Services adequately.

Audit fieldwork was conducted during February and March 2023. The scope of review varied depending on the procedure being performed. The following list summarizes major procedures performed during this time:

- Reviewed documentation to develop criteria including fuel vendor contract terms, documented policies, Texas Administrative Code– TAC – and Texas Commission on Environmental Quality – TCEQ – guidance and regulations, and best practices;

¹ The City of Denton Internal Auditor's Office is considered structurally independent as defined by generally accepted government auditing standard 3.56.

- Developed process narratives to identify current control activities in the fuel management process;
- Interviewed Fleet Services & Facilities, Human Resources, and Finance Department staff and staff from the City's fuel vendor;
- Performed an onsite visit to the City's two fueling station and observed a TCEQ monthly inspection conducted by staff;
- Reviewed 2022 TCEQ completed inspection checklists and Spill Prevention, Control, and Countermeasure monthly checklists;
- Inspected a sample 98 invoices calendar year 2022 fuel invoices and compared to manually entered invoice data to corresponding data to verify it was entered correctly;
- Inspected November and December 2022 received invoices and verified if payment was made for invoices with a calculated variance rate higher than 2.5 percent;
- Reviewed fuel access emailed requests, Oil Price Information Services website, and fuel monitoring system's related reports;
- Reviewed 2022 fuel transaction data to verify which employees have used fuel;
- Received a list of employees with car allowance privileges and compared with the list of permitted fuel users in the fuel transaction system;
- Inspected the list of permitted fuel users to verify if duplicates or non-usage was present;
- Compared terminated employees to 2022 fuel transactions to verify if any terminated employee credentials were used to obtain fuel; and
- Reviewed a judgmental sample of five departmental fuel billings from Fleet Services to ensure users Departments are charged appropriately.

Findings & Analysis

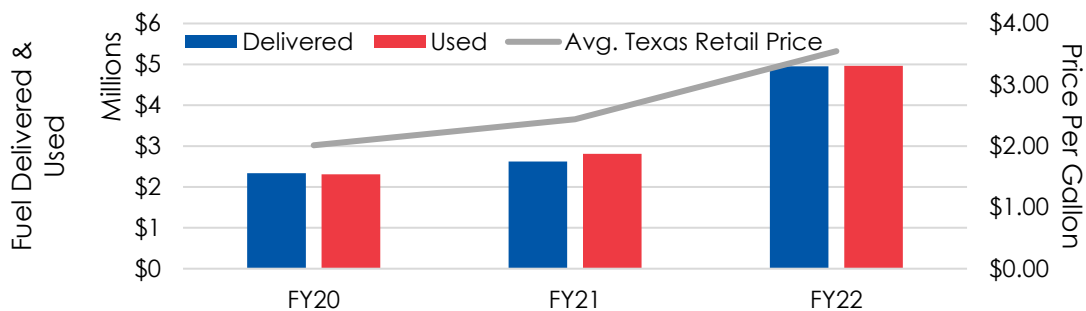
In order to save costs, the City of Denton purchases fuel, including unleaded gasoline, diesel, and biodiesel,² in bulk for usage by City vehicles at the City’s two fuel stations. The Fleet Services Division, in addition to managing and maintaining City vehicles, is largely responsible for managing usage of this fuel. An overview of the fuel management process is illustrated in Figure 1 below:

Figure 1: Fuel Management Process



Specifically, Fleet Services is responsible for ordering fuel when needed from the City’s vendor who make deliveries to each fuel station. Departments are then able to acquire the fuel from a fuel station for usage in City vehicles and are billed by Fleet Services in order to allocate fuel costs appropriately. In addition, Fleet Services is responsible for ensuring that fuel stations and tanks are appropriately safe, secure, and in compliance with applicable state and federal regulations. In November of 2022, Fleet Services experienced major turnover in leadership and has been in process of updating processes and addressing many of the concerns identified in this audit.

Figure 2: Historic City Fuel Deliveries & Usage



² Other fuel products such as propane or DEF are also purchased, but these fuel types were not reviewed as part of this audit.

The City has spent almost \$10 million on fuel over the last three fiscal years as shown in Figure 2. In addition, expenditures on fuel inventory are expected to increase to \$6.1 million based on the adopted Fiscal Year 2022-23 budget due to rising fuel costs.

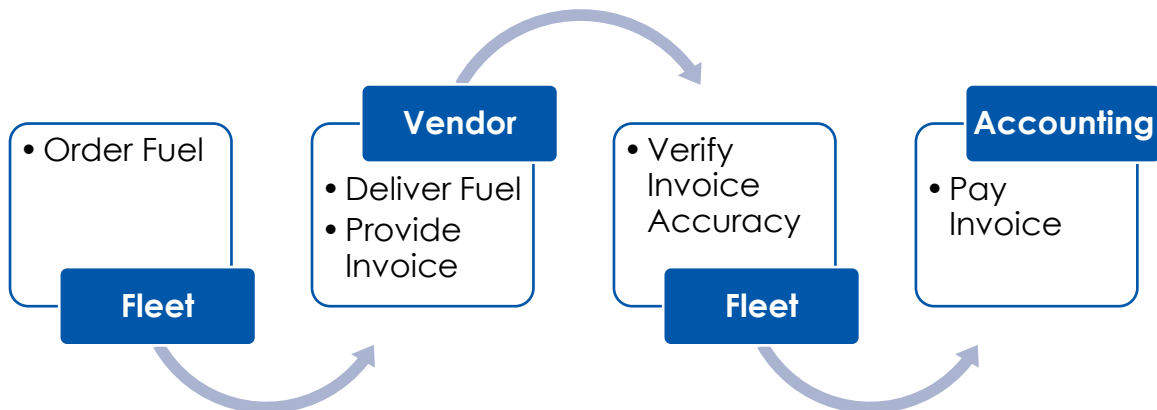
This audit generally evaluated the City's fuel management including ordering, delivery, employee access, billing, and safety & environmental regulation compliance to assist the new leadership in their reform of the division.

Resource Limitations & Lack of Formal Procedures Hampers Fuel Delivery Oversight

Inventory monitoring is critical to understanding when additional inventory is needed. Further, with liquid inventory such as fuel, it is important to monitor and try to minimize the difference – or variance – between inventoried tally of fuel versus the actual fuel available in the tank. Differences are not uncommon, but best practices stress minimizing variance to ensure organizations have accurate fuel inventory records and help minimize cost. Industry research suggests an acceptable fuel variance rate is dependent on the organization; however, overall, the higher the acceptable fuel variance, the higher the risk of paying for undelivered fuel.

The City has established a contract for the delivery of bulk fuel to each of its two fuel stations. Once ordered, the vendor delivers the fuel directly into the tank and provides a bill of lading – or receipt – detailing the quantity and temperature of the fuel delivered. Once fuel is delivered the vendor provides an invoice to request payment. This process is illustrated in Figure 3.

Figure 3: Fuel Order & Payment Process



Best practices suggest that an organization verify quantity and price of delivered goods before paying an invoice. With fuel, this generally requires close monitoring of tank levels and temperature in order to verify the quantity delivered.³ In addition, fuel prices change from day to day, requiring the purchaser and supplier to agree on a price reference point. To achieve this, best practices suggest an employee be present during fuel deliveries to help ensure adequate delivery documentation is acquired.

What We Found

- The City of Denton uses a fuel monitoring system that provides a range of fuel gauges and reporting mechanisms that are intended to continuously measure fuel levels and temperature in storage tanks. The fuel monitoring system also provides daily and monthly reports of fuel sale and delivery transactions. This inventory system can aid in identifying fuel leaks and confirming delivered fuel totals.
- Fuel monitoring capabilities are not fully used, hindering inventory tracking.
 - Best practices recommend a fuel monitoring system's accuracy be verified by ensuring tank equipment is working properly through routine maintenance and conducting manual inventory checks. A manual inventory check involves dipping a measuring stick into a tank to calculate the actual fuel level based on tank capacity as shown in Picture 1. A tank chart can then be used to easily calculate the amount of fuel in the tank based on the length measured.⁴
 - Based on discussions with Fleet Services staff, tank volume is measured manually each month and a system report is run onsite; however, the actual level is not calculated or compared to the system reading. Staff also reported that they plan to start recording capacity levels as inches and gallons to attempt to gain a point of reference.
 - Based on research, the fuel monitoring system has the ability to create its own measurement chart for each fuel tank using an internal tank calibration algorithm. Assuming original tank charts cannot be found,



Picture 1: Manual Fuel Level Check

³ Temperature is a critical component to the volume of a liquid, including fuel, and therefore must be monitored closely during delivery.

⁴ A tank chart is essentially a table that shows precalculated tank volumes (i.e. gallons in the tank) based on the tank's shape, size and the manually collected measurement.

creation and use of these charts would facilitate manual verification of the fuel monitoring system's accuracy.

- Lack of formal delivery procedures impede invoice reconciliation and could increase the risk of paying for fuel not delivered.
 - Historically fuel orders were placed verbally over the phone, so documentation of ordered quantity does not exist, increasing the risk that fuel was delivered when not needed and eliminating any possibility of review. According to Fleet Services staff, the ordering process was recently updated to ensure only written fuel orders were placed; however, a written procedure has not yet been developed.
 - According to Fleet Services, fuel is typically ordered when a tank has less than 55 percent of its capacity remaining based on information provided by the fuel monitoring system. This criterion appears to ensure fuel is available for use by City departments when needed.
 - Fuel is typically delivered without staff present, increasing the risk that fuel deliveries do not meet contract specifications such as the required delivery temperature. Additionally, without staff present, tank readings cannot be obtained just before and just after deliveries, which would improve Fleet's ability to reconcile the quantity delivered to the quantity invoiced.
 - Fleet Services has three individuals certified to operate underground storage tanks, which complies with State and federal regulations. However, these individuals are also responsible for performing fleet maintenance activities, which may limit the time available to perform fuel-related duties.
- Fuel invoice verification procedure was recently improved; however, additional checks would further ensure the City is accurately invoiced.
 - Fleet Services actively tracks fuel invoices using a spreadsheet to help ensure all fuel costs are allocated to user departments. Based on a review of 98 invoices from calendar year 2022 this spreadsheet was generally accurate.
 - Historically, fuel invoices were paid without comparing the quantity of fuel recorded as delivered by the fuel monitoring system to the quantity billed. In November 2022, Fleet Services began requesting new invoices from the City's fuel vendors if the variance was greater than 2.5 percent; however, this policy is not documented. Based on review, all invoices that exceeded this variance during November and December of 2022 were disputed and adjusted accordingly; however,

- while acceptable fuel variance is subjective, a review of best practices suggests 2.5 percent may be too high.
- The City's fuel contract designates a specific prices reference point based on Oil Price Information Services – or OPIS – data. However, based on discussion with the City's fuel vendor, invoices cannot show specific OPIS fuel prices due to OPIS's regulations despite this being required by the City's fuel contract. OPIS prices can be obtained via an online tool however it requires payment to OPIS. Fleet Services staff reported that they plan to begin periodically using this tool to ensure the vendor is invoicing appropriately.
 - Overall, the fuel invoice verification procedure lacks written policies and procedures.

Why It Matters

Adequate invoice delivery verification procedures are critical to ensuring that the City is only paying for the quantity of fuel delivered at the agreed upon price. While comparing invoiced quantity to fuel monitoring system readings helps to ensure that the quantity invoiced is accurate, having an employee on site to measure tank levels just before a delivery would allow for even more accurate delivered quantity calculations. Similarly, periodically comparing invoiced prices to OPIS would provide assurance that the vendor is invoicing the City based on the agreed upon price reference.

In addition, it is critical to manually verify that the fuel monitoring system is accurate periodically to ensure that fuel tank level information is accurate. While Fleet is currently performing this procedure, they do not have an easy way to use this measurement to calculate actual tank volumes. Using the fuel monitoring system to establish a tank chart, if the originals cannot be found, would ease this verification process and help identify differences between actual available fuel and the fuel levels according to the fuel monitoring system.

Lastly, establishing written policies or procedures for fuel ordering and invoice verification would help to retain institutional knowledge, navigate emergency situations, and ensure consistency. Specifically, requiring written order documentation, documenting critical invoice verification procedures, and establishing an acceptable delivered quantity variance would provide clear guidance to staff.

Recommendations:

1. Implement a written fuel ordering process that includes order record retention parameters and emergency order procedures.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.*

2. Developing a process to record tank levels just before and just after fuel deliveries to further ensure invoices are accurate. This could be achieved by requiring an employee to be present at fuel deliveries to run tank level readings immediately before and after fuel deliveries, which can be used to verify the bill of lading.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. In addition, Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary function.*

3. Document the established acceptable fuel variance and invoice process in a policy or procedure. Consider reducing the permitted fuel variance based on temperature adjusted readings and establishing parameters to periodically check invoice pricing.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation and ensure any adjustment to the fuel variance aligns with fuel storage regulations.*

4. Establish tank charts for all tanks and ensure manual dipping measurements are converted using established tank charts to ensure the fuel monitoring system is accurate. These verifications should be documented and performed periodically.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary role.*

Employee Access to City Fuel Has Been Loosely Controlled

According to the Standards for Internal Control in the Federal Government, management should limit access to fuel only to authorized individuals and should maintain accountability for fuel usage by ensuring adequate controls are in place. Further, control activities should be designed to properly update fuel access rights when employees change job functions or when they leave City employment. It's important to note that the lack of lack of controls and processes is reportedly a leading cause of fuel theft or misuse.

What We Found

- Employees are able to override fuel management system controls.
 - The City has implemented a fuel management system that regulates and records the City's fueling transactions. This system generally employs dual authentication by requiring entry of an authorized employee ID and an authorized asset ID to allow an individual to acquire fuel products from one of the City's fuel stations.

- Fuel station pumps are designed to automatically read an asset ID when nozzles are inserted into the vehicle via wireless nozzle readers and once an employees' badge is scanned fuel is released. However, each fuel pump has a manual entry station as shown in Picture 2, which would allow an individual to bypass the technical controls over asset and ID entry, potentially allowing for non-City vehicles to be fueled.



Picture 2: Manual Entry Station

- The fuel management system does prohibit users from accessing fuel products if the entered odometer reading is more than 500 miles from the previously recorded reading; however, this does not adequately reduce the risk of non-City vehicles being fueled. For example, someone with knowledge of a current odometer reading could enter this information manually and obtain fuel for a non-City vehicle.

- Lack of access management controls increases the risk of inappropriate usage.
 - Historically, Fleet Services has not clearly documented supervisor approval of access to the City's fuel sites. Instead, supervisors were only required to email Fleet Services with the employee's ID number and their badge number in order to obtain access to City fuel.
 - Based on review of the fuel management system's authorized users as of March 2023, roughly 10 percent appeared to be duplicate accounts. Fleet Services has historically created duplicate user accounts by adding a number to the employee's ID number despite seemingly being able to enter more than one account with the same ID number. Overall, this practice impedes review of a single employee's fuel transactions. Further, of the 1,943 unique (i.e., non-duplicated) fuel management system users, about 50 percent did not access the City's fuel during 2022.
 - Lastly, at least 210 fuel management system users – about 9 percent – no longer work for the City as of March 2023. Further, a total of

2,707.06 gallons of fuel products were accessed by eight of these terminated users.

- Fleet Services staff have begun updating the list of authorized users and have verified that fuel transactions completed by all eight terminated users were appropriate. Terminated employee transactions were generally due to the reassignment of a badge number to a new employee by the Facilities Management Division without communicating this change to Fleet Services.⁵
- No policies exist to guide who should have access to the City's fuel. Based on review, at least two users appeared to be Police Department volunteers and of the 29 City employees with car allowances, 15 also had access the City's fuel. While this access may be appropriate, these users have increased risk of inappropriate fuel transactions.

Why It Matters

While access to the City's fuel does require dual authorization, several issues have historically existed with the administration of the fuel management system. Specifically, best practices indicate that access to resources should only be granted when needed and once that need is no longer present the access should be removed timely.

Implementing a periodic review of fuel management system users and developing guidelines on what employees need fuel access would help to minimize the risk of fuel misuse or theft. In addition, creating procedures and approval documentation for granting, changing, and removing fuel access would help to retain institutional knowledge, navigate emergency situations, and improve user database consistency.

Recommendations:

5. Establish a written procedure for granting and removing fuel access including establishing minimum criteria for fuel access, retaining all requests, and requiring complete profile listings including the complete name as listed by Human Resources. Criteria should consider if City volunteers and City employees with car allowances should have access to bulk fuel.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.*

⁵ The fuel management system reads the badge number on the back of the card to verify a user's authorization, which allows a badge to be repurposed once the front is updated with a new employee's information.

6. Periodically review fuel management system users to ensure terminated employees are appropriately removed from the system. Consider reviewing annual usage by user to identify those who show no usage or minimal usage to determine if fuel access is necessary for their job duties.

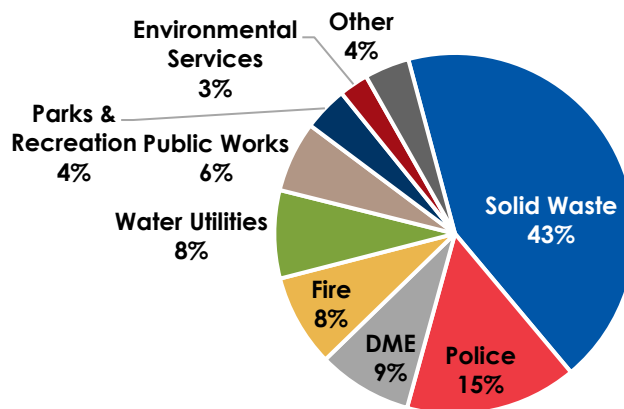
Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services has already commenced removing user with minimal to no usage.*

Some Fueling Practices Hinder Transaction Monitoring and Timely Billing

Bulk fuel is readily available for a large number of employees and is used daily, making it more prone to misuse or theft especially since fuel is a product that most people require in their everyday lives. Best practices suggest fuel requires ongoing monitoring of inventory and of general usage to help prevent unauthorized usage.

Furthermore, since Fleet Services manages bulk fuel ordering, they are responsible for “billing” Departments for their fuel usage to ensure fuel costs are allocated accurately to Departments, which is important as Department funds come from many different sources including sales taxes, property taxes, utility fees, etc. During 2022, City Departments used about 976,000 gallons of fuel. Proper fuel billing and reconciliation ensures that City Departments are maintaining their fiscal responsibilities to the citizens.

Figure 4: 2022 Fuel Usage by Department



What We Found

- Fleet Services has recently begun billing Departments based on the average monthly price of fuel instead of using the first in, first out method.
 - At the start of each month, Fleet Services staff calculate the average fuel price for the previous month based on the available invoices from the City's fuel vendor. These average prices are then entered into Fleet's asset management system by location and fuel product to calculate the amount to bill each department.
 - In general, monthly averaging may not result in as accurate of Department billing as the first in, first out method. However, as this is an internal cost allocation method, monthly averaging is not inappropriate and is likely a more efficient use of Fleet Services staff's time.
 - Calculation practices for monthly average fuel prices may not capture all invoices due to typical vendor timing delays; however, based on review of three months of averaged fuel prices, only small price differences were found suggesting that Fleet Services is appropriately recuperating costs from Departments.
 - Currently there are no written practices or procedures regarding price averaging or overall billing process.
- User odometer reading entry practices hinder transaction monitoring.
 - While importing daily fuel transactions, the asset management system is designed to flag potentially inappropriate fueling transactions based on odometer readings and other pieces of transaction data. In general, these flagged transactions should be reviewed and cleared before posting them to the asset management system for inclusion in monthly billing. Until a transaction is posted in the fuel management system it cannot be billed by Fleet Services.
 - On average, about 1,000 transactions were flagged monthly from October through December 2022 with a significant amount being caused by odometer readings. These types of flagged fuel transactions occur when an entered reading differs too much from the previous odometer reading for a particular asset. While there are other causes for flagged transactions, staff reported the largest and most consistent concern is that employees are manually entering incorrect readings.
 - All flagged transactions must be individually reviewed and cleared in the asset management system. However, staff have reported that with the large number of flagged fuel transactions detailed reviews and transaction verification is not possible.

- While Fleet tries to resolve these flagged transactions by requesting information from Departments, there is evidence that Department's do not understand why these controls are important to ensuring fuel is appropriately safeguarded from misuse.
- Fleet Services billing practices prevent Department's from monitoring their fuel usage.
 - Fleet Services only provides Department's with summary bills that do not include detailed transaction information. Instead billing information is sent directly to the City's Accounting Division, which posts the interfund transfer as directed. This practice prohibits Departments from monitoring their fuel transactions.
 - Based on review of five bills, three did not clearly match the supporting data from the City's fuel management system. This was likely the result of transaction posting delays that were caused by flagged transactions, which as mentioned above, often result from users' odometer reading entry practices.

Why It Matters

Accurate and timely billings are not only crucial for Fleet Services to recuperate the costs of ordered fuel, but also ensure user departments are able to appropriately monitor their fuel budgets. While Fleet appears to have developed a billing method to adequately recuperate these costs, employees with access to City fuel have historically not received training or guidance around fuel usage. This lack of guidance may, at least partially, explain the significant number of flagged transactions generated when fueling transactions are uploaded into Fleet's asset management system.

The significant number of flagged transactions hinder monitoring and billing of fueling transactions in two ways. First, flagged transactions must be individually cleared limiting Fleet's ability to ensure that all fueling transactions are appropriate, which increases the risk of fraud or misuse. Second, these flags may cause transactions to be posted to the system in a different month causing a difference in the fuel price than what would have been originally charged.

Furthermore, since Fleet Services does not provide departments with detailed bills, departments cannot review these charges to provide further assurance that no inappropriate usage is occurring, potentially hindering the identification of fraud or misuse. Providing guidance to both fuel users and departments on proper bulk fuel usage would help to reduce flagged fuel transactions and improve billing efficiency. In addition, providing detailed bills to departments would help to ensure inappropriate transactions or unwanted fuel usage is

identified and addressed. Finally, Fleet’s billing procedures should be created to help retain institutional knowledge, navigate emergency situations, and facilitate consistency and training.

Recommendations:

- 7. Implement policies, procedures, or training to help communicate requirements and responsibilities for appropriate use of bulk fuel to fuel users, including the importance of entering accurate odometer readings.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, document the current process to comply with this recommendation.*

- 8. Provide transaction details to user departments to allow for inappropriate transaction review. Additional guidance or training may be needed to ensure departments can verify and address inappropriate and flagged fuel transactions adequately.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.*

- 9. Establish a written procedure detailing the billing process and flagged fuel transaction correction process.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.*

Fleet Services Appear to Comply with Safety & Security Standards; Compliance with Environmental Regulations Is Not Well Documented

The City operates a total of six fuel tanks at two separate locations. Fleet Services is responsible for maintaining these tanks and associated pumps in accordance with state and federal regulations to ensure the City can continue purchasing and offering bulk fuel services to its employees.⁶ These regulations include record retention requirements, equipment testing, inventory tracking, and spill prevention activities and often require routine inspections and tests. In addition to regulations, best practices suggest fueling stations should be physically secured through the use of access control, video surveillance cameras, barriers, and exterior lightening.

What We Found

⁶ There are numerous regulations that the City is required to follow; however due to time constraints, this audit could only assess compliance with a limited number of regulations.

- Fleet Services has contracted with a vendor to perform major maintenance on fuel pumps and tanks. In addition, this vendor performs several inspections and tests to help ensure the City complies with State and federal regulations. Minor maintenance is performed by Fleet Services Underground Storage Tank certified staff.
- The City's fuel stations generally have appropriate safety and security equipment.
 - The Texas Commission on Environmental Quality – or TCEQ – requires parties responsible for fuel to be prepared for fuel spills. Based upon onsite observation, both City fuel stations were equipped with emergency shut-off valves, fire extinguishers, and spill kits fulfilling this requirement.
 - Both City fuel stations were also equipped with video surveillance, exterior lighting, and had appropriate physical barriers.
 - Per Texas Administrative Code – or TAC – Section 334.48, a test of the proper operation of release detection equipment must be performed at least annually and covers specific components and criteria. Fleet Services completes this requirement via an automatic tank gauge inspection completed by the fuel monitoring system. Specifically, this system is outfitted with water sensors that should cause an alarm if water is detected. However, based on review of the automatic tank gauge sensors of four tanks by the fuel tank maintenance vendor, water sensors in at least two tanks need replacement.
- Required TCEQ monthly inspections are completed timely and as required per regulation. Lack of documentation prevents verification of some regulatory compliance.
 - Every 30 days, Fleet staff complete two TCEQ required inspections using the provided checklists helping to ensure spill prevention and detection equipment are working adequately. Based on a review of 2022 inspection checklists, all appear to be complete and documented inspections results appropriately.
 - Per federal regulations, a Spill Prevention, Control, and Countermeasure – or SPCC – Plan is required for those who maintain fuel near waterways. The SPCC is the required documentation for the prevention and mitigation of oil spills in navigable waters or shorelines. A monthly SPCC inspection is also completed by Fleet Services staff. However, based on discussion, Fleet Services staff were unsure of the purpose of this checklist and of any other applicable SPCC plan requirements.

- In addition, the Texas Administrative Code requires cathodic protection systems to be tested every three years for operability and adequacy of protection.⁷ While staff stated that the fuel equipment maintenance vendor completes routine diagnostics and inspections, documentation for many of these tests, documentation was not readily available despite State regulations requiring documentation regarding tanks and associated inspections and test results be retained for at least five years and sometimes up to the tank's useful life.
- State regulations require fuel providers to implement release detection methods to ensure any tank leaks are quickly identified. Fleet Services appears to have implemented an acceptable method of release detection that includes a combination of automatic tank gauging and inventory control.⁸
 - However, proper inventory control requires reconciliation of detailed inventory records at least every 30 days in order to detect releases.⁹ If inventory reconciliation fails to match with the automatic tank gauge results for two consecutive months, TCEQ should be notified of a suspected leak.¹⁰ As mentioned previously, Fleet Services does not appear to be utilizing the fuel monitoring system to its full potential and overall fuel inventory tracking procedures limit the potential to identify potential tank leaks.
- A City fuel tank has historically been mislabeled; however, the Fleet Division is in the process of correcting this issue. In addition, delivery certificates and tank documentation required by the Texas Administrative Code were not historically visible. Fleet Services has reportedly remedied this during the course of the audit.
- State regulations require that at facilities where no attendant is routinely present, a weather-resistant sign must be posted and clearly visible from any dispenser. This sign should include basic safety procedures, a 24-hour contact number monitored by an UST certified operator for the facility, and instructions on when to call 911. A sign with this specific information was not clearly observed at either fueling stations.

Why It Matters

⁷ Cathodic protection is a technique used to control the corrosion of a metal surface.

⁸ There are a few different methods of release detection that may be implemented based on preference and tank equipment capabilities.

⁹ Reconciliation should be sufficiently accurate to detect a release as small as the sum of one percent of the total fuel flow-through for the 30-day period plus 130 gallons.

¹⁰ A suspected leak or release is an indication that a leak, spill, or overfill of fuel has occurred.

Ensuring compliance with safety and environmental regulations not only permits the City to continue operating their fueling sites but also helps safeguard the City's assets and natural resources. Ensuring all tank equipment is functioning properly not only fulfills State and federal regulations but helps to protect the City's land and water.

Fleet Services has contracted out a majority of regulatory required inspections and major maintenance, however, these inspection and test results do not always appear to be retained as required. Without this documentation, it is difficult to confirm that the City is complying with all applicable State and federal regulations.

An accurate fuel inventory helps ensure fuel is ordered appropriately and may help identify any potential fuel leaks. Minimizing fuel leaks or ideally avoiding all fuel leaks by ensuring equipment is maintained properly would help save the City money in the long-term. Lastly, onsite safety equipment and security features help employees be prepared for a potential spill helping to safeguard the City's fuel assets and protect the City's environment.

Recommendations:

10. Ensure all tank equipment, especially sensors, are operating and ensure if any issues are found the equipment is repaired promptly. Equip regularly unattended fueling stations with signage that details basic safety procedures, a 24-hour contact number monitored by an UST certified operator for the facility, and instructions on when to call 911.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.*

11. Verify what is the best release detection method for the City to implement and if inventory control remains a requirement, begin examining inventory records, specifically the difference between fuel tank volume and deliveries and sales, bi-monthly and report all suspected leaks per State requirements.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, document the process to comply with this recommendation.*

12. Develop written policies and procedures for all fuel management activities including manual fuel inventory checks, TCEQ required inspections and records retention.

Fleet Services Division Comments: *The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary role.*

Appendix A: Management Response Summary

The following summarizes the recommendations issued throughout this report. The auditors found that staff and the Division was receptive and willing to make improvements where needed. Management has provided their response to each recommendation.

1	<i>Implement a written fuel ordering process that includes order record retention parameters and emergency order procedures.</i>	Concur	Expected Completion: July 3, 2023
Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.		Responsibility: Fleet Admin	
2	<i>Developing a process to record tank levels just before and just after fuel deliveries to further ensure invoices are accurate.</i>	Concur	Expected Completion: October 1, 2023
Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. In addition, Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary function.		Responsibility: Fleet Admin & QAQC	
3	<i>Document the established acceptable fuel variance and invoice process in a policy or procedure.</i>	Concur	Expected Completion: July 31, 2023
Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation and ensure any adjustment to the fuel variance aligns with fuel storage regulations.		Responsibility: Fleet Superintendent	
4	<i>Establish tank charts for all tanks and ensure manual dipping measurements are converted using established tank charts to ensure the fuel monitoring system is accurate.</i>	Concur	Expected Completion: May 1, 2023
Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary role.		Responsibility: Fleet Superintendent	
5	<i>Establish a written procedure for granting and removing fuel access including establishing minimum criteria</i>	Concur	Expected Completion: July 31, 2023

	<i>for fuel access, retaining all requests, and requiring complete profile listings including the complete name as listed by Human Resources.</i>		
	Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.		Responsibility: Fleet Admin
6	<i>Periodically review fuel management system users to ensure terminated employees are appropriately removed from the system.</i>	Concur	Expected Completion: August 1, 2023
	Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services has already commenced removing user with minimal to no usage.		Responsibility: Fleet Admin
7	<i>Implement policies, procedures, or training to help communicate requirements and responsibilities for appropriate use of bulk fuel to fuel users, including the importance of entering accurate odometer readings.</i>	Concur	Expected Completion: October 1, 2023
	Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, document the current process to comply with this recommendation.		Responsibility: Fleet Superintendent & Admin Manager
8	<i>Provide transaction details to user departments to allow for inappropriate transaction review.</i>	Concur	Expected Completion: October 1, 2023
	Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.		Responsibility: Fleet Admin
9	<i>Establish a written procedure detailing the billing process and error correction process.</i>	Concur	Expected Completion: July 31, 2023
	Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.		Responsibility: Fleet Admin
10	<i>Ensure all tank equipment, especially sensors, are operating and ensure if any issues are found the equipment is repaired promptly.</i>	Concur	Expected Completion: Ongoing

Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation.

Responsibility:
OAQC & Fleet
Superintendent

11	<i>Verify what is the best release detection method for the City to implement and if inventory control remains a requirement, begin examining inventory records, specifically the difference between fuel tank volume and deliveries and sales, bi-monthly and report all suspected leaks per State requirements.</i>	Concur	Expected Completion: Ongoing
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Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, document the process to comply with this recommendation.

Responsibility:
Fleet
Superintendent

12	<i>Develop written policies and procedures for all fuel management activities including manual fuel inventory checks, TCEQ required inspections and records retention.</i>	Concur	Expected Completion: Ongoing
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Fleet Services Division Comments: The Fleet Services Division will evaluate, refine, and document the process to comply with this recommendation. Fleet Services is in the process of recruiting for a Quality Assurance position focusing on the fuel program as the primary role.

Responsibility:
ALL