CITY AUDITOR'S OFFICE

City Fuel Usage

FEBRUARY 18, 2009

AUDIT REPORT NO. 0905

CITY COUNCIL
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February 18, 2009

CITY AUDITOR

Your Honor and Members of the City Council:

This is the report on City Fuel Usage, Audit No. 0905.

Controls within the Fuel Program provide some assurance of regulatory compliance and mitigation of risk associated with fuel purchase and usage, inventory management, and accurate reporting.

The City should immediately increase utilization of compressed natural gas (CNG) and eliminate the unnecessary consumption of unleaded fuel to meet the objective of controlling costs.

Other areas of improvement include management of fuel cards, security of fuel, accuracy of report data, implementation of identified performance measures, documentation of written procedures, and update of the Program's Continuity Plan.

We would like to thank Fleet Management staff, particularly Danny Johnson, Melvin Galbraith, and Teri Raymond for their cooperation and assistance during the audit.

The audit was conducted by Auditor Joanna Munar, under the direction of Assistant City Auditor Lisa Gurtler.

If you need additional information or have any questions, please contact me at (480) 312-7756.

Sincerely,

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EXECUTIVE SUMMARY

An audit of City Fuel Usage was included on the City Council approved FY 2008/09 Audit Plan. The audit objectives were to evaluate Fuel Program operations and control activities to ensure appropriate usage and safeguarding of fuel, as well as accurate reporting and charging of fuel. In addition, the audit was to verify compliance with applicable laws and regulations, to assess steps taken to mitigate the risk associated with fuel purchase and usage, and to ensure that costs were controlled to the extent possible. The scope of the audit was fuel purchases and usage during the period of fiscal years 2005/06 through 2008/09.

Controls identified in Fuel Program activities provide some assurance towards the goals of appropriate usage and safeguarding of fuel, as well as accurate reporting and charging of fuel. The controls also contribute to the City's compliance with applicable laws and regulations and help to mitigate the risk associated with fuel purchase and usage. We conducted a test of the controls on a randomly selected sample of transactions and activities. The results provide assurance of compliance and mitigation of risk in those areas of the operation.

1. *Inventory Acquisition and Reconciliation* – In delivery receipts, invoices, and monitor/stick reads reviewed, there were no exceptions found. Documents and data tied to inventory fuel tables and provide accounting information required for the monitoring of a capital asset.
2. *Fuel Purchase, Usage, and Reconciliation* – In purchase transactions, billing statements, and vendor invoices reviewed, we found each transaction was accurate, complete, appropriately reconciled, and authorized for payment.
3. *Management of Purchase Mechanisms* – In the samples reviewed, we found each fuel card, fuel key, and electronic fueling device correctly tied to the vehicle or employee to which they are assigned, and appropriately utilized.
4. *Fuel Tax Refunds* – Requests for refunds and supportive documents reviewed were accurate, complete, and timely.

The following areas for improvement were identified and are further discussed in the Findings and Analysis section, and included in the Management Action Plan at the end of this report.

1. The City does not maximize use of available compressed natural gas (CNG) resources before purchasing additional unleaded fuel (page 23).
2. The Fuel Program lacks technological capabilities for the efficient management of inventory (page 25).
3. Control of issued Voyager and Trillium CNG fuel cards is not managed as effectively as it could be (page 26).

4. Some fuel sites and tanks are not secured (page 27).
5. The Fuel Program does not have written documented procedures (page 28).
6. The Fuel Program's Continuity Plan is not updated (page 29).
7. The Fuel Program's performance measures do not adequately measure Program performance (page 29).

BACKGROUND

Fuel Costs and Usage

The City of Scottsdale operates a fleet of 1,166 fuel-enabled vehicles and equipment in the course of conducting City business. Of these, 683 run on unleaded fuel, 383 on bio-diesel, which is a blended diesel that qualifies as an alternative fuel, and 86 are dual-fuel capable, meaning they operate on either unleaded fuel or compressed natural gas (CNG). In addition, seven are hybrid-electric vehicles that run on both unleaded and electricity, and another seven run on CNG only. Over the years, fuel consumption and the price of fuel have increased rapidly; today prices fluctuate and remain volatile.

Approximately $5.4 million was budgeted for fuel in fiscal year 2008/09. This is an increase of 46 percent over the $3.7 million budget in fiscal year 2007/08, 66 percent more than the $3.2 million budget in fiscal year 2006/07, and 117 percent more than the $2.5 million budget in fiscal year 2005/06. Table 1 shows the City's adopted budget and actual expenditures for fuel during the period of fiscal years 2005/06 through 2008/09.

Table 1. Budget and Actual Expenditures ($ in millions)

	FY 05/06	FY 06/07	FY 07/08	FY 08/09
Budget	$ 2.46	$ 3.24	$ 3.67	$ 5.37
Actual Expenditures*	$ 2.84	$ 2.93	$ 3.80	$ 1.86
Variance	$ .39	$ (.30)	$ .13	$ -

*FY 08/09 actual expenditure is 6-month YTD, July – December.

SOURCE: Auditor analysis of City of Scottsdale Financial Services Smartstream reports.

Table 2 shows the Fuel Program's acquisition of inventory by fuel type and cost for the period of fiscal years 2005/06 through 2008/09. The table includes other costs that represent adjustments for State fuel tax refunds, credits for third-party purchases, minimum cost obligations pursuant to terms of the CNG contract and timing differences in reporting.

Budgeted and actual dollars spent is a measure of the cost of fuel while the number of gallons purchased by users measures the consumption of fuel. An important element to fuel cost is the price-per-gallon, which may change daily based on the supply and demand of the market. Of note, the City's average year-to-date (July through December) cost-per-gallon was $3.12 for unleaded, $3.23 for diesel, and $1.97 for CNG.

Depicted in Table 3 is the City's fuel consumption by fuel type and number of gallons dispersed for the period of fiscal years 2005/06 through 2007/08. While the consumption of unleaded and diesel has increased steadily in recent years, CNG consumption has decreased (see pages 23-24).

Table 2. Acquisition Cost by Fuel Type ($ in millions)

	FY 05/06	FY 06/07	FY 07/08	6-Month YTD FY 08/09
Unleaded	$ 1.10	$ 1.20	$ 1.70	$ .06
Diesel	1.40	1.60	2.20	1.08
CNG	.04	.03	.02	.92
Other*	.30	.10	(.12)	-
Total	$ 2.84	$ 2.93	$ 3.80	$ 2.06

*Other includes adjustments for State fuel tax refunds, third-party purchases, minimum cost obligations per terms of a CNG contract, and timing differences in reporting.

SOURCE: Auditor analysis of Fuel Program Fuel Usage Reports of receipted fuel invoices.

Table 3. Consumption by Fuel Type and Gallons

	FY 05/06	FY 06/07	FY 07/08	6-Month YTD FY 08/09
Unleaded	594,399	615,758	647,102	317,792
Diesel	566,362	632,675	739,622	352,377
CNG	26,545	16,214	7,925	4,540
Total	1,187,306	1,264,647	1,394,649	674,709

SOURCE: Auditor analysis of Fuel Program Usage Reports of fuel purchase transactions.

Municipal Services Department, Fleet Management Division

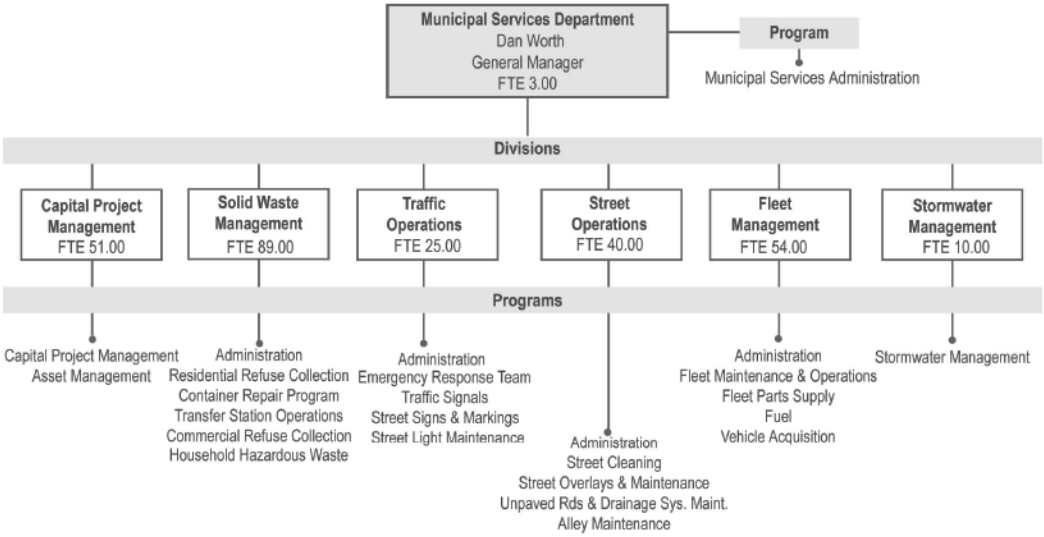
The City of Scottsdale's Municipal Services Department includes the Fleet Management Division (Fleet). Fleet operates five programs including (1) Administration, (2) Fleet Maintenance and Operations, (3) Fleet Parts Supply, (4) Fuel, and (5) Vehicle Acquisition (See Chart 1).

Fuel Program

The Fuel Program is responsible for the acquisition of fuel and manages inventory on-hand to ensure adequate supply is available for City vehicles and equipment. This Program also manages purchase transactions and the various mechanisms used to make a fuel purchase, i.e., fuel cards, fuel keys, and electronic fueling devices.

Fiscal responsibilities of the Program include regular monitoring and inspections of fuel tanks; complete, accurate and timely reporting, and reconciliation of acquisition and purchase activity to vendor billing invoices; and effective control of records, databases, and supportive documentation. Fuel Program staff is also responsible for applying for State fuel tax refunds as applicable, fuel contract administration, training, and City-wide disbursement of relevant and usable fuel information.

Chart 1. Organizational Chart



SOURCE: City of Scottsdale Adopted FY 2008/09 Budget, Volume Two.

Inventory Acquisition and Reconciliation

To manage fuel inventory the Fuel Program staff reconciles tank level readings with fuel delivery receipts and billing invoices using the following process:

- *Obtain Fuel Tank Level Readings* – Tank level readings are obtained either electronically or manually. They capture date, time, temperature, and depth in inches, which translate into fuel inventory levels by gallon. Fleet can collect data at any given time; they normally request the information every Monday, Wednesday, and Friday, and at month-end for reconciliation.

  Six of 17 City-owned fuel tanks are monitored electronically. A Sitetel monitor captures fuel level reads for electronically monitored fuel tanks. Fuel levels are also obtained on-site from a tank status printout from each individual fuel tank monitor. The vendor is required to test the monitors annually to certify accuracy. Two fuel tanks located at the McKellips Service Center in south Scottsdale, which is currently under construction and not yet operational, will be electronically monitored upon completion.

  For the nine manually monitored fuel tanks, "stick reads" are taken to measure fuel levels by inserting a measuring stick into the fuel tank to obtain depth in inches. Allowing for variables such as time of day and temperature, exact measurements are not possible and small variances are acceptable.

- *Compile Fuel Readings* – Reading levels are compiled to calculate current fuel inventory, determine when minimum levels are reached, and

when fuel must be ordered. Manually monitored tanks have regularly scheduled fuel deliveries or fuel orders placed on an as-needed basis.

Fuel Program staff obtained readings of 17 City-owned fuel tanks in early October to reconcile starting inventory for a new Monthly Fuel Inventory Activity Report. Fuel reports were developed in collaboration with the Financial Services Department Accounting Division (Accounting) for concurrence and to ensure that appropriate, useful, and relevant data appear in the reports.

- *Reconciliation and Receipting Fuel* – When a delivery to a City fuel tank is received, it is considered an addition to inventory. Each fuel tank monitor or manual read should reflect the addition by the increase in volume when readings are obtained. The vendor sends a delivery receipt and subsequently a billing invoice to the City for each delivery, which the Fuel Program staff reconciles to tank level readings. Upon staff review, approved invoices are "receipted" into the Tank Inventory Database to report additions to inventory.

Fuel Purchase and Reconciliation

There are several ways that a City employee (user) can make a fuel purchase.

1. At City-owned fueling sites, vehicles are either equipped with a transmitter that activates electronic fueling at the pump, or the employee utilizes a fuel key issued by Fuel Program staff. These means allow the user to purchase unleaded or diesel fuel only. Ninety percent of fuel purchase transactions are made in this manner.

   - The electronic fueling system, known as VIT, is a transmitter attached to a vehicle. A ground loop monitor electronically reads the VIT when the vehicle pulls up to the pump, which then activates the fueling process. The vehicle identification number and odometer reading from the VIT, and purchase transaction information such as fuel type, quantity, date, and time are electronically captured.

   - Similarly, data from a purchase transaction made with a fuel key is captured when a user inserts the key into the terminal, and then manually enters the vehicle number and odometer reading when prompted by the system. Fuel keys are issued to employees on a limited basis.

2. The Voyager fuel card is used to purchase unleaded or diesel fuel at local retail gas stations and accounts for approximately 9 percent of purchase transactions. Voyager fuel cards can be issued to a vehicle with multiple authorized users set-up in the Voyager database, or to a specific user who can fuel any City vehicle or active equipment. Voyager fuel cards are issued on a limited basis to vehicles, equipment, or employees in the Fire, Police, or Water Resources departments.

3. A Trillium CNG fuel card is used to make a purchase from the CNG station located at the Via Linda Campus (Corp. Yard) and accounts for approximately 1 percent of purchases. Transaction data is specific to the vehicle number entered into the system by the user when pumping fuel.

Fuel Program staff downloads fuel purchase transactions daily for processing, which includes the review of errors or exceptions and the appropriate action to resolve them. Fuel purchase transactions are reconciled to vendor invoices, approved for payment by management staff with appropriate authority, and then sent to the Financial Services Accounts Payable Division for payment. In the case of Voyager fuel transactions, applicable department management is responsible for reviewing and verifying each transaction billed to their area of responsibility as shown on the Voyager detail report and statement. If management agrees with the information, they complete and return an authorization form to Fuel Program staff within 10 days; if not, they must contact Fuel Program staff to resolve the discrepancy.

Fuel Tax Refunds

The City is entitled to tax refunds for diesel fuel purchased in bulk and used with off-highway or light-use class vehicles. Through December of this fiscal year, the City has applied for approximately $28,255 or an average of $4,700 per month in State fuel tax refunds. In fiscal years 2006/07 and 2007/08, the City received $51,755 and $52,962 respectively.

Fuel Program staff ensures proper documentation is submitted monthly to obtain these monies from the State of Arizona. Follow-up includes verifying receipt of payment from the State and forwarding the refunds to Accounting for receipting.

Fuel Sites and Pumps

There are ten City-owned fueling sites in the City, with nine currently operational. The McKellips Service Center in south Scottsdale is under construction and scheduled to be complete in 2009. In addition, there is one non City-owned CNG fueling station at the City's Corp. Yard (See Tables 4 and 5).

Contracts

The Fuel Program staff is responsible for securing cost effective commercial fueling and maintenance contracts for the City. The Contract Administrator for these contracts is the Fleet Systems Coordinator.

Unleaded and Bio-diesel - The City is party to contracts with various vendors to purchase both unleaded and blended diesel fuel, which is referred to as bio-diesel. Bio-diesel burns cleaner than regular diesel, and qualifies as an alternative fuel.

CNG - In addition, the City is in an agreement with Trillium USA to purchase CNG. Trillium USA constructed a CNG fueling station at the Corp. Yard at 9191 E. San Salvador Drive. The City Council approved this facility through a Council Action and corresponding Resolution dated March 3, 1997.

Table 4. City-Owned Fuel Site Locations

Site	Fuel Site Name	Fuel Types
1	Corp. Yard	Gas, Unleaded, Regular, Oxygenated B20 Diesel Fuel, Low Sulphur
2	Angus / South Site	Gas, Unleaded, Regular, Oxygenated B20 Diesel Fuel, Low Sulphur
3	North Police Dept.	Gas, Unleaded, Regular, Oxygenated
4	McKellips Service Ctr*	Gas, Unleaded, Regular, Oxygenated B20 Diesel Fuel, Low Sulphur
5	Fire Station No. 601	B20 Diesel Fuel, Low Sulphur
6	Railroad Park	Gas, Unleaded, Regular, Oxygenated B20 Diesel Fuel, Low Sulphur
7	Jomax Well Site 42 / Fire Station No. 613	B20 Diesel Fuel, Low Sulphur
8	Solid Waste Transfer Station	B20 Diesel Fuel, Low Sulphur
9	WestWorld	Gas, Unleaded, Regular, Oxygenated B20 Diesel Fuel, Low Sulphur
10	Fire Station No. 609	B20 Diesel Fuel, Low Sulphur

*Not yet operational.

SOURCE: Auditor analysis of Fleet Management Division, Fuel Program Tank List

Table 5. Non City-Owned Fuel Site Location Owned and Operated by Trillium USA

Site	Fuel Site Name	Fuel Type
1	Corp. Yard	Compressed Natural Gas (CNG)

SOURCE: Auditor analysis of Fleet Management Division, Fuel Program Tank List.

Terms of the agreement are 10 years and may be extended at the Lessee's option (Trillium USA) for two additional periods of 3 and 2 years respectively for a total of 15 years. According to the Intent to Award, the City cannot re-bid this contract without developing a strategy of closing the existing facility for approximately six months to replace existing Trillium-owned equipment. To date, the City does not have another facility that could be developed as a new CNG plant and as a result, the contract will remain in effect through the extended term; scheduled to expire March 3, 2012. Upon expiration of the term of the contract, the City will take possession of the CNG fueling site, its equipment, fixtures and improvements; and be responsible for its continuation of business.

The annual estimated cost on the contract increased from $100,000 to $200,000 to coincide with the City's fiscal year 2008/09 estimated usage. Applicable terms of the agreement require that the City request no less than 100,000 gas-gallon-equivalencies (GGEs) of CNG each fiscal year.

Maintenance - A maintenance contract between the City and Cochise Petroleum Equipment Company (Cochise) requires the vendor to provide servicing of fuel sites that ensure the City's compliance with all required federal, state, and local compliance testing.

Regulatory Compliance

In addition to regulatory compliance of fuel tank maintenance and inspections addressed by the Cochise contract mentioned earlier, the City is required to comply with a number of regulatory requirements related to air quality, as briefly described here:

- *Arizona Revised Statute 9-500.04, Air Quality Control* – Requires that 75 percent of City-owned vehicles operate on alternative fuels and clean burning fuels.
- *The Environmental Regulations Guide, published by the City of Scottsdale's Environmental Management System* – Provides information related to the Maricopa County Air Pollution Control Regulations (APCR). This is a set of rules separate from the Maricopa County Environmental Health Code. The intent of these rules is to prevent, reduce, control, correct or remove air pollution originating within the territorial limits of Maricopa County and to carry out the mandates of Title 49 of the Arizona Revised Statutes (ARS 49-402; 49-471-516).
- *APCR, Rules 352 and 353* – Requires that a stationary tank, aboveground or underground, must be fitted with a submerged fill pipe. Any City underground storage tank or aboveground storage tank that holds gasoline and has a capacity of 350 gallons or more, must have this device.

Training and Fuel Usage Reports

The Fleet Management Division provides training and information to City employees through a course called Fleet 101 and various fuel related reports. The training course includes, among other subjects, information related to the City's fuel policy, instructions for purchasing fuel, and use of the Customer Service Center within the Fleet Division's fuel and equipment database called FASTER, via the City Intranet. The course also addresses various ways to improve fuel efficiency and monitor fuel use.

In July 2007, the FASTER database system was implemented and activated. It is an improvement to the prior system due in part to its newer technology, capabilities, and reliability. CCG Systems, Inc. is the developer of the FASTER database system and according to their Web site at www.ccgsystems.com is a standard in the fleet management industry, serving 41 states and Canada. In addition to managing fleet operations (equipment, labor, maintenance, and fuel) FASTER also interfaces with other Fuel Program systems to manage fuel more efficiently, and to produce useful reports.

Fuel Program staff is actively working on the development and improvement of information reporting utilizing FASTER - particularly as it relates to fuel usage reports. However, these reports are in the infancy stage of development, distributed automatically to Fleet Management Division staff only and made available to other department management by request.

Prior Audit Work

Previous work related to this audit can be found in Audit Report No. 0161, dated August 20, 2003, *The Impact of Clean Air Mandates on the City's Light Duty Trucks and Passenger Vehicles*. Recommendations and management's responses made in this report are briefly discussed below.

Action Plan Recommendation - Designate responsibility for the Alternative Fuel Program until a replacement program is developed. The program should include:

1. Objectives that address desired CNG use for City vehicles.
2. Program measures that evaluate the effectiveness of the program and appropriate reports that can be used to monitor compliance.
3. The circumstances in which it is appropriate to acquire a dual fuel vehicle.
4. Development and documentation of a plan to progressively increase the use of CNG.

Prior Audit Management Response - Management agreed with the audit recommendations as stated. The City Manager directed the Fleet Management Director to establish criteria and objectives for the purchase and operation of CNG fueled vehicles, encompassing factors relating to the purchase and operation of CNG vehicles.

Current Management Response Status - In 2003, the Fleet Management Director wrote a draft Administrative Regulation (AR) for the Assignment and Utilization of City Owned & Leased Motor Vehicles. According to the Fleet Director, City management did not approve the AR. As of early 2008, the Municipal Services Department General Manager was provided with the same draft AR; further review and consideration are pending. Recently, the draft AR was submitted to the City's Acting City Manager as well for review and consideration. Key components of the draft AR include:

1. Acquisition and use of alternatively fueled vehicles (AFV) is an integral part of the City's vehicle assignment and utilization strategy. AFVs will be assigned whenever practical, based on equipment availability, agency mission and proximity to alternative fueling stations.
2. Departments, divisions, and offices assigned AFVs are required to operate those vehicles with alternate fuel a minimum of 50 percent of the time.

3. An alternatively fueled vehicle should be assigned if:

   - Requirements/mission can be accomplished without negative impact.
   - An original equipment manufacturer (OEM) AFV that fits the profile of the vehicle required for the assignment is available.
   - The assigned vehicle will be stationed at or near the location of an alternative fueling facility.
   - The vehicle operators' normal daily work activities routes them in close proximity of an alternative fueling facility on a regular basis.
   - The agency requests the assignment of an AFV in support of the City's clean air efforts.
   - Assignment of an AFV furthers the City's commitment to support the regional clean air mandates and reduces the use of petroleum-based fuels.

To address the audit recommendation that management develops and documents a plan to progressively increase the use of CNG, Fleet Management staff stated the following:

1. The City purchased CNG vehicles and converted much of the existing fleet to be CNG compatible. The City's sudden and large increase of dual-fuel fleet was partly attributed to mandates required by ARS 9-500.04, Air Quality Control, requiring that City-owned vehicles should operate on alternative fuels and clean burning fuels. In addition, the State of Arizona passed legislation for an alternative-fuel vehicle rebate. The rebate provided a tax credit for the purchase of alternative fuel vehicles or the after-market conversion of vehicles to be capable of running on alternative fuel. While municipalities did not directly qualify for these rebates, private companies passed on savings indirectly for the conversions.

2. The City had a CNG fueling site built at the Corp. Yard. It is the only CNG fueling facility available in the City and it is open to the public. Today, there are approximately six other CNG fueling sites in the Phoenix metro area. A second CNG fueling site in the downtown Scottsdale area was eliminated because it was not cost-effective ($250,000) to update the site when it was needed, thereby limiting convenience and accessibility.

3. There were unsuccessful efforts to reassign dual-fuel vehicles to departments/personnel closer to the one fueling site to help maximize use of CNG. A lack of department management support as well as failure to approve the draft AR mentioned above were additional contributing factors.

4. Due to apprehension by users to purchase CNG for reasons such as inconvenience, taking longer to fuel, vehicle not running efficiently, and small CNG tanks limiting distance traveled, the City offered an incentive of small prizes and awards to departments and users. The incentive was

in place for a short period beginning in 1998, then limited and eventually eliminated due to budget/financial restrictions by 2006.

5. The First Fuel Program, originally signed by then City Manager Dick Bowers, and later renewed by subsequent City Manager Jan Dolan, in 1997 was created to encourage use of CNG. According to the Fleet Management Intranet Web site, the Program urges all customers that operate a CNG/gasoline vehicle to do their part for a cleaner environment by using CNG as their "First Fuel" each day. However, the Program has always been optional, not mandatory.

6. The City's fleet of CNG capable vehicles decreased from 148 in 2003 to 96 by 2008, which in turn has reduced CNG usage. Fleet Management staff stated that conditions in the marketplace during this period affected the continued pursuit of converting vehicles. As a result, when existing City dual-fuel fleet were scheduled for replacement during this time, there were no equivalent (like equipment) replacements. Some of the contributing factors include:

   - Original equipment manufacture (OEM) vehicles are those built for CNG use only and were easy to obtain up to 2006. About this time, the main manufacturers of OEM CNG vehicles, Ford and General Motors, stopped production and essentially ended the supply. Staff stated that CNG use was not accepted enough by the marketplace to be successful and profitable to the automobile industry.

   - The alternative to purchasing an OEM CNG vehicle was to convert an existing vehicle after manufacture to make them CNG compatible. The City contracted with a vendor to convert much of the fleet. However, a lawsuit between the City and the vendor was brought forward, the suit was later settled, and the relationship and contract were severed.

Current Fuel Reduction Efforts

A fuel management meeting was held October 30, 2008. The meeting was facilitated by the Financial Services Department to discuss objectives related to the City's budget reduction initiatives and specifically to fuel management and fuel use reduction. The following items were discussed:

- Increase the use of CNG
- Reduce fuel consumption by 15 percent
- Reduce reliance on commercial gas stations
- Department access to information and its use
- Communication and training
- Compilation of information

Efforts to increase information and communication regarding fuel reduction include regular postings in an employee newsletter called CityLine. For example, the December 2008 publication included a short piece about

successful fuel reduction City-wide as well as tips for saving fuel towards the City's goal to reduce annual fuel use by 15 percent.

The article stated a comparison of fiscal-year-to-date usage was made to the same time frame for the prior fiscal year, to show reduced consumption by 11.9 percent. However, according to Fuel Program staff, this reduction only represents a comparison of fuel consumption by fleet vehicles that were in use for both fiscal years 2007/08 and 2008/09. Of note, total City-wide fuel consumption for the six-month period of July through December of fiscal years 2007/08 and 2008/09 was reduced by 6.5 percent, as shown in Table 6.

Table 6. Consumption by Fuel Type and Gallons, 6-Month YTD Comparison

	6-Month YTD FY 07/08	6-Month YTD FY 08/09	Yr/Yr % Chg
Unleaded	324,001	317,792	-1.9%
Diesel	393,351	352,377	-10.4%
CNG	4,611	4,540	-1.5%
Total	721,963	674,709	-6.5%

SOURCE: Auditor analysis of Fuel Program Usage Reports.

OBJECTIVES, SCOPE, AND METHODOLOGY

The audit objectives were to evaluate Program operations and control activities to ensure appropriate usage and safeguarding of fuel, as well as accurate reporting and charging of fuel. As well, the audit was to verify compliance with applicable laws and regulations and to assess steps taken to mitigate the risk associated with fuel purchase and usage to ensure that costs were controlled to the extent possible.

The scope of the audit was fuel purchases and usage during the period of fiscal years 2005/06 through 2008/09. While we reviewed available records for this period, online transaction data needed to conduct tests was readily available from July 2007, in the FASTER database when the system was implemented. Transaction data prior to this period, while available, was not in a reporting format that was easily accessible. Obtaining such would entail additional cost and time to query information from older and unused databases, tables, and files. We determined that transaction data available was sufficient to test audit objectives and to provide sufficient evidence to support findings or conclusions.

To address the overall objectives we reviewed:

1. *Prior Audit Work* - The Impact of Clean Air Mandates on the City's Light Duty Trucks and Passenger Vehicles, Audit Report No. 0161, dated August 20, 2003.

2. *Laws, Regulations, and Authoritative Documents* - Both internal and external, including (1) the City of Scottsdale's Environmental Regulations Guide, (2) Arizona Revised Statute 9-500.4, Air Quality Control, (3) Scottsdale Energy Task Force Report dated April 4, 1991, (4) United Stated General Accounting Office publications, and (5) fuel contracts between the City and various vendors.

3. *Existing Policies, Procedures, and Administrative Regulations (ARs)* - Including (1) the Fleet Department's Standard Operating Procedures Policy and (2) AR 226, *Capital Assets*.

Steps taken to conduct audit work include:

1. Visits to the Municipal Services Department to meet staff in the Fleet Management Division, tour the operations, and learn about the Fuel Program.

2. Visits to the City's fueling sites to learn about various types of fuel tanks and observe how fuels and CNG are pumped and purchased.

3. Meetings and interviews with various employees in the Fleet Management Division including the Fleet Management Director, Equipment Parts Supervisor, Fleet Systems Coordinator, and Senior Customer Support Representative.

4. Meetings with the Preservation Division Environmental Planner and attendance at a meeting related to the City's budget reduction initiatives, specifically related to fuel management and fuel use reduction, facilitated by the Financial Services Department.

5. Review of the Fleet Management Department organization chart and management prepared documents.

6. Review of various sources (not mentioned above) utilized to compile background information, including the City's and Municipal Services Department Web sites and Intranet, City Council Agendas, City Council Action Reports, and other published material.

7. Development of a Risk/Control Assessment Matrix which involved:

   - Identifying risks and the accompanying internal controls
   - Analyzing materiality of risks by their significance and likelihood
   - Rating controls for adequacy and effectiveness
   - Identifying the controls to be included in the control tests

8. Documentation and analysis of process flows for:

   - Fuel inventory management and acquisition reconciliation
   - Fuel purchase transaction management and reconciliation
   - Fuel tax refund requests
   - Management of fuel cards, fuel keys, and electronic fueling systems
   - Fuel usage reports

9. To test reconciliation of fuel acquisition to delivery receipts, vendor invoices, and fuel tables, we made a random selection of the following for review and analysis of controls:

   - Monthly records for four months in the past two fiscal years (17 percent of the total, including two months each from fiscal years 2005/06 and 2006/07) of fuel acquisition and delivery records, as well as tank level readings, vendor invoices, and fuel tables.

10. To test reconciliation of fuel purchase transaction to vendor invoices, we made a random selection of the following for review and analysis of controls:

    - Daily records for two days in the past six-month period of fuel purchase transactions. We reviewed 61 of 392 (16 percent) records of fuel purchases made with a fuel card, fuel key, or VIT. We also reviewed 26 of 57 (46 percent) records of fuel purchases made with a Voyager fuel card.

- Monthly records for two months from the past six-month period of CNG purchase transactions. We reviewed 54 of 228 (24 percent) records of CNG purchases made with a Trillium CNG card.

11. To test appropriate use of purchase mechanisms, we made a random selection of the following purchase transactions during the period of fiscal years 2006/07 through 2007/08 for review for analysis of controls. For transactions made the following purchase mechanism:

    - *Voyager Fuel Card* – A sample of 40 from a population of 184, or 22 percent.
    - *Electronic Fueling System* – A sample of 40 from a population of 1,480, or 3 percent.
    - *Fuel Site Key* – A sample of seven from a population of 27, or 26 percent.
    - *Trillium CNG Fuel Card* – A sample of 40 from a population of 445, or 9 percent.

    In addition, to verify the correct assignment of purchase mechanisms to a vehicle, equipment, or employee we tested a random sample of 40 vehicles or equipment from a population of 1,166.

12. To test whether fuel tax refund requests were accurate, complete, and timely, we made a random sample of six months within the period of fiscal years 2006/07 through 2007/08 to review monthly applications and supporting documentation.

Audit work was conducted in accordance with generally accepted government auditing standards as they relate to expanded scope auditing in a local government environment and as required by Article III, Scottsdale Revised Code, Section 2-117, *et seq.* Generally accepted government auditing 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 observations and conclusions based on our audit objectives. Audit work took place from September 2008 through December 2008, with Joanna Munar conducting the work.

EVALUATION OF MANAGEMENT CONTROLS

A sufficient control structure should exist to provide reasonable assurance that risks are mitigated and assets are safeguarded. To be considered sufficient, the following elements should be present:

- *Control Environment* – Management is aware of the need for a control system and communicates the need with an attitude and awareness that sets the tone for the organization.
- *Risk Assessment* – Relevant risks that impact compliance are identified, evaluated, and used as the basis for determining how to manage risk.
- *Control Activities* – Policies and procedures are developed and documented.
- *Information and Communication* – Usable, relevant information is captured and exchanged in a form and time frame that allows employees to effectively carry out their duties.
- *Monitoring* – Periodic assessments of the control structure are undertaken to identify what is working and what needs to be improved or modified.

Controls identified in Fuel Program activities provide some assurance towards the goals of appropriate usage and safeguarding of fuel, as well as accurate reporting and charging of fuel. The controls also contribute to the City's compliance with applicable laws and regulations and help to mitigate the risk associated with fuel purchase and usage. Below is a list of identified controls:

1. A User's Guide available on the City's Intranet provides directions for fueling and contact information for any questions or concerns. This encourages proper procedures by users of fuel and support as needed.
2. A collection of documents intended to assist Fuel Program staff with the development of established written procedures related to processing and reconciling fuel inventory, acquisition, and purchase transactions. These documents show the activities currently practiced. However, the Fuel Program's procedures manual has not yet been created.
3. Management review, training, and regular supervision were available. Fuel Program management staff was onsite and accessible to address operational concerns. They possessed sufficient knowledge of the database systems as well as vendor contact information for additional assistance as needed.
4. Regular and timely execution of daily activities required to manage fuel activity and timely submission of state fuel tax refund applications.
5. Appropriate segregation of duties.

6. Useful and relevant reports are made available to Fleet Division management and to department management upon request. Additionally, there are ongoing efforts to improve reporting capabilities to address needs of other department management.

7. Appropriate administration of fuel contracts and compliance with AR 215, *Contract Administration*.

Results from the following tests of controls provide assurance of compliance and mitigation of risk in those areas of the operation.

1. *Inventory Acquisitions and Reconciliation* – In all fuel delivery receipts, invoices, and monitor/stick reads reviewed, there were no exceptions found. Documents and data tied to the Fleet Division's fuel tables, which were created to satisfy the needs of the Financial Services Accounting Division. Fuel tables provide accounting data related to fuel inventory and value as required for the monitoring of a capital asset.

2. *Fuel Purchase, Usage, and Reconciliation* – In fuel purchase transactions, billing statements, and vendor invoices reviewed, we found each transaction was successfully transmitted from the vendor to the Fleet Division's database. All transactions were accurate and complete, and appropriately reconciled. In addition, fuel transactions were appropriately reviewed for exceptions, and authorized for payment by management.

3. *Management of Purchase Mechanisms: Fuel Key, Fuel Card, and VIT* – In the sample reviewed, we found each fuel card, fuel key, and VIT correctly tied to the vehicle or employee to which they are assigned. In addition, each mechanism showed current activity (vs. inactive), and appropriate utilization (correct fuel type, correct allowable quantity purchased, as well as proper mileage entry).

4. *Fuel Tax Refunds* – There were no exceptions found in the sample of refund requests and corresponding supportive documents reviewed. Applications were complete, accurate, and submitted in a timely manner. Receipt of refunds was verified with a copy of the refund check from the State.

During audit work, we identified occurrences of incorrect or missing vehicle odometer readings captured during fuel purchase transactions and subsequently used in various reports. The exceptions are not included in this report because they are outside the scope of the audit. However, the exceptions were reviewed and discussed with Fuel Program staff because of the importance of utilizing accurate data in reports intended to assist management in decision-making.

We identified the following areas for improvement that are discussed in the next section of this report.

1. The City does not maximize use of available CNG resources before purchasing additional unleaded fuel.

2. The Fuel Program lacks technological capabilities for the efficient management of inventory.
3. Control of issued Voyager and Trillium fuel cards is not managed as effectively as it could be.
4. Some fuel sites and tanks are not secured.
5. The Fuel Program does not have written documented procedures.
6. The Fuel Program's Continuity Plan is not updated.
7. Performance measures do not adequately measure Program performance.

FINDINGS AND ANALYSIS

1. The City does not maximize use of available CNG resources before purchasing additional unleaded fuel.

CRITERIA:
The City Council Goals, City's Comprehensive Financial Policies, and Employee Values require fiscal responsibility for the prudent use of public money and available resources.

CONDITION:
The City pays each year for compressed natural gas (CNG) that it does not fully utilize, thereby resulting in the unnecessary purchase of unleaded fuel. The following conditions were identified:

1. When a user purchases unleaded fuel instead of CNG for a dual-fuel vehicle, it is at an additional and greater cost because the City's CNG inventory is available, abundant, and underutilized. The City is party to a contract that requires the annual purchase of a minimum 100,000 gas-gallon-equivalencies (GGEs) of CNG. Since inception of the contract, the City has never consumed this minimum quantity and has paid the vendor for the unused fuel (shortfall). Current contract terms and minimum quantity obligations expire on March 3, 2012.

   Table 7 shows that the City has only used approximately 26.5 percent of available CNG in fiscal years 2005/06, 16.2 percent in 2006/07, and 8 percent in 2007/08. It also depicts the shortfall by GGEs and subsequent cost.

Table 7. Shortfall in CNG Usage by GGEs and Cost

Minimum Quantity: 100,000 GGEs	Unused GGEs (Shortfall)	Price Per Unit	Cost of Shortfall*
FY 05/06	73,454	$ 0.531	$ 39,005
FY 06/07	83,789	$ 0.553	$ 46,336
FY 07/08	92,033	$ 0.570	$ 52,459

*Cost of shortfall is calculated based on unused fuel per terms of a CNG contract.

SOURCE: Auditor analysis of Fuel Program Usage Reports.

2. In addition to the $52,459 shortfall paid in fiscal year 2007/08 due to unused CNG, the City paid approximately $29,300 for the unnecessary purchase of unleaded fuel. As a result, the estimated total cost to the City for failing to utilize available CNG was approximately $81,300.

   The Fuel Program's Fleet System Coordinator monitors and analyzes fuel usage reports on a monthly basis. Information from these reports is used

to calculate overbuying of unleaded fuel. The calculation is based on a conversion from the number of unleaded gallons consumed to the number of CNG gallons that could have been consumed in its place. Allowing for an 80 percent gasoline efficiency, a potential saving to the City can be calculated. If CNG had been utilized to 100 percent of capacity in lieu of overbuying unleaded when CNG fuel was available in abundance, the reduction in use and cost of unleaded fuel in fiscal year 2007/08 would equate to a potential savings of approximately $29,300.

CAUSE:
There are no City mandates requiring users of dual-fuel vehicles to purchase CNG before unleaded. While the First Fuel Program encourages users to purchase CNG before unleaded for dual-fuel vehicles, the program is optional rather than mandatory. As of September 9, 2008, (during the period of this audit and the date of analyzed reports), there were 93 CNG capable vehicles/equipment in the City, of which 86 are dual-fuel, or capable of running on either CNG or unleaded fuel. According to the Fleet Systems Coordinator, as of December 31, 2008, only 35.6 percent of CNG capable vehicles utilize CNG minimally.

Even with the known benefits of CNG, such as lower cost and cleaner burning, when given the choice, users will fuel vehicles with unleaded fuel instead of CNG for various reasons. According to Fuel Program staff, some factors that may contribute to less use of CNG include:

- There is only one CNG fueling site in the City.
- It takes longer to fuel a vehicle with CNG than it does unleaded fuel.
- CNG is less efficient than unleaded fuel by approximately 10 percent for smaller vehicles and 20 percent for larger vehicles. As a result, a vehicle will travel fewer miles per gallon on CNG than it will on unleaded fuel, requiring more frequent fueling.
- CNG tanks are usually smaller than a normal fuel tank, with capacity of approximately three to eight GGEs.
- Due to the small difference in the price between CNG and unleaded in prior years, users were not motivated by the savings of utilizing CNG over unleaded. However, there has recently been a greater disparity in price (See Table 8).

According to Fuel Program staff, as of December 2008, for the past 12-month period, of the total fuel dispensed, 51.7 percent is diesel, 47.8 is unleaded, and only 0.5 percent is CNG. Based on the current fleet composition, they estimated that the maximum potential CNG usage is approximately 5 percent of total fuel usage.

EFFECT:
There is a loss of opportunity to the City when available and prepaid CNG is underutilized.

Table 8. Price of CNG and Unleaded

	FY 05/06	FY 06/07	FY 07/08	FY 08/09
CNG Avg. price-per-GGE	$ 1.64	$ 1.94	$ 2.05	$ 1.97
Unleaded Avg. price-per-gallon	$ 2.30	$ 2.34	$ 2.81	$ 3.12
Variance	$ .67	$ .40	$ .76	$ 1.15

SOURCE: Auditor analysis of Fuel Program Usage Reports.

2. The Fuel Program lacks technological capabilities for the efficient management of fuel inventory.

CRITERIA:
AR 226, *Capital Assets*, requires the Fleet Management Division to reconcile the amount of fuel inventory on hand to the amount received and consumed at least once a month. In addition, according to the United States General Accounting Office (GAO) publication GAO-02-447G, *Best Practices in Inventory Counts*, proper inventory accountability requires that accurate and detailed records be maintained.

CONDITION:
We identified the following to support the finding:

1. In general, given the numerous steps and multiple manual processes involved in the management of inventory, we found operational weaknesses with regard to consistency, efficiency, and accuracy. Particularly as it relates to the procedures of manually measuring fuel levels, there is inherent and significant risk for error and high levels of the likelihood of occurrence.

2. Some tanks are not on the electronic monitoring system, which requires manual stick reads to obtain tank measurement and inventory on hand. Compared to a monitored tank, manual stick reads are done less often and efficiently, and may endanger the employee who must obtain the read from atop a tank. In addition, manual stick reads taken on different days, at different times of day, and in varying weather conditions compared to monitored tanks, can affect the measurement consistency and accuracy.

   In addition, if inventory were lost or stolen from a tank, it may not be discovered until a manual stick read were conducted; sometimes there are several days between measurements. With a monitored tank, levels can be taken as often as necessary; and real-time readings are possible, which could provide better security over fuel.

3. Technological capabilities (information systems) are lacking that would allow for the consistent, efficient, and accurate measurement and

reporting of inventory. Conditions are exacerbated by the fact that data is not on the City's network, and thus not backed up daily.

CAUSE:
Lack of effective and consistent automation and appropriate management oversight.

EFFECT:
The Fuel Program is not as effective or efficient as it could be. Accurate inventory and value are not readily available or known. There is a potential for unidentifiable loss or misappropriation of fuel. Data is not backed up daily to the City's network and can therefore result in a potential for loss of information and historical data.

3. Control of issued Voyager and Trillium CNG fuel cards is not managed as effectively as it could be.

CRITERIA:
Fuel Program staff and department management, their operations, and control activities should appropriately manage issued cards. The United States General Accounting Office (GAO) publication GAO-01-1008G, *Internal Control Management and Evaluation Tool*, states managers need to examine internal control to determine how well it is performing, how it may be improved, and the degree to which it helps identify and address risks for fraud, waste, abuse, and mismanagement. A common control activity the GAO identifies relates to the physical control of assets vulnerable to loss, theft, or unauthorized use; as well as the controlled access to these assets.

CONDITION:
We identified the following conditions to support the findings:

1. Voyager fuel cards are issued by Fuel Program staff on a limited basis to the Fire, Police, and Water Resources departments. The Senior Customer Support Representative of the Fuel Program is authorized as the main contact to receive fuel cards from the vendor. Voyager fuel cards are subsequently issued to department management as requested. Each department determines their need, and is responsible for the physical control, appropriate use, and management of the cards within their control.

   During the audit period, one instance of fuel theft occurred due to a stolen Voyager fuel card. In September 2008, a fuel theft was reported to Fuel Program staff by the Scottsdale Police Department. The theft involved approximately 300 gallons of fuel, estimated at $1,045 dollars, and involved numerous transactions from approximately two or three gas stations. The investigation resulted in no criminal charges brought against any party. According to management of the department to which the card was issued, at the time of the theft, a personal identification number (PIN) was not assigned to the card.

2. The number of issued Trillium cards far exceeds what is reasonable for the City's 96 CNG capable vehicles. A Trillium card is used to purchase

CNG and is issued to all vehicles with the ability to run on CNG. Issuance is managed by Fuel Program staff, but updated in the vendor database by the vendor. According to the Senior Customer Support Representative, two reports of issued Trillium cards can be produced; one from the vendor, and the other maintained by Fuel Program staff.

- The vendor's report dated November 11, 2008, lists 445 cards issued to the City. It includes all Trillium cards ever issued, but does not identify which cards are currently active, and which are not. Additionally, the report does not identify which cards are actively used or have been recently utilized.
- Fuel Program staff has created, and utilizes as a tool, a list of Trillium cards that depicts only those cards in use and appearing in CNG transaction detail reports. However, this list is not current, accurate, or complete.

CAUSE:

1. Police department management failed to manage the control of issued Voyager fuel cards and to ensure that all cards require a PIN to complete a purchase transaction.
2. Fuel Program management's failure to reconcile an internal list of issued fuel cards with that of the vendor.

EFFECT:
Controls are not as effective or efficient as they could be. As a result, there is a potential for unidentifiable loss or misappropriation of fuel. As well, there is no assurance that risks associated with fuel purchase and usage are managed.

4. Some fuel sites and tanks are not secured.

CRITERIA:
Fuel Program operations and control activities should appropriately safeguard fuel. AR 226, *Capital Assets*, requires the City to safeguard assets from unauthorized use, theft, and damage.

CONDITION:
We found the following conditions related to security of fuel:

1. No City fuel sites, except for the Corp. Yard location, are monitored with a security camera.
2. At six of eight sites visited, the location had either a secured gate or a checkpoint staffed with security staff. These locations required pre-authorized access to enter the gate with a PIN, a vehicle equipped with an electronic device (VIT), a key to a padlock on the gate, or approval from a security guard to enter. In two locations without secured access, we found open and free access by the public to the tanks and fueling pumps.

3. There is a medium sized pipe and cover at the top of each tank. These vary in size from approximately 12–18 inches. The pipe serves as the aperture and is the main access to the tank interior and used for adding fuel to the tank. In addition, the aperture is where staff can place a measuring stick into the tank when taking a manual reading to determine the quantity of inventory in the tank.

   At eight sites visited, we found that the tank aperture covers were present and in place. However, while the covers are designed with the ability to secure them in place with a lock, none of the covers had a lock or was secured beyond placement on the aperture. Some tanks have a ladder that allows a person to easily walk up to the top of the tank and obtain access to the tank aperture. Tank covers were easy to open, which allowed easy and full access to the fuel in the tank.

CAUSE:
Management oversight or failure to recognize that manually monitored or unsecured sites and unlocked apertures are a potential risk for loss, theft, or misappropriation of fuel. Costs of implementing are prohibitive and may outweigh the benefits of security. Management's focus and desire is to avoid the need for multiple sets of keys for each tank, at each site for each vendor that delivers fuel, as well as each Fuel Program staff requiring access to tanks to perform their duties.

EFFECT:
There is potential for unidentifiable loss or misappropriation of fuel inventory. As well, there is potential that fuel inventory, essential to the City's operation and staff's ability to provide services, may not be readily available.

5. The Fuel Program does not have written documented procedures.

CRITERIA:
The Fuel Program should have documentation of comprehensive written procedures. The United States General Accounting Office (GAO) publications GAO-02-447G, *Best Practices in Inventory Count*s, and GAO-01-1008G, *Internal Control Management and Evaluation Tool*, each cite the need for established written policies as an essential internal control tool.

CONDITION:
Fuel Program staff overrides some purchase transaction errors in order to clear them from the exception list. There is no written documentation of established authority or the maximum allowable dollar or gallon limit for overriding purchase transaction errors. As well, records are not maintained of past overridden transaction errors, which can provide the historical data needed for useful and relevant monitoring, management, and analysis.

Fuel Program staff has a collection of documents intended to assist with the development of established written procedures related to the activities involved with reconciling inventory, and the processing of fuel acquisition and user purchase transactions. These documents include the activities currently practiced; however, they are not yet included in a procedures manual or the Fleet Management Division's Standard Operating Procedures Policy.

CAUSE:
Management failure to establish written policies and procedures to define the appropriate actions and authority required with regard to addressing fuel transaction errors, maintaining records for analysis and decision-making, and other Fuel Program procedures.

EFFECT:
The continual overriding of some transaction errors results in inefficiencies due to regularly reworking the same problems. Controls intended to mitigate risks associated with purchase and inventory management are diminished when authority to override exceptions is not, in itself, defined or controlled. Current practice allows for the potential unidentifiable loss or misappropriation of fuel. In addition, there is a lack of established criteria, requirements, and procedures from which to measure performance. Written documented procedures can also be used to assist with training, contingency planning, and with business recovery from loss of resources, whether personnel, technological, or otherwise.

6. The Fuel Program's Continuity Plan is not updated.

CRITERIA:
The Fuel Program should have documentation of an updated Continuity Plan in case of emergency. The United States General Accounting Office (GAO) publications GAO-02-447G, *Best Practices in Inventory Counts*, and GAO-01-1008G, *Internal Control Management and Evaluation Tool*, each cite the need for established written policies as an essential internal control tool.

CONDITION:
The Emergency Safety and Preparedness (ESAP) manual includes a Continuity Plan; however, it was created in 2005 and has not been updated since.

CAUSE:
Management failure to update the ESAP Continuity Plan.

EFFECT:
Lack of established criteria, requirements, and procedures needed for contingency planning, as well as business recovery from the loss of resources, whether personnel, technological, or otherwise.

7. The Fuel Program's performance measures do not adequately measure Program performance.

CRITERIA:
The Fuel Program should identify performance measures that work towards the attainment of specific business goals. Per the City of Scottsdale Adopted Fiscal Year 2008/09 Budget, the Fuel Program should indicate outputs that measure how effectively and efficiently a program performs its services over a period of time, and outcomes should summarize key services for a fiscal year. Performance measures, indicators, and goals are cited in both the GAO publications GAO-02-447G, *Best Practices in Inventory Counts*, and GAO-01-1008G, *Internal Control Management and Evaluation Tool*, as needed and necessary internal controls.

CONDITION:
The Fuel Program has had the following performance measures reported in the City's Adopted Budget Books for fiscal years 2004/05 through 2008/09:

Table 9. Fuel Program Performance Measures

Program/Service Outputs: (goods, services, units produced)
Cost per gallon - Unleaded
Cost per gallon - Diesel

Program/Service Outcomes: (based on program objectives)
% of alternative fuel vehicles

SOURCE: City of Scottsdale Adopted FY 2008/09 Budget, Volume Two.

Staff stated that the existing performance measures could be more meaningful, and that they are not in fact effective given that fuel is a commodity with a set price that the Fuel Program does not control. However, the Fuel Program Fleet Systems Coordinator states improved performance measures were recently developed, and there are plans for implementation in the near future.

The City's Financial Services Department led a Fuel Management meeting related to ongoing budget reduction initiatives on October 30, 2008. The meeting agenda included discussion on the subject of implementing practices to improve reporting and accountability; specifically the need to identify performance measures.

CAUSE:
Management has not implemented identified program outputs and outcomes to adequately measure program performance.

EFFECT:
There is potential of not focusing on appropriate activities that directly affect the achievement of business plans and operational goals.

MANAGEMENT RESPONSE

Fleet Management Division

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Memorandum

February 18, 2009

To: Brent Stockwell, Acting City Auditor

From: Danny Johnson, Fleet Management Director

Re: Response to Audit No. 0905, City Fuel Usage

We welcomed the fuel audit and express our gratitude for the work of Joanna Munar, Kyla Anderson and Lisa Gurtler. This audit provides important direction to improve fuel management throughout the City and validates efforts currently underway and planned for the immediate future.

The opportunity to work with the individuals noted has been enlightening and the findings will serve as a foundation for improved asset management, controls and interdepartmental cooperation in fuel management and utilization

ACTION PLAN

1. The City does not maximize use of available CNG resources before purchasing additional unleaded fuel.

MANAGEMENT RESPONSE: Management concurs with this finding.

PROPOSED RESOLUTION: Currently, a monthly report of all dual-fuel vehicles is distributed to directors, or their designee. This report shows the number of unleaded gallons and the CNG GGE used for each center and vehicle and the percentage that CNG is of the total. It is expected that the directors will hold individuals accountable for maximizing the use of CNG.

Additionally, upgrading the fuel dispensing hardware and software is currently under study to improve fuel management capabilities

Three (3) CNG dedicated solid waste trucks will arrive early in fiscal year 09/10. This requires the addition of CNG slow fill stations at the North Corp. Yard. Over the two following fiscal years the number of solid waste truck fueled exclusively by CNG will increase to twelve (12) units.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: June 30, 2011

2. The Fuel Program lacks technological capabilities for the efficient management of inventory.

MANAGEMENT RESPONSE: Management concurs with this finding.

PROPOSED RESOLUTION: Management currently is progressing in efforts to upgrade and install modern technology at all City of Scottsdale fuel sites. Such plans were underway prior to the commencement of this audit.

This upgrade, in part, includes replacing the stand-alone personal computer using dial-up modems with a networked server and thin client software to connect to each fuel site.

Additionally, tank monitoring will be installed on each fuel tank. Doing so will improve accuracy, timeliness, remove the safety concern of climbing atop fuel tanks and reduce personnel time and travel.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: October 30, 2009

3. Control of issued Voyager and Trillium CNG fuel cards is not managed as effectively as it could be.

MANAGEMENT RESPONSE: Management concurs with this finding. Each department is responsible for the management of the appropriate use of Voyager fuel cards. Fleet Management authorizes payment based on the approval of relevant departmental management.

PROPOSED RESOLUTION: Voyager now requires a PIN authorization for purchase.

There are current plans to modify the Transfer Station fuel site by installing a split (diesel and unleaded) fuel tank. This will provide an easily accessible location for vehicles in the northern part of the City to fuel without using a Voyager card, and will allow the City to nearly eliminate Voyager credit card as a means of purchasing fuel for city equipment.

Fleet Management is currently working with Trillium to create a more current listing for CNG cards. Trillium has recently upgraded their fuel management system and Fleet has furnished them with the currently used cards to be entered as the only authorized cards in their new system's database. Fleet is in the process of verifying which cards are being used. Concurrently, older types of cards are replaced with new cards with current numbering on them. The Sr. Customer Support Representative will follow up with Trillium on a regular basis to check card listings for accuracy.

RESPONSIBLE PARTY: Teri Raymond, Senior Customer Support Representative and Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: September 1, 2009

4. Some fuel sites and tanks are not secured.

MANAGEMENT RESPONSE: Management concurs with this finding.

PROPOSED RESOLUTION: Install combination padlocks on tank aperture of tanks that are not in a secured area NLT June 30, 2009. Explore the cost of site security cameras.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: June 30, 2009

5. The Fuel Program does not have written documented procedures.

MANAGEMENT RESPONSE: Management agrees that there is not one document for all process and procedures.

PROPOSED RESOLUTION: The several documents are currently under review and will be combined into a Fleet Management Division Standard Operating Procedure.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: September 1, 2009

6. The Fuel Program's Continuity Plan is not updated.

MANAGEMENT RESPONSE: Management concurs with this finding.

PROPOSED RESOLUTION: Fleet Management will conduct a review of the Fuel Program portion of the Continuity Plan NLT March 15, 2009 and update the appropriate items.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: April 15, 2009

7. The Fuel Program's performance measures do not adequately measure Program performance.

MANAGEMENT RESPONSE: Management concurs with this statement.

PROPOSED RESOLUTION: Revise fuel management performance measures.

RESPONSIBLE PARTY: Mel Galbraith, Fleet Systems Coordinator

COMPLETED BY: June 30, 2009

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Search: "auditor"

Audit reports are available on the Web site.

This material is available in alternate format upon request.

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