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Office of the City Auditor

Audit Report

**AUDIT OF
SANITATION HEAVY EQUIPMENT FLEET
MAINTENANCE CONTRACT**
(Report No. A07-011)

May 11, 2007

City Auditor

Craig D. Kinton

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Executive Summary

This report presents the results of the audit¹ of the City's contract to privatize maintenance and repair services for the heavy equipment fleet used by the Sanitation Department. We evaluated the City's effectiveness in monitoring the contract and determined whether the City succeeded in reducing the cost of sanitation fleet maintenance during the first nine months of the contract.

The audit showed that:

- The City effectively monitors the contract with Serco. The City's persistence and diligence was needed to ensure Serco started submitting timely and accurate billing invoices and repair documentation. Further, the contract administrator prevented the City from being incorrectly charged \$65,261 for repairs misclassified as abuse rather than as routine repairs.
- In the first nine months of the contract, the City expected to reduce costs by \$686,467 because of privatizing fleet maintenance with Serco; however, the actual cost reduction has been \$1,141,382, or 66% more than originally estimated. This additional cost reduction can be primarily attributed to effective contract administration resulting in non-target repairs submitted by Serco being properly classified by the City as target repairs. The City pays a fixed monthly fee for all repairs classified as target repairs.
- The City's implementation costs were \$88,955 compared to the estimated cost of \$556,250. The estimated costs were reduced primarily because the City moved vehicles to available parking at other City facilities rather than pay \$450,000 to pave a parking lot and install lights and drainage.
- Serco has only met the fleet availability requirement for 81 of 171 workdays, or 47% of the time. After various meetings with Serco, in June 2006, the City had Serco submit a plan to meet the 90% fleet availability contract performance. Fleet availability has improved but continual improvement is needed. While the contract provides for overall fleet availability requirements, further analysis showed significant differences in the fleet availability based on the specific types of equipment. Nevertheless, the Sanitation Department advised us they were satisfied with Serco's service and that Serco's inability to achieve the fleet availability requirements has not interrupted service to citizens.

¹ Audit conducted under authority of Dallas City Charter, Chapter IX, Section 3.

- The City has not always properly enforced the contract. Serco was not always assessed liquidated damages of \$200 for each day the fleet availability requirements were not met, because City employees made computation errors and the new contract administrator was not aware of the responsibility to assess liquidated damages. As a result of these two problems, the City has not timely assessed and collected \$12,600 in liquidated damages. The City and Serco are working to resolve these issues.

Recommendations Summary

We recommend the Director of Equipment and Building Services (EBS):

Recommendation 1:

Meet with Serco management to:

- either develop a plan to ensure Serco meets the current contract fleet availability requirements, or consider modifying the contract to reduce the overall fleet availability requirement and reduce the contract cost; and,
- establish fleet availability requirements for specific types of equipment.

Recommendation 2:

Assess and collect the liquidated damages that Serco owes the City for not meeting the fleet availability requirements.

Management's Response Summary

The Director of EBS agrees with the two recommendations and is taking corrective actions to timely address the issues identified in this report. The complete response is included as Appendix III to this report.

Audit Results

I. The City effectively monitored the contract and realized more cost reductions than originally estimated by privatizing sanitation fleet maintenance.

The City is effectively monitoring compliance with the contract and ensures Serco makes repairs, adequately documents all repairs, and submits timely reports to the City. The City has a contract administrator specifically for this contract and has effective processes and controls designed to ensure payment for authorized and proper maintenance and repairs. For example, invoices for the first four months of the contract (January through April 2006) were not received until May 2006. As a result, the City reminded Serco that all future invoices must be more timely. Our audit showed Serco is currently adequately documenting the repairs and submitting timely invoices to the City.

Serco performs both target and non-target repairs. Target repairs are normal and predictable because they are due to mileage, age of vehicle, usage, and regularly scheduled preventive maintenance. Non-target repairs are caused by accidents, abuse, and misuse of equipment, vandalism, acts of nature, and vehicle modifications. The City pays a monthly fee for target repairs and pays separately for each non-target repair. During January 9, 2006 through September 30, 2006, the City paid \$1,118,201 for target repairs and \$793,624 for non-target repairs.

To ensure repairs are properly classified as either target or non-target, the contract administrator reviews every accident or incident of alleged abuse and reviews and approves estimates and actual charges for all repairs billed separately. As a result of the contract administrator's diligence in reviewing the estimates, Serco has been denied \$65,261 in charges submitted as non-target repairs that the City considers as target repairs. For example, the contract administrator denied an estimated repair cost of \$10,362 for damage to a rear loader packer and sweep blade pins. Serco stated this was operator abuse, but the City showed this was normal wear and tear.

The City realized cost reductions of \$1,141,382 during the first nine months of privatizing Sanitation heavy equipment fleet maintenance with Serco. This is 66% more than the estimated cost reduction of \$686,467. The cost of maintaining and repairing sanitation fleet is lower than the City can provide because Serco gets paid a monthly fee for all target repairs. Serco can only bill for non-routine repairs, while the majority of time is spent on routine repairs.

In addition, Serco underestimated the labor hours needed to comply with contract requirements and as a result had to hire more mechanics and spend more hours on target repairs than initially projected. As the following chart shows, Serco is spending about 250% more time on target repairs than originally estimated and 64% less time on non-target repairs than originally estimated.

Exhibit 1. Serco labor hours.

Type of repair	Estimated Hours	Expended Hours	Variance	Percent
Target	9,791	24,394	14,603	249.15%
Non-Target	12,231	4,355	7,876	64.39%

Source: Serco bid and Fleet Focus work order database.

Further, the City's implementation costs were only \$88,955 compared to the estimated cost of \$556,250. The estimated costs were reduced primarily because the City moved vehicles to available parking at other City facilities rather than pay \$450,000 to pave a parking lot and install lights and drainage.

II. Serco consistently does not meet fleet availability requirements and the City has not always assessed liquidated damages.

The City paid \$1,911,825 for heavy equipment fleet maintenance and repairs to Serco from January 9, 2006 through September 30, 2006; however, contract requirements have not always been met and the contractor has not been assessed the correct amount of liquidated damages.

A. Serco has not been able to consistently meet the 90 percent fleet availability requirement established in the contract.

Daily fleet availability reports for equipment awaiting maintenance and repair from February 1, 2006 to September 30, 2006², showed that Serco met the contract requirements for 81 of these 171 workdays, or 47% of the time. They did not meet the requirement 53% of the time. After various meetings with Serco, in June 2006 the City had Serco submit a plan to meet the 90% fleet availability contract performance. This plan identified various factors that were affecting the fleet availability, actions taken and planned for the future. Nevertheless, the Sanitation Department advised us they were satisfied with Serco's service and the inability to meet fleet availability requirements has not

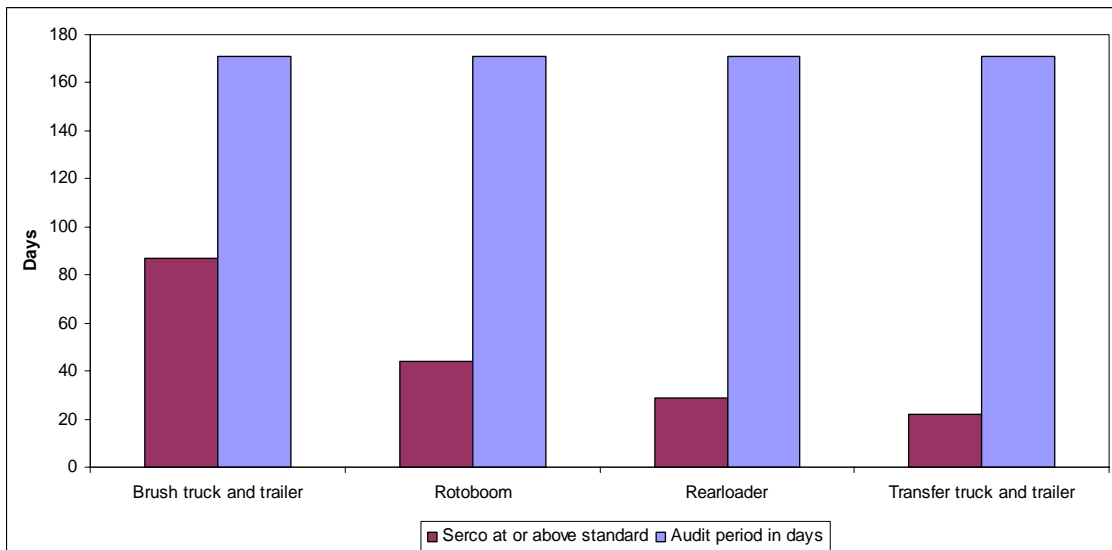
² EBS started tracking vehicle availability on February 1, 2006.

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caused equipment shortages significant enough to disrupt service delivery.

While the contract only provides for overall fleet availability requirements, further analysis showed significant differences in the fleet availability based on the specific types of equipment. The following exhibit shows Serco was not able to maintain a 90% availability for rear loaders (garbage collection trucks), rotobooms (mobile cranes for bulky item pick up), and transfer trucks and trailers.

Exhibit 2. Days that individual vehicle availability met 90% requirement compared to available workdays from February 1, 2006 to September 30, 2006.



Source: Serco daily reports.

Serco's inability to catch up with the preventive maintenance (PM) schedule could be one reason for not meeting contract requirements. Although the contract provides for 90% of the Sanitation fleet to be current on required PM, actual rates of compliance were between 55% and 67% during the audit period.

Our discussions with Serco and City management indicate that additional reasons for non-compliance could be the need to either further increase the number of mechanics, eliminate interruptions in spare parts supply, or provide more service bays. Both Serco and the City are also considering the possibility of changing the contract and revising the fleet availability standard.

B. The City assessed \$5,400 in liquidated damages but should have assessed \$18,000.

The City can assess liquidated damages of \$200 for each day the contractor does not meet the fleet availability requirement; however, fleet availability computation errors resulted in the City not assessing Serco the correct amount of liquidated damages from February 2006 through April 2006. The City assessed \$5,400 in liquidated damages, but should have assessed \$6,600, or an additional \$1,200.

The City has not assessed additional liquidated damages since May 2006. The contract administrator, selected in July 2006, was not aware that he was assigned the responsibility to assess liquidated damages. As a result, the City has not timely assessed and collected \$11,400 in liquidated damages from May through September 2006. EBS is aware of these issues and is working with Serco to collect the \$12,600 in liquidated damages. The following exhibit shows the liquidated damages that should have been assessed for each month.

Exhibit 3. Liquidated damages for not meeting fleet availability performance by month.

Month	Days of Substandard Performance	Liquidated Damages Due	Liquidated Damages Assessed	Liquidated Damages Not Assessed
February	10	\$ 2,000	\$ 1,800	\$ 200
March	15	\$ 3,000	\$ 2,200	\$ 800
April	8	\$ 1,600	\$ 1,400	\$ 200
May	22	\$ 4,400	\$ 0	\$ 4,400
June	20	\$ 4,000	\$ 0	\$ 4,000
July	3	\$ 600	\$ 0	\$ 600
August	3	\$ 600	\$ 0	\$ 600
September	9	\$ 1,800	\$ 0	\$ 1,800
Total	90	\$ 18,000	\$ 5,400	\$ 12,600

Sources: Serco daily reports, EBS records, and City Auditor analysis.

Recommendation 1:

We recommend the Director of EBS meet with Serco management to:

- either develop a plan to ensure Serco meets the current contract fleet availability requirements, or consider modifying the contract to reduce the overall fleet availability requirement and reduce the contract cost; and,

- establish fleet availability requirements for specific types of equipment.

Management's Response

Agree. The contractor will be required to develop and submit a plan for how the 90% overall availability can be achieved each day. Any future fleet maintenance contract will provide greater specification for availability by type of equipment rather than just an overall availability requirement.

Recommendation 2:

We recommend the Director of EBS assess and collect the liquidated damages that Serco owes the City for not meeting the fleet availability requirements.

Management's Response

Agree. As of May 9th, liquidated damages have been assessed and collected. The remaining outstanding liquidated damages of \$3, 200 will be deducted from the April 2007 invoice.

Appendix I

Background, Objectives, Scope and Methodology

Background

On October 26, 2005, the City of Dallas entered into a contract with Serco, Inc. for providing vehicle maintenance and repair services to the fleet of garbage trucks, brush trucks, trailers, and other heavy equipment used by the Sanitation Department. The contract was for 60 months beginning on January 9, 2006 and was not to exceed \$16,432,294.

Serco is one of the world's largest, most diverse government outsourcing service companies. Serco has more than 25 years of experience delivering services to governments, including 20 years experience specifically in fleet maintenance.

Objectives, Scope and Methodology

The audit objectives were to evaluate the City's effectiveness in monitoring the contract and to determine whether the City succeeded in reducing the cost of sanitation fleet maintenance during the first nine months of the contract. The audit covered maintenance and repair activities for January 9, 2006 to September 30, 2006 and was conducted in accordance with generally accepted government auditing standards.

We interviewed City and Serco staff and managers and reviewed Serco performance reports and repair documentation. To evaluate Serco's compliance with the contract requirements and test the City's internal controls, we reviewed:

- a judgmental sample of 10 of 293 files to ensure files were adequately maintained on all vehicles;
- all 171 daily reports which show fleet availability;
- a judgmental sample of 44 non-target work orders to ensure they were properly approved or denied;
- 9 invoices to ensure denied non-target repairs were properly adjusted on the billing; and,
- all invoices submitted by and payments to Serco.

We also:

- analyzed the methodology used by the City to project savings from the implementation of the contract; and,
- compared the estimated savings to actual savings.

Appendix II

Major Contributors to This Report

Gary Lewis, CIA, CFE, Audit Manager
Anatoli Douditski, CIA, Project Manager
Harry Krewson, Auditor
Theresa Hampden, Quality Control Manager

Management's Response to the Audit Report

Memorandum



DATE May 9, 2007

TO Craig D. Kinton, CPA
City Auditor

SUBJECT Audit Report – Sanitation Heavy Equipment Fleet Maintenance Contract

The Department of Equipment and Building Services (EBS) was requested to provide a response to the audit report of the Sanitation Heavy Equipment Fleet Maintenance Contract. Our response to the audit recommendations are as follows:

Recommendation #1:

Meet with Serco management to:

- Either develop a plan to ensure Serco meets the current contract fleet availability requirements, or consider modifying the contract to reduce the overall fleet availability requirement and reduce the contract cost; and,
- Establish fleet availability requirements for specific types of equipment.

Agree Disagree _____

Corrective Action Plan

The contract requires an overall fleet availability of 90% each day. As noted in the Audit Report, the contractor has failed to meet this requirement every day. However, the average overall availability has been 89% from February 2006 through April 2007. The contractor will be required to develop and submit a plan for how the 90% overall availability can be achieved each day.

Although the contract does not outline an availability requirement by type of equipment, it does indicate that the contractor will adapt to repair priorities as specified by the City. The contractor is aware of availability needs and priorities by equipment type. Any future fleet maintenance contract that is executed will provide greater specification for availability by type of equipment rather than just an overall availability requirement.

Implementation Date

July 31, 2007

Responsible Manager

Dewayne Jackson, Assistant Director, EBS

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Recommendation #2:

Assess and collect the liquidated damages that Serco owes the City for not meeting the fleet availability requirements.

Agree X Disagree _____

Corrective Action Plan

As of May 9th, liquidated damages have been assessed and collected for a total of 131 days. As the April 2007 invoice is processed, all outstanding liquidated damages (16 days; \$3,200) will be deducted from the April 2007 payment for services.

Implementation Date

June 30, 2007

Responsible Manager

Dewayne Jackson, Assistant Director, EBS

Please let me know if you require any additional information or response to your Audit Report.



Jack Ireland, Director
Equipment and Building Services

- c: Mary K. Suhm, City Manager
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