



Richmond City Council

The Voice of the People.

Richmond, Virginia

OFFICE OF THE CITY AUDITOR

REPORT # 2012-11

AUDIT

Of the

Department Of Public Works Solid Waste Management

June 2012

OFFICIAL GOVERNMENT REPORT

Richmond City Council

OFFICE OF THE CITY AUDITOR

900 East Broad Street, 8th Floor
Richmond, Virginia 23219

804.646.5616 (tel); 804 646.2230 (fax)

*Committed to increasing government efficiency, effectiveness,
and accountability on behalf of the Citizens of Richmond.*

TABLE OF CONTENTS

Executive Summary..... i

Comprehensive List of Recommendations..... iv

Introduction..... 1

Background..... 3

Observations and Recommendations..... 5

Management Responses..... Appendix A



Richmond City Council

The Voice of the People

Richmond, Virginia

Office of the City Auditor

Executive Summary

June 26, 2012

The Honorable Members of the Richmond City Council
The Honorable Mayor Dwight C. Jones

Subject: Department of Public Works – Solid Waste Division

The City Auditor's Office has completed a performance audit of the Solid Waste Division (SWM) within the Department of Public Works (DPW). Auditors conducted this audit in accordance with Generally Accepted Government Auditing Standards.

The following are the salient findings of the audit:

- ***SWM is environmentally responsible***

SWM has taken the initiative to improve its level of service to citizens and protect the environment. Specifically, SWM purchased compressed natural gas (CNG)-powered refuse trucks and installed forty-four solar-powered trash compactors.

- ***SWM is effectively delivering solid waste collection service***

Based on high citizen satisfaction and low level of complaints, the auditors concluded that DPW is effectively delivering the solid waste collections services to the Richmond citizens.

- ***There is a potential to improve efficiencies in this operation***

There are opportunities for saving money and enhancing efficiencies of delivering these services by expanding the use of automated trucks in certain parts of the City. After considering constraints faced by the operation, the auditors independently estimated cost savings for use of these five automated trucks to be about \$317,000 annually. Currently, DPW does not have a comprehensive survey of the City areas for the purposes of

evaluating the feasibility of using automated trucks. The Department needs to accomplish certain tasks prior to achieving these savings.

- ***Inventories of supercans need to be improved to verify appropriateness of revenues***

SWM distributes ninety-five-gallon supercans to their customers. SWM informed the auditors that it had not conducted a formal inventory of supercans since 2007. Without a complete inventory, it is not possible to verify if the City is receiving all the revenues due to the City. During the audit, SWM began to compile a new physical inventory to adjust its records.

- ***Internal controls need improvement***

Based on the results and findings of the audit methodology employed, auditors concluded that internal controls need improvement to enhance proper accountability over City resources invested in this division.

- ***SWM's recordkeeping needs improvement***

SWM is using Metastorm, a business-process management software for capturing statistical data pertaining to their operations. SWM does not verify the integrity of the system data. Unreliable data, in turn, may hinder or unintentionally cause erroneous business decisions. The system has a very limited capability to produce reports. To mitigate this discrepancy, the SWM manually reenters some of the data into Excel spreadsheets causing duplication of efforts. Overall, the reliability of the data needs to improve.

- ***Comprehensive procedures addressing several key issues were not available***

During the audit, SWM provided limited policies and procedures, which do not address all the activities of the Division. Without formal written procedures, the tasks may not be completed consistently in accordance with the City policies.

- ***Procedures for approving vendor invoices must be improved***

Auditors found that DPW has a policy to verify the appropriateness of vendor invoices and supporting documentation; however, due to staff turnover, the policy wasn't always followed. A review of invoices for the two largest SWM vendors (annual billing \$4 million) revealed no evidence of such verification.

- ***There is an opportunity to save or generate additional annual revenues of \$150,000***

The vendor providing recycling services charges the City for 60,476 units on its monthly billings. The auditor used DPU records for June 2011 and found that the City bills only 53,146 customers for recycling services. If the vendor's records are accurate, the City is not billing the customers for 7,330 recycling bins. Potentially, the City stands to lose about \$150,000.

- ***SWM needs a formal mechanism to comply with laws and regulations***

During the audit, SWM provided a list of legal provisions applicable to the Division. Upon repeated inquiry, the auditors found limited evidence of SWM's efforts to document their compliance with some applicable laws and regulations.

- ***The City needs to reconsider the accounting method for SWM***

The proper accounting treatment for a government operation that competes with private enterprise and provides service for a fee is to use an enterprise fund. Enterprise funds accounting facilitates comparing publicly-owned operations to private operations engaged in providing similar services. This accounting treatment improves transparency. SWM activities need to be properly accounted for in an enterprise fund to assure that solid waste revenues are used for the activities of the Division.

The City Auditor's Office appreciates the cooperation of the Department of Public Works' staff. Please contact me for questions and comments on this report.

Sincerely,

Umesh Dalal

Umesh Dalal, CPA, CIA, CIG
City Auditor

cc: Mr. Byron C. Marshall, CAO
The Richmond City Audit Committee
James Jackson, DPW Director

#	<i>COMPREHENSIVE LIST OF RECOMMENDATIONS</i>	<i>PAGE</i>
1	Conduct a comprehensive survey to determine the extent of possible use of automated trucks. Based on the results, consider expanding the automated trucks program.	8
2	Use temporary labor for special events whenever possible.	9
3	Complete a full physical supercan inventory.	11
4	Develop formal policies and procedures to strengthen controls, including data backup, periodic physical inventories, and reconciliation with billing records maintained by DPU.	11
5	Establish procedures to ensure operational data in the computer system is complete and accurate.	12
6	Develop comprehensive business procedures that provide guidance and strengthen controls over the activities listed above.	13
7	Strengthen processes and comply with the existing invoice approval policy to verify vendor quantity and price information to ensure that the amounts billed either by vendors or to customers are accurate and errors are detected promptly.	15
8	Establish a mechanism to comply with all the federal, state, or local laws and regulations applicable to SWM operation.	16
9	Develop performance measures that are: <ul style="list-style-type: none"> a. Based on program goals and objectives that tie to the Division’s mission or purpose; b. Used for measuring outcomes, efficiency and effectiveness leading to continuous improvement c. Verifiable, understandable and timely; d. Reported internally and externally; e. Monitored and used in managerial decision-making processes; f. Designed in a way to motivate staff at all levels to contribute toward organizational improvement. 	16
10	Establish an enterprise fund for solid waste activity to recognize the full costs of resources used or committed to solid waste programs and services.	18
11	Revise the budgeting method to reflect actual practices of staffing. This would require eliminating positions that have been vacant for the past several years and appropriating additional funds for temporary staffing.	19

Introduction and Background

Introduction

The City Auditor's Office has completed a performance audit of the Solid Waste Division within the Department of Public Works (DPW). This audit covers the 12-month period ending June 30, 2011. The objectives of this audit were to:

- Determine the existence and effectiveness of internal controls;
- Ensure compliance with department policies, procedures and applicable rules and regulations, and
- Evaluate the efficiency and effectiveness of operations.

Auditors conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those Standards require that the auditors plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for their findings and conclusions based on the audit objectives. The auditors believe that the evidence obtained provides a reasonable basis for their findings and conclusions based on the audit objectives.

Models of Service Delivery

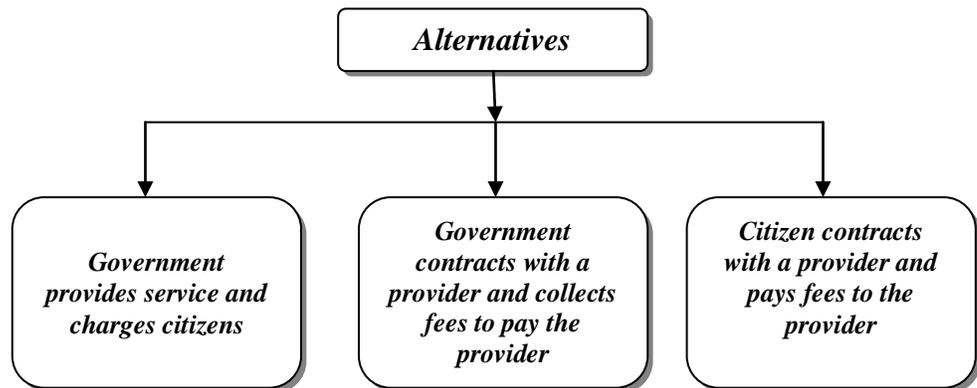
The Central Virginia Waste Management Authority prepared a revised solid waste management plan for central Virginia in 2009. This plan includes thirteen local governments, including Richmond, and demonstrates three distinct models of providing waste collection service as depicted in the following table:

City of Richmond Audit Report 2012-11
Department of Public Works – Solid Waste Management
June 2012

Locality	Public Collection	Private Collection Through Public Contract	Private Contract
Ashland		✓	
Charles City			✓
Chesterfield*			✓
Goochland			✓
Hanover			✓
Henrico	✓		✓
New Kent			✓
Powhatan			✓
Richmond	✓		✓
Colonial Heights		✓	
Hopewell		✓	
Petersburg	✓	✓	
Prince George			✓

Source: Central Virginia Waste Management Plan (§4.2 Table 1);

*Since the 2009 revision, Chesterfield County discontinued its limited solid waste collection service.



Currently, the City of Richmond uses a hybrid model for providing these services. For the residential refuse collection, the City uses DPW staff and temporary labor to provide services to the citizens. However, it requires the businesses operating in the City using bulk containers to contract directly with private refuse collection service providers without any involvement by the City.

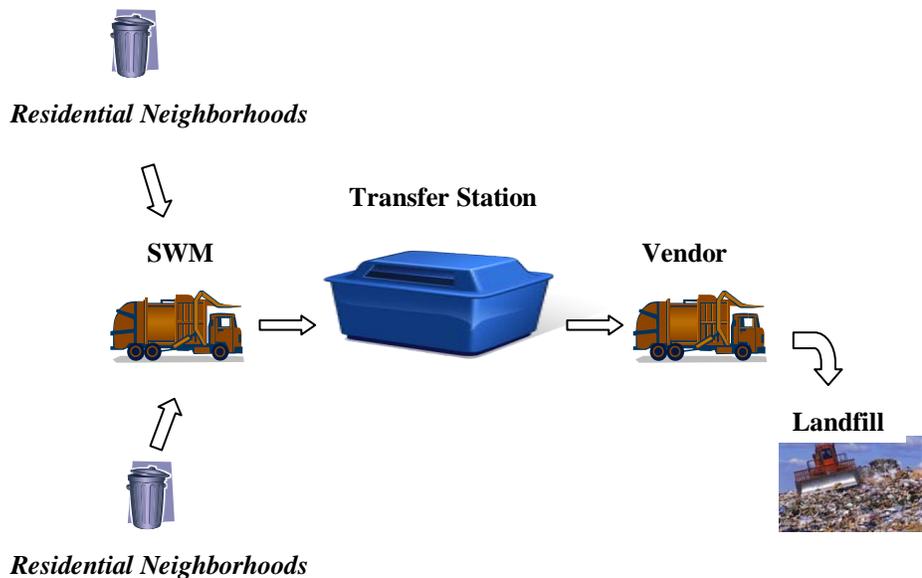
Methodology

To complete this audit, the auditors performed the following procedures:

- Interviewed the DPW Director, Solid Waste Management (SWM) truck drivers, vendors, Department of Public Utilities (DPU) personnel, Human Resources personnel, and the City Attorney’s Office.
- Reviewed pertinent records and policies and regulations
- Performed various audit tests, including ride-along with SWM personnel
- Benchmarked with other localities
- Performed other audit procedures, as deemed necessary

Background

SWM provides weekly residential trash pickup services in Richmond. A vendor transports the waste collected at the transfer station to a landfill located outside the City limits. The following diagram depicts the process:



Presently, the City provides the residential solid waste collection services to City residents. At no charge, City residents can dispose of appliances and bulk and brush refuse items at the East Richmond Road Convenience Center which also accepts household hazardous waste at specified hours. This includes solvents, paints, fuels, propane tanks, car fluids, etc. Commercial establishments using a bulk container for its refuse must retain the services of a private contractor for solid waste collection.

Accomplishments



SWM has taken the initiative to improve its level of service to citizens and protect the environment

Recently, DPW has taken steps to protect the environment as follows:

- SWM purchased twenty-five compressed natural gas (CNG)-powered refuse trucks during FY 2011. According to the U.S. Department of Energy, these vehicles produce 30-40% less greenhouse gas emissions.
- SWM has installed forty-four solar-powered trash compactors and recycling bins at various locations in the City of Richmond.
- In February 2012, the City signed a contract with a vendor to provide roll-out collection containers designed for semi-automated or automated collection systems with radio frequency identification tags (RFID), also called “smart labels”, and compatible tag software and scanners that can capture transactions and create management reports.
- Every four years, DPW voluntarily seeks accreditation from the American Public Works Association (APWA). During the most recent accreditation process completed in 2009, the APWA found SWM to be in full compliance for nine areas they selected for testing.

Observations and Recommendations

Finding 1: *DPW is effectively delivering the solid waste collections services to the Richmond citizens.*

Citizen Satisfaction

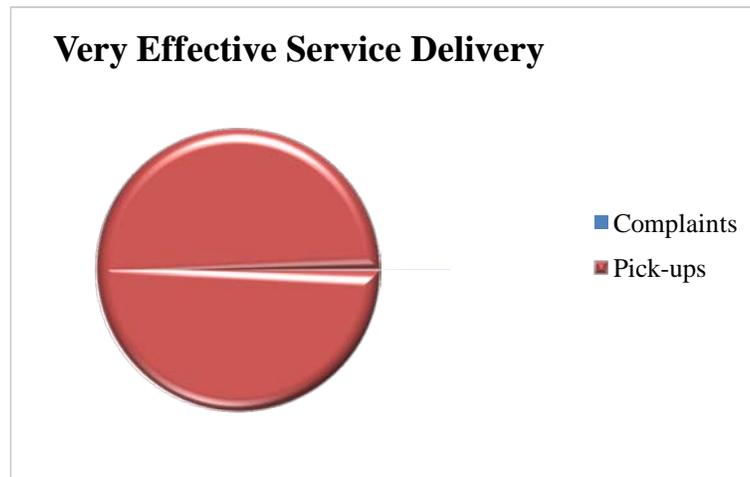
A public survey conducted by the City Auditor’s Office indicated high citizen satisfaction with the solid waste collection services as follows:

Citizens ratings of excellent or good

Service	2010	2009	2008	2007
Garbage Collection rating	85.6%	85.2%	86.0%	85.7%
Curbside Recycling rating	80.3%	83.9%	80.6%	82.6%

A public survey conducted by the City Auditor’s Office indicated high citizen satisfaction with the solid waste collection services

The SWM is experiencing an extremely low complaint rate that is less than 1%. The auditors observed completion of pick-ups in various routes within the daily scheduled time indicating completeness of coverage offered by the crews.



Based on this information, a conclusion can be drawn that the SWM is providing effective service to Richmond citizens.

Finding 2:

Opportunities may exist for improving cost-effectiveness of SWM operation.

Using automated trucks could save money by reducing labor costs

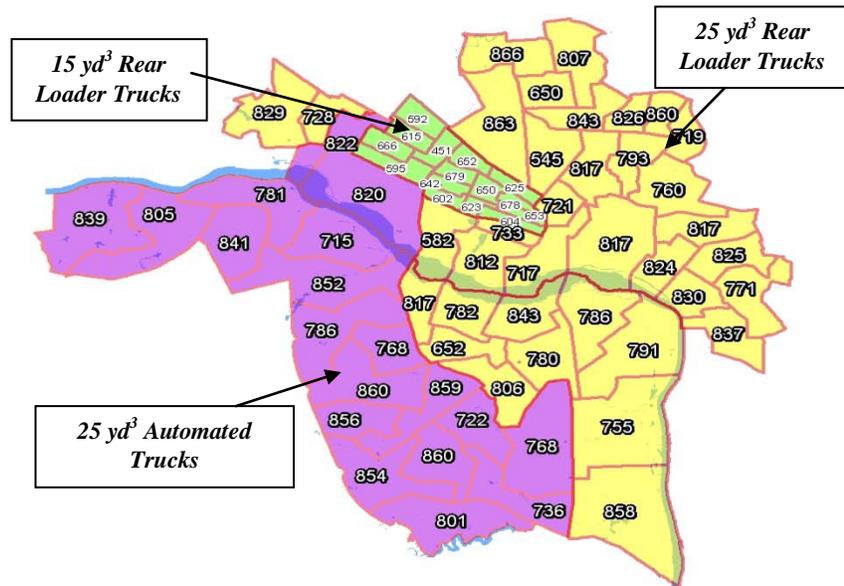
Automated vehicles are equipped with a mechanical arm that lifts, dumps, and returns the roll-out supercan to the curb. However, the City uses manual labor to perform this work. Although the use of automated trucks is very popular in other localities, Richmond has constraints that restrict their use throughout the City. These constraints include:



Using automated trucks, wherever practical, could result in significant annual savings

- Limited parking forces the residents to park their vehicles by the curbside which prevents effective use of automated trucks.
- The City has areas where the refuse is picked up from the alleys behind the homes. Narrower alleys prevent the use of automated trucks.
- The automated trucks require 18 feet clearance in order to operate. DPW is currently working with the electric utility company to enhance the clearance.

However, these conditions do not exist in the entire City. DPW had identified an area on the west side of the City that could allow the use of the automated trucks as depicted in the following map:



Why should the City use automated trucks?

In a 2009 presentation, the former DPW Director proposed to reengineer routes to reduce 109 routes to 69 routes. Use of automated and semi-automated trucks is efficient and enables the Division to cover a larger area per route. This results in reducing the number of routes. The reengineering of routes combined with the use of automated trucks was expected to save approximately \$1.5 million.

Currently, DPW does not have a comprehensive survey of the City areas for the purposes of evaluating the feasibility of using automated trucks. The presentation indicated that the automated trucks would improve efficiencies of providing solid waste collection services by reducing labor costs. If DPW’s 2009 assessment is accurate, the area then identified could use five automated trucks. The auditors independently estimated a cost savings of about \$317,000 annually by using five automated trucks:

City of Richmond Audit Report 2012-11
Department of Public Works – Solid Waste Management
June 2012

Estimated full-cost of City Refuse Collector \$31,700

A total of 10 collector positions could be eliminated (Savings of \$31,700 X 10)	\$317,000
--	------------------

The City purchased two automated trucks and twenty-three rear-loader trucks in November 2010. Review of mileage and tonnage data to date indicated that the automated trucks are not utilized at the same level as the CNG trucks requiring manual labor. According to SWM personnel, the automated trucks are used at least twice a week in RRHA housing. The Division intended to conduct a pilot project to study expanding this program. However, since their purchase in November 2010, the Division has not been able to conduct the pilot program.

Based on the above information, it appears that automating refuse collection could be beneficial for the City. This option is also preferable due to the high staff turnover rate in solid waste collection operation and the DPW’s difficulties in recruiting replacement personnel.

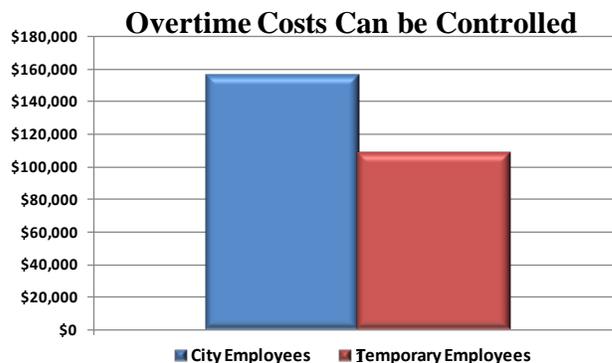
Recommendation:

- 1. Conduct a comprehensive survey to determine the extent of possible use of automated trucks. Based on the results, consider expanding the automated trucks program.***

Overtime costs may be reduced

Since 2007, SWM uses two vendors to provide temporary labor for refuse collection due to difficulties in hiring and retaining permanent employees. SWM is currently compensating their regular employees at overtime rates to work special events such as the Folk Festival, the Suntrust Marathon, and the Monument Avenue 10K. The City pays for benefits and overtime when the work is performed by the permanent employees. The overtime pay rate is significantly higher than the rate paid for temporary labor.

The use of temporary employees paid at the base rate during FY 2011 for special events might have saved an estimated \$47,500 as shown in the chart below:



SWM representatives indicated that in some instances, the regular employees are more reliable for conducting certain tasks. However, the Division's not using temporary labor when they can, may have cost the City additional resources that could have been avoided.

Recommendation:

- 2. Use temporary labor for special events whenever possible.*



Inventory of supercans must be updated

SWM distributes ninety-five-gallon cans to their customers. They have a monthly charge of \$17.50 per supercan for the customers. Obviously, to collect this charge, SWM must know how many cans are distributed to customers as some customers have more than one can. SWM allows a maximum of four cans per customer.

Without proper inventory of the supercans, accuracy of customer billing cannot be verified

SWM informed the auditors that it had not conducted a formal inventory since 2007. In 2007, the entire supercan inventory was erased, which the City’s Department of Information Technology (DIT) partially restored. SWM lacked procedures for data entry and reconciliation between physical inventory and corresponding billing records. During the audit, SWM began to compile a new physical inventory to adjust its records. However, it is not completed yet.

Comparing available information from DPU and SWM, the auditors determined the following:

Potential Number of Unaccounted-for Supercans	
Number of City-owned cans—from inventory records	85,778
Estimated number of cans from billing records	63,037
Number of cans unaccounted for	22,741

The auditors recognize that the inventory of the City-owned cans is not accurate. However, without a complete inventory, it is not possible to verify if the City is receiving all the revenues due to the City. Therefore, DPW must compile an accurate inventory count of City-

owned cans, which can be compared against the billing records maintained by DPU.

Recommendations:

- 3. Complete a full physical supercan inventory.***
- 4. Develop formal policies and procedures to strengthen controls, including data backup, periodic physical inventories, and reconciliation with billing records maintained by DPU.***

Finding 3: Opportunities exist to improve management practices in SWM

Internal Controls

According to Government Auditing Standards, internal control, in the broadest sense, encompasses the agency's plan, policies, procedures, methods, and processes adopted by management to meet its mission, goals, and objectives. Internal control includes the processes for planning, organizing, directing, and controlling program operations. It also includes systems for measuring, reporting, and monitoring program performance.

Based on the results and findings of the audit methodology employed, auditors concluded that:

- Internal controls need improvement to enhance proper accountability over City resources invested in this division
- There are opportunities to improve existing internal controls.

The SWM needs to strengthen its controls and procedures to effectively and efficiently perform and monitor its activities. Auditors observed issues with the following matters:

- Recordkeeping
- Policies and procedures
- Approval of vendor invoices
- Landfill monitoring
- Compliance with laws and regulations

A brief discussion of these issues is as follows:

Recordkeeping needs improvement

SWM is using Metastorm which is a business-process management software for capturing statistical data pertaining to their operations. The Division enters daily route information required for managing the operation such as route start and stop times, crew size, beginning and ending mileage, number of pickups, number of tons collected in this system. SWM does not verify integrity of the system data. Unreliable data, in turn, may hinder or unintentionally cause erroneous business decisions.

The SWM personnel indicated that the system has a very limited capability to produce reports. To mitigate this discrepancy, the SWM manually reenters the data into Excel spreadsheet causing duplication of efforts.

***SWM does not verify
the integrity of the
system data***

Recommendation:

5. *Establish procedures to ensure operational data in the computer system is complete and accurate.*

*SWM has limited
written procedures*

Written policies and procedures

During the audit, SWM provided limited policies and procedures, which do not address all the activities of the Division. However, comprehensive procedures addressing the following issues were not available:

- Contract administration
- Route balancing
- Route audits
- Vendor rebates
- Incentive time
- Overtime for solid waste personnel
- Miscellaneous billing for special events
- Commercial truck driver license verification
- Compliance with local, state and federal statutes and regulations

Without formal written procedures, the tasks may not be completed consistently in accordance with the City policies.

Recommendation:

6. *Develop comprehensive business procedures that provide guidance and strengthen controls over the activities listed above.*

During the audit period, SWM was not always able to follow its invoice approval policy.

Approval of vendor invoices

Auditors found that DPW has a policy to verify vendor invoices and supporting documentation; however, due to staff turnover, the policy wasn't always followed. Review of invoices of the two largest SWM vendors (annual billing \$4 million) revealed no evidence of such verification.

During their testing, the auditors compared the quantities charged by the vendor providing refuse services to the quantities recorded in SWM's main information system for 11 out of 12 FY 2011 invoices:

FY 2011 Unverifiable Vendor Charges-Refuse			
Number of tons charged by vendor	Number of tons recorded in SWM's primary information system	Difference	Total charge by vendor that could not be verified
73,457	58,663	14,794	\$393,459

However, SWM noted that the data in the information system does not include bulk and brush transactions. In addition, the information for trash dropped off by residents at the transfer station is not included. There was no additional evidence that could be used to verify the amounts charged by the vendor prior to payment. In this situation, vendor overcharges may not be detected.

The vendor recycling services charges the City for 60,476 units on its monthly billings. The auditor used DPU records for June 2011 and found that the City bills only 53,146 customers for recycling services.

SWM needs to evaluate accuracy of the recycling bins distributed to customers and adjust the billing data to prevent losses

FY 2011 Unverifiable Vendor Charges-Recycling			
Average # of	Estimated # of	Difference	Estimated annual

City of Richmond Audit Report 2012-11
Department of Public Works – Solid Waste Management
June 2012

dwelling units charged by vendor	billable dwelling units determined by the auditor		total charge by vendor that could not be verified
60,476	53,146	7,330	\$150,065

SWM indicated that it does not confirm the number of units billed by the vendor in accordance with the DPW policies and, instead, relies on vendor reports to provide that information. If the vendor’s records are accurate, the City is not billing the customers for 7,330 recycling bins. Potentially, the City stands to lose the above amount.

The same vendor also appeared to slightly increase the unit price. The contract allows for price increases based on increases in the Consumer’s Price Index (CPI-U) not to exceed five percent annually, but SWM could not provide any documentation to show that the increased rates had been checked for accuracy.

In both cases, the control process can be enhanced to verify the accuracy of the amounts billed. The absence of appropriate control processes increases the risk that overbillings, if they occurred, would not be detected.

Recommendation:

- 7. Strengthen processes and comply with the existing invoice approval policy to verify vendor quantity and price information to ensure that the amounts billed either by vendors or to customers are accurate and errors are detected promptly.***

SWM did not have mechanism to comply with all applicable federal, state, and local laws and regulations

SWM must identify all laws and regulations applicable to their operation and establish a mechanism to comply with them.

During the audit, SWM provided a list of legal provisions applicable to the Division. Upon repeated inquiry, the auditors found limited evidence of SWM's efforts to document their compliance with some applicable laws and regulations. Based on the information provided, it does not appear that SWM has the ability to verify and monitor compliance with all applicable statutory and regulatory requirements. Non-compliance with the requirements could subject the City to applicable fines and other legal actions.

Recommendation:

8. Establish a mechanism to comply with all the federal, state, or local laws and regulations applicable to SWM operation.

Performance Measures

SWM needs performance measures to improve management practices

SWM needs to develop and use meaningful performance measures

During the audit, SWM had not developed performance measures. Performance measures are tools for managers and supervisors to gauge organizational progress, inspire and motivate employees to improve performance or reward it, set the direction of the organization, and encourage alignment with organizational objectives. The absence of performance measures may result in missed opportunities to improve efficiencies and may hinder the Division from detecting productivity problems that can adversely affect its operations.

According to the DPW Director, the Department is in the process of developing performance targets for its various divisions including

SWM. The current efforts supported by internal staff, are expected to realign SWM with industry best practices.

Recommendation:

9. Develop performance measures that are:

- a. Based on program goals and objectives that tie to the Division’s mission or purpose;***
- b. Used for measuring outcomes, efficiency and effectiveness leading to continuous improvement***
- c. Verifiable, understandable and timely;***
- d. Reported internally and externally;***
- e. Monitored and used in managerial decision-making processes;***
- f. Designed in a way to motivate staff at all levels to contribute toward organizational improvement.***

Accounting Practices

SWM activities need to be properly accounted for in an enterprise fund to assure using solid waste revenues for the activities of the Division

The proper accounting treatment for a government operation that competes with private enterprise and provides service for a fee is to use an enterprise fund. Enterprise funds accounting facilitates comparing publicly-owned operations to private operations engaged in providing similar services. This accounting treatment improves transparency. The SWM operation is similar to the City’s DPU operation which represents an activity accounted for as an enterprise fund.

Accounting treatment needs to match the nature of the operation

This issue was discussed with the City Attorney’s Office. In absence of a recent Virginia case law, the City Attorney’s Office used a Massachusetts court that recently offered a test for distinguishing between taxes and fees by holding that legitimate fees as:

- (1) Charged in exchange for a particular governmental service, which benefits the party paying the fee in a manner not shared by other members of society,
- (2) Paid by choice (Richmond residents cannot get this essential services from anyone other than the City),
- (3) Collected not to raise revenues but to compensate the governmental entity providing the services for its expenses (The City collects revenues in excess of the expenditures and uses it for general governmental purposes).

The current method of accounting fails two of the three tests. To avoid the misperception about the character of these receipts, the City should segregate revenues and expenditures of this business type activity in a separate enterprise fund. It should also ensure that all the revenues are used for the business type activity. Local governments such as Charlottesville-Mecklenburg, NC and the City of Phoenix, AZ use enterprise funds to account for solid waste management activities.

Recommendation:

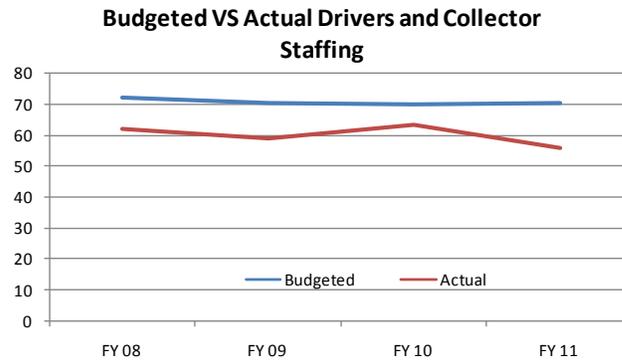
10. Establish an enterprise fund for solid waste activity to recognize the full costs of resources used or committed to solid waste programs and services.

Budgeting Practices

The SWM budget must reflect the actual staffing practices

The actual permanent staffing has consistently lagged behind the corresponding budgeted staffing as depicted in the following graph:

City of Richmond Audit Report 2012-11
Department of Public Works – Solid Waste Management
June 2012



SWM makes up the shortage in staffing by using temporary staff. This practice does not have any significant financial impact.

The following table depicts the comparison between the revenues and expenditures for the Division as follows:

Description	FY 2009	FY 2010	FY 2011
Solid Waste	\$12,589,199	\$12,437,620	\$12,415,495
Recycle Charge	\$ 1,008,076	\$ 1,034,808	\$ 1,036,135
Other	\$ 12,460	\$ 12,225	\$ 10,884
Total Revenue	\$13,609,735	\$13,484,653	\$13,462,514
Total Expenditures	\$11,891,854	\$12,086,469	\$11,034,863

Based on the above comparison, it is apparent that the use of temporary workers has not adversely affected the Division’s finances, as the actual expenditures are consistently less than revenues and corresponding budgeted expenditures.

Further analysis revealed that the Division is consistently under budget in permanent staffing costs whereas they are consistently over budget in temporary labor and overtime. The budget of the Division needs to

be adjusted to reflect the actual practice to assist them in better management of their budgeted resources.

Recommendation:

11. Revise the budgeting method to reflect actual practices of staffing.

This would require eliminating positions that have been vacant for the past several years and appropriating additional funds for temporary staffing.

MANAGEMENT RESPONSE FORM

DEPARTMENT OF PUBLIC WORKS - SOLID WASTE MANAGEMENT

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
1	Conduct a comprehensive survey to determine the extent of the possible use of automated trucks. Based on the results, consider expanding the automated trucks program.	Yes	Conduct a study to identify areas within the City of Richmond which are conducive to automated collection.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Mar-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			The initial pilot study was conducted in October 2010, Out of the 25 routes within the Division, only 8 were identified as potential good candidates for automated collection.
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
2	Use temporary labor for special events whenever possible.	Yes	DPW has reviewed city events and has identified low profile events that temporary personnel can be utilized. DPW will seek additional areas for this type of staffing augmentation.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Dec-12
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			Currently, temporary labor forces are utilized on special events. They are used to help augment staffing shortages within various positions.
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
3	Conduct a full physical supercan inventory.	Yes	1. Complete the super can audit. 2. Enter data received from the physical supercan audit into a database. 3. Collaborate with DPU Customer Billing for corrections and/or additions in order to provide accurate billing.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Mar-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

	A physical super can audit was initiated in February 2012. This audit is 80% completed. During this audit, parcels are identified with multiple super cans, correction of super can database is in progress, customer billings are investigated and corrected for accuracy with DPU Customer Billing.		
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
4	Develop formal policies and procedures to strengthen controls, including data backup, periodic physical inventories, and reconciliation with billing records maintained by DPU.	Yes	1. Complete review and revision of Solid Waste Operating procedures, policies and practices. 2. Complete review of data acquisition and back up procedures. 3. Develop procedure to conduct periodic review of billing records maintained by DPU.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		12/12/2012
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	Solid Waste SOP's are being revised. A physical super can audit began in February 2012. This audit is 70% completed. During this audit parcels are identified with multiple super cans. Correction of the super can data base is in progress. Customer billings are investigated and corrected for accuracy with DPU. A physical can count is being conducted as well.		
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
5	Establish procedures to ensure operational data in the computer system is complete and accurate.	Yes.	1. Investigate the possibility of employing / deploying CityWorks as the data acquisition and storage system to be utilized by Solid Waste in the future. 2. Continue investigation to allow invoice tickets for city loads being hauled to Waste Management Transfer Station to be transmitted directly to Solid Waste database in real time as each load is weighed and calculated in Waste Management System. (This process will allow Solid Waste to track each load as it is disposed of at the Transfer Station, and to provide 'one-to-one' correlation for all loads invoiced monthly by Waste Management.) 3. SWM has attempted to set up a meeting with WM & DIT in order to verify that an intergration of WM's invoice system and Citiworks could be used to intergrate systems.

1	TITLE OF RESPONSIBLE PERSON		TARGET DATE
1	Operations Manager		30-Jun-13
1	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
1			
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
6	Develop comprehensive business procedures that provide guidance and strengthen controls over the activities listed above.	Yes	As the system reviews identified in recommendation 6 are completed, they will be incorporated into the division's operating procedures, policies and practices.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Jun-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
7	Strengthen processes and comply with the existing invoice approval policy to verify vendor quantity and price information to ensure that the amounts billed by vendors are accurate and errors are detected promptly.	Yes	As the system reviews identified in recommendation 6 and 7 are completed, they will be incorporated into the division's operating procedures, policies and practices.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Jun-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
8	Establish a mechanism to comply with all the federal, state, or local laws and regulations applicable to the SWM operation.	Yes	Please see information provided from National Accreditation information. This information will be placed within the policies and procedures manual as established under recommendations 6 and 7.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager		30-Jun-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	We believe these federal, state and local regulatory statutes have been provided as part of the information provided from the National Accreditation information.		
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS

9	Develop performance measures that are: a. Based on program goals and objectives that tie to the Division's mission or purpose; b. Used for measuring outcomes, efficiency and effectiveness leading to continuous improvement c. Verifiable, understandable and timely; d. Reported internally and externally; e. Monitored and used in managerial decision-making processes; f. Designed in a way to motivate staff at all levels to contribute toward organizational improvement.	Yes	Performance measures are to be developed in accordance to the current CRS System, MPACT program, and Cityworks. Within these systems, specified target dates are provided and on-time completion percentages can be generated. Additional measures will be developed for the solid waste route management system based on the action items developed from the policies and procedures within recommendation 6 and 7 and the department's Tier 2 balanced scorecard.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Deputy Director		31-Aug-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
10	Establish an enterprise fund for solid waste activity to recognize the full costs of resources used or committed to solid waste programs and services.	Yes	With the development of a data acquisition and storage system which allows the organization to establish performance benchmarks previously referred to, we will be in a position to assess the efficiency of the operation and the cost-of-service for all aspects of the solid waste operation. This information will be utilized to provide an estimated timeframe for conversion to an enterprise operation.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Director of Public Works		31-Dec-13
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
11	Revise the budgeting method to reflect actual practices of staffing. This would require eliminating positions that have been vacant for the past several years and appropriating additional funds for temporary staffing.	No	
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Deputy Director		
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

The operation is currently budgeted for the accurate number of personnel required to provide the service. The nature of the operation is such that a high turn-over rate of employees working within the operation prevails. It is necessary to maintain the positions. While we work to fill these positions, we employ temporary personnel to maintain the operation.