



Audit Report Number 2006-11
City of Richmond
Department of Public Utilities
Special Investigation – Gas and Water Leak Repairs Contract
January 2004 through December 2004

Prepared by
CITY AUDITOR
Richmond, Virginia

Submitted to
The Honorable Members of City Council
February 10, 2006

CONTENTS

Page

City Auditor's Report	1
Executive Summary	4
FINDINGS AND RECOMMENDATIONS	5
1. Establish Monitoring Procedures to Prevent Excessive Overtime	5
2. Payments to Stand-by	7
3. Improve Internal Controls	8
4. Establish Formal Administrative Procedures Guidelines	10



City Auditor Report Evaluation Form

**Fax...Write...Call...
Help Us Serve the City of Richmond Better**

We strive to provide professional independent auditing services to City Agencies in order to promote full financial accountability, efficiency and effectiveness of operations and programs and compliance with relevant laws and regulations. The City Auditor's Office will help support management's internal control structures and thereby assist the City Council and City Administration to achieve their goals and objectives.

Your feedback helps us do a better job. If you would please take a few minutes to fill out the following information for us, it will help us assess and improve our work.

Please rate the following elements of this report by checking the appropriate box.

	Too Little	Just Right	Too Much
Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential Impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Suggestions for our report format: _____

Suggestions for future studies: _____

Other comments, ideas, thoughts: _____

Name (Optional): _____

Thanks for taking the time to help us.

Fax: 804.646.2230
Mail: City Auditor's Office, 900 E. Broad Street, Room 806, Richmond, VA 23219
Call: Randi Ricco-Clifford, CPA, Interim City Auditor, 804.646.5645
Email: askcityauditor@ci.richmond.va.us
Hotline: 804.646.5697

The Honorable Members of City Council
Richmond City Audit Committee
City of Richmond, Virginia 23219

City Auditor's Report

SCOPE

Our office received a letter expressing concerns regarding the excessive number of hours claimed by a City contractor to repair gas leaks and the related overtime earned by the City inspectors. Our office performed a special investigation to review the records of work performed and payments issued in the Gas and Water Leak Repairs Contract by the Department of Public Utilities (DPU) during January 2004 through December 2004. We reviewed and evaluated their system of internal controls for the same period to the extent considered necessary.

OBJECTIVE

The audit objectives were to determine whether the contractor over-billed the City and whether the City's Gas Leak inspectors earned excessive overtime.

METHODOLOGY

This was not an audit in accordance with Government Auditing Standards for Performance Audits issued by the Comptroller General of the United States. However, during the course of our work, we reviewed supporting documents, evaluated management controls, and conducted other appropriate tests that were in accordance with these Government Auditing Standards. We believe that our work provides a reasonable basis for our conclusions and our recommendations.

CONCLUSIONS

- The Department of Public Utilities needs to strengthen internal controls in its process to monitor the Gas and Water Leak Repairs Contract. Current controls are conducive to overtime abuse by the City inspectors, as well as the contractor's crews.

- The length of time to pinpoint and repair leaks was at times rather lengthy. Even though we recognize every leak is unique and several factors can contribute to the time needed for repairs, management must remain vigilant to ensure jobs are not stretched in order to benefit the contractor or the City inspectors.
- The contract needs to be managed more cost effectively. DPU made payments to the contractor for duties that seemed administrative in nature and that were the contractor's responsibility. Some of the duties included safety meetings attendance and preparation of payroll time sheets by the contractor's assistant superintendent.
- The Department of Public Utilities needs to implement formal administrative procedures for the operation of the Gas and Water Leak Repairs Contract. These procedures should be similar to any well-managed service contract.

The management of the City of Richmond, Virginia, is responsible for maintaining financial records. It is also responsible for establishing and maintaining a system of internal accounting controls and management controls. In fulfilling this responsibility, management is required to assess the expected benefits and related costs of control procedures.

We discussed the attached comments and recommendations with management throughout the audit and formally on January 19, 2006. We have included management responses from the responsible officials.

We would like to thank the departmental management and staff for their assistance during this audit.

This report is intended for the members of the Richmond City Council, the City Audit Committee, the City and departmental management; it is a matter of public record.

Respectfully submitted,

Randi L. Ricco-Clifford, CPA, CIA, CGAP
Interim City Auditor

Amarilis M. Hernandez, CPA, CIA
Auditor IV

Yolanda Tennessee
Auditor II

December 5, 2005

Executive Summary

Background

Our office received an anonymous letter that addressed concerns regarding potential wrongdoing within the Gas Maintenance Division of the Department of Public Utilities. The writer alleged that the Gas Leak Repairs contractor had developed strategies for “stretching the job” under the direction and approval of the City inspectors.

The Gas and Water Leak Repairs Contract term is one year with four possible renewals, which was executed on August 26, 2003. It is a time and material based contract. It consists of investigating, locating and repairing gas and water leakage services and mains. It also includes the relocation of gas meters on the City of Richmond gas and water system, service renewal/replacement, joint encapsulation and renewal of limited sections of main on a limited, as needed basis and other emergency work that the contractor is able to provide.

Summary of Recommendations

In order to improve operations and better achieve the Department’s objectives, we recommend the following for management’s consideration. Management should:

1. Implement monitoring guidelines to prevent potential overtime abuse by City inspectors and the contractor.
2. Improve the controls surrounding the decision process to allow crews to “stand-by” all day at their shop; review the contractor’s charges to the City for the “stand-by” of equipment hours.
3. Improve internal controls by ensuring all daily work reports are properly reviewed and approved by the appropriate inspector.
4. Establish formal written procedures for DPU inspectors so that they know the proper procedures to follow when questions arise.

FINDINGS AND RECOMMENDATIONS

1. Establish Monitoring Procedures to Prevent Excessive Overtime

On a regular basis, the contractor's superintendent reportedly worked many overtime hours during any given week. In many instances, he worked 80 hours or more during the week. During the seven weeks summarized below, the City paid the contractor \$ 30,620 for the superintendent's time.

<i>Week</i>	<i>Regular Hours</i>	<i>Overtime Hours</i>	<i>Total Hours</i>	<i>Regular Pay</i>	<i>Overtime Pay</i>	<i>Total Payment</i>
Jul 26, 2004 – Aug 1, 2004	40	46	86	\$1,541.60	\$2,659.26	\$4,200.86
Aug 30, 2004 – Sep 5, 2004	40	40.5	80.5	\$1,541.60	\$2,341.31	\$3,882.91
Oct 18, 2004 – Oct 24, 2004	40	44.5	84.5	\$1,541.60	\$2,572.55	\$4,114.15
Oct 25, 2004 – Oct 31, 2004	40	49.5	89.5	\$1,541.60	\$2,861.60	\$4,403.20
Nov 8, 2004 – Nov 14, 2004	40	49.5	89.5	\$1,541.60	\$2,861.60	\$4,403.20
Nov 15, 2004 – Nov 21, 2004	40	62.5	102.5	\$1,541.60	\$3,613.13	\$5,154.73
Dec 6, 2004 – Dec 12, 2004	40	50.5	90.5	\$1,541.60	\$2,919.41	\$4,461.01
Total				\$10,791.20	\$19,828.86	\$30,620.06

According to management, the contractor has at least three employees with comparable superintendent experience. Management has asked the contractor to spread the work.

However, management has indicated that the superintendent is the most willing to work the long hours. This practice does not utilize the most cost effective means of spending City funds and does not consider the City's best interest.

In order to manage the City's funds more efficiently, DPU management must insist that the contractor meet certain requirements. Some of those requirements may include: (1) assignment of specific supervisors for night and weekend shifts to curb incurring excessive overtime by the higher pay-rate superintendent position, and (2) assignment of enough crews and personnel to cover all shifts to prevent incurring excessive overtime. Those requirements must be monitored for compliance and non-compliance should be documented and followed-up accordingly.

In addition to the contractor's overtime, we reviewed the time sheets for four City Gas inspectors. The overtime paid to the four inspectors accounted for 25% to 45% of their total earnings for the year. Their overtime payments were as follows:

\$27,652.51, which accounted for **45%** of his total earnings
 \$17,630.11, which accounted for **30%** of his total earnings
 \$24,454.25, which accounted for **33%** of his total earnings
 \$13,669.74, which accounted for **25%** of his total earnings

During our review, we noted that:

- o the Gas Maintenance Supervisor approved the time sheets but did not monitor the total number of hours worked by the inspectors.
- o the inspectors reportedly worked many hours non-stop. According to management, even though there is not a written policy, the inspectors are required to take eight (8) hours off once they work 24 hours. However, we noted numerous occasions when the City inspectors worked more than 24 hours non-stop. At times, they reported 40 non-stop hours. Other times, they returned to work after a few hours off.

The table below depicts the number of hours worked non-stop by the inspectors:

Inspector	Date	Reported non-stop work time	Day	Comments
A	Jan 26, 2004	28 hours	Monday	Returned after 4-hour break
	Feb 5, 2004	32 hours	Thursday	
	Feb 25, 2004	29.5 hours	Wednesday	Returned after 4-hour break
	April 3, 2004	26 hours	Saturday	Returned after 6-hour break
	May 27, 2004	32.5 hours	Thursday	
	Aug 6, 2004	40 hours	Friday	
B	Jan 29, 2004	29 hours	Thursday	
C	Jun 18, 2004	31 hours	Sunday	
D	Sept 25, 2004	28 hours	Saturday	
	Oct 1, 2004	40 hours	Friday	
	Dec 6, 2004	32.5 hours	Monday	

Even though the Gas Maintenance Supervisor approved the time sheets, he indicated to us that he was not aware the inspectors were on the job beyond 24 hours non-stop. When the time sheets were amended for overtime, he did not review the number of hours already reported.

Overtime hours should be monitored to ensure compliance, reasonableness and accuracy. Furthermore, the lack of sleep (working 24-40 hours non-stop) represents a health and safety hazard to the employees, as well as to the City's citizens.

RECOMMENDATION

We recommend that DPU management monitor overtime by both the contractor and City inspectors to ensure due diligence is exercised to execute the work in the most efficient and cost effective manner. The supervisor should be vigilant to ensure neither the City inspectors nor the contractor abuse overtime.

MANAGEMENT RESPONSE

DPU concurs with this recommendation. Effective immediately, the Engineer III over the gas utility will review daily reports for each gas leak repair crew once a week to monitor for the potential abuse of overtime. In addition, the Engineer III will explore shift changes to reduce the amount of overtime paid to the contractor.



2. Payments to Stand-by

During our review, we observed that DPU paid the contractor's crews to stand-by at their shop all day during inclement weather. When the weather was not conducive for working, the inspectors and the Gas Maintenance Supervisor approved payments to the contractor's crews for standing-by an entire day. For example:

- on January 10, 2004, the City paid crew number 04 to stand-by for 9 hours.
- on January 26, 2004, the City paid crews number 01, 04 and 06 each to stand-by for 8 hours.
- on February 1, 2004, the City paid crew number 08 to stand by at their shop for 10 hours . The crew was on stand-by from 4 pm to 2 am.
- on July 27, 2004, the City paid crew number 08 to stand by at their shop due to rain for 6 hours.
- on August 2, 2004, the City paid crew number 08 to stand-by at their shop due to rain. However, the number of stand-by hours could not be determined since they did not break down the number of hours actually worked.

The above charges included not only the number of men hours for the crews, but it also included the same number of hours for the equipment. Payments for the above dates totaled \$5,876. According to the Gas Maintenance Supervisor, he kept the crews on stand

by for safety reasons. Even though we must always consider safety, we question whether DPU needs to pay three crews to stand-by.

RECOMMENDATION

We recommend that DPU management enhance controls surrounding stand-by decisions during inclement weather. Further, we recommend that DPW management review the equipment charges for compliance purposes and reasonableness.

MANAGEMENT RESPONSE

The practice of paying for a select number of contractor crews to stand-by at their shop is only used when the weather is so bad that sending the crews home may result in placing DPU in a position of not having crews on hand to repair gas leaks and not being able to get the crews to respond back to their shop in a timely manner. This policy relies on the judgment of the General Supervisor of Gas Maintenance to assess the likelihood of needing to have crews based on the number of grade I gas leaks and weather conditions.

The current policy will be amended so that DPU is not paying equipment charges when crews are on stand-by and the equipment is not being used. DPU will require certification from the contractor stating that the equipment was held for the exclusive use of DPU when they are charged for equipment. This policy change will be effective immediately.

The Engineer III over the gas utility will confer with the General Supervisor of Gas Maintenance before making a decision to authorize crews to stand-by.



3. Improve Internal Controls

The daily work reports for both the City inspectors and the Contractor's crews only included the number of hours worked and did not include the arrival and departure time for each job.

The arrival and departure time is needed to reconcile the time reported by the contractor and should be maintained for accountability purposes. In order to maintain effective accountability and oversight of work performed, the Gas Maintenance Supervisor should ensure the inspectors and the contractor's crews complete the daily work reports properly.

During our audit, we observed that in most cases, the daily work reports were approved by the inspectors. However, the approval process needs strengthening. At times, the inspectors:

- approved daily work reports for days they did not work. This meant the inspectors approved the daily work reports for work they did not supervise. They did not know whether crews actually work and the number of hours worked.
- approved daily work reports that did not have detailed description of work performed.
- did not approve the daily work reports for which payments were based upon. They were processed for payment even though they were not approved.

The inspectors should only approve the daily work reports that they supervise. It should be based on actual supervision of the duties and the length of time spent on the job.

RECOMMENDATION

We recommend that DPU management improve controls by establishing and adhering to effective oversight practices. Management should ensure the Gas Maintenance Supervisor monitors compliance and follows up on non-compliance. Management should improve controls by ensuring:

- the arrival and departure times on the daily work reports are filled out by both, the City inspectors and the contractor's crews.
- that all daily work reports are properly approved by the appropriate inspector.
- that daily work reports include an appropriate description of the work performed.

MANAGEMENT RESPONSE

DPU concurs with this recommendation. In December 2005 contractor crews were instructed to be more detailed on their daily reports. This includes more detailed information on the work performed as well as the times that the crew arrived on the job site, when they departed the job site, and the work performed. We currently have ten (10) gas leak repair crews working and only two (2) inspectors, therefore it's not possible for inspectors to witness all work that's being performed by each crew. The Construction Service Technician is monitoring daily reports and is returning daily reports that are incomplete or do not contain enough information. She is also returning daily reports that are not signed by both the inspector and the crew supervisor. This change was confirmed with a memo to the contractor dated January 18, 2006.



4. Establish Formal Administrative Procedures Guidelines

Formal (i.e., written) Administrative procedures did not exist for the operations of the Gas and Water Leakage Contract. Written administrative procedures should be available to the inspectors so that they know the proper procedures to follow, such as:

- how to handle their overtime as well as the contractor's overtime;
- the number of hours the inspectors are allowed to work non-stop (as noted in recommendation #2, management's intentions were not carried out);
- the number of hours permitted for standing-by; stand-by guidance for emergencies; and
- daily work report approval guidelines. (For instance, before approving the daily work reports, the inspectors should ensure the number of hours claimed by the contractor are correct. They should also ensure they only approve time for jobs actually monitored.)

Written procedures should be available to enhance the effective operation of any department. Written procedures:

- help ensure management that operations are executed according to its intentions;
- provide guidance whenever a question arises concerning the appropriate way to resolve a problem; and
- facilitate training of new employees.

RECOMMENDATION

We recommend that management establish procedures, specific for administrative operations of the Gas and Water Leakage Contract and distribute the manual and train the appropriate staff. This manual could then be used as a continuing reference source to promote consistency. Once implemented, management should ensure compliance.

MANAGEMENT RESPONSE

DPU concurs with this recommendation. We will enhance the existing inspector's manual to include the audit recommendations. The Deputy Director of Gas & Light will be responsible for having this done by March 31, 2006. The enhanced manual will be delivered to the appropriate staff and training will be completed by April 30, 2006.

