Office of Internal Audit

Performance Audit 17-10: Tool Room Inventory Process

May 2018

City Auditor
Stan Sewell, CPA, CGFM, CFE

Senior Auditor
Richard Walls, CPA, CIA

OFFICE OF INTERNAL AUDIT

Stan Sewell, City Auditor

May 3, 2018

To: Mayor Andy Berke
        City Council Members

Subject: Tool Room Inventory Process Audit (Report #17-10)

Dear Mayor Berke and City Council Members:

The attached report contains the results of our audit of the tool room inventory process. Our audit found City Wide Services is generally doing a good job managing the inventory process. However, we found there is value in exploring opportunities for improvement.

In order to address the noted areas for improvement, we recommended actions to establish written policies and procedures, improve controls to ensure inventory accuracy, increase management oversight and improve physical security.

We thank the management and staff of City Wide Services, and the Public Works and Information Technology Departments for their cooperation and assistance during this audit.

Sincerely,

Stan Sewell, CPA, CGFM, CFE
City Auditor

Attachment

cc: Audit Committee Members
        Jim Arnette, Tennessee Local Government Audit
        Stacy Richardson, Chief of Staff
        Maura Sullivan, Chief Operating Officer
        Daisy Madison, Chief Financial Officer
        Justin Holland, Public Works Administrator
        Ricky Colston, Director of City-Wide Services

TABLE OF CONTENTS

AUDIT PURPOSE

This audit was conducted in accordance with the Office of Internal Audit's 2017 Audit Agenda. The objective of this audit was to determine if there is adequate control over tool room inventory items to mitigate the risk of loss, theft or unauthorized use.

BACKGROUND

City Wide Services is one of six divisions of the City of Chattanooga's Public Works Department whose mission is "To preserve and enhance the quality of the City's physical environment and infrastructure through prompt, cost effective and courteous delivery of services to protect the health, safety and welfare of all employees, citizens, and visitors." City Wide Services is responsible for the management of the tool room whose function is to purchase and store tools, equipment and other items necessary for employees to successfully accomplish the department's mission.

Inventory management is one of the most important aspects of any operation and as a result the City requires "each department and agency of the city shall, under the supervision of the city finance officer, keep a perpetual inventory of the city property under its control, and furnish such reports in relation thereto as the city finance officer may require."[1]

Additionally, the Tennessee Comptroller's Internal Control Manual recommends implementation of the following control activities to mitigate risks related to inventory disbursements: "maintain perpetual inventory records, limit access to inventory, maintain usage records by employee, perform physical inventory counts and reconcile the amount to inventory records."[2]

Statistical Information

As of February 2018, the tool room inventory consisted of 560 different items with a total value of approximately $220,000.

---

[1] City of Chattanooga, Tennessee Code of Ordinances, Section 2-5. – Departmental inventories of city property.
[2] Tennessee Comptroller of the Treasury *Internal Control and Compliance Manual for Governmental Entities and Other Audited Entities in Tennessee*, Internal Control Framework, December 2015, Component 3 – Control Activities, 15.

FINDINGS AND RECOMMENDATIONS

Establish Policies and Procedures

We found there was a lack of written policies and procedures for the City's tool room inventory process. The State and City have general policies and procedures related to inventory. However, there are no policies and procedures directly related to operation of the tool room. The oversight, performance and control of the tool room inventory process is informal and based primarily on institutional knowledge of staff.

There is a risk for inconsistent practices among employees and discontinuity, should the tool room have staff turnover. Additionally, there is a risk inventory may not be properly recorded and reported.

The Government Finance Officers Association (GFOA) Best Practice indicates, "Every government should document its accounting policies and procedures" and "GFOA recommends every government undertake a systematic effort to identify all of its controlled capital-type (non-capitalized) items". These non-capitalized items included in the tool room inventory require special attention to compensate for a heightened risk of theft.

Same Finding Was Disclosed in a Prior Audit

A prior audit (06-09) expressed concerns that procedures for documenting inventory activity had not been formalized into a written document. The audit report recommended, "Inventory management procedures should be formalized into a written document."

Recommendation 1:

We recommend City Wide Services establish written policies and procedures for the tool room inventory process. The policies and procedures should include, among other measures, procedures to address the recommendations that follow.

Auditee Response: We concur with the audit finding and recommendation.

Improve Controls to Ensure Inventory Accuracy

We found quantity and pricing discrepancies during our test of a sample of inventory records. Inaccurate inventory records may cause financial misstatement and operational inefficiencies.

During the observation of the physical inventory, our statistical sample of 48 of 560 items found discrepancies with 15 of the 48 items sampled, a 31% error rate. However, the dollar value of these

errors amounted to only $51, compared to $24,396 for the 48 items sampled. Also, during price testing, our random sample of 31 of 560 items found discrepancies with 2 of the 31 items sampled, a 6% error rate. However, the dollar value of these errors amounted to only $153, compared to $23,846 for the items sampled. Additionally, we identified 10 items in the inventory without a dollar value assigned that amounted to $3,779 in additional inventory value.

The oversight, performance and control of the tool room inventory process is informal and based primarily on institutional knowledge of staff. In addition, inventory requisition and check out forms are not pre-numbered for control. Pre-numbered documents are a key feature of an internal control system.

The Government Accountability Office (GAO) Best Practice indicates "Inventory accuracy goals should be set at 95 percent or higher" and "GAO recommends setting "other performance expectations", as well as establishing "accountability and responsibility for the overall physical count."

Recommendation 2:

We recommend City Wide Services personnel ensure inventory records are accurately maintained, and enforce inventory policy and procedures, when established, to ensure consistent and accurate inventory records.

Auditee Response: *We concur with the audit finding and recommendation.*

Recommendation 3:

We recommend the use of pre-numbered forms for inventory requisitions and issues. Additionally, the employee name on the check-out form (issues) should also be printed.

Auditee Response: *We concur with the audit finding and recommendation.*

Recommendation 4:

We recommend the Inventory Coordinator periodically perform test counts of the inventory items in order to monitor inventory accuracy.

Auditee Response: *We concur with the audit finding and recommendation.*

Improve Segregation of Duties

We found there was a lack of segregation of duties. The same employee requisitions items for the tool room inventory, enters receipts and issues into the inventory system, makes adjustments to the inventory and updates the inventory system.

The on-site tool room inventory staff consists of two employees, an inventory technician and inventory clerk. Their supervisor, the inventory coordinator, is located at the City Wide Services offices. The limited number of employees presents a challenge for sufficient segregation of duties. There is an increased risk that inventory may be misappropriated.

Segregation of duties is a basic internal control to ensure no single individual has the authority to execute two or more transactions across the inventory process without checks and balances. When adequate segregation of duties is not possible, management oversight should be increased to provide reasonable assurance that irregularities are prevented or detected.[3]

Recommendation 5:

We recommend the tasks be divided between the tool room inventory staff as much as possible. Additionally, we recommend the use of compensating controls by utilizing the Inventory Coordinator to review the tool room inventory transactions, as well as approve all manual adjustments to the inventory.

Auditee Response: We concur with the audit finding and recommendation.

Improve Physical Security Over Inventory

We found a large number of employees are granted access to the tool room inventory. While only two City employees are assigned to work directly with the tool room inventory, there are eleven employees with codes that provide access to the tool room building.

The on-site tool room inventory staff consists of two employees, an inventory technician and inventory clerk. An entry code controls access to the tool room inventory. However, there are multiple codes issued to supervisors for after-hours access to the inventory in case of an emergency. This is done to eliminate the need for overtime.

---

[3] Tennessee Comptroller of the Treasury *Internal Control and Compliance Manual for Governmental Entities and Other Audited Entities in Tennessee*, Internal Control Framework, December 2015, Component 3 - Control Activities, 7.

Multiple access codes could result in inappropriate physical access to the tool room inventory.

An inventory management best practice is the existence of a tool room designed to effectively store, control and maintain specialty items. The space can be anywhere as long as it is controlled with limited access.[4] An additional best practice, to improve security, is the use of cameras for exterior and interior warehouse surveillance. Loss prevention is an important facet of inventory management.

Recommendation 6:

We recommend the review and improvement of access controls of the tool room inventory. Appropriate actions include, but are not limited to, reduction in the number of access codes and installation of security cameras.

Auditee Response: We concur with the audit finding and recommendation.

Assess Inventory System for Potential Opportunities for Improvement

We found the tool room inventory system does not interface or integrate with other City programs. The tool room uses Basic Inventory Control (BIC) to track its inventory using fundamental and simple commands. The City uses the Oracle E-Business Suite which includes an inventory management module that has not been implemented.

Because of the lack of integration, transactions are entered manually into BIC, which can lead to data entry errors. In addition, re-keying data from one system to another is inefficient and provides the opportunity for data manipulation or data entry errors.

"To optimize inventory management, leading companies integrate their inventory software directly with back-office and accounting systems. This integration provides a competitive edge with abilities to plan effectively, execute predictability with customers and minimize labor costs and errors associated with manual reconciliation."[5]

---

[4] *Why Don't You Have a Tool Crib?* By Doug Wallace, CPIM, https://www.lce.com/Why-Dont-You-Have-a-Tool-Crib-1881.html

[5] The Benefits of Integrating Your Inventory Software With Your Accounting and Back-Office Processes, http://www.netsuite.com/portal/resource/articles/inventory-management-software.shtml

Recommendation 7:

We recommend City Wide Services, in collaboration with the City's Information Technology Department, assess the inventory system and identify potential opportunities for improvement, including, but not limited to interface and integration with other City software programs.

Auditee Response: *We concur with the audit finding and recommendation.*

Ensure Sufficient Warehouse Space

Due to the large amount of work uniform apparel, we found there was insufficient warehouse space for storing clothing. Other than clothing, the inventory was well organized. There was a storage room with shelving used to store apparel. Additionally, there were boxes in the floor along the aisles, as well as additional boxes stored in the floor of the break room.

Because of the overflow storage, it was difficult to find some sizes and occasionally the same size was found in more than one location. Additionally, cluttered floors and aisles can be trip hazards.

According to the Occupational Safety and Health Administration (OSHA), "The fatal injury rate for the warehousing industry is higher than the national average for all industries." There are numerous potential hazards in a warehouse environment that can cause injuries or fatalities, including cluttered floors and aisles.

Recommendation 8:

We recommend City Wide Services address the lack of sufficient warehouse space for apparel by adding additional shelving. Also, consideration should be given to reducing apparel inventory levels.

Auditee Response: *We concur with the audit finding and recommendation.*

APPENDIX A: SCOPE, METHODOLOGY AND STANDARDS

Based on the work performed during the preliminary survey and the assessment of risk, the audit covers the tool room inventory process from January 1, 2017 to December 31, 2017. When appropriate, the scope was expanded to meet the audit objectives. Source documentation was obtained from City Wide Services. Original records as well as copies were used as evidence and verified through physical examination.

To evaluate the efficiency of the tool room inventory process, we interviewed City Wide Services personnel about tool room inventory management and communicated with the City's Information Technology Department. We also conducted inventory audit procedures such as review of inventory transactions, test counts and price testing.

To develop our recommendations, we reviewed city policies, industry best practice documents and consulted with City Wide Services personnel.

The sample size and selection were statistically generated using a desired confidence level of 90 percent, expected error rate of 5 percent, and a desired precision of 5 percent. Statistical sampling was used in order to infer the conclusions of test work performed on a sample to the population from which it was drawn and to obtain estimates of sampling error involved. When appropriate, judgmental sampling was used to improve the overall efficiency of the audit.

To achieve the audit's objectives, reliance was placed on computer-processed data contained in the Oracle E-Business Suite and the Basic Inventory Control system. We assessed the reliability of the data contained in the two systems and conducted sufficient tests of the data. Based on these assessments and tests, we concluded the data was sufficiently reliable to be used in meeting the audit's objectives.

We conducted this performance audit from November 2017 to March 26, 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

City of Chattanooga Fraud, Waste, and Abuse Hotline

Internal Audit's Fraud, Waste, and Abuse Hotline gives employees and citizens an avenue to report misconduct, waste or misuse of resources in any City facility or department.

Internal Audit contracts with a hotline vendor, The Network, to provide and maintain the reporting system. The third party system allows for anonymous reports. All reports are taken seriously and responded to in a timely manner. Reports to the hotline serve the public interest and assist the Office of Internal Audit in meeting high standards of public accountability.

To make a report, call 1-877-338-4452 or visit our website:
www.chattanooga.gov/internal-audit