

**DEPARTMENT OF ENVIRONMENTAL SERVICES
BUREAU OF WATER
STOCKROOM INVENTORY OBSERVATION**

**Office of Public Integrity
Date: December 8, 2015**

I. EXECUTIVE SUMMARY

The Office of Public Integrity (OPI) observed the annual physical inventory of the Department of Environmental Services (DES), Bureau of Water on October 24, 2015. This inventory includes the Water stockroom, the Street Lighting stockroom, the Department of Recreation and Youth Services (DRYS), Bureau of Recreation inventory and the DES Cemeteries inventory maintained by the Bureau of Water. The results of the inventory indicate that the Bureau of Water maintains adequate inventory control.

- ◆ OPI did not note any variances in our sample selection of water stockroom inventory items indicative of the differences between the physical counts and the quantities recorded in the perpetual records. In the previous inventory we also did not note any variances in this stockroom.
- ◆ OPI did not note any variances in the street lighting stockroom inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. In the previous inventory we noted an error rate of 0.4%.
- ◆ OPI did not note any variances in the DRYS, Bureau of Recreation inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. In the previous inventory we noted an error rate of 0.05%.
- ◆ OPI did not note any variances in the DES, Cemeteries inventory items. We also did not note any variances during the previous inventory.

II. BACKGROUND, OBJECTIVES, AND SCOPE

A. Assignment

The Office of Public Integrity routinely observes and participates in annual physical inventories of various City stockrooms to independently ensure the accuracy of the inventory counts and to evaluate internal controls in the inventory maintenance process. The Bureau of Water conducted its annual physical inventory of the Water, Street Lighting, Bureau of Recreation and Cemeteries stockrooms on October 24, 2015. OPI participated in these counts at the request of the Department of Environmental Services.

B. Background

The Materials and Equipment unit of the Director's Office stores and manages an inventory of supplies and materials necessary to operate and maintain the water distribution system. As of October 24, 2015, the

inventory consisted of 3,094 line items valued at \$3,474,027. Also, in addition to the main inventory storage area on Felix Street, the Bureau of Water stores some inventory at the Hemlock Lake treatment facilities. OPI verified the inventory at that location on September 17, 2015. The inventory at Hemlock Lake consisted of 27 line items valued at \$194,085.

In 2007, City management transferred the Street Lighting unit from the Bureau of Water to the Bureau of Architecture and Engineering. However, the Materials and Equipment unit of the Bureau of Water continues to store and manage the street lighting inventory of supplies and materials. The Street Lighting unit oversees the City's street lighting system. As of October 24, 2015, the inventory consisted of 458 line items valued at \$1,157,345.

In June 2008, City management transferred the DRYS, Bureau of Recreation stockroom to the Materials and Equipment unit of the Bureau of Water. As of October 24, 2015, this inventory consisted of 1,877 line items valued at \$534,325.

In January 2013, the Bureau of Water began storing Cemetery inventory items in their warehouse. As of October 24, 2015, the Cemetery inventory consisted of 131 items valued at \$41,438.

Bureau of Water personnel utilize an automated inventory system that assists in controlling quantities and providing various management information. A perpetual inventory record is an essential feature of this system.

C. Objectives and Scope

The objectives of this review are to assure an accurate and complete physical inventory count and to assess the effectiveness of inventory controls.

Management is responsible for establishing and maintaining a system of internal accounting and administrative control. Fulfilling this responsibility requires estimates and judgments by management to assess the expected benefits and related costs of control procedures. The objectives of a system are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of accurate, informative reports that are fairly stated.

Because of inherent limitations in any system of internal accounting and administrative control, errors or irregularities may nevertheless occur and not be detected. Also, projection of any system evaluation to future

periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the degree of compliance with procedures may deteriorate.

We conducted this audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). 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

The recommendations presented in this report include the more significant areas of potential improvement that came to our attention during the course of the examination, but do not include all possible improvements that a more extensive review might develop.

III. RESULTS OF REVIEW

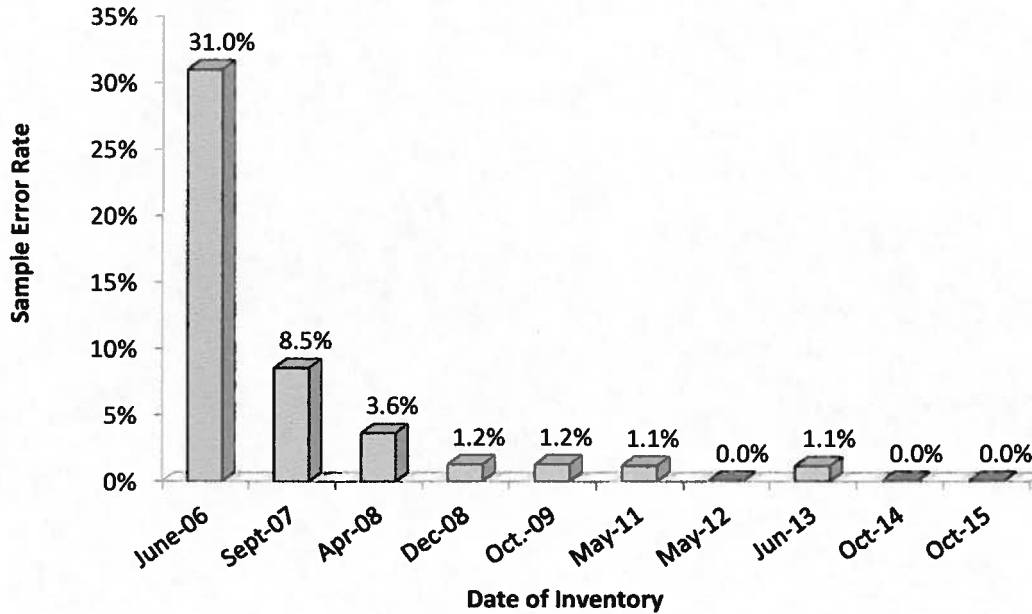
The results of this physical inventory indicate that Water Bureau personnel have continued to maintain adequate control over the inventories.

A. Variance Analysis - Water Stockroom

The Office of Public Integrity selected a statistical sample of items included in the stockroom inventory. The sample selection assures proper representation throughout the entire population of inventory items and allows us to accurately project the results against the entire inventory. The range of unit costs included in the sample extends from \$0.01 to \$2,752.80. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 177 inventory items tested in the sample, OPI did not note any variances. The sample error rate is therefore 0%. The following graph presents historical error rates as a reference.

**Bureau of Water
Water Stockroom Inventory
Sample Error Rate Percentages**



When OPI extends the sample error rate of 0% to the entire population of 3,121 different stock items, the projection indicates that the actual number of errors in the population is in the range of 0 to 91 stock items. When comparing the current error rate of 0% to the prior error rates of 0% in 2014, 1.1% in 2013, 0% in 2012 and 1.1% in 2011, it appears that, based on the results of the sample selection, Bureau of Water personnel have continued to maintain adequate control over the stockroom inventory. Additionally, it appears that conducting cycle counts throughout the year has assisted in achieving and maintaining these lower variance rates.

◆ **Recommendation**

Bureau management should continue to make inventory control a priority.

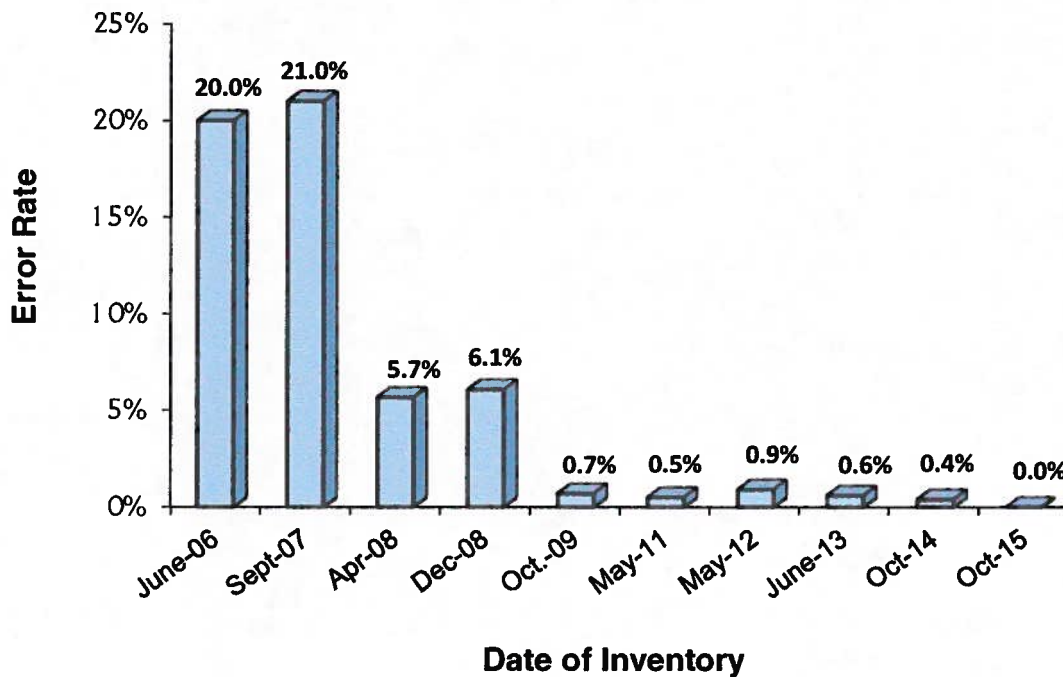
B. Variance Analysis - Street Lighting Stockroom

Due to the relatively small number of street lighting inventory line items, OPI examined 100% of the inventory rather than selecting a statistical sample. As a result, the error rate noted represents the true error rate in the population of street lighting inventory items. The range of unit costs

included in the inventory extends from \$0.13 to \$6,817.34. The Office of Public Integrity compared the actual count of each of these items to perpetual records and noted any variances.

Of the 458 line items in the street lighting inventory, OPI did not note any variances. The true error rate is therefore 0%. This variance is consistent with the 0.4% error rate noted in October 2014, the 0.6% error rate noted in May 2013 and the 0.9% error rate noted in May 2012. This variance represents the implementation of corrective actions by Water personnel when compared to both the error rate of 21% noted in September 2007 and the error rate of 20% that we noted in the 2006 inventory. The following graph presents historical error rates as a reference.

Bureau of Water
Street Lighting Stockroom Inventory
Inventory Variance Error Rate Percentages



◆ Recommendation

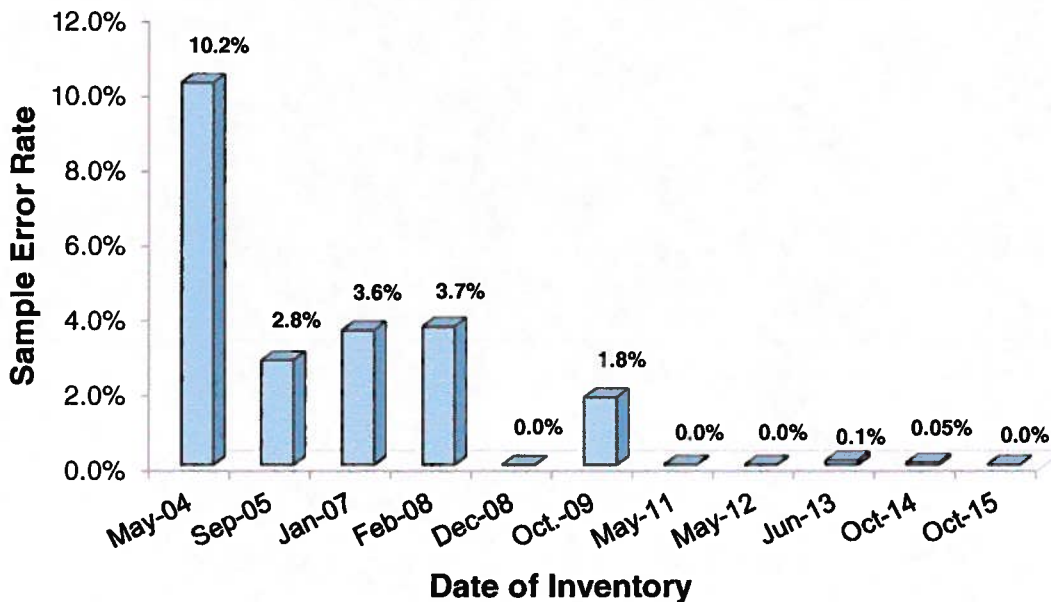
Bureau management should continue to make inventory control a priority.

C. Variance Analysis – DRYS Stockroom

OPI examined 100% of the DRYS Bureau of Recreation inventory items maintained by the Bureau of Water. As a result, the error rate noted represents the true error rate in the population of recreation inventory items. The range of unit costs included in the sample extends from \$0.01 to \$10,000.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 1,877 line items, OPI did not note any variances. The true error rate is therefore 0%. This variance is consistent with the .05% variance rate noted in October 2014, the 0.1% variance rate noted in May 2013 and the 0.0% error rate noted in May 2012. The following graph presents historical error rates as a reference.

Bureau of Water
DRYS Stockroom Inventory
Inventory Variance Error Rate Percentages



◆ Recommendation

Bureau management should continue to make inventory control a priority.

D. Variance Analysis - Cemeteries Inventory

Due to the relatively small number of cemetery inventory line items, OPI examined 100% of the inventory rather than selecting a statistical sample. As a result, the error rate noted represents the true error rate in the population of cemetery inventory items. The range of unit costs included in the sample extends from \$0.33 to \$1,500.00. OPI compared the actual count of each item to perpetual records and noted any variances.

Of the 142 line items, OPI did not note any variances. The true error rate is therefore 0%. This is the same error rate noted in the 2014 inventory.

◆ Recommendation

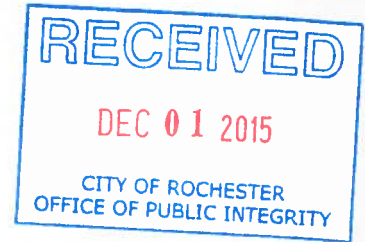
Bureau management should continue to make inventory control a priority.

IV. DEPARTMENTAL RESPONSE

The response of the Department of Environmental Services to this report begins on the next page.



Inter-Departmental Correspondence



To: Daniel Mastrella, Internal Audit/OPI

From: Norman H. Jones, Commissioner/DES

Date: November 17, 2015

Subject: Inventory Audit Results – Water Bureau Materials & Equipment Stockroom

The Water Bureau conducted its physical inventories of the Water Materials, St. Lighting, DRYS, and Cemeteries databases on October 24, 2015. The previous inventory of these areas was performed October 25, 2014. The Office of Public Integrity observed both of these inventories.

At the time of the most recent audit, the Materials & Equipment stockroom maintained 5,587 items, comprised of 293,806 physically counted units, valued at \$5,400,025.

The results of this year's audit were outstanding.

Based on OPI's examining 100% of the following databases:

- DRYS inventory had zero variances.
- Cemeteries inventory had zero variances.
- Street Lighting inventory had zero variances.

Based on OPI's statistical analysis of a sample selection of 177 items:

- Water inventory had zero variances

A combined 100% physical verification of the Felix Street M&E inventory by our third party contracted vendor found the actual results for the combined inventory were:

- 1 variance of 5,560 items for an actual variance rate of <0.02%
- A shortage of two pins with a combined value of \$2.00
- A combined actual accuracy rate by item of 99.98%

The statistically perfect results of the OPI audit, in conjunction with the nearly perfect results of the complete physical inventory confirmed that, the Water Bureau's Materials & Equipment stockroom staff continued to maintain adequate control over all inventories.

Attachments:

- OPI Tentative Report for Bureau of Water Stockroom Inventory Observation
- Comparison of Results of 2015 and 2014 Bureau of Water Stockroom, dated 11/17/15
- Summary of 2015 Bureau of Water Stockroom 100% Physical Inventory Verification, dated 10/26/15

XC: P. O'Connor
L. Cichocki-Lalka
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