

I. EXECUTIVE SUMMARY

The Office of Public Integrity (OPI) observed the annual physical inventory of the Bureau of Water on May 19, 2012. This inventory included the Water stockroom, the Street Lighting stockroom and the Department of Recreation and Youth Services (DRYS), Bureau of Recreation 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. We noted a 1.1% error rate in the previous inventory.
- ◆ OPI noted variances in 0.9% of street lighting stockroom inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. This is slightly higher than the 0.5% error rate noted in the previous inventory.
- ◆ OPI did not note any variances in our sample selection of DRYS, Bureau of Recreation inventory items. We also did not note any variances in 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, and DRYS, Bureau of Recreation stockrooms on May 19, 2012. 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 May 19, 2012, the inventory consisted of 2,627 line items valued at \$1,875,418. In addition to the main inventory storage area on Felix Street, the Bureau of Water also stores some inventory at the Hemlock Lake treatment facilities. Accordingly, OPI also verified the inventory at that location. As of May 19, 2012, the inventory at Hemlock Lake consisted of 47 line items valued at \$236,832, for a combined inventory totaling 2,674 items valued at \$2,112,250.

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 May 19, 2012, the inventory consisted of 458 line items valued at \$768,974.

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 May 19, 2012, this inventory consisted of 2,033 line items valued at \$301,886.

Bureau of Water stockroom 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.

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

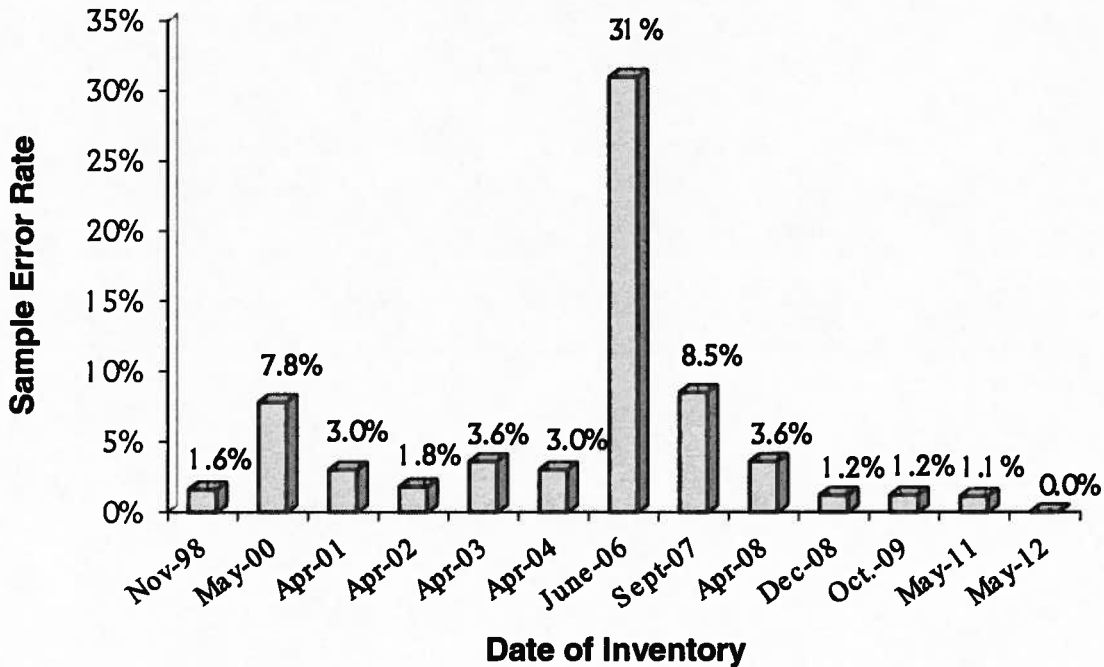
The results of this physical inventory indicate that Water Bureau personnel have continued to maintain adequate control over the inventories.

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 \$0.07 to \$2,000.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 176 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 2,674 different stock items, the projection indicates that the actual number of errors in the population is in the range of 0 and 78 stock items. When comparing the current error rate of 0.0% to the prior error rates of 1.1% in 2011 and 1.2% in 2009, 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 the implementation of cycle counts throughout the year has assisted in achieving and maintaining these lower variance rates.

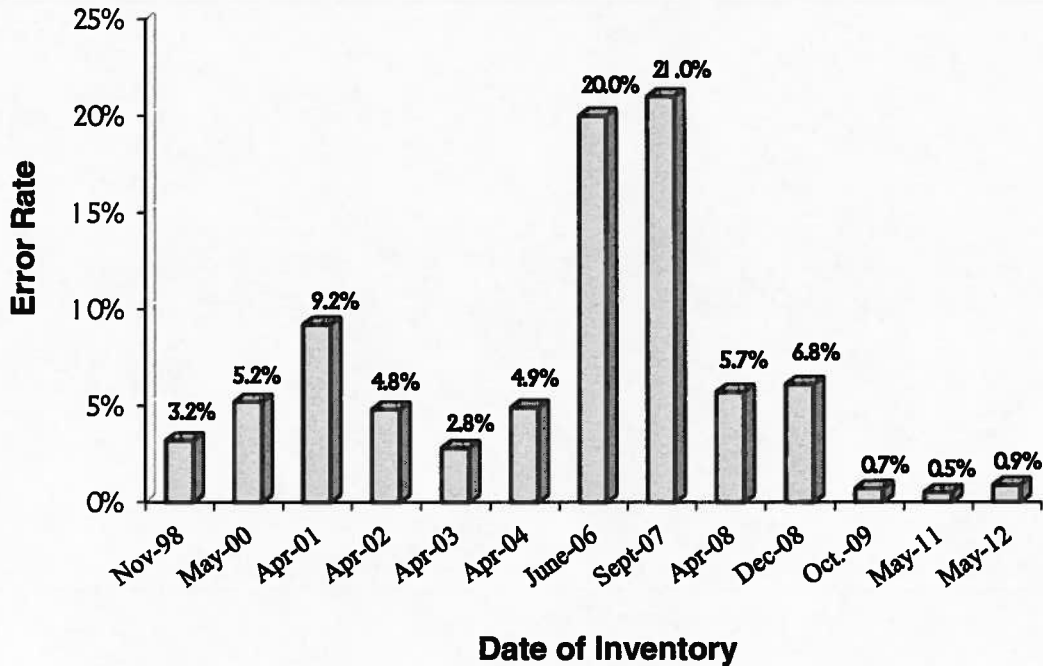
◆ Recommendation

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 entire population of street lighting inventory items. The range of unit costs included in the inventory extends from \$0.00 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, variances exist in four items. The true error rate is 0.9%. This variance is consistent with the 0.5% variance rate noted in May 2011 and the 0.7% error rate noted in October 2009. This variance represents the implementation of corrective actions by Water personnel when compared to both the variance 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**



The attached table presents the variance analysis of the statistical sample selection for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. Additionally, the table includes the net variance. To eliminate counting errors, Bureau of Water personnel recounted all items in which a difference existed between the quantities recorded in the perpetual record and the actual quantities on hand during the physical inventory.

◆ **Recommendation**

Bureau management should continue to make inventory control a priority.

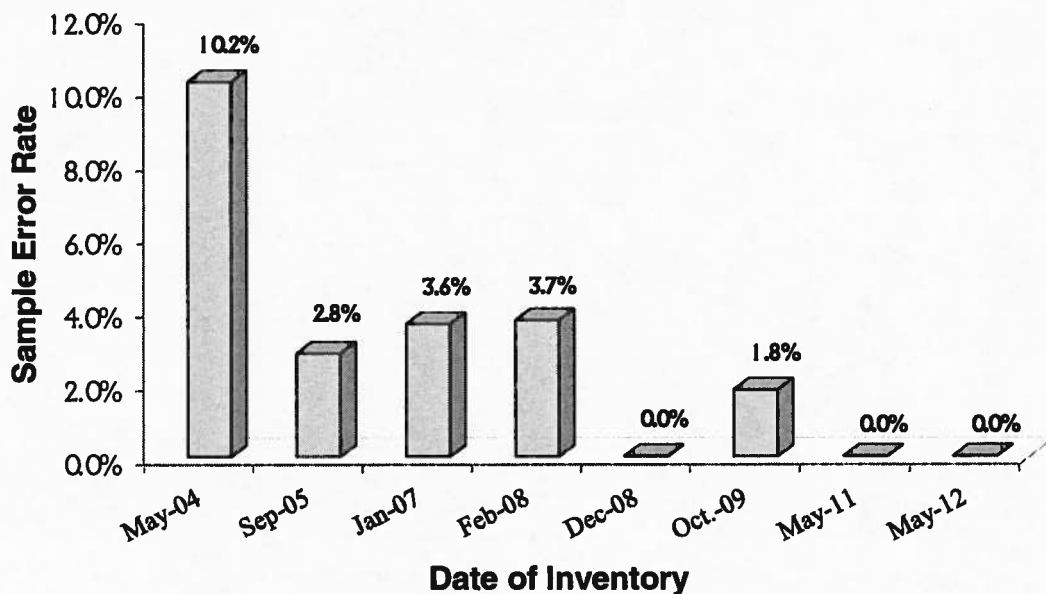
C. **Variance Analysis – DRYS Stockroom**

The Office of Public Integrity selected a statistical sample of items included in the DRYS stockroom inventory maintained by the Bureau of Water. 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 \$0.10 to \$5,777.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 172 line items selected, 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
DRYS Stockroom Inventory
Inventory Variance Error Rate Percentages**



When OPI extends the sample error rate of 0% to the entire population of 2,033 different stock items, the projection indicates that the actual number of errors in the population is in the range of 0 and 59 stock items. When comparing the current error rate of 0% to the prior error rates of 0% in 2011 and 1.8% in 2009, 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.

◆ **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.

Department of Environmental Services
 Bureau of Water
 Street Lighting Stockroom Inventory – May 19, 2012
Schedule of Items with Variances Only

Stock Number	Part Description	Booked Quantity On Hand	Actual Quantity On hand	Item Count Variance		Unit Cost	Dollar Variance	
				Over	Short		Over	Short
6L500	Photo Control	6	0		6	\$ 8.95		\$ -53.70
0L007	70H Non	697	613		84	10.25		-861.00
5L125	Pole 25' Galv Sing Davit	8	15	7		530.00	\$3,710.00	
5L0218	Pole 18' FRP w/o Arm	6	5		1	943.00		-943.00
		<u>717</u>	<u>633</u>	<u>7</u>	<u>91</u>		<u>\$3,710.00</u>	<u>\$-1,857.70</u>
Net Variance								<u>\$1,852.30</u>



Inter-Departmental Correspondence



To: Daniel Mastrella, Internal Audit/OPI
From: Paul Holahan, Commissioner/DES *PH*
Date: July 10, 2012
Subject: Inventory Audit Results – Water Materials, St. Lighting and DRYS

The Water Bureau conducted its physical inventories of the Water Materials, St. Lighting and DRYS stockrooms on May 19, 2012. The previous inventory of these areas was performed May 21, 2011. The Office of Public Integrity observed these inventories.

At the time of the most recent audit, the Materials & Equipment stockroom maintained 5,165 items, comprised of more than 167,000 physically counted units, valued at \$3,183,110.

I am very pleased to learn that the OPI results, based on sample selection, indicate a variance rate of 0.0% for DRYS, and a variance rate of 0.0% for Water Materials. The DRYS 0.0% variance result is a remarkable repeat of the 2011 audit results. The Water Bureau 0.0% variance result is an improvement from the 1.1% variance result of the 2011 audit, and the lowest variance rate recorded, for Water Materials, thus far. In fact, based on sample selection of DRYS and Water Materials, the M&E staff has achieved the ultimate inventory accuracy goal.

The Street Lighting variance rate, based on a 100% audit, was found to be 0.9%. Although the 0.9% variance rate for Street Lighting is slightly higher than the 0.5% rate of the May 21, 2011 audit, only 4 variances of 458 items were actually found, and the results are still well within acceptable limits.

After compiling the OPI reported findings of 4 variances for 5165 items, the combined variance rate is an outstanding 0.08%. Based on their consistently acceptable audits, and obvious commitment to excellence, I am confident that the Materials & Equipment staff will continue to make inventory control a top priority. Please contact me as needed.

Attachments: 05/19/12 findings

RM

XC: R. Morrison
M. Ekiert