

I. EXECUTIVE SUMMARY

The Office of Public Integrity (OPI) observed the annual physical inventory of the Bureau of Water on October 10, 2009. The results of the inventory indicate that the variance rate for the Water stockroom has remained the same and the variance rate for the Street Lighting stockroom has decreased since the last inventory observed by OPI on December 6, 2008. The variance for the Department of Recreation and Youth Services (DRYS), Bureau of Recreation inventory that is maintained by the Bureau of Water, has increased slightly since the last inventory. We noted the following findings during this review:

- ◆ OPI determined variances in 1.2% of our sample selection of water stockroom inventory indicative of the differences between the physical counts and the quantities recorded in the perpetual records. This is the same variance noted in the previous inventory.
- ◆ OPI determined variances in .7% of street lighting stockroom inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. This is significantly lower than the 6.8% error rate noted in the previous inventory.
- ◆ OPI determined variances in 1.8% of DRYS, Bureau of Recreation inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. This is higher than the 0% variance error rate noted in the previous inventory.
- ◆ OPI noted that the perpetual inventory records did not include unit costs for 62 or 1.62% of the combined 3,827 line items of all three stockrooms.

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 October 10, 2009. 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 10, 2009, the inventory consisted of 1,855 line items valued at \$1,340,593.12. 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 October 5, 2009, the inventory at Hemlock Lake consisted of 76 line items valued at \$231,534.74, for a combined inventory totaling 1,931 items valued at \$1,572,127.86.

The Street Lighting unit was transferred from the Bureau of Water to the Bureau of Architecture and Engineering in 2007, 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 10, 2009, the inventory consisted of 297 line items valued at \$443,206.49.

The DRYS, Bureau of Recreation stockroom was transferred to the Materials and Equipment unit of the Bureau of Water in June 2008. This inventory consisted of 1,599 line items valued at \$266,547.76 as of October 10, 2009.

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. Objective 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 the variance rate for the Water stockroom is the same while the DRYs, Bureau of Recreation stockroom variance has decreased since the last inventory date. The variance rate for the Street Lighting stockroom has increased slightly.

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 \$ 14,257.00 to \$0.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 172 inventory items tested in the sample, variances exist in two items. This represents a sample error rate of 1.2%. The following graph presents historical error rates as a reference.

Bureau of Water
Water Stockroom Inventory
Sample Error Rate Percentages

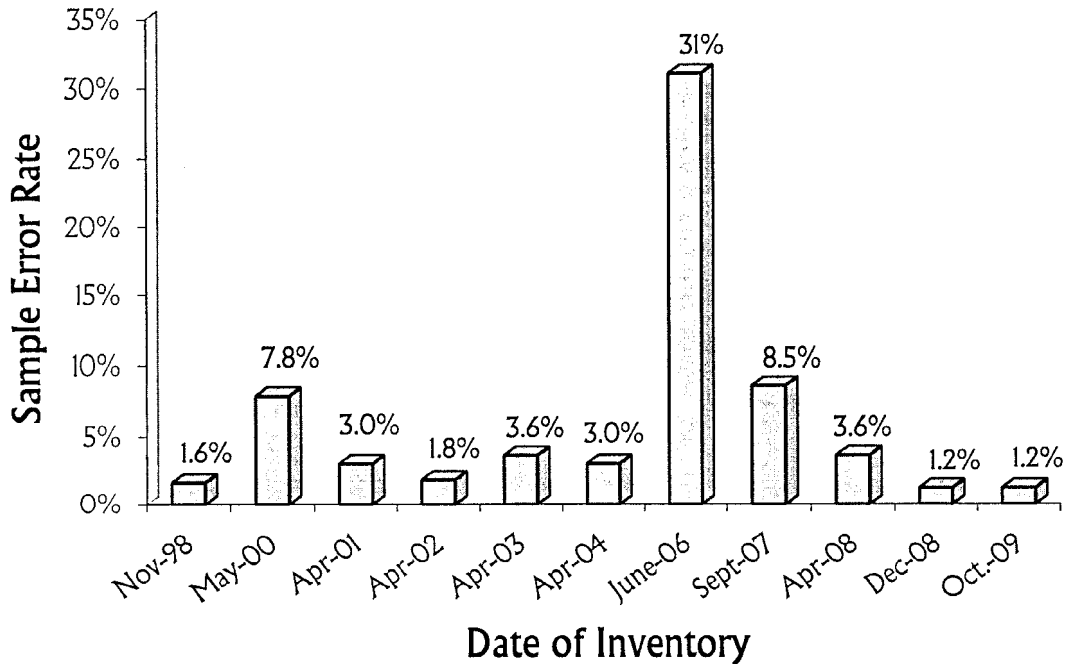


Table I (attached) presents the variance analysis of the statistical sample selection for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. Additionally, the table includes the net variance. To eliminate counting errors, Bureau 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.

When OPI extends the sample error rate of 1.2% to the entire population of 1,931 different stock items, the projection indicates that the actual number of errors in the population is in the range of 4 and 66 stock items. The error rate of 1.2% is the same as that noted in the December 2008 inventory and lower than the error rate of 3.6% in the April 2008 inventory. The positive variances currently existing may indicate ineffective posting procedures to the perpetual records of the automated inventory system, control weaknesses in computer processing or improper identification of items within the inventory.

◆ 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, we 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 \$5,795.00 to \$0.00. The Office of Public Integrity compared the actual count of each of these items to perpetual records and noted any variances. Of the 297 line items in the street lighting inventory, variances exist in two items. The true error rate is .7%. This variance is significantly lower than the variance rate of 6.8% noted in December 2008. 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

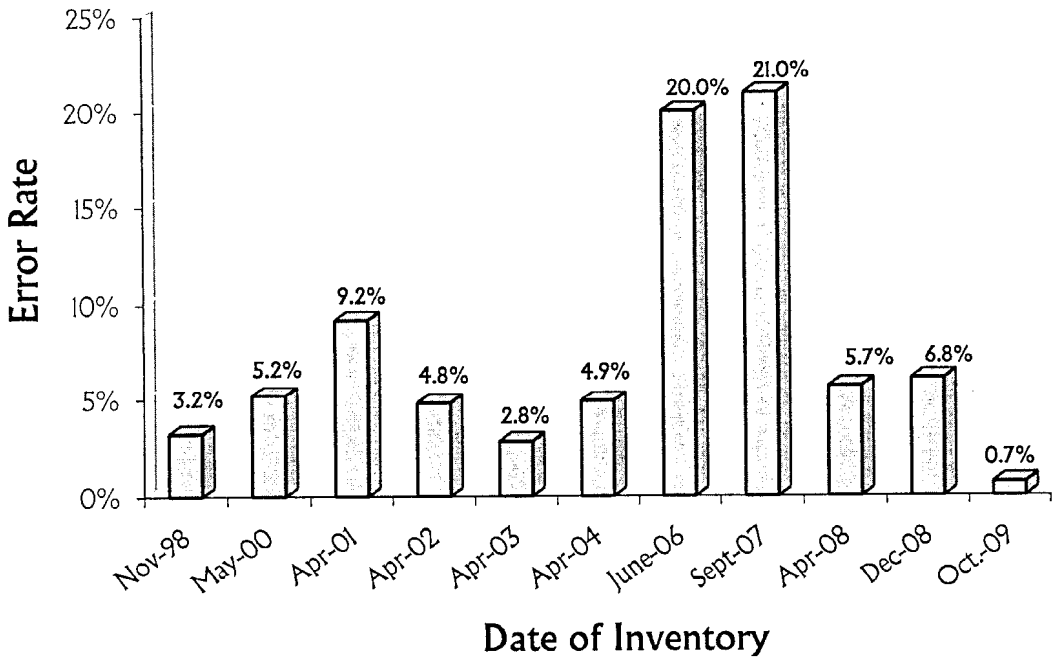


Table II (attached) presents the variance analysis for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. Additionally, the table includes 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 that is 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 \$4,255.00 to \$0.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 168 line items selected, variances exist in three of the items. The sample error rate is therefore 1.8%. Although, this variance error rate is higher than the variance error rate of 0% noted in December 2008, it is lower than the 3.7% noted in February 2008. The following graph presents historical error rates as a reference.

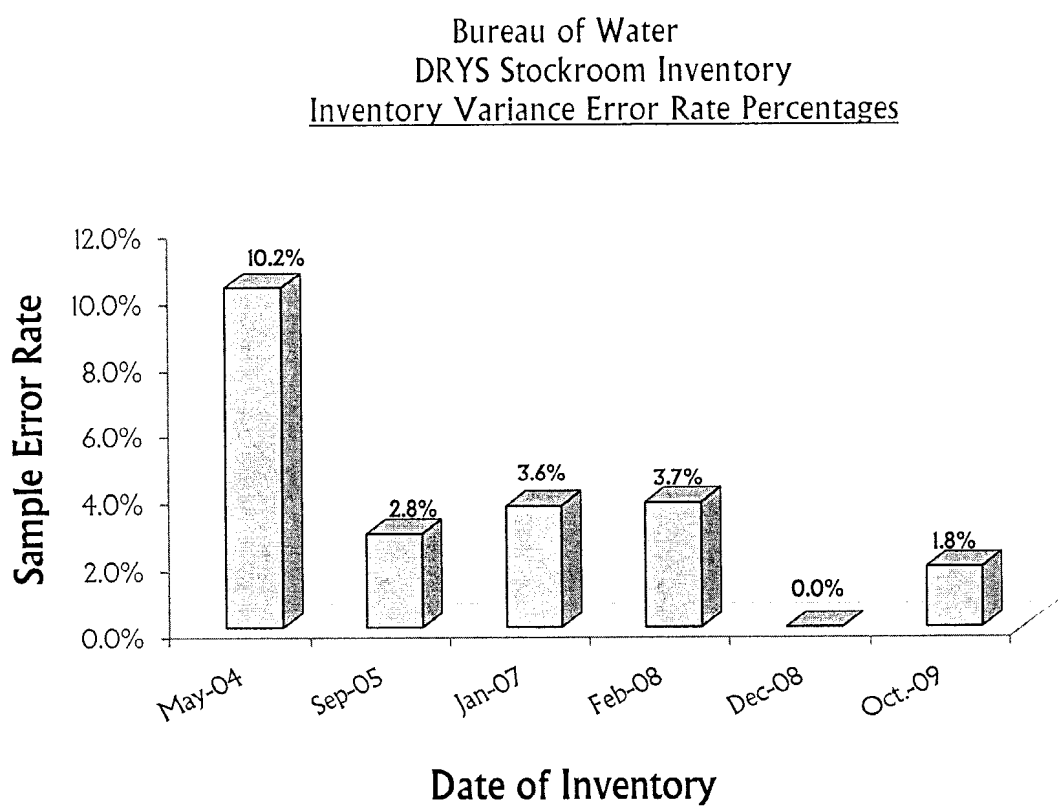


Table III (attached) presents the variance analysis for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. Additionally, the table includes 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.

When OPI extends the sample error rate of 1.8% to the entire population of 1,559 different stock items, the projection indicates that the actual number of errors in the population is in the range of 11 and 77 stock items.

◆ Recommendation

Bureau management should determine the causes of the variances, implement corrective action, and continue to make inventory control a priority.

D. Unit Costs Omitted From Perpetual Records

OPI observed that the perpetual records do not include unit costs for 62 of 3,827 inventory items, representing 1.62% of the total. The identification of unit costs for all line items is essential for proper determination of the total inventory value and to understand the dollar impact of positive and negative variances.

◆ Recommendation

The Bureau of Water should strive to include unit costs for all line items in all of the perpetual inventory records.

IV. DEPARTMENTAL RESPONSE

The response of the Department of Environmental Services follows.

Department of Environmental Services
Bureau of Water
Water Stockroom Inventory – October 10, 2009
Schedule of Inventory Variances Only

<u>Stock</u>	<u>Part</u>	<u>Booked</u>	<u>Actual</u>	<u>Item Count Variance</u>		<u>Unit</u>	<u>Dollar Variance</u>	
<u>Number</u>	<u>Description</u>	<u>Quantity</u>	<u>Quantity</u>	<u>Over</u>	<u>Short</u>	<u>Cost</u>	<u>Over</u>	<u>Short</u>
		<u>On Hand</u>	<u>Counted</u>					
1610	Vest, Class 2 Xxl 1 Yah4	20	21	1	0	\$ 7.75	\$ 7.75	\$ 0.00
1456	Pit Pad, MIU Assembly, Neptune	<u>0</u>	<u>3</u>	<u>3</u>	<u>0</u>	435.10	<u>1,305.30</u>	<u>0.00</u>
		<u>20</u>	<u>24</u>	<u>4</u>	<u>0</u>		<u>\$ 1,313.05</u>	<u>\$ 0.00</u>
								<u>\$1,313.05</u>
Net Variance								

TABLE II:

Department of Environmental Services

Bureau of Water

Street Lighting Stockroom Inventory – October 10, 2009

Schedule of Inventory Variances Only

TABLE III: Department of Environmental Services
Bureau of Water
Recreation Stockroom Inventory – October 10, 2009
Schedule of Inventory Variances Only

Stock Number	Part Description	Booked Quantity On Hand	Actual Quantity Counted	Item Count Variance		Unit Cost	Dollar Variance	
				Over	Short		Over	Short
20383	Utility Ball Small 6"	32	33	1	0	\$ 1.14	\$ 1.14	\$ 0.00
150063	Pks. T White 100% w/Pocket L	32	27	0	5	5.55	0.00	(27.75)
120029	S Hook For Trapeze Rings H,14	95	97	2	0	.50	1.00	0.00
		159	157	3	5		\$ 2.14	\$ (27.75)
	Net Variance							\$ (25.61)



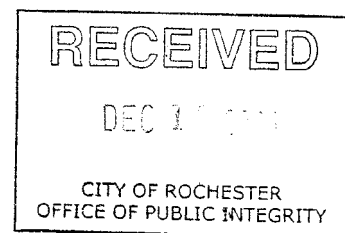
Inter-Departmental Correspondence

To: Daniel Markese, Internal Audit/Office of Public Integrity

From: Paul Holahan, Commissioner/DES

Date: December 17, 2009

Subject: **Results of Inventory Audit (Water, Street Lighting and DRYs)**



The Bureau of Water in conjunction with the Office of Public Integrity (OPI) recently concluded its annual physical inventory of the water materials, street lighting and DRYs stockrooms.

The audit results for water materials and DRYs, which were based on sample selection, indicated variance rates of 1.2% and 1.8% respectively. The variance rate for the street lighting materials (based on a complete audit of all materials) was found to be .7%. This is a dramatic improvement from the 6.8% result achieved in December 2008.

The number of recorded items increased from 3,176 to 3,827 since the last audit. During the most recent audit, OPI discovered 62 items still with no assigned value. This issue has been corrected.

I concur with your findings that that indicate Bureau of Water personnel have adequate control over inventory stock. I would like to acknowledge Robert Morrison and his entire warehousing staff for their high standards in maintaining control over the stockroom inventories.

The department will continue to make inventory control a top priority in the management of the department.

cc: Robert Morrison