I. EXECUTIVE SUMMARY

The Office of Public Integrity (OPI) observed the annual physical inventory of the Bureau of Water stockroom on April 26, 2008. The results of the inventory indicate that the variance rate for Water has decreased since the last inventory observed by OPI on September 29, 2007. The variance for Street Lighting has decreased significantly from the previous inventory. We noted the following findings during this review:

- OPI determined variances in 3.6% of our sample selection of water stockroom inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. This is lower than the variance rate noted in the previous inventory.

- OPI determined variances in 5.7% of street lighting stockroom inventory items indicative of differences between the physical counts and the quantities recorded in the perpetual records. This is significantly less than the 21% error rate noted 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. The Bureau of Water conducted its annual physical inventory of the water and street lighting stockrooms on April 26, 2008. 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 April 26, 2008, the inventory consisted of 1,340 line items valued at $925,842.

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 April 29, 2008, the inventory consisted of 38 line items valued at $164,403.

The Street Lighting unit was transferred 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 April 26, 2008, the inventory consisted of 246 line items valued at $392,664.

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 rates for the water stockroom and the street lighting stockroom have decreased since the last inventory date.

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 $1,120.18 to $0.07. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 165 inventory items tested in the sample, variances exist in six items. This represents a sample error rate of 3.6%. The following graph presents historical error rates as a reference.

Bureau of Water
Water Stockroom Inventory
Sample Error Rate Percentages

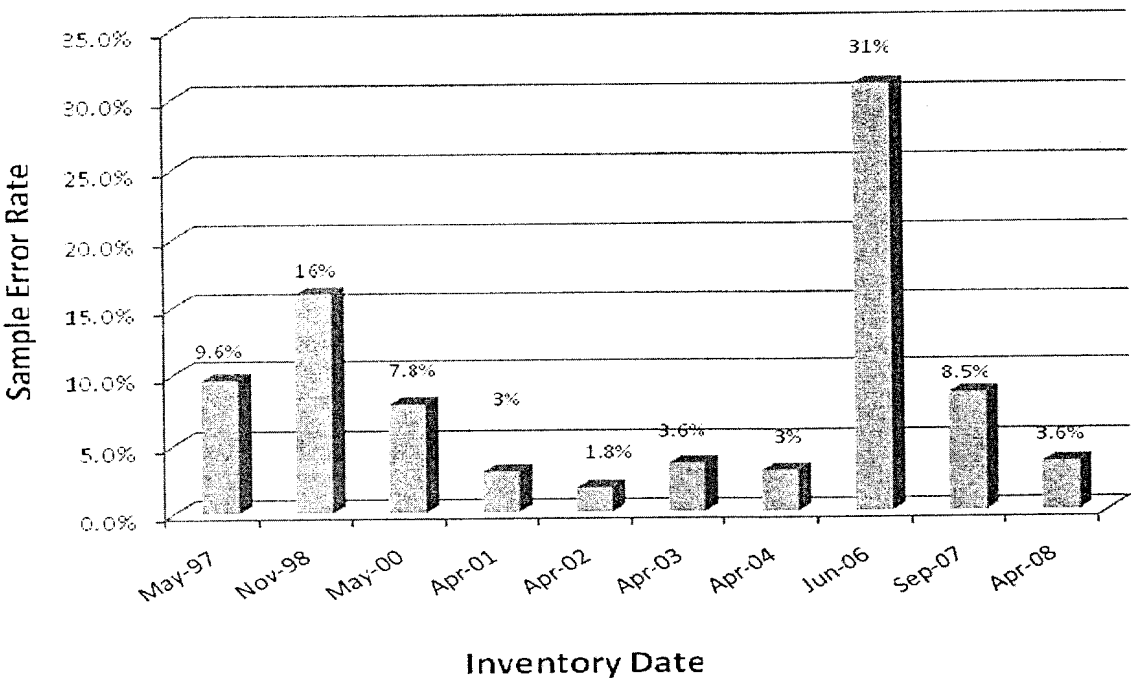

Table I (attached) presents the variance analysis of the statistical sample selection for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. 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 3.6% to the entire population of 1,340 different stock items, the projection indicates that the actual number of errors in the population is in the range of 16 and 130 stock items. The error rate of 3.6% is lower than the prior error rate of 8.5% in the September 2007 inventory. The positive and negative variances currently existing may indicate ineffective posting procedures to the perpetual records of the automated inventory system, control weaknesses in computer processing, improper identification of items within inventory, or theft.

♦ Recommendation

Bureau management should determine the causes of the variances, take corrective action and 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 $2,715.00 to $0.01. The Office of Public Integrity compared the actual count of each of these items to perpetual records and noted any variances. Of the 340 line items in the street lighting inventory, variances exist in 14 items. The true error rate is 5.7%. This variance rate is significantly lower than 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

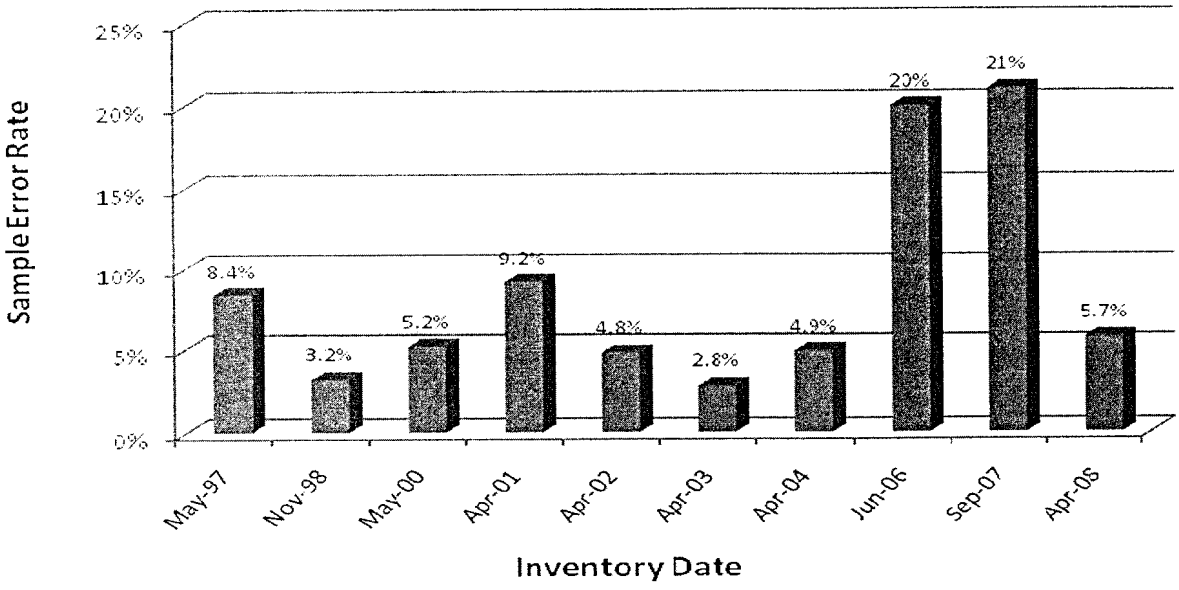

Table II (attached) presents the variance analysis for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately. Additionally, the table includes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

When OPI compares the error rate of 5.7% to the prior error rate of 21% in September 2007, the variance rate has decreased significantly. The positive variance that currently exists may indicate ineffective posting procedures to the perpetual records of the automated inventory system, control weaknesses in computer processing, improper identification of items within inventory, or theft. Bureau of Water personnel should establish procedures enabling them to maintain adequate control over the stockroom inventory.

- Recommendation

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

IV. DEPARTMENTAL RESPONSE

The response of the Department of Environmental Services follows.

TABLE 1: Department of Environmental Services
Bureau of Water
Water Stock Room Inventory – April 26, 2008
Statistical Sample Selection
Schedule of Inventory Variances Only

Stock Number	Part Description	Booked Quantity On Hand	Actual Quantity Counted	Item Count Variance Over	Item Count Variance Short	Unit Cost	Dollar Variance Over	Dollar Variance Short
1419	Valve, Drain Facing M-94 Hydt	57	56	0	1	$ 12.50	$ 0.00	$ (12.50)
1615	Pellets, Ice, Melt	30	25	0	5	9.80	0.00	(49.00)
1002	Handle, Replacement, Broom	21	15	0	6	4.89	0.00	(29.34)
787	OFFSET, CI, 08 X 18, MJ X PE	6	5	0	1	588.30	0.00	(588.30)
632	Paint, Yellow, Gal	35	48	0	0	23.05	299.65	(0.00)
1469	Gloves, Winter, Lg	188	185	13	3	2.59	0.00	(7.77)
		337	334	13	16		$299.65	($ 686.91)

Net Variance.....($387.26)

TABLE II: Department of Environmental Services
Bureau of Water
Street Lighting Inventory – April 26, 2008
Schedule of Inventory Variances Only

Stock Number	Part Description	Quantity On Hand	Quantity Counted	Item Count Variance Over	Item Count Variance Short	Unit Cost	Dollar Variance Over	Dollar Variance Short
2I246	Cobrahead 250W Used Type III	5	4	0	1	$ 71.50	$ 0.00	$ (71.50)
9A101	Sterner Harp Fixture	14	12	0	2	863.64	0.00	(1,727.28)
1L899	Refractor Acorn Granville Type III	4	5	1	0	210.00	210.00	0.00
2L325	Cobrahead 250H L/S Type III	36	37	1	0	143.00	143.00	0.00
2L340	Cobrahead 400H L/S Type III	54	55	1	0	168.09	168.09	0.00
1L511	Lum Acorn Rebuilt 100W HPS wo/lens	6	3	0	3	436.50	0.00	(1,309.50)
1L512	Lum Acorn Rebuilt 150W HPS wo/lens	4	3	0	1	200.00	0.00	(200.00)
0L015	150W Noncycling HPS Lamp	5	7	2	0	12.05	24.10	0.00
5L003H	Washers 5/8" Galv 2" OD	1230	1240	10	0	0.13	1.30	0.00
9L425B	Harp – Browns Race	2	7	5	0	0.01	0.05	0.00
1L315	Lum Acorn Granville 150H/BLK	1	0	0	1	603.00	0.00	(603.00)
1L515	Lum Acorn Rebuilt 250W HPS wo/lens	8	5	0	3	339.27	0.00	(1,017.81)
5L125	Pole 25' Galv Sing. Davit	2	0	0	2	530.00	0.00	(1,060.00)
9L300	Triplex cable	0	23	23	0	100.00	2,300.00	0.00
		1371	1401	43	13		$2,846.54	$ (5,989.09)

Net Variance.....$ (3,142.55)