

DEPARTMENT OF ENVIRONMENTAL SERVICES
EQUIPMENT SERVICES DIVISION
STOCKROOM INVENTORY OBSERVATION

Office of Public Integrity
Date: March 31, 2014

I. EXECUTIVE SUMMARY

The Office of Public Integrity (OPI) observed the annual physical inventory of the Department of Environmental Services, Bureau of Operations and Parks, Equipment Services Division auto parts stockrooms on October 12, 2013. The results of the inventory indicate that Equipment Services maintains adequate inventory control.

- ◆ The Office of Public Integrity noted variances in 2.2% of our sample selection of the main auto parts inventory indicative of differences between the physical counts and the quantities recorded in the perpetual records. In the previous inventory, we noted a 5.1% variance in this stockroom.
- ◆ The Office of Public Integrity did not note any variances in the tire stockroom inventory. In the previous inventory, we noted a variance rate of 10.4% in this stockroom.
- ◆ The Office of Public Integrity did not note any variances in the police auto parts stockroom inventory. The last time that OPI evaluated this area as a separate stockroom was in 2010. At that time we noted an 11% variance rate.
- ◆ The Office of Public Integrity noted variances in 1.6% of the machine shop stockroom inventory indicative of differences between the physical counts and the quantities recorded in the perpetual records. This was the first time that OPI evaluated this area as a separate stockroom.
- ◆ The Office of Public Integrity noted that Equipment Services removed used tires from the perpetual inventory system. In previous inventories Equipment Services included used tires as part of the inventory. As a result, the value of the inventory is understated by the combined value of these tires and control over them is diminished.
- ◆ The Office of Public Integrity noted that Equipment Services does not include the quantities of small, low cost hardware parts on the perpetual inventory system. As a result, the value of the inventory is understated by the combined value of these parts.

II. BACKGROUND, OBJECTIVES, AND SCOPE

A. Assignment

The Office of Public Integrity routinely observes and participates in annual

physical inventories of various City stockrooms. The Equipment Services Division of the Department of Environmental Services conducted its annual physical inventory on October 12, 2013. The Office of Public Integrity participated in this physical inventory at the request of Equipment Services.

B. Background

Equipment Services maintains and repairs City motor vehicles and other motorized equipment, except Fire Department vehicles. Equipment Services stores and manages an inventory of supplies and materials necessary to perform these functions.

As of October 12, 2013, the total value of the entire perpetual inventory was \$564,568.50. The inventory is comprised of four storerooms. The main auto parts inventory is comprised of 3,299 line items valued at \$489,945.04, the tire inventory is comprised of 70 line items valued at \$48,040.86, the machine shop is comprised of 188 line items valued at \$10,755.93 and the police auto parts stockroom is comprised of 32 items valued at \$15,826.67.

Stockroom personnel use an automated inventory system that assists in controlling quantities and providing various types of information. Equipment Services installed this system in August 2002. A perpetual inventory record is an essential feature of this system.

C. Objective and Scope

The objectives of this review were 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.

II. RESULTS OF REVIEW

The results of the inventory indicate that Equipment Services maintains adequate inventory control. The variance rates for main auto parts inventory and the tire inventory have decreased since the last inventory conducted on June 25, 2012. Additionally, the variance rate for the police auto parts inventory is significantly lower than the last time we evaluated this area as a separate stockroom. Following is a list of all inventory stockrooms and the variances that OPI noted.

Department of Environmental Services Equipment Services Inventory by Location

<u>Location</u>	<u>Stockroom</u>	<u>Total Line Items</u>	<u>Total Value</u>	<u>Number of Items Tested</u>	<u>Number of Variances</u>	<u>Error Rate</u>
100	Main Auto Parts	3,299	\$489,945.04	403	9	2.2%
101	Machine Shop	188	10,755.93	188	3	1.6%
107	New Tire	70	48,040.86	70	0	0.0%
109	RPD Auto Parts	<u>32</u>	<u>15,826.67</u>	32	0	0.0%
	Total:	<u>3,589</u>	<u>\$564,568.50</u>			

A. Variance Analysis – Main Auto Parts

OPI selected a statistical sample of items included in the auto parts stockroom inventory. The sample selection assures proper representation throughout the entire population of inventory items and accurately projects the results against the entire inventory. The range of unit costs included in the sample extends from \$0.01 to \$886.00. OPI compared the actual count of each of these selected items to perpetual records and noted any variances.

Of the 403 inventory items tested in the sample, we noted 9 variances. This represents a sample error rate of 2.2%. The following graph presents historical error rates as a reference.

Equipment Services Division
Main Auto Parts Inventory
Sample Error Rate Percentages

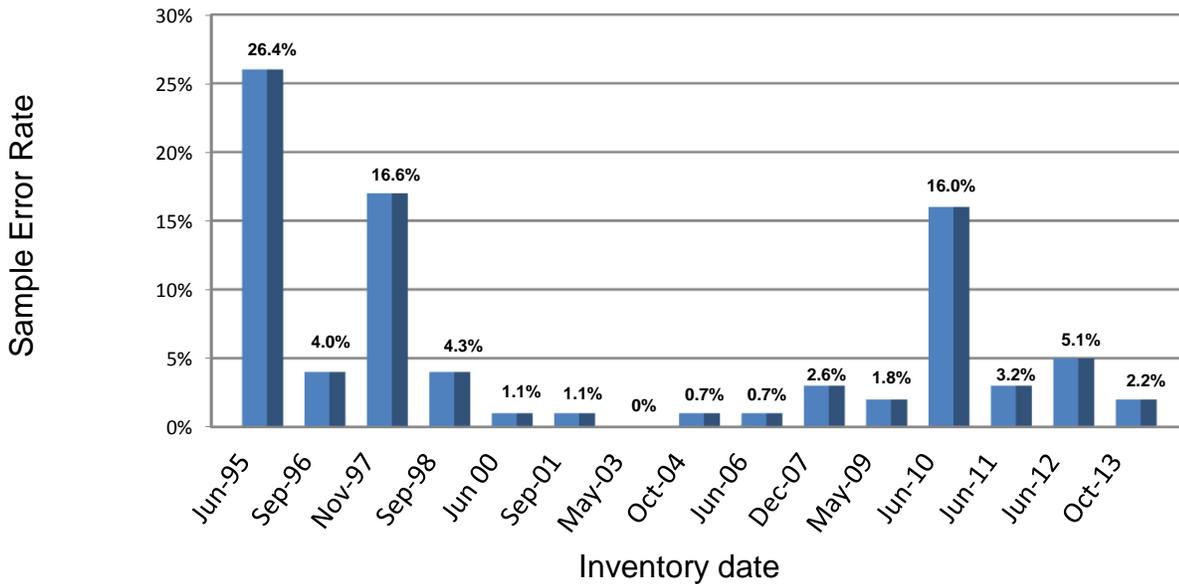


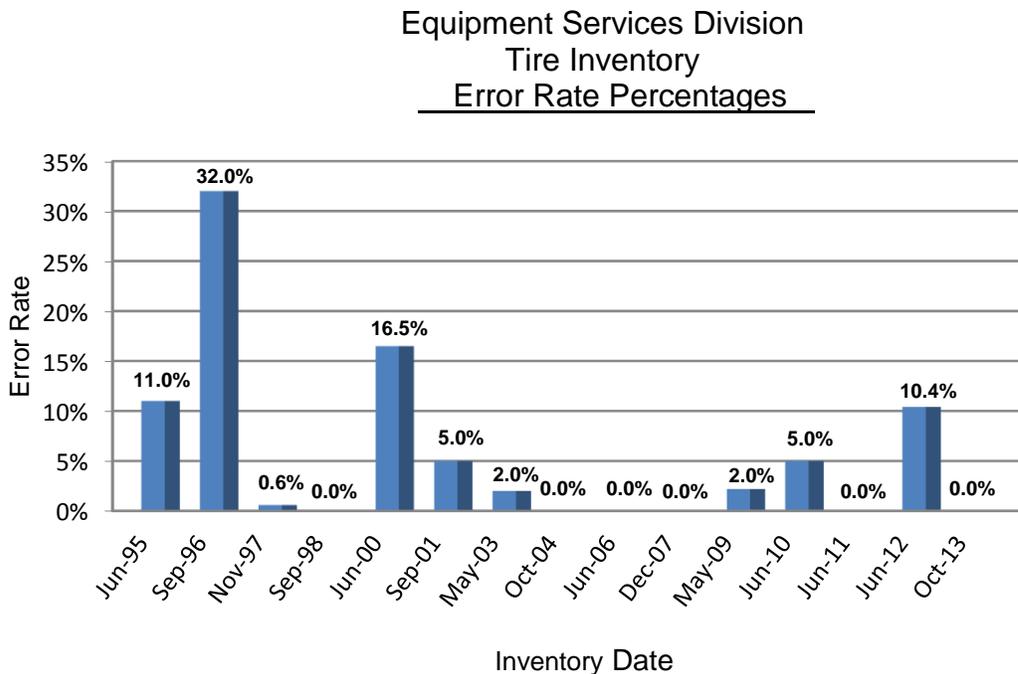
Table I (attached) presents the variance analysis of the statistical sample selection for those items in which a variance exists. It demonstrates individual variances between actual physical counts and quantities recorded in the perpetual records, and presents positive and negative variances separately.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

When OPI extends the sample error rate of 2.2% to the entire population of 3,299 different stock items, the projection indicates that the actual number of errors in the population is in the range of 30 to 130 item types. When comparing the current error rate of 2.2% to the prior error rates of 5.1% in 2012 and 3.2% in 2011, it appears that, based on the results of the sample selection, Equipment Services personnel have continued to maintain adequate control over the stockroom inventory.

B. Variance Analysis – Tires

The Office of Public Integrity counted and compared all tire storeroom quantities to quantities recorded in the perpetual records. This is in contrast to the statistical sample taken of auto parts.

Of the 70 inventory line items located in these stockrooms, we did not note any variances. This is a significant improvement from the 10.4% error rate noted in the 2012 inventory. The following graph presents historical error rates as a reference.



C. Variance Analysis – Machine Shop

Due to the relatively small number of machine shop 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 machine shop inventory items. The range of unit costs included in the inventory extends from \$0.01 to \$19.68. The Office of Public Integrity compared the actual count of each of these items to perpetual records and noted any variances.

Of the 188 inventory items tested in the sample, we noted 3 variances.

This represents a sample error rate of 1.6%. This was the first year that OPI evaluated this area as a separate stockroom. The low variance rate indicates acceptable control over this area.

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.

D. Variance Analysis – Rochester Police Department Auto Parts

Due to the relatively small number of police 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 police inventory items. The range of unit costs included in the inventory extends from \$0.00 to \$556.03. The Office of Public Integrity compared the actual count of each of these items to perpetual records and noted any variances.

Of the 32 inventory line items located in these stockrooms, we did not note any variances. The error rate is therefore 0%. This is significantly lower than the error rate of 11% noted in 2010.

◆ Recommendation

Equipment Services should continue to make inventory control a priority.

E. Items Not Included on the Perpetual Inventory System

Stockroom personnel utilize an automated perpetual inventory system to assist in controlling quantities and to provide various inventory information. Inclusion of all stockroom items and their related value in the perpetual records is essential to maintain control over the inventory and to accurately track the value of the inventory. Additionally, total inclusion allows management to fully understand the true dollar value of items included in inventory and the impact of positive and negative variances.

Failure to include all stockroom items in the perpetual inventory record understates the value of the inventory by the value of the items. Additionally, failure to include all stockroom items diminishes the control over the inventory.

OPI noted the following two instances in which Equipment Services did

not include stockroom items in the perpetual inventory system.

1. OPI noted that Equipment Services does not include the quantities of several small, low cost hardware parts on the perpetual inventory system. Rather, they combine all of these parts into one part number and record it as an independent issue to Equipment Services. Equipment Services uses a unit cost of \$0.25 for this “one” part number regardless of the actual cost of each item. When mechanics need one of these parts for a job, inventory personnel issue it at a unit cost of \$0.25 and deduct it from the quantity issued to Equipment Services.

Equipment Services personnel list each of these parts separately on the perpetual inventory system with the actual unit cost but with a quantity of zero. Therefore, the value of these items is not included in the perpetual inventory system.

2. OPI noted that Equipment Services personnel removed all used tires from the perpetual inventory system although there are still used tires physically stored at the facility. Previously, Equipment Services had included these used tires and their related value in the perpetual inventory. During the prior physical inventory we noted 35 line items for used tires which were valued at \$3,476.67.

As a result, Equipment Services is understating the value of the perpetual inventory by the total value of these hardware parts and used tires. Additionally, control over these items is diminished when they are not included in the perpetual inventory record.

A prime objective of taking a physical inventory is to determine variances between actual inventory quantities and quantities recorded on the perpetual records. Analysis of variances provides insight into potential problems and can deter major problems before they occur.

◆ Recommendation

We recommend that Equipment Services include the quantities and value of all stockroom items on the perpetual inventory system. For the low cost hardware parts, a small quantity of open stock items is acceptable practice with the remaining quantities listed as distinct parts with actual unit costs on the perpetual inventory system.

IV. DEPARTMENTAL RESPONSE

The response of the Department of Environmental Services follows.

TABLE I: Department of Environmental Services
Equipment Services Division
Stock Room Inventory – October 12, 2013
Variance Analysis – Main Auto Parts Storerooms
Schedule of Inventory Variances Only

Stock Number	Part Description	Booked	Actual	Item Count Variance		Unit Cost	Dollar Variance	
		Quantity On Hand	Quantity On Hand	Over	Short		Over	Short
78003	7" Single Face Amber	2	1		1	\$37.35		\$-37.35
920153	7" Amber Lens	4	3		1	5.34		-5.34
94706	Adapter Plug 3 Prong	1	3	2		2.69	\$ 5.38	
94993	3 Prong Harness	1	2	1		1.09	1.09	
RP244	Strobe Module	1	2	1		79.83	79.83	
9007A	Amber Lens	2	3	1		0.62	0.62	
DBF38C	3/8" HSS Drill Bit	4	3		1	6.42		-6.42
RS3994	Outer Air Filter	2	1		1	13.41		-13.41
98175Y	3" Amber Reflector	4	2		2	0.84		-1.68
		<u>21</u>	<u>20</u>	<u>5</u>	<u>6</u>		<u>\$86.92</u>	<u>\$-64.20</u>
Net Variance								<u>\$ 22.72</u>

TABLE II: Department of Environmental Services
 Equipment Services Division
 Stock Room Inventory – October 12, 2013
 Variance Analysis – Machine Shop
 Schedule of Inventory Variances Only

Stock Number	Part Description	Booked	Actual	Item Count Variance		Unit Cost	Dollar Variance	
		On Hand	On Hand	Over	Short		Over	Short
1/8x2	c.r.s	288	274		14	\$0.10		\$ -1.40
1-1/4odx1id	Seamless Tubing	26			26	0.17		-4.42
1-1/4Sq	c.r.s.	146			146	0.14		-20.44
		<u>460</u>	<u>274</u>	<u>0</u>	<u>186</u>		<u>\$0.00</u>	<u>\$-26.26</u>
Net Variance								<u>\$-26.26</u>



City of Rochester

Inter-Departmental Correspondence

To: Daniel Mastrella, Office of Public Integrity (OPI)

From: Norman H. Jones, Commissioner/DES

Date: March 24, 2014

Subject: **Equipment Services Stockroom Inventory Audit**

I have reviewed the audit report for the Division of Equipment Services Stockroom and I would agree with your assessment that Equipment Services personnel have maintained adequate inventory control. The inventory that took place on October 12, 2013 resulted in the following decreases in the variation rate:

- In the main auto parts storeroom, there was a decrease in variation rate from 5.1% in the previous inventory of June 2012, to 2.2%.
- In the tire room, there was a decrease in variation rate from 10.4% in the previous inventory of June 2012, to 0%.

As recommended by OPI, Equipment Services has identified causes of the variances and possible weaknesses in our procedures. Corrective measures are as follows:

- All cycle counts will be reviewed and signed off by the Automotive Parts and Materials Manager with a copy to the Assistant Director of Operations. Corrective steps will be taken on an as needed basis.
- We have gone back and recounted all used tires. We decided to keep 30 of the used tires which fit miscellaneous equipment and surplus the remaining tires. The used tires will be put into the main tire inventory and will be counted as part of the perpetual inventory.
- Regarding small, low cost hardware parts: at the end of each month, the Division will review the monthly Independent Issue document to confirm the parts being charged to it meet the criteria of open stock hardware. On an annual basis, the Division will total the twelve previous months' independent issues and compare the dollar value to the dollar value of the sales of the part number "Hardware" and adjust the price of the part number "Hardware" if needed to balance the sales and purchases.
- All stockroom staff will continue to participate in best practice training and will adhere to all stockroom policies and procedures.

Equipment Services personnel have corrected ALL variances found on the perpetual inventory during the October 12, 2013 audit; therefore, errors will not carry over to future audits.

We will continue to make inventory control a high priority in this Division.

cc: K. St. Aubin, M. Quattrone, Department Copy