FINANCIAL MANAGEMENT FOR GEORGIA LOCAL UNITS OF ADMINISTRATION

Date Issued	Effective Date	Section	Title:
07/01/93	07/01/93	I	GAAP Accounting and Financial Reporting Principles
Revision No.	**Date Revised**	**Chapter**	**Title:**
3	September 2016	I-12	Inventory Accounting for Consumable Supplies

INTRODUCTION

For accounting purposes, Local Units of Administration's (LUA) inventory may consist of supplies (e.g., office supplies, school supplies, lumber, paper goods and food) on hand not yet distributed to schools and users. That is, supplies are considered inventory if not distributed and therefore, not in use.

There are two allowable methods to account for inventories under generally accepted accounting principles (GAAP): the purchases method and the consumption method. Governmental type funds may use either method at the fund reporting level but must use the consumption method at the government-wide reporting level. Because of the GAAP requirement to report using the consumption method at the government-wide level, it is recommended, although not required, that LUAs report inventory at the consumption method at the governmental fund level as well. Proprietary type funds must use the consumption method at both reporting levels. This chapter discusses these inventory methods, and the valuing of inventories.

PURCHASES METHOD

When a LUA uses the purchases method, it charges all inventory acquisitions as expenditures when purchased. In addition, it must report any material amount of inventory on hand at the end of the fiscal year on the governmental fund balance sheet. For example, if an LUA purchases supplies during the year totaling $50,000, the general journal entry is to record the purchase when using the purchases method is:

Description	Account No.	DR	CR
Expenditures*	0602	$50,000	
Accounts Payable	0421		$50,000

* Coded by detailed QBE account number, if applicable.

The above entry assumes the LUA did not encumber the purchase order issued for the inventory purchased. If the LUA had encumbered the purchase order, they would cancel the encumbrance.

See Chapter I-8 for guidance in accounting for encumbrances.

The purchases method is unique in that although the LUA records the inventory purchases as an expenditure on the operating statement, GAAP requires a LUA to also report the ending inventory on the balance sheet if it is considered material. As an example, assume there are $25,000 of supplies on hand at the end of the year (i.e. of the original $50,000 purchases per above) based on a physical inventory using an acceptable valuation method, the general journal entry to record the inventory on the balance sheet is:

Description	Account No.	DR	CR
Inventories	0171	$25,000	
Fund Balance – Nonspendable	0751		$25,000

For inventory balances that are required to be updated each month with a physical inventory count, such as the purchased food and donated commodities in the school lunchrooms, the inventory asset balance is updated with a month end journal entry. This is necessary for the monthly reporting to the GaDOE Nutrition Services in accordance with Federal regulations.

Using the example above, if the inventory balance at the end of the next month totals $20,000, the following entry to record the ending balance is necessary:

Description	Account No.	DR	CR
Inventories	0171	$5,000	
Fund Balance - Nonspendable	0751		$5,000

To summarize, the LUA records inventory purchases as expenditures on the operating statement when made. Then any material amount of inventories on hand at year end are recorded as an asset and a component of fund balance (i.e., added back to fund balance) since the original purchase is deducted from fund balance (i.e., the amount of unused inventory is added back to fund balance).

CONSUMPTION METHOD

When an LUA uses the consumption method, it charges all inventory acquisitions to the inventory asset account in the general ledger at the time of purchase as follows:

Description	Account No.	DR	CR
Inventories	0171	$16,000	
Accounts Payable	0421		$16,000

In the government fund types at the fund reporting level, the LUA subsequently reduces the inventory account and charges the expenditure accounts charged when goods are requisitioned and used as follows:

Description	Account No.	DR	CR
Expenditures*	0602	$1,200	
Inventories	0171		$1,200

* Coded by detailed QBE account number

Inventory charges to expenditures (i.e., the inventory used) should be made at least monthly. This method of accounting for inventory assumes that acquisitions are put in "storage" until they are used.

In general, the school districts follow the purchasing method and adjust for the effects of the consumption method before the close of the fiscal year end, or as an adjustment to the financial statements prepared and presented for CAFR and/or audit purposes. Conversion from the purchase method to the consumption method requires the expenditure account to be credited (reduced) for the amount of the change in inventory during the period.

For example, assume the inventory for purchased food increased from $15,000 at July 1 to $25,000 at July 30. The inventory increased by $10,000. The purchase of this inventory increased the expenditures using the purchasing method. However, because the inventory has not yet been consumed, the expenditures would not be recorded during the month of July using the consumption method. The entry to adjust from the purchase method to the consumption method is as follows:

Description	Account No.	DR	CR
Fund Balance - Nonspendable	0751	$10,000	
Purchased Food Expenditures	630.00		$10,000

Some consider the consumption method to be superior to the purchases method because it allows for better controls over inventory (i.e., by maintaining an asset account that reports the value of the inventory). In addition, this method simplifies charging expenditures to the appropriate Quality Basic Education (QBE) program expenditure account in the governmental fund types (i.e., the allocation of inventory items would be charged to the QBE programs when the LUA requisitioned the consumable supplies inventory, rather than when it purchased the inventory).

Proprietary fund types would record the same journal entries at both reporting levels and in the governmental fund types at the government-wide reporting level, but would debit an expense account rather than an expenditure account.

PHYSICAL QUANTITIES OF INVENTORY

The determination of physical inventory quantities usually is accomplished by using either a periodic inventory system or a perpetual inventory system.

Periodic Inventory System

The use of this system requires periodic physical counts of inventory items. Generally, the use of this system in a LUA is different from that used in the commercial sector. In the commercial sector, inventories purchased are charged to a "purchases" account and withdrawals from inventory are not recorded. At year-end, a physical inventory is conducted and the inventory asset account is adjusted to the actual value through the "purchases" account.

However, in governmental fund types, LUAs do not use the "purchases" account; therefore, modifications are required when using the periodic inventory system. When the LUA uses the "purchases" inventory method, it follows more closely to the traditional periodic inventory system. Purchases of inventory are charged to expenditures at the fund reporting level when purchased (i.e., the inventory asset account is not affected) and withdrawals are not reported. At month-end or year-end when a periodic inventory is taken, expenditures are not changed (i.e., what the LUA purchases is what they charge to the expenditure account). However, the LUA must report any material amount of inventory value on the balance sheet as explained previously.

When the LUA uses the consumption inventory method, it charges the inventory to the inventory asset account and deducts withdrawals. Therefore, at month-end or year-end when a periodic inventory is taken, theoretically, the value of this inventory should agree with that carried on the accounting records. However, adjustments to the inventory asset account (i.e., usually through the applicable expenditure accounts) usually are necessary to correct errors that have resulted from inventory shrinkage due to theft, errors and obsolescence.

Perpetual Inventory System

When using this system, the LUA maintains a continuous record of items they entered and issued from inventory. The balance in the inventory balance sheet account at any specific time reveals the inventory that should be on hand. The use of this system would be more consistent with the use of the consumption inventory method. At year-end, an inventory count would be required to verify the inventories maintained through the perpetual inventory system and the LUA would need to adjust any differences through the applicable expenditure accounts.

VALUATION OF INVENTORY

A problem arises when a LUA must determine the value of inventory on hand at year-end. When a LUA uses the purchases method, it must value any balance on hand at year-end to record the general journal entry to establish the Inventory and the Fund Balance - Nonspendable accounts. When using the consumption method, the value charged to expenditures (i.e., the amount used) must be determined. Under either inventory method, LUAs may have purchased inventories at different times during the year and at different unit prices. Thus, computing the value is not necessarily a straight extension of quantity multiplied by a certain cost.

If the LUA can identify specifically the actual items existing in the inventory at year-end and their actual cost, the inventory value is a simple extension of the quantity multiplied by the identified cost. This valuing method is known as the specific identification method. However, in most LUAs, the use of this method is not practical because of many purchases of many inventory items at various costs during the year. However, there are several other acceptable methods in use to assign values to inventory balances and inventory used. The three most common methods are:

- First in - first out (FIFO)
- Last in - first out (LIFO)
- Average inventory cost methods

These methods generally represent a flow of cost and not an actual flow of goods. That is, the oldest goods purchased might be the first goods actually used (i.e., inventories are rotated) although the cost used to charge out the inventories used might vary.

First in - First out Method

When valuing inventories under the FIFO method, the first inventories the LUA purchased are assumed to be the first goods the LUA used. Therefore, the ending inventory consists of the last goods purchased. The ending inventory value is the number of units multiplied by the unit prices of the most recent purchases, since the earlier purchases are assumed to have been used first.

For example, assume an LUA uses the consumption method and begins the fiscal year with 320 units of inventory at a cost of $5.00 per unit for a total of $1,600. During the year, the LUA makes the following purchases:

July 20	300 units @ $5.25
December 12	200 units @ $5.30
February 20	500 units @ $6.00

During the year, the LUA issues the following units:

July 17	100 units
September 11	260 units
December 2	200 units
June 21	400 units

Using the FIFO method, the ending inventory is valued at $1,960 calculated as follows:

Date		Units	Unit Cost	Inventory Amount	Expenditures Inventory
July	1	320	$5.00	$1,600	
	17	(100)	5.00	(500)	$500
	20	300	5.25	1,575	
September	11	(220)	5.00	(1,100)	1,100
	11	(40)	5.25	(210)	210
December	2	(200)	5.25	(1,050)	1,050
	12	200	5.30	1,060	
February	20	500	6.00	3,000	
June	21	(60)	5.25	(315)	315
	21	(200)	5.30	(1,060)	1,060
	21	(140)	6.00	(840)	840
Ending Inventory		360	6.00	$ 2,160	$5,075

In the above example, the LUA issued 960 units out of inventory of 1,320 units (i.e., the beginning inventory of 320 units and the 1,000 units purchased), leaving 360 on hand that are valued at $6.00 each (i.e., the February 20 purchase) resulting in an ending inventory value of $2,160.

To summarize:

	Units	Value	
Beginning inventory	320	$1,600	
Purchases	1,000	5,635	
Total available inventory	1,320	7,235	
Less ending inventory	360	$2,160	(160 @ $6)
Inventory used	960	$5,075	

Last in - First out Method

For valuing inventories, LIFO means that the last goods purchased are assumed to be the first goods used. Therefore, the ending inventory consists of the first goods purchased. LIFO requires the value assigned to the inventory remaining at year-end to be the value of the first purchases and the charges to expenditures for goods used are the values of the last purchases. Using the same facts as the above example, the valuation of the ending inventory using the LIFO method is $910 calculated as follows:

Date		Units	Cost	Amount	Total Expenditures From Inventory
July	1	320	$5.00	$1,600	
July	17	(100)	5.00	(500)	$500
July	20	300	5.25	1,575	
September	11	(260)	5.25	(1,365)	1,365
December	2	(40)	5.25	(210)	210
December	2	(160)	5.00	(800)	800
December	12	200	5.30	1,060	
February	20	500	6.00	3,000	
June	21	(400)	6.00	(2,400)	2,400
Ending Inventory		360		$1,960	$5,275

In the above example, the LUA used 100 of the 320 units beginning inventory @ July 1, 260 of the 300 purchased July 20, 40 of the 300 purchased in July, and 160 of the 320 purchased July 1 and 400 of inventory purchased in February; thus the ending inventory is valued as follows:

100 units @ $6.00 =	$ 600
200 units @ $5.30 =	1,060
60 units @ $5.00 =	300
	$1,960

To summarize:

	Units	Value
Beginning inventory	320	$1,600
Purchases	1,000	$5,635
Total available inventory	1,320	$7,235
Less ending inventory	360	$1,960 (See above)
Inventory used	960	$5,275

Average Inventory Cost Methods

A third type of method for valuing inventories is the average inventory cost method. This method assumes that both cost of inventory used and the ending inventory should be based on the average cost of the inventories available for use during the period. That is, the inventories are commingled and that no particular batch (i.e., either the first purchased or the last purchased) is used first.

This third type includes two specific valuation methods. The weighted average method costs inventory items based on average prices paid, weighted according to the quantity purchased at each price. This method generally is used with a periodic inventory system. The moving average method requires a computation of a new average after each purchase and requires the use of a perpetual system. Issues are priced at the latest average unit cost.

Generally, these methods require the use of a computer to accurately value inventories and cost issuances because of the many mathematical computations required.

SUMMARY

1. Two methods of reporting inventories as expenditures/expenses exist under GAAP, the purchases method and the consumption method.
2. When the LUA uses the purchases method, they charge all inventory acquisitions as expenditures when purchased rather than when used.
3. When the LUA uses the consumption method, they charge inventories as expenditures when used rather than when purchased.
4. Governmental fund types may use either the purchases method or the consumption method at the fund reporting level, and must use the consumption method at the government-wide reporting level.

5. Proprietary fund types must use the consumption method at both reporting levels.
6. When LUAs use the purchases method, they must report only material inventories on hand at the end of the year on the balance sheet at year-end.
7. The use of a periodic inventory system to determine inventory quantities requires periodic physical counts (e.g., annual inventory).
8. When using the perpetual inventory system, a continuous record is maintained of items entering into and issued from inventory.
9. The three most common methods used to value inventories include FIFO, LIFO and the weighted average cost.
10. The FIFO method of balancing inventories means that the first inventories purchased are assumed to be the first inventories used, therefore, the ending inventory consists of the last inventories purchased.
11. The LIFO method of balancing inventories means that the last goods purchased are assumed the first goods used, therefore, the ending inventory consists of the first goods purchased.
12. The average inventory cost method assumes that both the cost of inventory used and the ending inventory should be based on the average cost of the inventories available for use during the period.