

Guidelines for Managing Inventory

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Introduction and Scope

This procedure applies to all inventories maintained at Memorial University (the “University”), including our Separately Incorporated Entities.

Departments are not permitted to create an inventory without the prior approval of the Department of Financial and Administrative Services (“FAS”).

This procedure provides accounting guidance for:

1. Determining if items should be inventoried based on risk and dollar value;
2. Procedure for managing physical inventory counts;
3. Valuing of inventory; and
4. Recording the inventory in our accounting system.

The inventory of the University, as defined in this procedure, should be valued in a consistent manner and accurately reflected in the University’s financial statements, in accordance with Public Sector Accounting Standards (PSAS) and Generally Accepted Accounting Principles (GAAP). Inventory is a valuable University asset and should be properly safeguarded. Consistent compliance with the provisions of this procedure reduces cost and ensures that supplies are available when needed.

The purpose of this procedure is to:

1. Promote consistency and accuracy in the valuation and recording of the University’s inventory;
2. Promote compliance with specific PSAS guidelines and conformity with GAAP;
3. Ensure that the University’s inventory is properly safeguarded; and
4. Ensure inventory is purchased and managed in the most efficient and cost effective manner.

Roles and Responsibilities

The roles and responsibilities associated with the management of inventory are shared amongst the applicable units holding inventory and FAS. Below is a brief description of each role and its responsibilities in the inventory management process.

Unit Representative

Units hold inventory for the purpose of executing their approved University activities. Each unit must assign one person responsible for inventory management and notify FAS of that individual,

and as changes to that position occur. The Unit Head should delegate the necessary authority to ensure this individual is responsible for performing, or directing, the functions associated with inventory management, such as ensuring the units' responsibilities as outlined below are met:

1. Having clearly defined roles and responsibilities for those involved in the management of inventory;
2. Understanding the related University policies and procedures;
3. Developing procedures to effectively manage inventories and safeguard inventory from loss due to damage, theft and obsolescence;
4. Maintaining detailed inventory records including tracking inventory costs and inventory additions and sales;
5. Providing training on the unit's general inventory management operating practices;
6. Purchasing inventory in compliance with the Purchasing policy;
7. Strategically planning for inventory stock based on previous years' history of use and knowledge of upcoming projects/requirements; and monitoring inventory levels to ensure operational needs are met;
8. Segregating purchasing from receiving activities;
9. Matching goods received to packing information - these documents should be date stamped and signed by the individual receiving the goods.
10. Receiving inventory goods in the system based on the packing slip details;
11. Providing vendor invoice to FAS for payment against the PO;
12. Determining the total value of their inventory at each fiscal year-end;
13. Identifying accounting information allocated to the expenditure;
14. Securing and limiting access to inventory items;
15. Conducting annual inventory counts - cycle counts are recommended;
16. Assessing cause of inventory count discrepancies; and
17. Providing year-end inventory adjustment entry and supplementary information to FAS.

Department of Financial and Administrative Services' Representative

The Manager of Financial Reporting and Analysis is assigned as the inventory subject matter expert within FAS who performs, or directs, the functions associated with inventory, such as ensuring FAS responsibilities as outlined below are met:

1. Maintaining this inventory document;
2. Obtaining, reviewing and recording the year-end inventory adjustments for all units holding inventory;
3. Spot checking the inventory during the counting process;
4. Reviewing calculations used to value the inventory;
5. Communicating changes in accounting principles for valuing inventory;
6. Communicating year-end requirements; and
7. Providing accounting guidance regarding inventory valuation as needed.

Definition and Purpose of Inventory

Inventory consists of items purchased for resale to external customers or for subsequent use within the University:

1. Inventory for sale – items to be sold to external parties.
2. Inventory of supplies – items to be used by departments or sold to internal clients.

University departments and units maintain inventories for one or both of the following purposes:

1. To provide items in a more timely manner than individual purchases from an outside vendor; and
2. To provide items at a lower cost by purchasing larger quantities at one time.

Items to be Included in Inventory

The following should be considered when determining if items should be included in inventory:

1. Items purchased with the intent of resale to external customers should be included in inventory. Examples of such purchases are:
 - i. Food and other consumables to be used in University cafeteria; and
 - ii. Items sold in University stores or other retail operations.
2. Items purchased in quantity for subsequent use by service departments such as Facilities (e.g., plumbing parts), should be recorded in inventory if:
 - i. The total value of the items in stock is greater than \$50,000; and
 - ii. Supplies purchased by a stockroom for subsequent purchase by other departments.

All other items should be recorded in the appropriate expense account at time of purchase.

Purchasing & Receiving Inventory

Inventory should be physically examined upon receipt and matched to packing list prior to being received into the financial system. If discrepancies are identified, the vendor should be notified immediately. The receiving in the system should be based on the matched packing list, or other document received with the shipment. Receiving should not be made based on the vendor's invoice without confirmation the goods have in fact been received. Segregation between the purchaser and receiver must be maintained.

Refer to Purchasing policy.

Valuing Inventory

Inventory is valued at the lower of cost or net realizable value principle.

The University has chosen to value inventory based on the weighted average cost method.

Example of Weighted Average method:

1. On September 1st, we received 10 of item DEF at \$80.00 each.
2. On September 15th, we received 10 of item DEF at \$90.00 each.

The inventory system shows quantity on hand of 20 items at a cost of \$85.00 each.

This \$85.00/unit price will be used for the value of “sales” to the end-users and for the valuation of the remaining inventory at September 30th.

Other methods for determining cost must be approved, in writing, by the FAS representative.

Net realizable value is defined as the estimated selling price in the normal course of business. If the cost per unit of inventory exceeds the price at which the item can be sold, the units must determine the net realizable value per unit (selling price less any costs related to the sale). Where the inventory has lost significant market value and is not worth the cost, it should be written down. Accounting records should be adjusted to reflect the lower of the cost or net realizable value. At least annually, the Unit must review its inventory listing for situations where the items have lost significant market value and the expected selling price is below the recorded cost. If the market value of the item increases in value since this write down, no adjustment upward is allowed.

This adjustment must be recorded in general ledger account and sent to FAS via the regular journal entry processes.

Reporting the Theft of Inventory

The suspected theft of inventory should be reported to the Unit Head immediately. CEP should also be notified. If fraudulent activities are suspected, the Office of the Internal Auditor should be notified. Safeguarding measures should be reviewed to determine how assets can be better secured and prevent theft in the future.

Replenishment of Inventory

Inventory levels should be monitored on a regular basis. All replenishments should be made in compliance with the Purchasing Policy. Purchases should not be performed ad-hoc without due regard for proper planning and gaining the most economic pricing. Purchases should not be split over multiple purchases orders with the intent to bypass quote requirements.

For those units purchasing through the Strategic Procurement office, all inventory items should be assigned a commodity code that has been created. All items in inventory should have a lead-time, maximum and minimum order points, proper manufacture/vendor codes and adequate location codes. Purchase orders must be used for all inventory items being purchased.

Refer to Purchasing policy.

Safeguarding Inventory

Inventory is a valuable asset of the University. Inventory should only be used for University purposes. Departments should ensure that their storage and management procedures provide appropriate security for inventory, to guard against theft as well as damage.

All reasonable efforts should be made to safeguard inventory held at units, including limiting access to goods using swipe card access and access to electronic records in the inventory systems to only those with inventory management responsibilities. If appropriate logical access segregation is not feasible within a units' inventory management system, compensating monitoring controls must be designed and implemented.

Audits

For internal management purposes, units may also perform surprise counts during the year, whether in aggregate or on a sample basis.

All inventories are subject to audit at any time by either internal or external auditors. Adherence to established inventory procedures and guidelines is necessary to ensure accurate financial reporting. Audits may entail observing the procedures, reviewing written inventory instructions, evaluating internal controls over inventory, and performing independent counts.

Management of Inventory Levels

The benefits of inventory are often maximized by carrying larger quantities. However, large inventory levels can also result in greater costs to the University in the following ways:

1. Inventory may become obsolete or exceed usable shelf life (e.g., items such as computer supplies);
2. Funds used to purchase inventory are not available for other purposes;
3. Inventory is subject to theft or damage;
4. Storage and maintenance of goods incurs costs; and
5. Space availability (on campus and off campus).

Unit managers should consider these factors and maintain inventory at levels that maximize the net benefit to the University.

To this end, it is recommended that departments identify slower moving items in their inventory and consider reducing the supply of these items by such methods as:

1. Returns to the original vendor;
2. Discounted pricing to promote removal from inventory
3. Issue an Open Call for Bid and sell to highest bidder, or
4. Smaller purchase quantities in the future.

Some slower moving items may be acceptable if they are critical spare parts or other important items.

Unusable Inventory

Inventory items may become damaged or obsolete during storage. These items should be written off via a journal entry. The journal entry description should clearly indicate the reason for the write-off.

Write-Offs and discounted sales of inventory must be approved by the department Unit Manager.

Annual Counting

A complete physical inventory count must be conducted at least once a year to verify quantities and inventory value. This must be done at year end, in order to ensure a more accurate valuation at fiscal year-end.

Inventory balances less than \$50,000 are considered immaterial and units should seriously consider expensing such amounts and not maintain an inventory. This deviation does not apply to items for sale to external clients, such as bookstores, gift shops or cafeterias.

Please refer to the procedure below for your annual inventory counts to ensure an efficient, effective and accurate valuation of your inventory.

Physical Inventory Counts

Physical inventory counts must be performed at year-end for the purposes of ensuring the University's financial statements are accurately reflected. The counts should be conducted as close to March 31st as possible. A sufficient amount of time to properly perform the inventory count should be factored into the schedule. A sufficient number of independent qualified people must be available during the time scheduled.

Operations during the count time should be limited and managed so as to enable an accurate counting process. The following guidelines promote consistency and accuracy in the valuation and recording of inventory. Each unit should maintain additional procedure documentation to manage logistics specific to their operations (e.g. closure notifications), however may not contradict this University-wide procedure.

Segregation of Duties

Two-person inventory counting teams should be established to ensure appropriate internal controls and safeguards are in place with respect to counts. One individual should count the items and the second to observe and record the count. Counts should not be performed by the same individuals who also conduct other key procurement activities within the unit. Creating new inventory codes, purchasing, receiving, counting and adjusting inventory are functions that must be properly segregated to have safeguards in place in order to prevent theft or fraud. This will involve bringing in staff from other areas of the unit, or from another unit, to perform an independent audit of the inventory on-hand.

Supervision

One person having knowledge of all phases of department operations should be assigned responsibility for planning, coordinating, and supervising the entire inventory count operation, however not be involved in the counting. As well, access to updating inventory records should be available to individual(s) not involved in performing the inventory count. Supervisors should observe the counting process and make certain instructions are being followed. A supervisor should check each area to verify that counting has been completed – see Completeness section below.

Proper Cut-off

Goods received and shipped during the year-end inventory counts must be controlled. Goods received before March 31, or in transit, should be included in the count and the applicable costs absorbed in the purchase records. Likewise, goods sold by March 31 must be included in the sales records. Goods being returned to vendors should be deducted from count. Goods purchased or sold during the counting period should be noted so that the inventory count may be adjusted as required.

Organizing

All goods owned by the unit, and stored in any of its locations, must be counted. There should be a neat and orderly arrangement of goods so as to simplify counting, weighing, measuring or other means of determining quantities. All inventory items on hand should be properly located prior to the beginning of the inventory count. Consignment, obsolete, damaged or substandard goods, should be placed together, if possible, before counting begins. Only goods to which the University has title should be considered part of its inventory.

Count Sheets

Inventory tags, cards, sheets, etc. should be pre-numbered and pre-printed. Both the supplies of unused forms and completed forms should be subject to strict numerical control. For retail inventory, the inventory sheets should provide space for recording price tag amounts for comparison against the system as well. System counts should not be recorded on the count sheets. 'Blind' counting should be done to avoid a bias. If available, scanning systems could be used and a printout affixed to each completed section. Alternatively, carbon copies could be used with one copy affixed to the completed section and the second part retained by the counter to be provided to the supervisor at the end of the count. If tags are not used, a sticker or other means of identifying inventory already counted should be affixed – see Completeness section below.

Obsolete, Damaged, and Substandard Stock

Methods need to be in place to determine any inventory items that are obsolete, damaged or substandard stock. Those items must be set aside during the count and separately accounted for in the year-end adjusting entry. Items found during the year to be obsolete, damaged or substandard stock can be dealt with right away rather than waiting until the year-end counts.

Completeness

Methods should be in place to demonstrate which sections have been counted as they are completed. Items should be clearly marked as counted to ensure all items on the floor are recorded in the books and prevent duplicate counting. This will allow for a completeness check and identify items held that are not recorded in the inventory system. After the counts are completed, an individual other than the count team(s) should inspect the area to ensure all items are marked as included or excluded.

Coding

All items should be precisely identified and accurately described in the inventory system. Ensure that only unique items are coded under the same inventory code to maintain accurate costing. If items are similar but different sizes, and therefore prices, for example, these should be recorded under separate codes so as to not incorrectly affect the cost calculation. Any exceptions noted during the count should be brought to the attention of the individual overseeing the inventory count and records updated accordingly.

Shrinkage

The amount and percentage of inventory shrinkage is required. Inventory shrinkage is defined as the amount of inventory listed in the accounting records (perpetual or periodic inventory system) but which no longer exists in the actual inventory. It is important to keep historical inventory shrinkage records in order to provide information for estimates as well as for internal control purposes. To calculate the percentage of inventory shrinkage, conduct a physical count of the inventory and calculate its costs, and then subtract this cost from the cost listed in the accounting records (perpetual or periodic inventory system). Divide the difference by the amount in the accounting records to arrive at the inventory shrinkage percentage. Trending, investigation and root cause analysis should be conducted on all significant discrepancies between the physical counts and the levels recorded in the system. Action should be taken as necessary, such as:

Further restricting access to items that appear to be have high levels of shrinkage

1. Reporting suspected thefts to CEP
2. Reporting suspected fraud to the Office of Internal Audit

Continuous Improvement

Count results should be analyzed to determine if process improvements are required to better ensure more accurate and better controls over inventoried items.

Information Provided to FAS at Year End

Information to adjust financial records to reflect an accurate valuation of inventory must be provided to FAS within 7 days of year-end. There should be an independent check of the summarization, valuation and all arithmetical calculations prior to submission. The information to be provided to FAS must include:

Summary of adjustments for the general ledger, including:

1. Unit Head approval of adjustments; and
2. FOAPAL information.

Breakdown of:

1. Cost of goods sold;
2. Write down to lower of cost or net realizable value;
3. Obsolescence (if applicable);
4. Shrinkage; and
5. Damaged or substandard stock (if applicable).

Date of inventory count.

Method for valuing:

1. Cost or net realizable value.

Method for determining:

1. Obsolescence
2. Shrinkage
3. Damaged stock
4. Substandard stock

Method for controlling:

1. operations
2. cut-off

Notification of instances where:

1. Exceptions to the above annual count procedures undertaken, with rationale for deviation;
2. Internal control deficiencies have been identified, action plans to address; and
3. Theft has been suspected and what actions were taken.

Other documentation (e.g. count sheets) should be retained by the unit for a period of 7 years, then may be destroyed, in accordance with MUNClass Finance.