

Chapter three: Audit of Inventory and warehouse**I. Introduction**

Inventories are the direct source of income for companies and its impact of misstatement has an immense significance. Inventory affects both the balance sheet and income statement. The overall objective in the audit of the inventory and warehousing cycle is to provide assurance that the financial statements fairly account for raw materials, work-in-process, finished goods inventory, and cost of goods sold.

The audit of inventory is very important (difficult to the auditor) due to:

- a) Misstatement of the inventory balances has a direct effect on reported profit. It is the easiest asset for management to manipulate and thereby b manipulates profit.
- b) Some inventories can be very difficult for the auditor to identify. There may be some items which have a very special nature.
- c) The quantity of inventory held at a given movement may be difficult to establish. It may not be possible to cease inventory movements during the inventory count and cut off may be difficult to establish with a precision.
- d) Valuation may be difficult. Inventories may have specialist nature and there might be obsolescence inventory items for which establishing net realizable values may be hard.
- e) Inventory losses from pilferage (stolen), wastage, etc may be difficult to control
- f) Some work in progress balances may be intangible in nature (eg. Film production costs)

The inventory and warehouse cycle has direct ties with

- The acquisition and payment cycle
- The payroll and personnel cycle
- The sales and collection cycle

Therefore, audit of inventory is the broader audit since it consider these all cycles. In inventory audit auditors must first identify class of transactions,

accounts affected by the cycle, business functions for the cycle, and related documents and records second, the auditors understand the key internal controls, test its effectiveness, and design test of control and substantive test of transactions and test of detail of balances.

II. Functions in the Cycle and Internal Controls

This cycle consists of two separate but closely related systems involving the actual physical flow of goods and the related costs. Inventory is a major item in both merchandising and manufacturing businesses. In the following discussions a manufacturing business setting is assumed as the inventory in this type of business has various components and reflects a broader perspective. Six functions making up the inventory and warehousing cycle are described below:

1. Process purchase orders

The controls over purchase requisitions and the related purchase orders are evaluated and tested as part of the acquisition cycle.

2. Receive new materials

Receipt of the ordered materials is also part of the acquisition and payment cycle and the items are sent to the store room after inspection.

3. Store raw materials

Materials received are stored in the stock room until needed for production and issued for use upon presentation of:

- Properly approved material requisition, work order or similar document
- On the basis of the requisition, perpetual inventory records are updated and book transfers made from raw materials to work in process

4. Process the goods

The length and complexity of the manufacturing processes the raw materials have to go through to be converted to finished goods varies from company to company.

- Production and scrap reports must be generated by the production department
- The accounting department reflects the movement of materials in the books and determines accurate cost of production through its cost accounting system

5. Store finished goods

The control of finished goods is an integral part of the sales and collection cycle

6. Ship finished goods

This is transfer of ownership of goods and crucial point in sales and collection cycle.

In these six functions different documents and records are prepare. These includes: Purchase requisition, purchase order, receiving report, venders' invoice, purchase transaction file, purchase journal or listing, payroll record, monthly statements, cash disbursement transaction file, cash disbursement journal, check, voucher, accounts payable trial balance, sales order, sales invoice, sales transaction file, sales journal, cash collection journal, accounts receivable trial balance, debit and credit memo, sales return and allowances journal, purchase return and allowances journal, perpetual accounting records, ect.

Large number of asset accounts, liability accounts, revenue and expense accounts are affected by inventory and warehousing cycle of manufacturing company.

III. Parts of Audit of Inventory

The audit of the inventory and warehousing cycle can be divided into five activities within the cycle:

1. Acquire and record raw materials, labor and overhead

This part includes the first three functions stated above, viz. process purchase orders, receive new materials, and store raw materials. The controls over these functions are evaluated and tested as part of performing compliance and substantive tests in the acquisition and payment cycle and

the payroll and personnel cycle. The auditor has to be satisfied as to adequacy of the controls and fair statement of the balances when testing those cycles. Therefore, to audit this part the auditors must understand key internal controls for each function and design test of control, substantive test of transactions and detail of balances.

The key internal controls for each of the business functions are authorization of purchases, separation of the custody of the received goods from other functions, timely recording and independent review of transactions (adequate documentation), and authorization of payments to vendors. These internal controls are developed to achieve transaction related audit objectives, detail-related audit objectives and disclosure and presentation audit objectives.

Generally in this part appropriate audit procedures are designed for acquisition, payment and payroll.

1.1. Audit of acquisition and payment

The overall objective of audit of acquisition and payment is to give assurance for the fair presentation of accounts affected by the cycle. To do so auditors first identify risks associated with the cycle and develop audit procedures.

Risks Associated with purchase

- ❖ Unauthorized purchases may be processed
- ❖ Purchases may be undertaken from unauthorized supplier
- ❖ The right quality of the items may not be purchased
- ❖ Purchases may not be made at fair price /competitive price/
- ❖ Purchased items may not be arrived at warehouse but invoiced
- ❖ Purchases may be undertaken while there are sufficient stocks in the warehouse.
- ❖ Purchases may not be undertaken at the right time (eg. government orgns)
- ❖ Purchases may be processed without having sufficient budget.

Audit procedures of purchase

Some of the procedures on purchase are:

- Obtain approved budget for the year under review, if any
- Obtain the purchase ledger of the company and select a sample of purchases from the ledger and check:
 - Approved purchase requisition are available
 - Suppliers are screened out by the mgt or purchase committee
 - Approved purchase orders are available with a pre-defined authority limit
 - Goods receiving notes against purchase requisition and purchase order
 - Check cut-off documents
 - The purchased item against the approved budget (board approval) if applicable
 - The receiving reports are signed by an inspector (checker) and store man
 - Under or over deliveries, if any, are communicated to the supplier

If the purchase is foreign purchase, add the following procedures:

- ✚ Check the quantity received against the packing list and the purchase order.
- ✚ Check that freight costs, clearing costs, warehouse costs insurance and other related costs are properly accounted
- ✚ Check the completeness of the cost by verifying the cost accumulation sheet.
- ✚ Check that recoverable taxes such as 15% VAT and 3% withholding taxes are not included in the inventory costs.
- ✚ Check the availability of relevant correspondences withholding taxes are not included in the inventory costs.
- ✚ Check the availability of relevant correspondences with the suppliers, insurance company, freight agreements, commercial invoices, etc.

B) Audit of Accounts payable

This account is directly related with the credit purchase that a given organization undertaken and some of the procedures that we are going to apply related with the purchase account.

Audit Risks of Accounts payable

- ✦ Possible understatement of the payable account
- ✦ Late payment to suppliers which damage the future relationship with suppliers
- ✦ Payables may be recorded in full for under delivered items
- ✦ Unauthorized payment may be effected

Audit procedures on payables

Obtain the list (schedule) of payable accounts and check:

- ✦ Payables were recorded after approved by a responsible officials
- ✦ The amount recorded as payable agrees with the suppliers invoices
- ✦ The suppliers invoice against the receiving report to ensure that the liability is recognized only for items received
- ✦ The payable accounts against the suppliers' statement of account.
- ✦ The payable amount recorded to the right supplier
- ✦ Ask direct conformation from the supplier at a given date
- ✦ Subsequent settlement of the account which confirms us the balance was correct.
- ✦ The debit and credit balances are reported separately and report debit balances as receivable
- ✦ The cut-off documents of purchases

Audit of payment

These payments which are made by an organization relate to the above account payable. Therefore, the procedures which are listed here relates to the purchase and payable accounts.

- ✦ Check that payment is effected after propel authorization with a pre-defined authority limit
- ✦ Check that the payments are supported by relevant documents such as suppliers' invoices, agreements (if any), proforma invoices, purchase requisitions, purchase orders, minutes of purchase committee (mgt), if any and others.
- ✦ Check that the payment is addressed to the correct supplier

Check that payments are made within the discount period, if it makes the organization better off.

1.2. Audit of payroll and personnel cycle

We know that personnel expenditure is one of the major cost of an organization. As a result, the payroll account should be verified by the auditor using some audit procedure.

Risks Associated with payroll

- New and terminated employees may be paid before their effective employment date and after their effective termination date respectively.
- Payment of salary may be made for those who are not employee of the company
- Payment may be made for absent employees and late comers
- Unauthorized salary increment and bonus payment may be made.
- The personal files of the employees may not be properly filed
- Income Taxes may not be paid on time and the company may be penalized
- Unauthorized overtime may be paid

Audit Procedures

The objective of our audit procedures for payroll is that payment is made only for work that has been done, at the correct rate and that the liabilities to the tax authority are accurate and paid timely to avoid fines.

Some of the procedures are:

- Ensure that payment is made only to the employees of the company by looking on sample employment letters
- Check that starters and leavers are paid only from (till) the effective date by looking again on their letters
- Enquire and check that time sheets are available and payroll is made from that record to check that payment is made only for work performed

- Check that salary increment and bonus are approved by the responsible mgt of the company
 - Ensure that personal files are pre-numbered and complete as to letter of employment, medical costs, leave forms, promotion letters, termination letters and clearance of terminated employee
 - Check that overtimes are paid only after proper approval by a responsible person
 - Check the accuracy of tax calculation and other deductions and their timely payment to the respective Authority.
 - Perform Annual (monthly) payroll reconciliation and arrive at the yearend (month) ledger balance and obtain explanation for variances
 - Check that the payroll is approved by an independent person and each employee has signed for receiving
 - Check that cheque is withdrawn for the net amount
 - Ensure that unclaimed salaries are collected and deposited back to bank
- Check casting and cross casting of payroll sheet for accuracy

2. Transfer assets and costs

Internal transfers include functions stated as numbers 4 & 5 above viz. process the goods and store finished goods. These two functions are not related to any other cycle and therefore must be evaluated and tested as part of the inventory and warehousing cycle. Many of the activities in this function pass through the cost accounting system and necessitate audit of cost accounting.

2.1. Audit of cost accounting

Cost accounting systems implemented in companies vary depending upon the degree of complexity of the business and level of sophistication desired by management.

2.1.1. Cost accounting controls

Cost accounting controls relate to the physical inventory and consequent processes from the point of requisition to transfer finished goods to store.

These controls can be divided in to two broad categories: physical controls and controls over related costs.

Physical controls

- Includes controls over raw materials, work in process and finished goods
- Pre-numbered documents for authorization of inventory movements and limited access to storage area are some of the controls appropriate for this area

Controls over related costs

- Perpetual inventory records and segregation of duties between custody of assets and related record keeping are some of the important controls

Integration of production and accounting records is necessary to obtain accurate cost information. The information generated from the cost accounting system aids management in pricing, cost control and inventory valuation, among other things.

2.1.2. Tests of cost accounting

Physical control

- Tests to verify existence of proper physical control are restricted to observation and enquiry. So, the auditor examines the storage area to determine its adequacy and enquires of staff about access restriction and other controls.

Documents and records for inventory transfer

- Understand the client's procedures and perform tests to:
 - o Verify recorded transfers are valid
 - o Transfers actually taken place are recorded
 - o Verify accuracy of transfers recorded in terms of quantity, description, date etc
 - o Examine approval of transfers
 - o Account for sequence of material transfer documents

Perpetual inventory

- Existence of properly maintained perpetual inventory records affects the timing and extent of the auditor's physical examination of inventory
- A well maintained and reliable perpetual inventory record enables the auditor take inventory before the balance sheet date thereby saving audit time in the subsequent period. The client can also receive the audit report earlier under such circumstances.

Unit cost records

- Obtain cost data for:
 - o Raw materials
 - o Direct labor
 - o Manufacturing overhead and check its accuracy

Cutoff procedures

- In ensuring proper cutoff procedures see to that:
 - o Sales and stock records are matched to ensure that goods sold are not included in stock
 - o Purchase and stock records are matched to ensure that such goods are included in stock although they may not have arrived at the premises by the financial year end
 - o Issues to, and transfers between, departments or processes are properly adjusted
 - o Items in the possession of the client but held on behalf of others are not included in stock

The shipping function is also an integral part of the sales and collection cycle and is not repeated here.

3. Ship goods and record revenue and costs

The last function in the inventory and warehousing function, ship finished goods, is part of the sales and collection cycle. Tests of the systems is thus done while auditing the sales and collection cycle.

4. Physically observe inventory

This procedure is performed to determine whether:

- Recorded inventory actually exists
- It is properly counted by the client

This procedure solely relates to the inventory and warehousing cycle.

5. Price and compile inventory

Costs used to value inventory must be tested:

- The client must follow an inventory method allowed in GAAP and application must be consistent from year to year
- Audit procedures used to verify acceptability of the inventory method used as per generally accepted accounting principles and consistency of applications is referred to as price tests.
- Tests to determine correct summarization of physical count are called compilation tests.
- Price and compilation tests are performed in the inventory and warehousing cycle

Risks Associated with Inventory

- a. Inventory may be accounted (valued) based on record instead of physical count
- b. Inventory unit price may not be accurate
- c. Obsolete inventory may be valued as if it is an active item
- d. Physical count of work in process inventory may not be properly undertaken
- e. Inventory cut-off may not be accurately taken
- f. Acceptable valuation method (FIFO, Average, LIFO, and NRV) may not be used.
- g. Inventory held by third party (consignment goods) may be omitted

- h. Third party stock (consignment goods) may be included
- i. Inventory may be written off without proper authorization and may not have satisfactory evidence to write-off them.
- j. Inventory may not be insured (for fire, theft, damage, etc)
- Note that the auditor should have to apply audit procedures which can trace the above possible risks.

Audit Procedures

- ✚ Obtain the valuation sheet (quantity times unit cost) of each of the inventory count of the organization
- ✚ Check the quantities on the valuation sheet against the auditors inventory count if any.
- ✚ Check extension of quantity and unit costs, on sample basic
- ✚ Cast the valuation column and agree the total with the inventory ledger balances.
- ✚ Check that inventory shortages are investigated properly and are not included in the stock valuation
- ✚ Ask (identify obsolete damaged and slow-moving inventory items and check how they are valued and discuss with mgt about the need for stock provision
- ✚ Check whether or not the inventory valuation method of the organization is in line with valuation for tax purpose. (f not recalculated for tax purpose)
- ✚ Check that cut-off documents are properly recorded
- ✚ Check that inventories are disclosed separately as:
 - Raw Materials
 - Work in process
 - Finished goods
 - Goods in transit (payments on account)
 - Consumables
 - Fuel and lubricants, etc

- If standard costs were used for valuation, enquire about the basis of standard and compare the standard with the actual to see the variance.
- For WIP inventory
 - Ascertain what elements of costs are included. If overheads are included, ascertain the basis on which they are included.
 - If there are estimate costs, enquire and check the basis of the estimate.
 - Ensure that abnormal costs are excluded from cost
- During inventory count (perpetual and periodic) the auditor should perform the following:
 - Observe the clients count procedure and check its completeness
 - Observe the arrangement of inventory in stores and ensure that they are suitable for count
 - Take sample of inventory count from floor to record (stock card, bin card) and vice versa and note any shortage/overage, if any.
 - Note any damaged, obsolete and slow-moving stock items.
 - Take cut-off documents to be used during the audit
 - Try to stop stock movements or closely control the movement if not possible to stop
- Select a sample of receiving reports and vendors/customer invoice and check that:
 - The documents are authorized by a responsible person
 - These documents are posted (recorded) to the ledger
 - Check stock valuation and ensure the calculation of cost of sales

We have to note our audit procedures will vary from company to company based on the nature of the company and its inventory and other factors

Note that only physical inventory did not ascertain the valuation of inventory rather both physical inventory and unit cost verification and taking other factors (obsolescence) is relevant.