# CHAPTER 8 CLOSING INVENTORY

## **LEARNING OBJECTIVE**

- I. VALUATION OF INVENTORY
- II. METHODS OF VALUING INVENTORY
- III. ACCOUNTING FOR INVENTORY

#### I. VALUATION OF INVENTORY

#### Inventory may include any of:

- Finished goods
- Work in progress
- Material

The <u>prudence concept</u> requires that profit are not anticipated, but losses are accounted for as soon as they are known.

For this reason, IAS2 Inventories states that inventory is valued in the statement of financial position at the <u>lower</u> of cost and net realisable value (NRV).

#### Cost of inventory (goods) may include:

- The purchase price
- Transportation and handling costs
- Less: trade discounts (buying in bulk or regular customer, but not settlement discounts)

#### I. VALUATION OF INVENTORY

#### **NRV**

Net realisable value is estimated as follows.

	\$	\$
Selling Price		X
Less: Trade discounts All further costs to completion All marketing, selling and distribution costs	X X <u>X</u>	(X)
Net realisable value		<u>xx</u>

This definition ensures that all costs of selling the product are taken into account, such as discount, marketing and delivery costs.

#### I. VALUATION OF INVENTORY

#### **NRV** Compared to cost

When following the rule of valuing inventory at the lower of cost and net realisable value, the valuation should normally be done on an item by item basis.

The comparison may, however, be made on a category by category basis where relevant.

Item	Cost	NRV	Valuation (lower of Cost and NRV)
Α	\$2,000	Item to be sold for \$3,500. no other costs are anticipated, so NRV=\$3,500	\$2,000
В	\$500	Item to be sold for \$600. Selling costs will be \$50 and a 10% trade discount, so NRV=\$600-50-60=\$490	\$490
Total	\$2,500	\$3,990	\$2,490

where inventories consist of a large number of <u>interchangeable</u> (ie identical or very similar) items.

The cost of inventories should be assigned by using the **first-in**, **first-out (FIFO)** or **weighted average** cost formulas. The LIFO formula (last in, first out) is **not permitted** by IAS 2.

FIFO- is a method of estimating cost which assumes that inventory is used or sold in the same order that it is purchased by the business.

AVCO (average cost)- method of estimating cost which assumes that all inventory purchased is mixed together. This assumption would be true for liquid inventory. Two possible AVCO- 1. <u>periodic</u> weighted average or simple weighted average 2. <u>continuous</u> weighted average.

#### **Example:**

In November 1,000 units were purchased as follows:

3 November 400 units at \$60 per unit

11 November 300 units at \$70 per unit

21 November 300 units at \$80 per unit

During the same period, some inventories are sold 200 units each, on 5,14,22 and 27 November.

#### First In First Out (FIFO) Method:

Date	Receipts	Sold	Balance	
			No. of invntory	\$
3 Nov	400 x \$60		400	24,000
5 Nov		200 x \$60	200	12,000
11 Nov	300 x \$70		500	33,000
14 Nov		200 x \$60	300	21,000
21 Nov	300 x \$80		600	45,000
22 Nov		200 x \$70	400	31,000
27 Nov		100 x \$70 100 x \$80	200	16,000
Cost of sale is \$53,000 and the value of closing inventory is \$16,000				

Cost of sale is \$53,000 and the value of closing inventory is \$16,000.

# Continuous Weighted Average Cost (AVCO) Method:

Weighted average cost is calculated each time that there is a new delivery into stores.

Weighted average price =

(inventory value of items in stores + purchase cost of units received)/(Quantity already in stores + Quantity received)

# 3. PRICING ISSUES OF MATERIALS

Date	Quantity	Purchase Price	Value	Weighted average price
		\$	\$	\$
3 Nov	400	60	24,000	60
5 Nov	(200)		(12,000)	60
	200		12,000	60
11 Nov	<u>300</u>	70	<u>21,000</u>	
Balance	500		33,000	66 (33,000/500)
14 Nov	(200)		(13,200)	66
	300		19,800	66
21 Nov	<u>300</u>	80	<u>24,000</u>	
Balance	600		43,800	73(43,800/600)
22 Nov	(200)		(14,600)	73
27 Nov	(200)		(14,600)	73
30 Nov (bal)	200		14,600	73
Cost of sale is \$54,400 and the closing inventory is \$14,600.				

# **Periodic Weighted Average Cost Method:**

Period weighted average price= (cost of opening inventory + cost of all receipts in the period)/(units in opening inventory + units received)

Periodic weighted average price = (400x60+300x70+300x80)/(400+300+300)=\$69 per unit.

Cost of sale = 800 units x 69\$
Inventory of end = 200 units x 69\$

#### III. ACCOUNTING FOR INVENTORY

# When inventories are purchased:

Dr. Purchase

Cr. AP/Cash

# When opening inventory written off to income statement:

Dr. Opening inventory account (in IS)

Cr. Inventory account (in BS)

#### When closing inventory adjusted to show in BS:

Dr. inventory account (in BS)

Cr. Closing inventory account (in IS)

#### Note:

cost of goods sold = opening inventory + purchase – closing inventory.