Accounting Standard (AS) 2
(revised 1999)

Valuation of Inventories

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The following Accounting Standards Interpretation (ASI) relates to AS 2:

- ASI 2 - Accounting for Machinery Spares

The above Interpretation is published elsewhere in this Compendium.

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(This Accounting Standard includes paragraphs set in ***bold italic*** *type and plain type, which have equal authority. Paragraphs in bold italic type indicate the main principles. This Accounting Standard should be read in the context of its objective and the Preface to the Statements of Accounting Standards[1].)*

The following is the text of the revised Accounting Standard (AS) 2, 'Valuation of Inventories', issued by the Council of the Institute of Chartered Accountants of India. This revised Standard supersedes Accounting Standard (AS) 2, 'Valuation of Inventories', issued in June, 1981.

The revised standard comes into effect in respect of accounting periods commencing on or after 1.4.1999 and is mandatory in nature.[2]

Objective

A primary issue in accounting for inventories is the determination of the value at which inventories are carried in the financial statements until the related revenues are recognised. This Statement deals with the determination of such value, including the ascertainment of cost of inventories and any write-down thereof to net realisable value.

Scope

1. This Statement should be applied in accounting for inventories other than:

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* The Standard was originally issued in June 1981.

[1] Attention is specifically drawn to paragraph 4.3 of the Preface, according to which Accounting Standards are intended to apply only to items which are material.

[2] Reference may be made to the section titled 'Announcements of the Council regarding status of various documents issued by the Institute of Chartered Accountants of India' appearing at the beginning of this Compendium for a detailed discussion on the implications of the mandatory status of an accounting standard.

(a) work in progress arising under construction contracts, including directly related service contracts (see Accounting Standard (AS) 7, Accounting for Construction Contracts[3]);

(b) work in progress arising in the ordinary course of business of service providers;

(c) shares, debentures and other financial instruments held as stock-in-trade; and

(d) producers' inventories of livestock, agricultural and forest products, and mineral oils, ores and gases to the extent that they are measured at net realisable value in accordance with well established practices in those industries.

2. The inventories referred to in paragraph 1 (d) are measured at net realisable value at certain stages of production. This occurs, for example, when agricultural crops have been harvested or mineral oils, ores and gases have been extracted and sale is assured under a forward contract or a government guarantee, or when a homogenous market exists and there is a negligible risk of failure to sell. These inventories are excluded from the scope of this Statement.

Definitions

3. The following terms are used in this Statement with the meanings specified:

Inventories are assets:

(a) held for sale in the ordinary course of business;

(b) in the process of production for such sale; or

(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

[3] This Standard has been revised and titled as 'Construction Contracts'. The revised Standard is published elsewhere in this Compendium.

4. Inventories encompass goods purchased and held for resale, for example, merchandise purchased by a retailer and held for resale, computer software held for resale, or land and other property held for resale. Inventories also encompass finished goods produced, or work in progress being produced, by the enterprise and include materials, maintenance supplies, consumables and loose tools awaiting use in the production process. Inventories do not include machinery spares which can be used only in connection with an item of fixed asset and whose use is expected to be irregular; such machinery spares are accounted for in accordance with Accounting Standard (AS) 10, Accounting for Fixed Assets[4].

Measurement of Inventories

5. Inventories should be valued at the lower of cost and net realisable value.

Cost of Inventories

6. The cost of inventories should comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Costs of Purchase

7. The costs of purchase consist of the purchase price including duties and taxes (other than those subsequently recoverable by the enterprise from the taxing authorities), freight inwards and other expenditure directly attributable to the acquisition. Trade discounts, rebates, duty drawbacks and other similar items are deducted in determining the costs of purchase.

Costs of Conversion

8. The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production, such as depreciation and maintenance of factory

[4] See also Accounting Standards Interpretation (ASI) 2 published elsewhere in this Compendium.

buildings and the cost of factory management and administration. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour.

9. The allocation of fixed production overheads for the purpose of their inclusion in the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on an average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. The amount of fixed production overheads allocated to each unit of production is not increased as a consequence of low production
or idle plant. Unallocated overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed production overheads allocated to each unit of production is decreased so that inventories are not measured above cost. Variable production overheads are assigned to each unit of production on the basis of the actual use of the production facilities.

10. A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products as well as scrap or waste materials, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

Other Costs

11. Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include overheads other than production overheads or the costs of designing products for specific customers in the cost of inventories.

12. Interest and other borrowing costs are usually considered as not relating to bringing the inventories to their present location and condition and are, therefore, usually not included in the cost of inventories.

Exclusions from the Cost of Inventories

13. In determining the cost of inventories in accordance with paragraph 6, it is appropriate to exclude certain costs and recognise them as expenses in the period in which they are incurred. Examples of such costs are:

(a) abnormal amounts of wasted materials, labour, or other production costs;

(b) storage costs, unless those costs are necessary in the production process prior to a further production stage;

(c) administrative overheads that do not contribute to bringing the inventories to their present location and condition; and

(d) selling and distribution costs.

Cost Formulas

14. The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects should be assigned by specific identification of their individual costs.

15. Specific identification of cost means that specific costs are attributed to identified items of inventory. This is an appropriate treatment for items that are segregated for a specific project, regardless of whether they have been purchased or produced. However, when there are large numbers of items of inventory which are ordinarily interchangeable, specific identification of costs is inappropriate since, in such circumstances, an enterprise could obtain predetermined effects on the net profit or loss for the period by selecting a particular method of ascertaining the items that remain in inventories.

16. The cost of inventories, other than those dealt with in paragraph 14, should be assigned by using the first-in, first-out (FIFO), or weighted average cost formula. The formula used should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.

17. A variety of cost formulas is used to determine the cost of inventories other than those for which specific identification of individual costs is appropriate. The formula used in determining the cost of an item of inventory needs to be selected with a view to providing the fairest possible approximation to the cost incurred in bringing the item to its present location and condition. The FIFO formula assumes that the items of inventory which were purchased or produced first are consumed or sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. Under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the enterprise.

Techniques for the Measurement of Cost

18. Techniques for the measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate the actual cost. Standard costs take into account normal levels of consumption of materials and supplies, labour, efficiency and capacity utilisation. They are regularly reviewed and, if necessary, revised in the light of current conditions.

19. The retail method is often used in the retail trade for measuring inventories of large numbers of rapidly changing items that have similar margins and for which it is impracticable to use other costing methods. The cost of the inventory is determined by reducing from the sales value of the inventory the appropriate percentage gross margin. The percentage used takes into consideration inventory which has been marked down to below its original selling price. An average percentage for each retail department is often used.

Net Realisable Value

20. The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined. The cost of inventories may also not be recoverable if the estimated costs of completion or the estimated costs necessary to make the sale have increased. The practice of writing down inventories below cost

to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use.

21. Inventories are usually written down to net realisable value on an item-by-item basis. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses and are produced and marketed in the same geographical area and cannot be practicably evaluated separately from other items in that product line. It is not appropriate to write down inventories based on a classification of inventory, for example, finished goods, or all the inventories in a particular business segment.

22. Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made as to the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the balance sheet date to the extent that such events confirm the conditions existing at the balance sheet date.

23. Estimates of net realisable value also take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess inventory is based on general selling prices. Contingent losses on firm sales contracts in excess of inventory quantities held and contingent losses on firm purchase contracts are dealt with in accordance with the principles enunciated in Accounting Standard (AS) 4, Contingencies and Events Occurring After the Balance Sheet Date[5].

24. Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in

[5] Pursuant to AS 29, Provisions, Contingent Liabilities and Contingent Assets, becoming mandatory in respect of accounting periods commencing on or after 1-4-2004, all paragraphs of AS 4 that deal with contingencies stand withdrawn except to the extent they deal with impairment of assets not covered by other Indian Accounting Standards. Reference may be made to Announcement XX under the section titled 'Announcements of the Council regarding status of various documents issued by the Institute of Chartered Accountants of India' appearing at the beginning of this Compendium.
A limited revision to AS 29 was made in 2005, so as to include Onerous Contracts in the scope of the Standard. The said limited revision to AS 29 comes into effect in respect of accounting periods commencing on or after April 1, 2006.

which they will be incorporated are expected to be sold at or above cost. However, when there has been a decline in the price of materials and it is estimated that the cost of the finished products will exceed net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

25. An assessment is made of net realisable value as at each balance sheet date.

Disclosure

26. The financial statements should disclose:

(a) the accounting policies adopted in measuring inventories, including the cost formula used; and

(b) the total carrying amount of inventories and its classification appropriate to the enterprise.

27. Information about the carrying amounts held in different classifications of inventories and the extent of the changes in these assets is useful to financial statement users. Common classifications of inventories are raw materials and components, work in progress, finished goods, stores and spares, and loose tools.