S 17- PROPERTY PLANT AND EQUIPMENT

PRESENTED BY FATIMA OMARJEE CA(SA)
LEARNING OBJECTIVES

• Distinguish items of PPE from other assets of an entity
• Identify when items of PPE qualify for recognition in financial statements
• Measure items of PPE on initial recognition and subsequently - on the cost and revaluation model
• To account for a change in residual value and change in an estimated useful life of PPE
• Identify when an item of PPE is to be derecognised or transferred to another classification of asset, and account for that derecognition or transfer
• To account for an impairment of an item of PPE
• To present and disclose PPE in financial statements
SCOPE S17.1

Property, plant and equipment

Investment property whose fair value cannot be measured on an ongoing basis

It is important to note that this type of investment property will only be measured in terms of s17 however the disclosure will made be made in accordance with s16 investment property.
1. **Tangible assets**
   - Distinction between tangible and intangible is important as intangible assets are accounted for under another section.

2. To be used in the **a) production or supply of goods and services, b) rental to others or c) for administrative purposes**

3. Expected to be **used during > 1 period**
ITEMS THAT ARE NOT PPE AND NOT ACCOUNTED FOR IN TERMS OF THIS SECTION S17.3

- Biological assets related to agricultural activity
- Mineral rights and mineral reserves
RECOGNITION S17.4

What do we recognise as PPE?

Items that meet the recognition criteria in terms of s2

-1) It is probable that future economic benefits will flow to an entity
-2) The cost can be reliably measured
RECOGNITION OF S 17

Recognition deals with recognising items as PPE or not.
<table>
<thead>
<tr>
<th>Item</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare parts, stand by equipment and servicing equipment</td>
<td>If they meet the definition of PPE, it will be treated as PPE. If not, these are treated as inventories</td>
</tr>
<tr>
<td>Replacement parts that are expected to add incremental future benefits</td>
<td>When replaced, carrying amount relating to that part should be derecognised and new cost of part should be added to the carrying amount of the item of PPE</td>
</tr>
<tr>
<td>Inspections</td>
<td>cost of inspection should be added to the carrying amount of the item of PPE and derecognised when a replacement is performed. If the cost of inspection was not recognised separably then a current estimate can be used</td>
</tr>
<tr>
<td>Land and buildings</td>
<td>Land and buildings should be disclosed and measured separately even though they are purchased as a single item</td>
</tr>
</tbody>
</table>
MEASUREMENT OF S 17

Measurement

At initial recognition

After recognition
Measurement with the value at which PPE will be reflected in the financial statements
MEASUREMENT AT INITIAL RECOGNITION S17.9

PPE at initial recognition is measured at:

COST
WHAT ARE THE ELEMENTS OF COST
S17.10

The cost is the cash price equivalent of all its elements at recognition date. If payment is deferred beyond normal credit terms, the cost is the PV of all future payments.

- Purchase price
- Other directly attributable cost bringing PPE to the present location and condition intended to be used by management
- Dismantling, removing and restoration cost

Cost
The purchase price

- This includes legal and brokerage fees, import taxes and non-refundable purchase taxes after deducting trade discounts and rebates
DIRECTLY ATTRIBUTABLE COSTS

- Site preparation
- Initial delivery and handling
- Installation and assembly
- Testing and functionality

Present condition and location to be operated in a manner intended by management
COST TO DISMANTLE REMOVE AND RESTORE

When an entity has an **obligation** to remove, dismantle or restore an item of PPE as a result of **acquiring that asset or by using that asset**

The initial estimate of dismantling, removing or restoring the item should be added to the initial cost of PPE.
COSTS THAT CANNOT BE RECOGNISED AS PPE S17.11

- Cost of opening a new facility
- Cost of introducing a new product or service
- Cost of conducting a business in a new location
- Administration or other general overhead costs
- Borrowing costs
MoneyBuild (Pty) Ltd, a VAT vendor, constructed a piece of machinery for use in its operations. The following costs were incurred:

- Purchase price of materials for construction – R684 000 (this is repayable after 1 year at a fair market interest rate is 10%) including VAT at 14%
- Labour costs incurred in constructing the machinery – R100 000
- Labour costs incurred in training staff to use the machinery – R20 000
- Testing costs to ensure the machine was functional – R10 000
- Operating losses incurred due to lower production while machine was being constructed – R100 000
- The machine took exactly one year to complete.
**EXAMPLE 1-INITIAL COST**

<table>
<thead>
<tr>
<th>You are required to</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Calculate the cost of the machine manufactured by MoneyBuild assuming the entity is a VAT vendor. Provide explanations for any costs included or excluded from the cost.</td>
</tr>
<tr>
<td>Cost</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>Purchase price</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>VAT</strong></td>
</tr>
<tr>
<td><strong>Borrowing costs</strong></td>
</tr>
<tr>
<td><strong>Construction labour</strong></td>
</tr>
<tr>
<td><strong>Training costs</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Testing costs</strong></td>
</tr>
<tr>
<td><strong>Operating losses</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
An asset can be purchased in exchange for a non-monetary asset.

- If the fair value of the acquired asset can be established, the acquired asset should be measured at its fair value.
- If the fair value of the acquired asset cannot be established or if it lacks commercial substance, the acquired asset will be measured at the carrying value of the asset given up.
Initial recognition at initial cost

Subsequent measurement period

Point of derecognition
MEASUREMENT AFTER INITIAL COST
S17.15

The choice between the two models is an accounting policy choice. The model should be applied consistently to an entire class of PPE.

For both models, depreciation and impairment losses are relevant.

Cost model

Cost less accumulated depreciation and any accumulated impairment losses

OR

Revaluation model

Fair value less subsequent accumulated depreciation and any accumulated impairment losses

An entity should obtain the fair value of the item of PPE at regular periods so that the carrying amount does not differ materially from the fair value.
### COST MODEL

**ABC Co. Extract of SOFP**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE at carrying value</td>
<td>$xxxx</td>
</tr>
<tr>
<td>PPE at cost</td>
<td>$xxx</td>
</tr>
<tr>
<td>Accumulated depreciation and impairment</td>
<td>(xx)</td>
</tr>
</tbody>
</table>

*Always at initial cost unless there are additions or disposals.*

*Calculated based on initial cost.*
### REVALUATION MODEL

#### ABC Co. Extract of SOFP

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE at carrying value</td>
<td>XXXX</td>
</tr>
<tr>
<td>PPE at cost</td>
<td>XXX</td>
</tr>
<tr>
<td>Accumulated depreciation and impairment</td>
<td>(XX)</td>
</tr>
</tbody>
</table>

- **Latest revalued amount**
- **Based on latest revalued amount**

Using the net replacement method
REVALUATION MODEL S17.15C&D

Increase in CA due to an **increase** a revaluation increase will be recognised in **OCI**.

However the increase will be recognised in P&L to the extent that it reverses a revaluation decrease of the same asset previously recognised in P&L.

Revaluation **decreases** will be recognised in P&L.

However the decrease will be recognised in **OCI** to the extent that it reverses a revaluation increase of the same asset previously recognised in OCI.
REVALUATION INCREASE

Prior period revaluation decrease of 100 in P&L

- P&L = Dr 100

Current year revaluation increase of 300

- P&L = CR 100
- OCI = CR 200

Total increase of 300
Prior period revaluation increase of 100 in OCI

- OCI balance = CR 100

Current year revaluation decrease of 300

- OCI = DR 100
- P&L = DR 200

Total decrease of 300
NET REPLACEMENT VALUE

• Before an item is re-measured:
  • Close off accumulated depreciation to the cost account
  • This is done by the following:
    • Dr the accumulated depreciation account
    • Cr cost
  • The effect is the item of PPE is now carried at its carrying amount and accumulated depreciation is zero

In effect, this is the “new cost”
EXAMPLE 2- REVALUATION UPWARD

AAA (Pty) Ltd revalued its machinery to fair value for the first time on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R 1 500 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000).

Required:

1. Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.
### SOLUTION

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>31/12/20X6</td>
<td>Accumulated depreciation: machinery</td>
<td>600 000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machinery: cost</td>
<td></td>
<td>600 000</td>
</tr>
<tr>
<td></td>
<td>Reversal of accumulated depreciation against the cost of machinery before revaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31/12/20X6</td>
<td>Machinery: cost</td>
<td>300 000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revaluation Surplus (OCI)</td>
<td></td>
<td>300 000</td>
</tr>
<tr>
<td></td>
<td>Recognition of revaluation surplus upon revaluation to fair value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXAMPLE 3-REVALUATION DOWNWARD

AAA (Pty) Ltd revalued its machinery to fair value for the first time on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R 1 100 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000).

Required:

1. Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.
<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>DR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>31/12/20</td>
<td>Accumulated depreciation: machinery</td>
<td>600 000</td>
<td></td>
</tr>
<tr>
<td>X6</td>
<td>Machinery: cost</td>
<td></td>
<td>600 000</td>
</tr>
<tr>
<td></td>
<td>Reversal of accumulated depreciation against the cost of machinery</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>before revaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31/12/20</td>
<td>Revaluation decrease (P/L)</td>
<td>100 000</td>
<td></td>
</tr>
<tr>
<td>X6</td>
<td>Machinery: cost</td>
<td></td>
<td>100 000</td>
</tr>
<tr>
<td></td>
<td>Recognition of revaluation decrease upon revaluation to fair value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXAMPLE 4- UPWARD AND DOWNWARD

AAA (Pty) Ltd revalued its machinery to fair value for the on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R1 100 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000). The balance of the revaluation surplus before the revaluation was R100 000.

Required:

1. Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.
## SOLUTION

<table>
<thead>
<tr>
<th>Date</th>
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<td>Reversal of accumulated depreciation against the cost of machinery</td>
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<tr>
<td></td>
<td>before revaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31/12/20</td>
<td>Revaluation Surplus (OCI)</td>
<td>100 000</td>
<td></td>
</tr>
<tr>
<td>X6</td>
<td>Machinery: cost</td>
<td></td>
<td>100 000</td>
</tr>
<tr>
<td></td>
<td>Recognition of revaluation decrease upon revaluation to fair value</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>against existing balance of revaluation surplus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If major components of PPE have significantly different patterns of consumption of economic benefits, then each component will be depreciated separately. At initial recognition the cost should be allocated to these major components.

If the consumption of economic benefits are not significantly different then the item of PPE will be depreciated as a single unit.

Depreciation expense should be recognised in most instances in P&L.
DEPRECIABLE AMOUNT

The estimated amount that an entity would CURRENTLY obtain from disposal of an asset less estimated cost of disposal, if the asset were ALREADY AT THE AGE AND EXPECTED CONDITION AT THE END OF ITS USEFUL LIFE.

Cost ——— Residual value = Depreciable amount
EXAMPLE 5-RESIDUAL VALUES

• An entity is attempting to calculate the residual value of a building it owns and holds for use. Buildings of a similar age and in a similar condition to what this building will be in at the end of its useful life have sold for R2 million recently. It is estimated that this building will be sold for R4 million at the end of its useful life, which, when discounted to today, is R2,6 million.

You are required to

A  Discuss which figure must be used as the residual value of this building.
The depreciation period, represented by this line commences when an item of PPE is available for use up until the date of disposal or Derecognition. Depreciation does not cease if the asset is idle within this period.
DEPRECIATION METHODS S17.22-S17.23

A method that best reflects how the economic benefits of an item of PPE is consumed should be used.

- **Straight line**
  - Depreciable amount over the estimated useful life of the item of PPE

- **Reducing balance**
  - The cost multiplied by the reducing balance percentage

- **Units of output**
  - The depreciable amount over the estimated total units, multiplied by the actual units in the period
EXAMPLE 6- DEPRECIATION METHODS

Calculate the depreciation p.a. for a vehicle with a cost of R500 000 as per the following:

• A) Using the straight line method with a useful life of 5 years
• B) Using the reducing balance method with a rate of 20%
• C) Using the units of production method assuming the vehicle did 25 000 kms in the current year and has a total estimated mileage capacity of 300 000 kms.
SOLUTION

A. \( \frac{500\,000}{5} = 100\,000 \)
B. \( 500\,000 \times 20\% = 100\,000 \)
C. \( 500\,000 \times \left( \frac{25000}{300000} \right) = 41.667 \)
DEPRECIATION ESTIMATES

Factors used to determine useful lives
1. Expected usage of the asset
2. Expected physical wear and tear of the asset
3. Technical or commercial obsolescence
4. Legal limits such as lease expiry dates (will be covered in more detail when leases are covered.)
The gain/loss from Derecognition shall be recognised in P&L. The gain/loss calculated is the difference between the proceeds on disposal and the carrying amount of the item of PPE.
An entity shall disclose the following for each class of property, plant and equipment determined in accordance with paragraph 4.11(a) and separately for investment property carried at cost less accumulated depreciation and impairment:
PRESENTATION AND DISCLOSURE
(NOTE INFORMATION)

• (a) the **measurement** bases used for determining the gross carrying amount;
• (b) the depreciation methods used;
• (c) the useful lives or the depreciation rates used;
• *These are usually shown in the accounting policy*
PRESENTATION AND DISCLOSURE (RECON INFORMATION)

(d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the reporting period; and

(e) a reconciliation of the carrying amount at the beginning and end of the reporting period showing separately:

(i) additions;
(ii) disposals;
(iii) acquisitions through **business combinations**;
(iv) increases or decreases resulting from revaluations under paragraphs 17.15B–17.15D and from impairment losses recognised or reversed in other comprehensive income in accordance with Section 27;
(v) transfers to and from investment property carried at fair value through profit or loss (see paragraph 16.8);
(vi) impairment losses recognised or reversed in profit or loss in accordance with Section 27;
(vii) depreciation; and
(viii) other changes.

This reconciliation need not be presented for prior periods.
If items of property, plant and equipment are stated at revalued amounts, an entity shall disclose the following:

(a) the effective date of the revaluation;
(b) whether an independent valuer was involved;
(c) the methods and significant assumptions applied in estimating the items’ fair values;
(d) for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and
(e) the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.