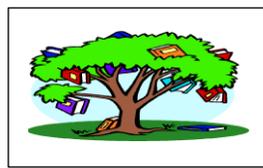


Toward Business Literacy: Accounting Outlines



Long Term Assets

Assets are used for operations, not for resale. They are physical and long term in nature, subject to depreciation (with the exception of land). Assets are accounted for by book value (Cost less depreciation)

- Tangible assets (land, building, equipment) are **depreciated**
- Resources (oil, gas, gold, timber) are **depleted**
- Intangibles (rights, advantages) are **amortized**

Nature of Expenditures

- Capitalized Costs (*balance sheet*) include all costs to acquire, position and ready it for use (purchase, freight, tax, installation).
- Costs are added after acquisition if they add to future service potential, life or quality
- Costs are **expensed** (*income statement*) for repair, maintenance, and operation

Land

Cost of land:

- Purchase price and closing costs (title, attorney, recording)
- Preparation (grading, filling, draining, clearing)
- Assume loans, mortgages and encumbrances; If there is a building, costs up to excavation and removal of old building
- Salvage (old building or timber) is a reduction in the land cost
- Add special assessments for pavement, lights, sewers, drainage

Driveways, walks, fences and parking go to **Land Improvements account**

Land for speculation is an **investment**.

Land held by a real estate concern is **inventory**.

Building *Offices, factories, warehouses*

- Cost of building include design, construction, architect and legal fees and permits

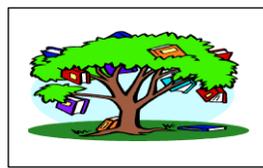
Equipment *Office, machinery, furniture and fixtures*

- Costs of equipment include purchase price, foundations, assembly and installation, trial runs, freight and handling and insurance

Interest on loans for acquisition

- Lower of actual cost or avoidable interest
- Capitalized interest is written off (depreciated) over life of asset (not debt)
- If loan proceeds are invested before needed, do not net the investment
 - Interest expense on loans are deducted from investment revenue

Toward Business Literacy: Accounting Outlines



Valuation issues

- Assets purchased in lump sum → each individual asset is valued proportionately based on FMV times the cost of the purchase
- Example:
 - Total purchase **cost** of two assets is \$1200
 - Fair market value of asset one is \$750; FMV of asset two is \$1500
 - Value of asset one = $(750/2250) \times 1200 = \400
 - Value of asset two = $(1500/2250) \times 1200 = \800
- If stock is exchanged, the asset is valued at the fair value of the stock
- The cost of an asset is whatever was *given up* to purchase asset
- If long term credit is exchanged, the cost is the **present value** of credit
- If self-constructed, cost is direct materials and labor and pro-rata overhead.
- If asset is contributed or donated:

○ JE:	Asset	xxx
	Revenue	xxx

Exchange of non-monetary assets

- Dissimilar assets: acquired asset valued at fair value of asset given up, with recognized gains and losses
- With similar assets and no cash involved, defer gains and recognize losses
- With similar assets and cash (boot) involved, recognize part of the gain.
 $\text{Boot} / (\text{Boot} + \text{Fair value of asset received}) \times \text{total gain} = \text{recognized gain}$

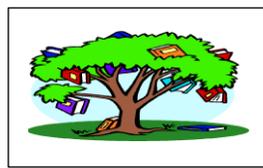
Disposition of Plant Assets

- Recognize gain or loss from continuing operations (normal) or discontinued operations (segment asset is associated with is discontinued)
- Involuntary conversion from fire, flood, theft or condemnation is usually an **extraordinary item** (unusual in nature; infrequent in occurrence)

Retirement of Assets

- May be due to physical factors such as wearing out or being a casualty
- May be due to economic factors such as obsolescence for such reasons as:
 - Inadequacy: demands on the business have increased
 - Supercession: asset is replaced with another more efficient asset
 - Obsolescence: technology is out dated

Toward Business Literacy: Accounting Outlines



Depreciation

Assets wear out and are used up. Depreciation is a contra-account that is subtracted from the cost of the asset to arrive at a book value. Market value may vary from book value. Depreciation expense is the cost to use assets, which are in place to produce revenue. Matching requires that expenses are recognized in the same period that they help generate revenues.

Terms

- **Cost:** purchase price and costs necessary to get asset into place and usable
- **Residual value:** what can be obtained on scrap, salvage or trade-in.
- **Estimated useful life:** how long the asset will serve its purpose
- **Depreciation:** for physical plant and equipment
- **Depletion:** for natural resources
- **Amortization:** for intangible assets and financial instruments

Depletion

For wasting assets and natural resources such as oil, gas, coal and timber

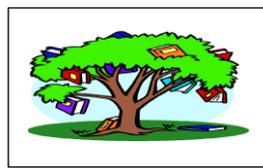
- The cost of these assets are based on:
 - Acquisition cost
 - Property rights may be acquired by lease or land purchase, with mineral rights. Undeveloped property is assigned to the resource if finding minerals is successful; debit loss if not
 - Exploration and discovery cost
 - Expense as incurred; costs that are substantial w/uncertain risk are capitalized
 - Development cost
 - Tangible equipment is not considered in the depletion base
 - Transport and heavy equipment to extract minerals
 - They carry separate depreciation charges
 - Intangible development costs are in the depletion base
 - Drilling costs, tunnels, shafts, wells
 - Restoration cost
 - Costs to restore property after extraction are added to base
- Costs are combined into depletion base, and the quantity of minerals is estimated. The depletion expense is done by the units of production.

JE:	Inventory	xxx	
	Accumulated Depletion		xxx

Full cost vs. Successful Efforts- these two methods are acceptable

- Full cost: unsuccessful ventures are a cost of successful ventures
- Successful efforts: only costs of successful efforts should be capitalized

Toward Business Literacy: Accounting Outlines



Depreciation Methods

Straight-line

- $(\text{Cost} - \text{Residual Value}) / \# \text{ of periods} = \text{depreciation expense per period of use}$
- Example:

Asset cost	\$12000
Residual value	\$2000
Life of asset	10 years

Depreciation expense per year = $(\$12,000 - \$2,000) / 10 = \$1,000$

JE:	Depreciation expense	\$1000
	Accumulated Depreciation	\$1000

- The depreciation expense is the expense for all depreciable assets
- Accumulated Depreciation is asset-specific and is a contra account set off against the cost of the individual asset on the Balance Sheet

Declining balance

- Don't take into consideration residual value until the end
- Total cost multiplied by $(1/\text{estimated life}) \times 2$
- Apply $(1/\text{estimated life}) \times 2$ to a declining balance
- At the end, don't let the balance fall below residual value
- Using same information above:
 $\$12000 \times (1 \text{ divided by } 10 \text{ (years)} \text{ times } 2) = \$2400 \text{ (1st yr. expense)}$
 $\$12000 \text{ less } \$2400 \text{ times } 1/5 \text{ (2nd yr. expense)}$

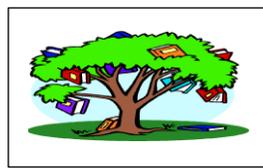
Activity or units of production

- Take the cost less the salvage value and divide by the estimated units of production the asset is capable of during its life → this is the rate
- Every year, take this rate and multiply by the actual year's output
- Using the same information above, assume that the asset can produce 20000 units.
The depreciation expense per unit is:
 $\$12000 - \$2000 = \$10000 \text{ divided by } 20000 = \0.50 per unit
1st year's production = $3000 \text{ units} \times \$0.50 = \$1500 \text{ depreciation expense}$

Sum of the year's digits

- An accelerated method; the rate is # of years left divided by the sum of the year's digits
- Example: for a 5 year life, the rate for the 1st year is:
 $5 \text{ divided by } 5+4+3+2+1 \text{ or } 5/15$
 - The 2nd year's rate is $4/15$ and so on

Toward Business Literacy: Accounting Outlines



Impairment

Impairment of Real Assets

- This is when carrying amount is not recoverable
 - Significant decrease in market value
 - Change in extent or manner an asset is used
 - Adverse change in legal factors or business climate
 - Accumulation of costs in excess of original
 - Projection of losses associated with an asset
- Recoverability test:
 - If the estimated future net cash flows (fair market value) are less than the carrying amount, the asset is impaired and loss is recognized. The reduced carrying value becomes new cost basis.
 - Example:
 - Asset cost is \$10000 with Accumulated Depreciation of \$5000 → book value of \$5000
 - The fair market value is \$2000; there is impairment
 - JE:

Loss on impairment	\$3000	
Asset		\$3000
 - The new cost basis is \$2000 with no A/D
 - Impairment loss may not be restored for asset held for us

Impairment of Investments

- Loss of major customers, changing economic conditions, loss of significant patent or legal right, damage to reputation
 - Non-temporary loss in value is same as loss of other long-term assets
 - Absence of ability to recover carrying amount of investment
- Write down is a realized loss
 - Debt is not probable to be able to collect
 - Equity: Net Realizable Value is less than the carrying amount
 - Time duration of condition, financial condition & investors intent and ability to persevere
- If value of stock is reduced to zero, discontinue equity method (the account retains a zero balance)
- When the stock is going to be sold → Update the carrying value
 - If the value goes below the requirement for the equity method, there is no retroactive adjustment