

Chapter Seven

Accounting for Property, Plant, & Equipment

And accounting for Depreciation

Property, plant, and equipment is defined as (tangible assets that are held for use in production or supply of goods and services, for rentals to others, or for administrative purposes; they are expected to be used during more than one period.

Property, plant, and equipment therefore includes land, building structures (offices, factories, warehouses), and equipment (machinery, furniture, tools). The major characteristics of property, plant, and equipment are as follows.

1. They are acquired for use in operations and not for resale.
2. They are long-term in nature and usually depreciated.
3. They possess physical substance.

Acquisition of Property, Plant, and Equipment

Most companies use historical cost as the basis for valuing property, plant, and equipment. Historical cost measures the cash or cash equivalent price of obtaining the asset and bringing it to the location and condition necessary for its intended use.

In general, costs include:

1. Purchase price, including import duties and non-refundable purchase taxes, less trade discounts and rebates.
2. Costs attributable to bringing the asset to the location and condition necessary for it to be used in a manner intended by the company.

Companies value property, plant, and equipment in subsequent periods using either the cost **method or fair value (revaluation) method.**

Cost of Land

All expenditures made to acquire land and ready it for use. Costs typically include:

1. purchase price;
2. closing costs, such as title to the land, attorney's fees, and recording fees;
3. costs of grading, filling, draining, and clearing;

4. assumption of any liens, mortgages, or encumbrances on the property;
and
5. additional land improvements that have an indefinite life

Cost of Buildings

Includes all expenditures related directly to acquisition or construction. Costs include:

1. materials, labor, and overhead costs incurred during construction and
2. professional fees and building permits.
3. Companies consider all costs incurred, from excavation to completion, as part of the building costs.

Cost of Equipment

Include all expenditures incurred in acquiring the equipment and preparing it for use. Costs include:

1. purchase price,
2. freight and handling charges,
3. insurance on the equipment while in transit,
4. cost of special foundations if required,
5. assembling and installation costs, and
6. costs of conducting trial runs.

Contrasting long-lived Asset Expenditures with Expenses

Companies capitalize expenditures for assets that benefit more than the current accounting year; that is, they add the purchase price to an asset account rather than expensing it immediately. Capital expenditures add new assets or increase the capacity, efficiency, or useful life of existing assets. They become expenses in the future, when the company uses the assets. In contrast, expenditures that provide a benefit lasting one year or less become expenses in the current year.

Example (1): Assume the cost of land cash price is \$50,000 and the purchaser agrees to pay accrued taxes of \$5,000, **the cost of the land is \$55,000.**

Land	55000
Cash \ Accounts payable	55000
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Example (2): Assume that Lenard Company purchases a delivery truck at a cash price of \$22,000. Related expenditures consist of sales taxes \$1,320, painting and lettering \$500,

Solution:

Cost of delivery truck= (22,000+1,320+500)

Equipment	23,820
Cash	23,820

To record purchase of delivery truck and related expenditures

Accounting for Depreciation:

Depreciation is the accounting process of allocating the cost of tangible assets to expense in a systematic and rational manner to those periods expected to benefit from the use of the asset.

Allocating costs of long-lived assets:

1. Fixed assets = Depreciation expense
2. Intangibles = Amortization expense
3. Mineral resources = Depletion expense

Factors Involved in the Depreciation Process:

Three basic questions:

1. **What depreciable base is to be used?**
2. **What is the asset's useful life?**
3. **What method of cost apportionment is best?**

Factors in Computing Depreciation:

1. **Cost:** all expenditures necessary to acquire the asset and make it ready for intended use.
2. **Useful life:** Estimate of the expected life based on need for repair, service life, and vulnerability to obsolescence
3. **Salvage value:** Estimate of the asset's value at the end of its useful life.

Computation of Depreciable Base: From a practical standpoint, companies often assign a zero residual value. Some longlived assets, however, have substantial residual values.

Original cost	€10,000
Less: Residual value	<u>1,000</u>
Depreciation base	<u>€ 9,000</u>

Estimation of Service Lives: The service life of an asset often differs from its physical life. A piece of machinery may be physically capable of producing a given product for many years beyond its service life. But a company may not use the equipment for all that time because the cost of manufacturing the product in later years may be too high.

Service life often differs from physical life.

Companies retire assets for two reasons:

1. Physical factors (casualty or expiration of physical life).
2. Economic factors (inadequacy, supersession, and obsolescence).