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Educational Case

A case of fixed asset accounting: Initial and subsequent measurement

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A R T I C L E I N F O

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A B S T R A C T

This instructional case integrates multiple accounting concepts relating to fixed asset acquisition and subsequent measurement. You must apply accounting knowledge, professional judgment, and critical thinking skills to evaluate fixed assets and make recommendations. You must also analyze differences between fixed asset accounting under US generally accepted accounting principles and IFRS. As a student, you generally understand basic application of asset cost computation that simply recognizes the amount of cash paid for acquiring the asset. However, determining asset cost becomes challenging when you encounter more complex situations. You must consider initial measurement issues relating to a land purchase (demolition of existing building and a special assessment expenditure), interest capitalization for a self-constructed building, a nonmonetary asset exchange, and an asset retirement obligation. The case also considers subsequent measurement issues in terms of depreciation (straight-line and accelerated methods), replacement of an asset component, and impairment. The case structure is flexible and the teaching notes include alternatives for using scaled-down versions.

1. Case

1.1. Introduction

Playful Pals, Inc. (PPI) manufactures children toys. The company began operations on January 1, 2015 and has a December 31 year-end. PPI is compiling data about fixed assets for its financial statements

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prepared under US generally accepted accounting principles (US GAAP). You are to prepare a report addressing issues relating to accounting for PPI's fixed assets. Part 1 considers initial measurement of asset costs and depreciation for the company's first year of operations. Part 2 analyzes events in a subsequent year of operations. Part 3 evaluates how application of International Financial Reporting Standards (IFRS) would impact accounting for PPI's fixed assets. You must research and reference relevant sources throughout your report, as appropriate, to support your conclusions and recommendations. Relevant sources include US GAAP, IFRS, accounting standard setters' conceptual frameworks, and tax regulations.

1.2. Part 1: initial year of operations

In 2015, PPI purchased land on January 1 for $100,000. When the company purchased the land, there was an existing building on the property. On February 3, PPI paid $20,000 in demolition costs to remove this old building. On March 3, PPI paid a $5000 special assessment to the local municipality for sidewalks on the property. The company also paid $6500 on March 3 to install fencing around the property's perimeter. PPI constructed a new building on the property to house its operations. Construction began March 3 and ended June 30. PPI moved into the new building and began using it for operations on July 1. The company made the following expenditures for construction of the new building: $125,000 (March 3); $100,000 (April 1); $75,000 (May 1); $100,000 (June 2); and $50,000 (July 1). During the construction period, PPI used a portion of the land as a general parking area for other local businesses and area visitors and collected parking fees. PPI collected a total of $30,000 in parking fees during the construction period. PPI also purchased the following in 2015: production machinery on January 1 for $80,000; office equipment on May 1 for $7500; and office furniture on July 1 for $7000.

The company also provides the following information regarding its debt. On January 1, 2015, PPI signed a $300,000 2-year note to finance general operations. Under the note's terms, PPI will make a 10 percent annual interest payment on January 1, 2016. Note principal plus additional 10 percent annual interest is due on January 2, 2017. On March 3, PPI signed a $400,000 4-year note to finance construction of the building. Under this note's terms, PPI will make 8 percent annual interest payments on March 3, 2016, 2017, and 2018. Note principal plus additional 8 percent annual interest is due on March 3, 2019.

All of the above amounts are pre-tax figures. Annual 2015 pre-tax income before accounting for any of the above items is $50,000. PPI's effective tax rate is 40 percent. Events and circumstances do not suggest impairment of any fixed assets as of December 31, 2015. PPI estimates the new building's salvage value is $20,000. PPI does not estimate salvage values for any other fixed assets. Based on manufacturers' specifications and industry reviews for the production machinery, PPI anticipates the machinery will be most productive earlier in its life and that maintenance costs directly correlate with the age of the machinery. However, PPI intends to retain the machinery and use it for as long as possible. In your report, address the following:

- Identify PPI's depreciable fixed assets as of December 31, 2015. For each depreciable asset, make a professional judgment to determine an appropriate useful life. Present a listing of PPI's depreciable fixed assets with the following data: asset item, date placed in service, cost, salvage value, and useful life. Explain your process for determining the appropriate useful lives, citing relevant sources to support your determinations.
- Compute and present annual depreciation expense for December 31, 2015 through December 31, 2019 (five years) for each depreciable fixed asset using each of the following methods: straight-line, 150 percent declining-balance, and sum-of-the-years' digits. Discuss the implications of each method of computing depreciation for PPI's results in 2015, citing relevant sources to support as appropriate.
- Recommend a depreciation method for financial statement reporting of each of PPI's depreciable fixed assets, with logical reasoning and justification for your recommendations. (Note: Methods do not have to be the same for all assets.) What is PPI's 2015 net income based on your recommendations?
- Independent of your recommendations, discuss which method you would choose if you are part of PPI's upper management. Assume you have a cash bonus based on reported net income and intend to stay with the company for three years. Why would you choose this method? Would your choice

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