# 11. The Units-of-Output Method

This technique involves calculations that are quite similar to the straight-line method, but it allocates the depreciable base over the units of output (e.g., machine hours) rather than years of use. It is logical to use this approach in those situations where the life is best measured by identifiable units of machine "consumption." For example, perhaps the engine of a corporate jet has an estimated 50,000 hour life. Or, a printing machine may produce an expected 4,000,000 copies. In cases like these, the accountant may opt for the units-of-output method. To illustrate, assume Data Nguyen Painting Corporation purchased an air filtration system that has a life of 8,000 hours. The filter costs $100,000 and has a $10,000 salvage value. Nguyen anticipates that the filter will be used 1,000 hours during the first year, 3,000 hours during the second, 2,000 during the third, and 2,000 during the fourth. Accordingly, the anticipated depreciation schedule would appear as follows (if actual usage varies, the schedule would be adjusted for the changing estimates using principles that are discussed later in this chapter):

| | Depreciation Expense | Accumulated Depreciation at End of Year | Annual Expense Calculation |
|---|---|---|---|
| Year 1 | $11,250 | $11,250 | 1,000 hours/8,000 hours X ($100,000 - $10,000) |
| Year 2 | $33,750 | $45,000 | 3,000 hours/8,000 hours X ($100,000 - $10,000) |
| Year 3 | $22,500 | $67,500 | 2,000 hours/8,000 hours X ($100,000 - $10,000) |
| Year 4 | $22,500 | $90,000 | 2,000 hours/8,000 hours X ($100,000 - $10,000) |

The form of journal entry and balance sheet account presentation are just as were illustrated for the straight-line method, but with the revised amounts from the above table.