



2003

## SFAS 143 on Asset Retirement Obligations

Cheri Mazza  
*Sacred Heart University*

Robert H. Colson

Follow this and additional works at: [http://digitalcommons.sacredheart.edu/wcob\\_fac](http://digitalcommons.sacredheart.edu/wcob_fac)

 Part of the [Accounting Commons](#), and the [Business Law, Public Responsibility, and Ethics Commons](#)

---

### Recommended Citation

Mazza, Cheri and Colson, Robert H., "SFAS 143 on Asset Retirement Obligations" (2003). *WCOB Faculty Publications*. Paper 63.  
[http://digitalcommons.sacredheart.edu/wcob\\_fac/63](http://digitalcommons.sacredheart.edu/wcob_fac/63)

This Article is brought to you for free and open access by the Jack Welch College of Business at DigitalCommons@SHU. It has been accepted for inclusion in WCOB Faculty Publications by an authorized administrator of DigitalCommons@SHU. For more information, please contact [ferribyp@sacredheart.edu](mailto:ferribyp@sacredheart.edu).

Beginning in 2003, some calendar year-end companies will apply the provisions of SFAS 143, Accounting for Asset Retirement Obligations, which requires the recognition of a liability for certain obligations associated with the retirement of long-lived assets. Recognition of estimated costs for future retirement activities is not new to some companies, such as those in the extractive, utility, and waste management industries. Others, however, may never have considered accounting for retirement costs until an asset is physically retired and the cash outflows incurred.

### Asset Retirement Obligations

Although a company may not pay cash until an asset is physically retired, it may nonetheless be committed to incur those costs prior to that time--sometimes from the date of acquisition. In an accounting sense, such obligations are "real" liabilities when they meet the definition in FASB Concepts Statement 6, Elements of Financial Statements:

Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.

SFAS 143 applies only to enforceable retirement obligations that result from the acquisition, construction, development, or normal operation of a long-lived asset. Examples include a contractual obligation to tear down a manufacturing facility upon retirement or a legal obligation to decontaminate a nuclear power plant at the end of its operating life. The former obligation would be incurred upon the construction of the manufacturing facility. The latter obligation would be incurred throughout the operating life of the power plant as it is contaminated with nuclear waste.

Obligations resulting from the improper operation of an asset are not within the scope of SFAS 143 but may be covered in other accounting pronouncements, such as AICPA Statement of Position 96-1, Environmental Remediation Liabilities. Such obligations are reasonably avoidable, are generally unpredictable, and are not likely to occur. Alternatively, those obligations incurred in the normal operation of an asset within the scope of SFAS 143 are predictable and likely to occur. For example, an obligation associated with an accidental oil spill would not be within the scope of SFAS 143. An obligation associated with the normal chemical emissions of a pharmaceutical manufacturer would be.

### Initial Recognition

The focus of SFAS 143 is on liability recognition and measurement. When a company recognizes a liability for an asset retirement obligation, it will also recognize an equal amount as an increase to the carrying amount of the associated long-lived asset. Therefore, to avoid confusing references to the amount recorded as a liability and the amount recorded as an asset, SFAS 143 makes a distinction between an asset retirement obligation and an asset retirement cost. The former refers to the credit side of the entry (liability), and the latter refers to the debit side of the entry (capitalized cost).

A company must recognize a liability for an asset retirement obligation in the period in which the obligation meets the definition of a liability and the amount of the liability can be reasonably estimated. A retirement obligation meets the definition of a liability when 1) a company has a duty or responsibility to a third party that requires settlement by a future transfer of cash; 2) there is little or no discretion to avoid that future transfer of cash; and 3) the obligating event giving rise to the duty or responsibility has already occurred.

With respect to asset retirement obligations, the obligating event will fall into one of two broad categories. In one category, the event is the acquisition, construction, or development of the asset. For example, if XYZ is legally obligated to fill in a swimming pool when that pool is retired, the construction or acquisition of the pool is the obligating event requiring liability recognition. The operation of the pool does not create any further duty or responsibility. The second category includes events occurring while the asset is operated, such as those that stem from land damage or contamination. Because those obligations occur ratably over the life of the asset, they are recognized as liabilities periodically during its operation.

### Initial Measurement

SFAS 143 is very specific about the use of a fair-value-based measurement for the liability and incorporates the FASB's latest thinking about the use of cash flows in estimating fair value as outlined in Concepts Statement 7, Using Cash Flow Information and Present Value in Accounting Measurements. Specifically, the measurement of a liability for an asset retirement obligation should equal what a willing third party would require currently to assume the company's liability. Generally, companies use future cash flows to estimate the fair value of the liability. If those cash flows are uncertain in timing or amount, companies must apply an expected present value technique.

An expected present value technique begins with a set of estimated cash flows using, to the extent possible, marketplace amounts. In estimating the cash flows, a company is to maintain a "fair value" discipline by incorporating assumptions that a third party would include in determining its price, including the costs it would incur in performing the retirement activities; items such as inflation, overhead, equipment charges, and profit margin; and the uncertainties and unforeseeable circumstances inherent in the obligation. Each cash flow set is probability weighted to incorporate uncertainties about timing and amount. The probability-weighted amounts are then discounted using a current risk-free rate adjusted for the effect of the company's credit standing. That amount, which is the estimated fair value, is recognized as a liability and capitalized as part of the carrying amount of the long-lived asset.

### Subsequent-Period Accounting

Increased asset amounts and discounted liability measurements result in expenses on the income statement for depreciation and interest, respectively. Therefore, subsequent to initial recognition, a company will recognize depreciation expense on the amount of the asset retirement cost capitalized as part of the long-lived asset. Generally, a company will simply increase the depreciable base of the asset by the amount of the asset retirement cost and spread the total depreciable amount over its remaining useful life.

With respect to the liability, a company will measure the amount of interest expense by multiplying the beginning carrying amount times the discount rate used to initially measure the liability at fair value. SFAS 143 does not require a company to label that amount as interest expense, but suggests the term "accretion expense," classified as an operating item on the income statement.

Periodically, companies also must assess whether there are any changes in the underlying assumptions in estimating the cash flows incorporated into the liability measurement. If estimated cash flows change, they are incorporated into the carrying amount of the liability and the carrying amount of the asset as was required upon initial recognition. SFAS 143 requires increases in cash flow estimates to be discounted using the current credit-adjusted risk-free rate; decreases in cash flow estimates must be discounted using the credit-adjusted risk-free rate used in the initial measurement of the liability.

For example, assume a company discounted its initial liability using an 8% rate. In a subsequent period, when its credit-adjusted risk-free rate is 9%, the company revises the cash flow estimates embedded in the liability. If the revision increases the underlying cash flows, it will be incorporated at the 9% rate. If the revision decreases the underlying cash flows, however, it will be incorporated at the 8% rate.

### Transition Provisions

Upon adoption of SFAS 143, a company will apply the provisions to assets already held. Therefore, a company should begin assessing whether there are any contractual arrangements or legal requirements associated with the ultimate retirement of its tangible long-lived assets. If an asset retirement obligation exists, the company must recognize amounts on the balance sheet for the liability adjusted for cumulative interest, the asset retirement cost, and accumulated depreciation. In the income statement, the company will recognize a cumulative-effect adjustment.

A company must measure transition amounts using current information, current assumptions, and current interest rates. For example, if a company first applies the provisions of SFAS 143 on January 1, 2003, to an asset retirement obligation incurred on January 1, 2000, it would use cash flow assumptions and discount rates from January 1, 2003. Nonetheless, it would apply the recognition provisions as of January 1, 2000. That would result in the recognition of a liability adjusted for three years of cumulative interest, capitalization of an asset retirement cost that would be equal to the liability before being adjusted for cumulative interest, and three years of accumulated depreciation on that cost. Assuming the company did not have amounts recorded before the adoption of SFAS 143, the net of those

three amounts would equal the cumulative effect adjustment reported in the income statement for the period of adoption.

~~~~~

By **Cheri Reither Mazza** and Robert H. Colson, PhD, CPA, Editor, The CPA Journal

**Cheri Reither Mazza**, PhD, CPA, is an associate professor at Fordham University, New York City.