Statement of Financial Accounting Standards No. 39

Note: This Statement has been completely superseded

FAS39 Status Page
FAS39 Summary

Financial Reporting and Changing Prices: Specialized Assets—Mining and Oil and Gas

(a supplement to FASB Statement No. 33)

October 1980

Financial Accounting Standards Board
of the Financial Accounting Foundation
401 MERRITT 7, P.O. BOX 5116, NORWALK, CONNECTICUT 06856-5116

Statement of Financial Accounting Standards No. 39

Financial Reporting and Changing Prices:

Specialized Assets--Mining and Oil and Gas

a supplement to FASB Statement No. 33

October 1980

CONTENTS

FAS 39: Financial Reporting and Changing Prices: Specialized Assets—Mining and Oil and Gas

a supplement to FASB Statement No. 33

FAS 39 Summary

FASB Statement No. 33, *Financial Reporting and Changing Prices*, requires companies that meet specified size tests to disclose certain supplementary information on both a historical cost/constant dollar basis and a current cost basis. This Statement:

- Applies the provisions of Statement 33 for measuring current costs to the mineral resource assets of mining and oil and gas enterprises.
- Requires the disclosure of information about quantities, production, and selling prices of mineral resources other than oil and gas reserves.

The information required by this Statement, like the information required by Statement 33, is experimental. This Statement will be reviewed comprehensively, at the same time as Statement 33, after a period of not more than four years.

In recent years, extensive new disclosure requirements have been imposed on the oil and gas industry. The Board intends to study further the usefulness of those requirements in providing information about the effects of changing prices. It intends to work with the oil and gas industry and the Securities and Exchange Commission to refine the requirements and to develop improved methods of presentation.

INTRODUCTION

1. FASB Statement No. 33, *Financial Reporting and Changing Prices*, establishes standards for reporting certain effects of price changes on business enterprises. Statement 33 requires that large public enterprises disclose information on both historical cost/constant dollar and current cost bases. However, that Statement does not contain provisions for measuring income-producing real estate or unprocessed natural resources and related depreciation, depletion, and amortization expense on a current cost basis for fiscal years ended on or

after December 25, 1980. The Board decided to undertake further studies of the usefulness of current cost information for those types of assets and expenses. This Statement supplements Statement 33 by requiring measurement of mineral resource assets and related expenses at current cost or lower recoverable amount.

2. The current cost of mineral resource assets is given by current market buying prices or by the current cost of finding and developing mineral reserves. The Board recognizes that no generally accepted approach exists for measuring the current finding cost of mineral reserves. To indicate the effects of changes in current costs, it may be impracticable to do more than adjust historical cost by an index of the changes in specific prices of the inputs concerned. That approach may fail to yield a close approximation of the current cost of finding and developing new reserves. In recognition of this difficulty, the requirements of this Statement are flexible regarding the approach used to measure current cost. The approach may include use of specific price indexes, direct information about market buying prices, and other statistical evidence of the cost of acquisitions; enterprises are required to disclose the types of information that have been used. The Board believes that historical costs adjusted by specific price indexes can be useful for the assessment of certain effects of changing prices on an enterprise. For the purposes of aggregate measurements on a current cost basis, that information is preferable to the alternatives of making no adjustment to historical cost or of using historical cost adjusted for changes in the general price level.

3. Statement 33 refers to the need for experimentation on the usefulness of alternative types of information about the effects of changing prices on business enterprises. It also provides, within certain guidelines, flexibility to encourage the development of new techniques that fit the circumstances of particular enterprises. Those considerations are equally applicable to the provisions of this Statement. The Board intends to review the requirements of this Statement on an ongoing basis and to add, amend, or withdraw requirements whenever that course is justified by the evidence. This Statement will be reviewed comprehensively at the same time as Statement 33.

4. The oil and gas industry is the subject of a large number of disclosure requirements (including reserve recognition accounting) introduced by the Board and the Securities and Exchange Commission (SEC). The Board has decided not to call for the disclosure of any new information, apart from information on a current cost basis, until it has studied further the usefulness of all requirements for assessing the effects of changing prices. The Board intends to work with the industry and with the SEC during 1981 to attempt to refine disclosure requirements. As part of that process, it will consider the usefulness of additional disclosures supported by commentators on the FASB Exposure Draft, *Financial Reporting and Changing Prices: Specialized Assets*, including separate information about income from oil and gas producing activities and information that is useful for assessing the fair value of mineral resource assets; for example, current prices, planned rates of production, and current lifting costs.

STANDARDS OF FINANCIAL ACCOUNTING AND REPORTING

Definitions and Scope

5. For the purposes of this Statement, certain terms are defined as follows:

a. *Mineral resource assets* are assets that are directly associated with and derive value from all minerals that are extracted from the earth. Such minerals include oil and gas, ores containing ferrous and nonferrous metals, coal, shale, geothermal steam, sulphur, salt, stone, phosphate, sand, and gravel. Mineral resource assets include mineral interests in properties, completed and uncompleted wells, and related equipment and facilities, and other facilities required for purposes of extraction (FASB Statement No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, paragraph 11). The definition does not cover support equipment because that equipment is included in the property, plant, and equipment for which current cost measurements are required by Statement 33.

b. *Proved mineral reserves in extractive industries other than oil and gas* [1] are the estimated quantities of commercially recoverable reserves that, on the basis of geological, geophysical, and engineering data, can be demonstrated with a reasonably high degree of certainty to be recoverable in the future from known mineral deposits by either primary or improved recovery methods.

c. *Probable mineral reserves in extractive industries other than oil and gas* [2] are the estimated quantities of commercially recoverable reserves that are less well defined than proved reserves and that may be estimated or indicated to exist on the basis of geological, geophysical, and engineering data.

d. *Unprocessed natural resources* encompass mineral resource assets, timberlands, and growing timber.

6. The requirements of this Statement apply to the enterprises identified in paragraphs 23 and 24 of Statement 33 and in the manner specified in paragraphs 26-28 of that Statement. The Board encourages nonpublic enterprises and enterprises that do not meet the size tests in paragraph 23 of Statement 33 to present the information called for by this Statement.

7. An enterprise shall disclose the principal types of information used to measure the current cost of mineral resource assets.

8. The disclosures described in paragraphs 9-14 are required by this Statement. Enterprises are encouraged to provide additional information to help users of financial reports understand the effects of changing prices on the activities of the enterprise. Formats that may be used for the presentation of the supplementary information are illustrated in Appendix A of both Statement 33 and this Statement.

Current Cost Information

9. Statement 33, paragraphs 30(a)-(c) and 35(c)(1)-(4), requires the disclosure of supplementary information on a current cost basis. This Statement applies those provisions to mineral resource assets. Accordingly, an

enterprise shall measure the current cost or lower recoverable amount [3] of mineral resource assets and related depreciation, depletion, and amortization expense in computations of:

a. Income from continuing operations on a current cost basis;
b. The current cost amounts of inventory and property, plant, and equipment;[4]
c. Increases or decreases in the current cost amounts of inventory and property, plant, and equipment, net of inflation;
d. Current cost information in the five-year summary of selected financial data.

10. Paragraph 51 of Statement 33 deals with the measurement of the current cost amounts of inventory and property, plant, and equipment. Subparagraph 51(b) excludes income-producing real estate and unprocessed natural resources from provisions applicable to property, plant, and equipment. That subparagraph is superseded by the following:

> Property, plant, and equipment at the current cost or lower recoverable amount (paragraphs 57-64) of the assets' remaining service potential at the measurement date. (This provision is qualified by paragraph 53 as amended by FASB Statement No. 39, *Financial Reporting and Changing Prices: Specialized Assets — Mining and Oil and Gas*, in respect of income-producing real estate and unprocessed natural resources.)

11. Paragraph 52 of Statement 33 deals with the measurement of cost of goods sold and depreciation and amortization expense. Line 4 of paragraph 52 shall be amended by the insertion of the word "depletion" after "depreciation." Subparagraph 52(b) excludes income-producing real estate and unprocessed natural resources from provisions applicable to property, plant, and equipment. Subparagraph 52(b) is superseded by the following:

> Depreciation, depletion, and amortization expense of property, plant, and equipment shall be measured on the basis of the average current cost or lower recoverable amount (paragraphs 57-64) of the assets' service potential during the period of use. (This provision is qualified by paragraph 53 in respect of income-producing real estate and unprocessed natural resources.)

12. Paragraph 53 of Statement 33 contains interim provisions for the measurement of income-producing real estate and unprocessed natural resources. It is superseded by the following:

> This Statement does not contain provisions for the measurement, on a current cost basis, of income-producing real estate and unprocessed natural resources and related expenses for fiscal years ended before December 25, 1980 (paragraph 19). If an enterprise presents information on a current cost basis for a fiscal year ended before December 25, 1980, it may measure those assets and related expenses at their historical cost/constant dollar amounts or by reference to an appropriate index of specific price changes. When an enterprise presents information on a current cost basis for fiscal years ended on or after December 25, 1980, it shall measure mineral resource assets and related depreciation, depletion, and amortization expense in accordance with the provisions in this Statement for the measurement of

property, plant, and equipment and related expenses.

Quantity and Price Information

13. Enterprises that own mineral reserves other than oil and gas [5] shall disclose the following information for each of their five most recent fiscal years:

a. Estimates of significant quantities of proved, or proved and probable (whichever is used for cost amortization purposes) mineral reserves, other than oil and gas, at the end of the year or at the most recent date during the year for which estimates can be made. If estimates are not made as of the end of the year, the disclosures shall indicate the dates for which they apply.
b. The estimated quantity, expressed in physical units or in percentages of reserves, of each mineral product that is recoverable in significant commercial quantities if the mineral reserves included under section (a) include deposits containing one or more significant mineral products.
c. The quantities of each significant mineral produced during the year. If the mineral reserves included under section (a) are ores that are milled or similarly processed, the quantity of each significant mineral product produced by the milling or similar process shall also be disclosed.
d. The quantity of significant proved, or proved and probable, mineral reserves purchased or sold in place during the year.
e. For each significant mineral product, the average market price, or for mineral products transferred within an enterprise, the equivalent market price prior to use in a manufacturing process.

14. In determining the quantities to be reported in conformity with paragraph 13:

a. If the enterprise issues consolidated financial statements, 100 percent of the quantities attributable to the parent company and 100 percent of the quantities attributable to its consolidated subsidiaries (whether or not wholly owned) shall be included.
b. If the enterprise's financial statements include investments that are proportionately consolidated, the enterprise's quantities shall include its proportionate share of the investee's quantities.
c. If the enterprise's financial statements include investments that are accounted for by the equity method, the investee's quantities shall not be included in the disclosures of the enterprise's quantities. However, the enterprise's (investor's) share of the investee's quantities of reserves shall be reported separately, if significant.

Effective Date and Transition

15. The provisions of this Statement shall be effective for fiscal years ended on or after December 25, 1980. Disclosure of information incorporating current cost measurements of mineral resource assets and information about quantities and prices for fiscal years ended before December 25, 1980 is encouraged but not required.

16. An enterprise that is first required to apply the provisions of this Statement for fiscal years ended on or after December 25, 1981 is not required to disclose the information for earlier years, although disclosure for

earlier years is encouraged.

The provisions of this Statement need not be applied to immaterial items.

This Statement was adopted by the affirmative votes of five members of the Financial Accounting Standards Board. Messrs. Sprouse and Walters dissented.

Messrs. Sprouse and Walters dissent primarily because they believe that requiring enterprises to attempt to estimate the current cost of finding oil and gas reserves is a futile exercise that tends to detract significantly from the usefulness and credibility of disclosures of current cost information about other assets and by other enterprises for which provision of that information is reasonably feasible and meaningful.

This Statement provides some flexibility for determining current cost information, but basically it provides that current cost should reflect the method of acquisition that would currently be appropriate in the circumstances of the enterprise. That approach may be reasonable for assets that can be purchased or manufactured within a reasonable period of time, but estimating the current costs of finding oil and gas reserves by applying specific price indexes to historical costs or by substituting current costs for the amount of labor, materials, and activities used to discover oil and gas reserves in the past is seriously defective. Because that aspect of reliability referred to as representational faithfulness is totally lacking in that approach, the credibility of supplementary information about changing prices generally is likely to be diminished. The defects are accentuated in the case of oil and gas reserves because two significantly different methods of accounting for the historical costs of finding those reserves are presently in use.

Determining the current cost of finding oil and gas reserves in existing quantities is simply not feasible. Indeed, it may not be possible to find existing quantities at any cost and it is impossible to estimate the quantity that might be found at any particular cost. Therefore, attempts to estimate the current cost of finding oil and gas reserves are unlikely to provide relevant and reliable information for users' assessments of future cash flows, maintenance of operating capability, or financial performance. Unfortunately, requiring that such estimates be inextricably intermingled with other current cost information that could be relevant and reasonably reliable detracts seriously from the usefulness of that other information as well.

Messrs. Sprouse and Walters believe that estimates of fair value of mineral reserves would be highly relevant, but they agree that such estimates are not sufficiently reliable at present to serve as a basis for a supplementary calculation of income from continuing operations or to be presented separately as supplementary information. Instead, they would favor requiring presentation of supplementary information about oil and gas reserves that is similar to that required by this Statement for other mineral reserves: estimated reserve quantities by major geographical areas, current unit prices and current unit production (lifting) costs for those areas, and current production and near-term production plans (e.g., two to three years) for those areas. To enhance comparability and retain the usefulness of current cost information about other assets and downstream activities (e.g., the refining and marketing activities of an integrated oil and gas enterprise), current cost information should be limited to those other assets and activities. It also should be disclosed separately from information about oil and gas producing activities, as proposed in the April 21, 1980 Exposure Draft of this Statement.

In their view, that information would (a) provide an acceptably reliable basis for users' assessments of future cash flows, maintenance of operating capability, and financial performance; (b) provide comparable information regardless of the accounting method used by an enterprise; and (c) hopefully, provide an equally relevant and more reliable substitute for the reserve recognition accounting presently required by the SEC. It has been observed that much of the information that Messrs. Sprouse and Walters would favor is presently required in filings with the SEC, but that observation does not relieve the Board of its responsibility to identify and require information that it concludes is sufficient and necessary.

Members of the Financial Accounting Standards Board:

Donald J. Kirk, *Chairman*
Frank E. Block
John W. March
Robert A. Morgan
David Mosso
Robert T. Sprouse
Ralph E. Walters

Appendix A: ILLUSTRATIONS OF DISCLOSURES

17. This appendix illustrates a format for presenting quantity and price information relating to an enterprise's mineral reserves other than oil and gas. The format given here is only an illustration and is not intended to constrain enterprises from experimenting with the use of different forms of presentation. Illustrations of formats for presenting information on a current cost basis are given in Statement 33, Appendix A.

ILLUSTRATION OF SUPPLEMENTARY OPERATING STATISTICS FOR A MINING ENTERPRISE FOR THE FIVE YEARS ENDED 19X5

	19X5	**19X4**	**19X3**	**19X2**	**19X1**
Proven and probable ore reserves at beginning of year (Note)					
Tons (thousands)	21,000	21,500	22,000	23,000	24,000
Copper (percent)	1.10	1.10	1.10	1.10	1.10
Lead (percent)	5.99	5.98	5.98	5.98	5.98
Silver (ounces/tons)	3.79	3.80	3.80	3.75	3.75
Tons of ore milled (thousands)	1,025	1,000	890	900	850
Metal produced (thousands)					
-copper (pounds)	17,250	18,480	16,880	10,980	11,220
-lead (pounds)	92,700	92,400	75,450	53,910	45,750
-silver (ounces)	2,800	2,803	2,270	1,850	1,540
Average market price					
-copper (cents per pound)	85	75	68	72	61
-lead (cents per pound)	44	40	36	36	32
-silver (cents per ounce)	510	400	350	368	325

Proved reserves—The estimated quantities of commercially recoverable reserves that, on the basis of geological, geophysical, and engineering data, can be demonstrated with a reasonably high degree of certainty to be recoverable in the future from known mineral deposits by either primary or improved recovery methods.

Probable reserves—The estimated quantities of commercially recoverable reserves that are less well defined than proved reserves and that may be estimated or indicated to exist on the basis of geological, geophysical, and engineering data.

This form illustrates one method of disclosing information about quantities of minerals owned, marketable products produced, and average market prices for those products. Other formats are acceptable. Information about ore grades and differentiation between the production of ores and of marketable product may not be appropriate for some minerals. The classification and degree of detail should follow normal industry practice. Beginning-of-year reserves are used for illustrative purposes. The requirement is for end-of-year or the most recent date during the year. Ranges of prices during the year may be supplied in addition to average prices.

Appendix B: BACKGROUND

18. Statement 33, issued in September 1979, does not contain provisions for the measurement, on a current cost basis, of income-producing real estate or unprocessed natural resources and related expenses, for periods ending after December 25, 1980 (paragraph 53, Statement 33). The Board concluded in Statement 33 that further studies were required to provide a basis for decisions on the applicability to those assets of the requirement to present information on a current cost basis.

19. Many different categories of assets could have been chosen as suitable subjects for special study, and the identification of categories that merited special treatment involved subjective judgment. The Board began its studies of the measurement of specialized assets on a current cost basis by selecting six industries in which special types of assets were judged to be particularly important, and by forming task groups to advise it on the applicability to the industries concerned of the proposals in the FASB Exposure Draft, *Financial Reporting and Changing Prices*, issued December 28, 1978. Those task groups dealt with banking, forest products, insurance, mining, oil and gas, and real estate. All six task groups held meetings that were open to the public, issued preliminary and interim reports that were widely distributed, and made presentations at a conference on financial reporting and changing prices. The Board concluded in Statement 33 that the general provisions of that Statement were useful and applicable to banking and insurance.

20. With respect to oil and gas, the Board adopted a form of successful efforts accounting in FASB Statement No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, issued in December 1977. Before that Statement became effective, the Securities and Exchange Commission issued ASR No. 253, *Adoption of Requirements for Financial Accounting and Reporting Practices for Oil and Gas Producing Activities*. That release (a) adopted the form of successful efforts accounting called for in Statement 19, (b) indicated an intention to adopt a form of full cost accounting (which was subsequently done), (c) permitted the use of either (a) or (b) for SEC reporting purposes, and (d) concluded that both forms of historical cost accounting fail to provide sufficient information on the financial position and operating results of oil and gas producing companies. Therefore, the release indicated that steps should be taken to develop an accounting method based on valuation of proved oil and gas reserves (reserve recognition accounting). In order to avoid conflicting requirements, the Board suspended the effective date of that part of Statement 19 pertaining to the successful efforts method. After forming the Oil and Gas Advisory Committee and following its due process procedures, the SEC issued ASR No. 269, *Oil and Gas Producers—Supplemental Disclosures on the Basis of Reserve Recognition Accounting* (RRA).

21. Although RRA information, as promulgated by the SEC, is based on a discounted cash flow or a present value methodology, it is not intended to result in a fair value basis of presentation where fair value is the price that would be accepted as reasonable in a transaction between a willing buyer and a willing seller. The valuations under RRA do not represent an estimate of fair value because the methodology does not permit full consideration of expected future economic conditions, varying discount rates, or quantities of probable reserves.

22. The Board and its staff have followed closely the development of RRA. Representatives have attended all meetings of the SEC Advisory Committee and its working committee on measurement. All public comment letters to the SEC have been reviewed by the FASB staff and summarized for the Board's information.

23. Since Statement 33 was issued, the Oil and Gas, Mining, Real Estate, and Forest Products Task Groups have each met one or more times with the FASB staff.

24. On April 21, 1980, the Board issued an FASB Exposure Draft, *Financial Reporting and Changing Prices: Specialized Assets*. The Board received 124 letters of comment on the Exposure Draft.

25. In July 1980, the Board conducted a public hearing on the Exposure Draft. Twenty-one organizations and individuals presented their views at the two-day hearing.

26. After issuing the Exposure Draft, the Board held five open meetings at which it considered the issues dealt with in the Exposure Draft.

27. This Statement differs from the Exposure Draft principally in that it deals with only the mining and oil and gas industries and that it contains no provision for the *separate* disclosure of current cost information for mineral resource assets nor any requirement to disclose information about the fair values of oil and gas reserves. The Board will issue separate Statements dealing with financial reporting and changing prices for (a) timberland and growing timber and (b) income-producing real estate.

Appendix C: BASIS FOR CONCLUSIONS

Introduction

28. This appendix reviews considerations that members of the Board deemed significant in reaching the conclusions in this Statement; it includes reasons for accepting certain views and rejecting others. Individual Board members gave greater weight to some factors than to others.

29. Statement 33 calls for the presentation of supplementary information about the effects of changing prices on certain large public enterprises according to a historical cost/constant dollar basis and a current cost basis. It requires the presentation of information on a historical cost/constant dollar basis for all those enterprises. However, it contains only interim provisions, applicable to years ended before December 25, 1980, for the presentation of supplementary information on a current cost basis for mineral resource assets. The purpose of this Statement is to set forth provisions for the measurement of mineral resource assets and related expenses in information prepared on a current cost basis.

30. The general objectives of reporting the effects of changing prices are discussed in Statement 33 (paragraphs 92-96). That discussion provides a starting point for the conclusions in this Statement. In summary, the objectives call for the provision of information that would help users to:

a. Assess future cash flows,
b. Assess the maintenance of operating capability,
c. Assess financial performance, and
d. Assess the maintenance of general purchasing power.

Those objectives are derived from the objectives of financial reporting set out in FASB Concepts Statement No. 1, *Objectives of Financial Reporting by Business Enterprises*.

The Accounting Alternatives

31. The reasons for the Board's decision that special consideration should be given to the measurement of mineral resource assets are set out in paragraph 156 of Statement 33:

> Special considerations arise in the choice of a system for measuring the effects of changing prices on enterprises that own particular categories of assets. Discussions about which attribute of an asset should be measured involve weighing the relevance and reliability of various alternatives, taking account of the costs of preparing the information. Consideration of those factors may suggest the desirability of measuring different attributes of different assets. The Board has concluded that current cost is a useful measurement for inventory and property, plant,

> and equipment. However, measurements of the current costs of some assets may have relatively low relevance and reliability while other measures, for example net present value of future cash flows, may have more relevance and an acceptable level of reliability. In such cases, it may be desirable to call for measurement of a different attribute from the one that is required for other assets, provided that information about the measurements can be presented in a format that enables users to understand its significance.

32. The Board considered the following alternatives for the measurement of expenses related to the use and sale of mineral resource assets in the computation of income from continuing operations on a current cost basis:

a. Use measures based on fair values or present values,
b. Use measures based on current cost or lower recoverable amount,
c. Use measures based on historical cost/constant dollar amounts,
d. Use measures based on historical cost/nominal dollar amounts, and
e. Exclude activities that involve the use of mineral resource assets from current cost income measurements.

33. Statement 33 calls for information about the current cost amounts of inventory and property, plant, and equipment and about changes in current cost amounts, net of inflation. The Board considered the following main alternatives relating to the application of those requirements to mineral resource assets:

a. Exclude mineral resource assets from any such requirement;
b. Include mineral resource assets on the same basis as inventory and property, plant, and equipment;
c. Measure mineral resource assets on a current cost basis and disclose the information separately;
d. Measure mineral resource assets on a fair value basis and disclose the information separately; or
e. Measure mineral resource assets on a fair value basis and aggregate those measures with current cost measures for other assets.

34. The Board also considered what sources of information would provide useful bases for alternative measurements of mineral resource assets and related expenses. If those assets and expenses are to be measured at current cost, it is necessary to consider whether an enterprise should be able to use both direct pricing methods and methods depending on specific price indexes (paragraph 60, Statement 33). If assets and expenses are to be measured at fair value, similar kinds of questions arise regarding the admissibility of alternative sources of information.

35. If the current costs of assets and related expenses are to be measured, the procedures used to estimate those costs may become critical. Current cost measures can vary significantly according to which costs are to be capitalized and which are to be treated as expenses when they arise. Particular difficulties arise in determining the cost of mineral resource assets, and the Board consequently considered whether special provisions were required to identify the costs that should be capitalized in the measurements of those assets.

36. The Board also has assessed the usefulness of information about the quantities of resources available to the enterprise and the selling prices of those resources.

Current Cost

37. Paragraph 58 of Statement 33 states that for inventory and property, plant, and equipment ". . . the sources of information used to measure current cost should reflect whatever method of acquisition would currently be appropriate in the circumstances of the enterprise." Application of that provision to the assets covered by this Statement indicates that the current cost of an asset may be measured by (a) the estimated buying price for an asset having the same characteristics as the asset owned or (b) the estimated cost of some other method of acquisition; for example, exploration and development.

38. The provision in paragraph 58 of Statement 33, given in the preceding paragraph, identifies information that may be helpful in assessing whether an enterprise is capable of maintaining its operating capability. The provision is applicable to mineral resource assets as well as other assets. Consider, for example, a case in which the enterprise intends to maintain operating capability by acquiring resources that are similar to those used or sold. Current cost is equal to replacement cost. If depletion, depreciation, and amortization expense, measured at current cost, is deducted from revenues, a basis is provided for assessing the maintenance of operating capability. If revenues exceed expenses, measured at current costs where appropriate, and it has not been necessary to invest the excess in other assets, such as receivables, the enterprise may be expected to be able to finance the replacement of resources without borrowing. However, for that argument to hold, current cost must reflect the actual cash needed to acquire the new resources. The cost of buying the asset may exceed the cost of other methods of acquisition. In that case, assuming that the other methods of acquisition are possible, the purchase price would overstate the measure of cost required to assess the maintenance of operating capability. Another possibility is that the purchase price may be less than the cost of other methods of acquisition. In that case, purchase must be assumed to be the usual method of acquisition, and the purchase price is the appropriate basis for measurement of current cost. It also is possible that the costs of replacement by alternative methods are approximately equal. In that case, all methods may be acceptable as bases for the estimation of current cost, and the choice may depend on the reliability of alternative sources of information.

39. It is important to consider the implications of the timing of new acquisitions. If an enterprise were to attempt to replace its mineral resource assets immediately after their use, without advance planning, it probably would find that the only way to avoid a substantial waiting period would be to purchase assets developed by another enterprise. Such a purchase might be the best course of action because waiting would involve a significant loss of income. A similar situation can arise with inventory and property, plant, and equipment. An asset normally cannot be obtained with negligible lead time. Those considerations do not in themselves establish the case for measuring the current cost of mineral resource assets on the basis of purchase prices. An enterprise normally will plan its acquisition of new resources in sufficient time; measurement of current cost at current purchase price may misstate the basis for assessing the maintenance of operating capability if new supplies of the resources can be obtained by less costly methods.

40. One special feature of mineral resource assets is the possibility that replacement, except by purchase, may be impracticable or uneconomic or may require an indeterminate period of time or be of indeterminate feasibility. Additional supplies may be limited or the risks of failure to obtain new supplies by exploration may

be great. In such cases, measures of current cost, based on methods of acquisition other than purchase, may be quite uncertain and possibly higher than purchase price; and application of concepts may suggest that current cost or lower recoverable amount should be measured by reference to the purchase price of a comparable existing asset or value in use (the present value of future cash flows).

41. As noted above, the definition of the current cost of mineral resource assets may call for a measurement of the current cost of acquiring, by means other than purchase, resources that are similar to those owned or used and sold; it also may call for measurement at current buying price. However, the Board recognizes that no generally accepted methods exist for those measurements in the cases of mineral resource assets. Moreover, many people believe that such methods are unlikely to be developed in the foreseeable future. The current cost of depletion of oil and gas reserves, for example, depends on the cost of finding new reserves in currently unknown locations and quantities and on the cost of providing facilities to extract the oil and gas from those locations, which may pose new technological problems. In such circumstances, it may be impracticable to obtain a better estimate of current cost than that found from adjustment of historical cost by an index of specific price changes. Some Board members believe that it may be useful to define operating capability in terms of the ability to repeat today the activities that originally were undertaken to find and develop the nonrenewable natural resources of the enterprise. That belief supports the use of historical costs, adjusted for specific price changes, in the assessment of the maintenance of operating capability.

42. Estimates of the current cost of finding nonrenewable natural resources must depend partly on computations that are predictions rather than measurements in the normal sense. Uncertainty about the ability to find and, therefore, about the cost of finding nonrenewable natural resources makes it difficult to draw general conclusions about the relationship between their costs of purchase and their costs by other methods of acquisition. It is possible that the costs are similar by alternative methods of acquisition and that buying prices should be regarded as one important source of evidence about current cost of acquisition by discovery. However, the existence of price controls for oil and gas reserves might weaken greatly any relationships between cost of purchase and cost by other methods of acquisition. Experience with current cost measurements may well lead to an improved understanding of the advantages and disadvantages of different measurement methods and to the development of improved measurement methods. In the meantime, the Board concluded that a choice of method should be permitted for the estimation of current cost. The preparers of financial reports can, accordingly, use their judgment in selecting a method that provides the best reflection of current costs in the circumstances of the enterprise. The requirement to disclose the types of information on which measurements are based will help users to interpret the measurements.

43. Information about the current cost or lower recoverable amount of assets at the end of the year and about the increase or decrease in current cost amounts during the year is intended to provide information for the assessment of enterprise performance, taking into account changes in the potential of the enterprise's assets to produce future cash flows. Practical difficulties in the measurement of the current cost of mineral resource assets may limit the usefulness of current cost information for the assessment of enterprise performance. However, the Board believes that the measurements required by this Statement are likely to assist with the assessment of cash flows to some extent; and that this belief should be tested by the inclusion of the assets covered by this Statement in the experiment with information about the effects of changing prices.

44. Commentators on the Exposure Draft had various opinions about the usefulness of current cost measures of mineral resource assets. Most commentators recognized the limitations of those measures for assessments of future cash flows, given that the current cost of finding and developing the reserves held may bear little relationship to the cost of finding and developing reserves in the future. Some of those who argued against a requirement for current cost measures did so because of doubts about the general usefulness of current cost accounting. Other commentators emphasized the possible usefulness of current cost measures as indicators of enterprise performance; they favored the application of the current cost provisions of Statement 33 to mineral resource assets in order to obtain experience in all industries in the experiment with the presentation and use of information about the effects of changing prices. Commentators suggested that the incremental costs of preparing current cost information for mineral resource assets were of minor importance.

45. The Board concluded that information about mineral resource assets on a current cost basis should be required in the same way as information about the current cost of other kinds of property, plant, and equipment. That information may be useful for the assessment of both enterprise performance and the maintenance of operating capability. The Board believes that there is an urgent need to provide information about the effects of specific price changes on enterprises that use mineral resource assets. There is a serious gap in public understanding of income levels that may appear large under historical cost measures and yet be inadequate to provide for the maintenance of operating capability. Current cost measures, even if they are subject to difficulties of estimation, are likely to be a useful supplement to historical cost measures by contributing to the development of public understanding.

46. The primary financial statements of different mining and oil and gas enterprises lack comparability because they have adopted materially different accounting policies for capitalizing expenditures as part of the cost of mineral resource assets. It follows that current cost measures also lack comparability if they are obtained by adjusting historical cost measures by specific price indexes. However, the Board believes it to be beyond the scope of this Statement to attempt to attain uniformity in the supplementary information about changing prices for those industries.

Fair Value

47. One of the purposes of financial reporting is to provide information that is useful for the assessment of future cash flows. Such information could possibly be provided directly by reporting estimates of future cash flows or estimates of the net present value of future cash flows associated with assets. Information about the estimated fair values of assets, defined as the prices that would be accepted as reasonable in transactions between a willing buyer and a willing seller, is another potential source of useful information. Fair values are likely to have a closer and more stable relationship than historical cost to the net present value of cash flows: The buyer of an asset is likely to regard the net present value of estimated cash flows from using an asset as the maximum acceptable price, and the seller is likely to regard that amount as the minimum acceptable price. In an active and efficient market, the price is likely to be approximately equal to net present value of future cash flows.

48. A measurement that reflects the net present value of the cash flows from an asset, if it has sufficient reliability, may provide a useful basis for the assessment of overall enterprise performance. As noted in paragraph 120 of Statement 33, the measurement of assets at current cost or lower recoverable amount may be regarded as partial recognition of the present values of future cash flows; income from continuing operations on a current cost basis and the increase or decrease in current cost amounts then may be regarded as two factors useful for the assessment of overall performance.

49. The actual relationship between current cost and fair value is uncertain; the two concepts overlap to a considerable extent. Measurements of current cost may be based on information about current market prices (i.e., fair value) or current costs of other methods of acquisition. If the current cost of other methods of acquisition, such as exploration and development, is believed to be lower than fair value, it may be assumed that the enterprise normally will not purchase assets and that "other acquisition cost" will be the appropriate basis for estimating current cost. In other cases, fair value will be an appropriate basis for estimating current cost either because the enterprise normally buys its assets or because fair value is approximately equal to "other acquisition cost." Current buying price is a market price and is, therefore, likely to be indistinguishable from fair value. Consequently, current cost is likely to differ from fair value only when the costs of methods of acquisition, other than purchase, are believed to be lower than purchase price.

50. Some people believe that, if measurement difficulties are ignored, the value to the business of a specialized asset is represented better by fair value than by the cost of other methods of acquisition. Value to the business is defined in paragraph 99 of Statement 33, and it is the concept that leads normally to measurement at current cost or lower recoverable amount. It may be identified by assuming that an enterprise has been deprived of the use of an asset and asking what loss it then would incur. The loss may exceed normal acquisition cost because the normal process of acquisition may be lengthy, and net income would be lost during the waiting period. Fair value may be a better measure of the loss than "other acquisition cost" because it represents the cost of obtaining an asset fairly quickly when lengthy planning of the acquisition is not possible. The excess of fair value over "other acquisition cost" (if any) may then be regarded as partly attributable to the worth of the cash flow that would be lost during the planning period if purchase were not undertaken. Arguments for disclosure of information about the fair value of assets may be relatively strong when doubts exist about the relationships between historical cost and fair value at the date of acquisition. In that case, information about fair value may contribute to the assessment of the reliability of current cost measures.

51. Paragraphs 47-50, above, summarize the reasons for believing that information about fair values may be relevant in helping users with the assessment of future cash flows and with related needs. However, information also must satisfy a test of reliability before its disclosure is required in financial reports. The measurement of the fair value of oil and gas and other mineral reserves depends on estimates of the physical quantities of the reserves, the rate of extraction, future selling prices, future development and extraction costs, and the discount rate. Recent research, described at the Board's July public hearing, has shown that estimates of physical quantities of oil and gas reserves are subject to extensive revisions as time passes; that research also has provided examples of material differences among the estimates of independent assessors.[6] Information provided by the Mining Task Group and respondents to the Exposure Draft indicates that similar findings would be likely to apply to estimates of the quantities of other mineral reserves. Consideration of the other factors involved in

estimates of fair value indicates that their overall reliability is likely to be low since they involve forecasts of future events, particularly price changes, of a type that previously have been subject to high variability as a result of economic and political changes. Comments by financial analysts on the Exposure Draft suggested that the users of financial reports prefer to make their own assessments of fair value rather than rely on direct assessments provided by the enterprise.

52. The Board also considered the relationship between the proposals in its Exposure Draft and the SEC's existing requirements for disclosure of information about the net present value of proved oil and gas reserves. Respondents emphasized the cost of providing value information on a basis different from that required by the SEC, and the confusion expected to result from requirements for the disclosure of two different types of value information. The SEC's requirements have avoided some of the uncertainties in the measurement of fair value by specifying that expected future price changes are not to be taken into account and by requiring the use of a specified discount rate. Consequently, the value number required by the SEC has a higher verifiability than fair value but it does not represent fair value; fair value depends partly on expectations of changing prices and changing discount rates. The Board intends to evaluate the usefulness of the SEC's requirement and to study the use actually made of the required information as part of an ongoing review of the accounting and reporting requirements for this industry (paragraph 4).

53. After considering the measurement difficulties discussed in paragraphs 51 and 52, and the information provided by respondents to the Exposure Draft, the Board concluded that the reliability of measurements of fair value of mineral resource assets was inadequate for disclosure to be required at the present time. The evidence on reliability cited above relates to measures of the quantities of reserves as well as other factors. Enterprises are, nonetheless, required by this Statement (mineral reserves other than oil and gas) and by Statement 19 (oil and gas reserves) to provide information about those quantities. The Board believes that information about quantities can be useful and that the main arguments distinguishing the reporting of quantities from the reporting of fair values are (a) the cumulative effect on reliability of all the components of fair value measures (fair values have lower reliability than quantities) and (b) the possibility of giving a misleading impression of reliability in the disclosure of a composite number representing fair value.

Other Issues

54. The Exposure Draft called for separate disclosure of information about income from continuing operations for (a) oil and gas producing activities and (b) other activities of an oil and gas producing enterprise. The main purpose of that requirement was to facilitate comparisons of the results of "other activities" among enterprises that use the full cost method for capitalizing expenditures on the one hand and the successful efforts method on the other hand. If current cost is estimated by adjusting historical cost for specific price changes, similar enterprises would report different numbers for current cost income from continuing operations depending on which costing method was used. Separate reporting of income for oil and gas producing activities would leave income from other activities on a comparable basis. However, that course of action would not resolve the basic problem. Some respondents to the Exposure Draft argued that such requirements amounted to a significant extension of FASB Statement No. 14, *Financial Reporting for Segments of a Business Enterprise*, and that they should not be adopted without consideration of the implications for Statement 14. The Board

noted that some financial analysts regarded the separate disclosure of information about income from producing activities as useful. However, the Board concluded that the net benefits from such a requirement had not been demonstrated clearly enough to justify the requirement at the present time. It will reconsider this requirement as part of the additional work described in paragraph 4.

55. As noted above, estimates of the fair value of mineral resource assets can be computed from estimates of the quantities of mineral reserves, the rate of production, future selling prices, future production and development costs, and the future cost of capital. The Board considered the usefulness of requirements to disclose estimates of those items or requirements to disclose past information that would be useful for forming such estimates. Disclosure of information that would enable users of financial reports to estimate fair values might be useful and it would minimize the danger, attributed to direct reporting of fair values, that users might develop an exaggerated impression of the reliability of the numbers. The SEC already requires some disclosures of this type of information. In the case of the mining industry, the Exposure Draft proposed disclosure of information about quantities and selling prices of minerals. Respondents to the Exposure Draft generally supported the proposals and the Board concluded that they should be incorporated in this Statement. In the case of the oil and gas industry, the requirements of the SEC are already extensive. The Board concluded that it should not introduce any additional requirements at the present time. It plans to continue to work with the industry and the SEC to study the interrelationships of existing requirements with the purpose of limiting the disclosure requirements to those most effective in achieving the objectives of financial reporting.

56. The quantities of mineral reserves other than oil and gas, disclosure of which is required by this Statement, need not be the quantities at year-end but may be the quantities at the beginning of the year or some other date during the year. The Board weighed the advantage of mandating more current information provided by year-end disclosure against the cost and the possible delay in issuing annual reports. The Board understands that information about year-end reserves may not always be available in a timely manner and that a requirement for year-end disclosure might cause a delay in the issuance of annual reports. New discoveries are not frequent, but a long period of time is required for the assessment of quantities and grades. Current information about discoveries can be provided by management discussion. The Board concluded that the additional value of mandating more current information about reserve quantities did not justify the probable cost and delay in the issuance of annual reports.

57. Several respondents to the Exposure Draft requested clarification of the disclosures required of reserves held by subsidiaries and other investees. The Board concluded that the reporting of those reserves should follow as closely as possible the methods used to incorporate the results of the investee in the primary financial statements. Those provisions (paragraph 14) are similar to provisions contained in Statement 19 for the reporting of oil and gas reserves.

58. Several respondents to the Exposure Draft asked for clarification of the nature of the assets, described as "proved oil and gas reserves," and by other expressions in the Exposure Draft. The Board decided to adopt the term "mineral resource assets" in this Statement. This term was previously used in the SEC's SAB No. 18, *Amended Interpretation Regarding Disclosure of Replacement Cost Data for Mineral Resource Assets Employed in Mining Operations*. It includes mineral interests in properties, completed and uncompleted wells,

and related equipment and facilities and other facilities used for purposes of extraction. It does not include movable equipment and support facilities that are covered by the provisions of Statement 33 relating to property, plant, and equipment.

Footnotes

FAS39, Footnote 1--FASB Discussion Memorandum, *Financial Accounting and Reporting in the Extractive Industries,* December 1976. The various classes of oil and gas reserves are defined in FASB Statement No. 25, *Suspension of Certain Accounting Requirements for Oil and Gas Producing Companies*, February 1979.

FAS39, Footnote 2--Discussion Memorandum on financial accounting and reporting in the extractive industries.

FAS39, Footnote 3--Statement 33, paragraph 62.

FAS39, Footnote 4--Statement 33, paragraph 23, footnote 1, provides that "for the purposes of this Statement, except where otherwise provided, inventory and property, plant, and equipment shall include land and other natural resources. . . ."

FAS39, Footnote 5--Quantity disclosures for oil and gas reserves are required by Statement 19.

FAS39, Appendix C, Footnote 6--Stanley P. Porter, *Study of the Subjectivity of Reserve Estimates and Its Relation to Financial Reporting*, 1980.