Project **Extractive Activities**

Topic **Accounting for stripping costs in the production phase of a surface mine – draft Interpretation**

IFRIC [X] STRIPPING COSTS IN THE PRODUCTION PHASE OF A SURFACE MINE

References

- *The Conceptual Framework for Financial Reporting*
- IAS 1 *Presentation of Financial Statements*
- IAS 2 *Inventories*
- IAS 16 *Property, Plant and Equipment*
- IAS 36 *Impairment of Assets*
- IAS 38 *Intangible Assets*

Background

1. In surface mining operations, entities may find it necessary to remove mine waste materials (overburden) to gain access to mineral ore deposits. This waste removal activity is known as 'stripping'.
2. During the development phase of the mine (before production begins), stripping costs are usually capitalised as part of the depreciable cost of building, developing and constructing the mine. Those capitalised costs are depreciated or amortised on a systematic basis, usually by using the units of production method, once production begins.
3. A mining entity may continue to remove overburden and to incur stripping costs during the production phase of the mine.

4. The material removed in the production phase will not necessarily be 100 per cent waste; often it will be a combination of ore and waste. The ratio of ore to waste can range from uneconomic low grade to profitable high grade. Removal of material with a low ratio of ore to waste may produce some usable material, which can be used to produce inventory, but its removal might also provide access to deeper levels of material that have a higher ratio of ore to waste. There can therefore be two benefits accruing to the entity from the stripping activity: usable ore that can be used to produce inventory and improved access to further quantities of material that will be mined in future periods. When the material being removed contains a low ratio of ore to waste, its removal might be uneconomic if it were not for the access benefit being created at the same time.
5. This [draft] Interpretation considers when and how to account separately for these two benefits arising from the stripping activity. This includes how to measure them both initially and subsequently.

Scope

6. This [draft] Interpretation applies to waste removal (stripping) costs that are incurred in surface mining activity, during the production phase of the mine.

Issues

7. The [draft] Interpretation addresses the following issues:
    a) recognition of production stripping costs;
    b) initial measurement of the stripping cost asset; and
    c) subsequent measurement of the stripping cost asset.

Consensus

Recognition of production stripping costs

8. An entity shall recognise production stripping costs as part of an asset if, and only if:
    a) it is probable that the future economic benefit associated with the costs will flow to the entity; and

b) the costs can be measured with reliability.

9. To the extent that the benefit is realised in the current period in the form of inventory produced, the entity shall account for the costs in accordance with the principles of IAS 2 *Inventories*.
10. To the extent that the benefit is the improved access to ore that is to be realised (mined) in a future period, the entity shall recognise these costs as a long-term asset. This [draft] Interpretation refers to this long-term asset as the 'stripping cost asset'.
11. In order to recognise the stripping cost asset, the entity must be able to:
    a) identify the component of the ore body for which access has been improved; and
    b) measure the costs relating to the improved access to that component with reliability.

    If the entity cannot identify the component of the ore body for which access has been improved, or cannot measure the costs relating to the improved access to that component with reliability, then the entity shall recognise these costs in profit or loss.
12. The stripping cost asset shall be accounted for as an addition to, or an enhancement of, an existing asset. In other words, the stripping cost asset will become a component of an existing asset.
13. An entity shall classify the stripping cost asset as tangible or intangible according to the nature of the existing asset to which it relates.
14. An entity shall recognise the stripping cost asset when the production stripping activity takes place and the costs are incurred.
15. When the entity has completed the waste removal activity necessary to access the identified component of the ore body, no further costs shall be recognised as part of the stripping cost asset relating to that component of ore.

Initial measurement of the stripping cost asset

16. The entity shall measure the stripping cost asset initially at cost, this being the accumulation of costs directly incurred to perform the stripping activity over the identified component of ore, plus an allocation of directly attributable overhead costs. Some incidental operations may take place at the same time as the

production stripping activity, but which are not necessary for the production stripping activity to continue as planned. The costs associated with these activities shall not be included in the cost of the stripping cost asset.

17. Where it is not possible to separately measure the cost of the stripping cost asset, the entity shall allocate the production stripping costs between the inventory produced and the stripping cost asset by applying a residual cost approach.

18. The residual cost approach involves the entity measuring the cost of inventory produced using a standard cost methodology and allocating the residual costs incurred to the stripping cost asset. To do this, the entity calculates the standard or expected cost of accessing ore in the identified component of the mine. Where the cost incurred to mine the quantity of ore produced is higher than would be expected for that quantity of ore produced in that component of the mine, the amount of costs incurred in excess of that standard or expected cost are deemed to be the cost of improving the access to ore to be mined in future periods. This excess cost shall be recognised as a stripping cost asset for that component of the mine.

19. The standard or expected cost of accessing ore in a component of a mine is estimated at the start of the production phase for that component, and revised whenever additional information about that component of the mine, and about the costs expected to be incurred, becomes available.

Subsequent measurement of the stripping cost asset

20. After initial recognition, the stripping cost asset shall be carried at its cost less depreciation or amortisation, and less any impairment losses.
21. The stripping cost asset shall be depreciated or amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method is applied unless another method is more appropriate.
22. The expected useful life of the identified component of the ore body used to depreciate or amortise the stripping cost asset may differ from that used to depreciate or amortise the mine itself and the related life-of-mine assets. This

can be the case, for example, when the stripping activity improves access to only a part of the total ore body in the mine.

Appendix A

Effective date and transition

This appendix is an integral part of the [draft] Interpretation and has the same authority as the other parts of the [draft] Interpretation.

A1 An entity shall apply this [draft] Interpretation for annual periods beginning on or after [date]. Earlier application is permitted. If an entity applies this [draft] Interpretation for an earlier period, it shall disclose that fact.

A2 An entity shall apply this [draft] Interpretation to production stripping costs incurred on or after the beginning of the earliest period presented.

A3 Each existing stripping cost asset balance as at the date from which this [draft] Interpretation is applied, which resulted from stripping activity undertaken during the production phase, shall be reclassified as a component of the asset to which the stripping activity relates. Such balances shall be depreciated or amortised over the remaining expected useful life of the specific component of the ore body to which each stripping cost asset relates.

A4 If there is no identifiable component of the ore body to which that stripping cost asset can be directly associated, it shall be recognised in opening retained earnings at the beginning of the earliest period presented.

Basis for Conclusions on IFRIC Interpretation [X] Accounting for Stripping Costs in the Production Phase

This Basis for Conclusions accompanies, but is not part of, IFRIC [X].

Introduction

BC1 This Basis for Conclusions summarises the IFRS Interpretations Committee's considerations in reaching its consensus. Individual Committee members gave greater weight to some factors than to others.

Background

BC2 The Committee received a request to issue guidance on the accounting for waste removal (stripping) costs incurred in the production phase of a mine. Accounting for production stripping costs is challenging, because such costs incurred may benefit both future and current period production, and there is no specific guidance in IFRSs addressing this issue.

BC3 Consequently, there is diversity in practice in accounting for production stripping costs – some entities recognise production stripping costs as an expense (a cost of production), and some entities capitalise some or all production stripping costs, on the basis of a life-of-mine ratio calculation, or some similar basis, and some capitalise the costs associated with specific betterments. The Committee decided to develop an Interpretation in response to that divergence in practice.

Scope

BC4 The Interpretation proposes guidance on the accounting for stripping costs incurred in surface mining activity. In developing the Interpretation, the Committee decided not to include oil and natural gas extraction and underground mining activities. The Committee understood that stripping

activity occurs predominantly in surface mining activities, and decided to confine the scope to these circumstances.

BC5 The Committee decided not to include stripping costs incurred during the development phase of the mine, because the Committee became aware that there is not significant diversity in practice in this regard.

Consensus

Recognition of production stripping costs

BC6 The Committee decided that an entity may create benefits by undertaking stripping activity (and incurring stripping costs). These benefits are the extraction of the ore mined in the current period, and the improved access to ore that is to be mined in a future period. The result of this is that the activity creates an inventory asset and a long-term asset.

BC7 The Committee did not think there was a need to give guidance on how the current period benefit was accounted for, beyond stating that the principles of IAS 2 should be followed.

BC8 In terms of the long-term asset – the stripping cost asset - the Committee noted that it was imperative that the entity be able to identify the specific component of the ore body for which future access has been improved. Apart from providing a basis for measuring the costs reliably at recognition stage, the specifically identified component of ore is crucial to the subsequent depreciation or amortisation of the stripping cost asset, which will take place as the ore is mined.

BC9 The specifically identified component of ore is a subset of the total ore within the mine. A mine may have several specific components identified during the production phase.

BC10 Identifying specific components will require judgement. The Committee thinks, however, that an entity's mine plan will provide the information required, and will allow these judgements to be made with reasonable consistency.

BC11 The Committee decided that the stripping cost asset was more akin to an addition to, or improvement of, an existing asset, than an asset in its own

right. Practically, the stripping cost asset might add to, or improve, a variety of existing assets, for example the mine property (land), the mineral deposit itself, an intangible right to extract the ore, or an asset that originated in the mine development phase.

BC12 The Committee decided that it is not necessary for the Interpretation to define whether the benefit created by stripping activity is tangible or intangible in nature—this will follow from the nature of the underlying asset to which the benefit relates.

Initial measurement of the stripping cost asset

BC13 The stripping cost asset is an accumulation of costs incurred, as a result of stripping activity, that meet the asset recognition criteria (paragraph 4.44 of the *Conceptual Framework for Financial Reporting).* Consequently, the stripping cost asset is recognised as the stripping activity takes place.

BC14 The Committee noted that, when inventory is produced at the same time as the improved access is created, it may be difficult in practice to measure the separate cost of each benefit directly. The Interpretation requires an approach that allocates the cost between the inventory asset and the stripping cost asset. The Committee decided on the residual cost approach as the allocation approach, based on how the actual cost of producing inventory and accessing the ore in an identified component of the mine relates to the standard or expected cost of that activity.

BC15 The Committee also noted that the residual cost approach is similar to the strip ratio approach, albeit modified to limit it to the identified component of the mine, rather than applied on a whole/life of mine basis. Feedback received by the staff from the outreach done has indicated that the residual cost approach would be workable in practice, as it is similar to the approaches taken by many entities currently.

BC16 The Committee also considered a relative benefit allocation approach for allocating the production stripping costs between the inventory produced in the period and the improved access created. This would involve the entity allocating the production stripping costs for an identified component of the

mine on a pro-rata basis, according to the sales value or mineral content of the ore that has been extracted, relative to the sales value or mineral content of the ore that remains in the ground, for extraction at a future date.

BC17 The Committee rejected this option, as it understood that applying the approach would be practically difficult and costly to apply in relation to the benefit it would provide. For example, identifying a sales price for ore that will be mined in the future can be difficult, given the volatility of market prices for many minerals. Further difficulties may be experienced when there is more than one mineral present (whether by-products or joint products), when the ore is extracted. In this case, using the relative mineral content may be a more relevant method to apply, which could require more sophisticated weighting to be applied when allocating the costs to the relative mineral content to reflect the further effort needed to extract the ore that will be mined in the future.

BC18 The Committee decided to follow a similar principle to that in paragraph 20 of IAS 16 *Property, Plant and Equipment* in determining when the recognition of costs of a stripping cost asset shall end. Paragraph 20 of IAS 16 states that recognition shall cease when the item is 'in the location and condition necessary for it to be capable of operating in the manner intended by management'. An entity incurs stripping costs with the ultimate goal of extracting ore from the land. Consequently, once a component of land is stripped to the extent required in order to achieve this objective, recognition of stripping costs relating to that component of land shall cease. Subsequent stripping costs shall be separately assessed to determine whether they meet the criteria stated in this Interpretation to be recognised as a stripping cost asset.

Subsequent measurement of the stripping cost asset

BC19 The Committee decided that the most systematic way of depreciating or amortising the cost of the stripping cost asset would be over the expected useful life of the identified component of the ore body that benefited from the activity. This is an application of the units of production method that is

commonly used, but is focused only on the identified component of the ore body for which access has been improved through the stripping activity. Because the life of the identified component is usually a subset of the entire life of the mine, the stripping cost asset will be depreciated or amortised over a shorter period than the life of the mine.

BC20 The Committee also decided that there was no need for specific impairment guidance to be given and confirmed that the entity should consider the stripping cost asset for impairment, according to the principles in IAS 36 *Impairment of Assets.*

Transition

BC21 Because of the complex and lengthy nature of many mining operations, and the diversity of practice in respect of this issue, the Committee concluded that the cost of applying the change in accounting policy retrospectively would exceed the benefit to be gained in doing so. The Committee therefore decided that the proposed Interpretation shall require prospective application to production stripping costs incurred on or after the beginning of the earliest period presented.

BC22 The Committee also decided that any existing stripping cost asset balances shall each be reclassified as components of other existing assets, and depreciated or amortised as the specific ore to which those asset balances are associated is mined. If it is not possible to identify any remaining ore to be mined for those stripping cost asset balances, the amounts shall be recognised in opening retained earnings at the beginning of the earliest date presented.