
Project	Extractive Activities
Topic	Accounting for stripping costs in the production phase of a surface mine – revised principle for capitalisation

Introduction and purpose of this paper

1. The IFRS Interpretations Committee received a request in 2009 for guidance on how to account for stripping costs in the production phase of a surface mine. The Committee took the issue onto its agenda in January 2010, and in August 2010 it published for public comment a Draft Interpretation *Stripping Costs in the Production Phase of a Surface Mine*. The 90 day comment period ended on 30 November 2010.
2. At the January 2011 Committee meeting, a comment summary paper¹ was presented to the Committee. At that meeting, the Committee agreed to continue deliberating comments received on the Draft Interpretation at its March 2011 meeting. Specifically, the Committee asked us to:
 - (a) describe a revised principle for capitalising production stripping costs, that includes guidance on the apportionment of the costs incurred between a current and a future benefit, and
 - (b) to describe a refined approach for the depreciation/amortisation of the capitalised costs, that fits in with the principle in (a).

¹ <http://www.ifrs.org/NR/rdonlyres/D44FC49C-6212-4176-942A-A63CA0E557EE/0/021101Obs02IAS16.pdf>

This paper has been prepared by the technical staff of the IFRS Foundation for discussion at a public meeting of the IFRS Interpretations Committee.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the IFRS Interpretations Committee or the IASB. Comments made in relation to the application of an IFRS do not purport to be acceptable or unacceptable application of that IFRS—only the IFRS Interpretations Committee or the IASB can make such a determination.

Decisions made by the IFRS Interpretations Committee are reported in *IFRIC Update*.

Interpretations are published only after the IFRS Interpretations Committee and the Board have each completed their full due process, including appropriate public consultation and formal voting procedures. The approval of an Interpretation by the Board is reported in *IASB Update*.

3. Subsequent to the January Committee meeting, we have performed outreach on these issues with some mining preparer entities, to try to better understand the practical considerations in accounting for production stripping costs. Our paper reflects aspects of our discussions with the group.

Capitalisation of production stripping costs

4. From the comment letters the Committee received on the Draft Interpretation, it appeared that the concepts of a stripping campaign and routine stripping were not broadly supported. However, as we noted at the January Committee meeting, without the boundaries provided by a stripping campaign, it may be difficult to identify the production stripping costs that may qualify for capitalisation, and to differentiate those costs from costs that should be accounted for as current period costs of production.
5. When developing a revised principle for capitalisation, we thought it would be helpful for the principle to focus on the benefit created by the production stripping activity, and when that benefit is realised.

Analysis of the activity

6. Stripping activity during the production phase of a surface mine can produce two benefits. These benefits are the inventory produced in the period and the improvements to access for ore that will be mined in a future period. The issue to be addressed by the interpretation is how to account for the stripping activity when both benefits are created.

Recognition of the benefits from stripping activity

7. The basis for recognising the inventory produced from stripping activity in the production phase is set out in IAS 2 *Inventories*, and not considered further in this paper.
8. The future benefit created by production stripping activity was described in paragraph 7 of the Draft Interpretation to be ‘improved access to the ore’. This is

consistent with the definition of an asset in paragraph 4.4(a) of *The Conceptual Framework for Financial Reporting*.

An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.

9. The basis for recognition of an asset, or any other element, in the financial statements is set out in paragraph 4.38 of the *Conceptual Framework*. An element is recognised if:
 - (a) it is probable that any future economic benefit associated with the item will flow to or from the entity; and
 - (b) the item has a cost or value that can be measured with reliability.
10. The basis for asset recognition in paragraph 7 of IAS 16 *Property, Plant and Equipment* is consistent with the recognition of assets in accordance with the *Conceptual Framework*.

A principle for capitalisation

11. We suggest a principle for capitalisation as follows: **an entity shall capitalise stripping costs in the production phase of a mine to the extent that the benefit created by the stripping activity is expected to be realised in a future period.**
12. The Draft Interpretation had proposed that the asset recognised in respect of the future benefit created by the stripping activity be specifically associated with the section of ore that becomes *directly accessible* as a result of the stripping activity.
13. A number of respondents had raised concerns about the proposal in the Draft Interpretation to link the access benefit created by the stripping activity only to the ore that becomes *directly accessible*, noting that it can also benefit other parts of the ore body.
14. To balance the concerns raised by respondents with the original objective of linking the asset recognised with the benefits that are created, we propose that the principle should be applied to a *section* of a mine. Thus the asset recognised

will be linked to the ore present in that ‘section of the mine’. The link would be used both as the basis for capitalisation and the basis for amortisation.

15. We understand from our outreach that the term ‘section’ is widely used in the surface mining industry to identify a distinct part of the mine that is defined by the mine plan. We recognise that to make the concept of a ‘section of the mine’ workable, we will have to work further with those in the industry to develop a clear description of a ‘section of a mine’ that can be understood by both those responsible for financial reporting and those responsible for the mine operations, and to ensure that it can be applied consistently and robustly.
16. In order to apply this principle, we think that the entity must be able to:
 - (a) identify the ore body (or component of the ore body) in the section of the mine, for which access has been improved by the stripping activity, and
 - (b) measure with reliability the costs of that stripping activity.
17. If the entity can not identify the ore body (or component of the ore body), or if the entity cannot measure with reliability the costs of that stripping activity, then we think that the entity *should not* capitalise the costs and should account for them as current period costs in terms of IAS 2.
18. The bases on which the entity might be able to measure the costs of the stripping activity are considered further in paragraphs 19 to 31 of this paper.

Question 1 for the Committee

1.1 Does the Committee agree with the principle for capitalisation in paragraph 11 above?

1.2 Does the Committee agree that this principle should be applied to a section of the mine, and not the entire mine?

Bases for the measurement of the costs of the stripping activity attributable to the future benefit

19. Once a section of ore becomes accessible, there are a few possible scenarios:

- (a) *All* the accessible ore in that section is extracted in the current period. In this case, the full benefit of the production stripping activity will be realised in the current period, and no production stripping costs will be capitalised as no future benefit of those costs remains. The costs will all be accounted for in the current period, or
- (b) *None* of the accessible ore in that section is extracted in the current period. In some circumstances, forward stripping is done well in advance of the ore being mined – possibly for climatic factors, amongst others. In this case, all the costs will be capitalised, as the full benefit of the production stripping activity will be realised in a future period, or
- (c) *Some* of the accessible ore in that section will be mined in the current period, and *some* will be mined in a future period. In this case, the production stripping costs need to be split between the current and the future period, according to when the benefit of the production stripping activity is realised.

- 20. In the case of (c) above, we think that stripping activity creates two benefits – access to ore that is to be mined in the current period and 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. The challenge is how to measure each benefit/asset with reliability.
- 21. We note that it is a single activity that creates both benefits. We understand, therefore, that it is not possible to measure the separate cost of each benefit directly. Instead an allocation approach will be required.
- 22. We think this situation can be analogised to the joint products concept in IAS 2. Paragraph 14 of IAS 2 states:

A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production.

23. Therefore, in order to allocate the production stripping costs into the inventory component and the long-term asset component on a rational and consistent basis, we think that the entity could apply one of two methodologies, described below.

Relative benefit approach

24. Analogising to IAS 2 paragraph 14, the entity could allocate the production stripping costs for a section of the mine on a relative benefit, or 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.
25. If one type of mineral is being extracted at a time, using the relative sales value could provide a suitable way of apportioning the costs. However, we understand from the outreach performed that this method may be difficult to apply in practice, as 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. A related issue with this method is whether a weighting should be applied to the relative mineral content to reflect the further effort needed to extract the ore that will be mined in the future.

Residual cost approach

26. This approach is based on standard costing theory, where the entity would calculate the standard cost of removing ore in a section of the mine. Where the cost of the ore removed is in line with that standard cost, the cost would be accounted for as inventory. Where the ore cost incurred is in excess of that standard cost, this excess cost is deemed to be the cost of improving the access to the ore to be mined in future periods. This cost would be capitalised as a long-term asset.

27. We note that the residual approach is effectively the same as the strip ratio approach, albeit modified to limit it to the *section* of the mine, rather than applied on a whole/life of mine basis.
28. As the Committee might expect, the feedback we have received from our outreach to date has indicated that the residual approach would be workable in practice, as it is similar to the approaches taken by many entities currently.

Level of detailed guidance required

29. The proposed principle for the capitalisation of stripping costs in the production phase of a surface mine requires capitalisation of the costs to the extent that the benefit created will be realised in a future period.
30. The detailed guidance in IAS 2 for joint products requires that costs are *allocated on a rational and consistent basis*. It goes further and gives as an *example*, the allocation on the basis of the relative sales value of each product produced.
31. The question we would like to ask the Committee is how prescriptive should the interpretation be regarding the basis of allocating costs between the two assets created by the stripping activity? We think the answer to this question might depend in part on whether the Committee thinks that either the relative benefit approach or the residual cost approach is acceptable.

Question 2 for the Committee

2.1 Does the Committee agree with adopting a cost allocation approach to measuring the benefits created by the stripping activity?

2.2 Assuming the Committee agrees that a cost allocation approach is appropriate in response to question 2.1, does the Committee agree that, depending on the entity's circumstances, either the relative benefit approach or the residual cost approach could be applied in apportioning production stripping costs between the current and future periods?

2.3 What level of detail does the Committee think that the staff need to provide guidance for the allocation of costs?

Depreciation/amortisation of production stripping costs

32. We think that the principle of depreciation/amortisation described in the Draft Interpretation is broadly consistent with the principle of capitalisation articulated in this paper.

33. Paragraph 17 of the Draft Interpretation states the following

The stripping campaign component shall be depreciated or amortised in a rational and systematic manner, over the expected useful life of the specific section of the ore body that becomes directly accessible as a result of the stripping campaign. The units of production method is applied unless another method is more appropriate.

34. The principle for capitalisation articulated in this paper requires that the entity identify the section of ore that has been made more accessible by the stripping activity, and which part of it will be mined in a future period. The entity will then capitalise the production stripping costs relating to the ore to be mined in the future.

35. Because the entity has identified the section of ore to which the costs relate, the staff think that applying a specific identification method for depreciation/amortisation, is consistent with this principle. We therefore suggest refining as follows the principle for depreciation/amortisation of the capitalised costs as stated in the Draft Interpretation:

The ‘stripping cost asset’ [or another term] shall be depreciated or amortised in a rational and systematic manner over the expected useful life of the ore body (or component of the ore body) in the section of the mine that becomes more accessible as a result of the stripping activity. The units of production method is applied unless another method is more appropriate.

36. We have removed the word ‘directly’ when referring to the ore body that becomes accessible. As noted in paragraph 14 of paper 2 for the January 2011 meeting, stripping activity can also result in accessibility to a further part of the ore body, in addition to that ore which is made directly accessible, depending on the geology of the ore distribution.

37. In addition, a number of the comment letters received on the Draft Interpretation noted that the section of the ore body that was planned for extraction may change, as more information is gained about it, as a result of the mining activities. Changes in the ore base specified for depreciation/amortisation of the related stripping costs such as these would require a rework of the depreciation/amortisation charge. In response to this, we think that any changes in the section of the ore body requiring rework of the depreciation/amortisation charge should be accounted for as a change in estimate in terms of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Question 3 for the Committee

Does the Committee agree with the revised principle for depreciation/amortisation as stated in paragraph 35 above?

Next steps

38. We plan to prepare another draft Interpretation for discussion at the May 2011 Committee meeting, incorporating the results of the discussion of this paper. In that draft, we will also deal with the following issues:
- (a) Transition considerations;
 - (b) Impairment of the stripping cost asset; and
 - (c) Whether or not to retain the illustrative example in the final Interpretation.

Question 4 for the Committee

Does the Committee have any other comments for the staff to consider in preparing a revised draft of the Interpretation?