

# Staff Paper

Date

May 2011

Project **E** 

**Extractive Activities** 

Accounting for stripping costs in the production phase of a surface mine – cover note to the revised draft of the

Topic

Interpretation

## Introduction and purpose of this paper

- 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 March 2011 Committee meeting, the Committee considered a revised principle for capitalisation of production stripping costs, and for allocation of those costs between the current and future periods. The Committee also considered a refined approach for depreciation/amortisation of the capitalised costs. The Committee requested us to bring a revised draft of the Interpretation to the May 2011 meeting. This revised draft is presented as Agenda paper 2A.
- 3. This paper discusses the following issues for the Committee's consideration, with a view to finalising the Interpretation:
  - (a) The wording of the revised principle for capitalisation now referred to as the **recognition principle**,
  - (b) The bases of allocating costs between current and future benefits, and
  - (c) Other topics: impairment, transition and the illustrative example.

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*.

## The recognition principle

- 4. At the March 2011 Committee meeting, the Committee advised us to combine ideas in paragraphs 11 and 16 of agenda paper 2<sup>1</sup> in order to develop the recognition principle for the revised draft Interpretation.
- 5. The Committee also advised us to remove the word 'section' from the recognition principle, and to rather make use of the word 'component'.
- 6. We recommend that the principle be stated as follows (paragraphs 8 11 of the draft Interpretation):

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.

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*.

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'.

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.

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<sup>&</sup>lt;sup>1</sup> http://www.ifrs.org/NR/rdonlyres/70763C28-4457-494C-A879-DF3552DD3D95/0/021103AP02IAS16 accountingforstrippingcosts.pdf

### The stripping cost asset

7. The Committee tentatively decided at the March 2011 meeting not to continue with the concept of a stripping campaign. We have decided to describe the long-term asset created by the production stripping activity the 'stripping cost asset' (paragraph 10 of the revised Draft Interpretation).

### Mixed ore and waste

- 8. From the outreach we performed, we understand that the material removed in order to gain access to a particular ore body may not always be 100% waste material, but rather a combination of ore and waste in the material removed.
- 9. Sometimes this ore will be low grade in quality and/or be found in small amounts relative to the waste being removed. It is usually considered uneconomic for the material to be removed solely to access the low grade ore, and the removal of this material would be accounted for as waste. Removal of this waste will provide a benefit to the entity, in the form of improved access to the richer ore body below.
- 10. In other cases this ore will be of a higher grade and/or found in greater concentration within the material being removed. In this case, the useable ore will be processed as part of the inventory cycle, and therefore is of benefit to the entity in the current period. In addition, removal of the material will also create improved access to the further ore below.
- 11. We have explained this issue in the 'Background' section of the revised draft Interpretation, in paragraph 4.

## **Question 1 for the Committee**

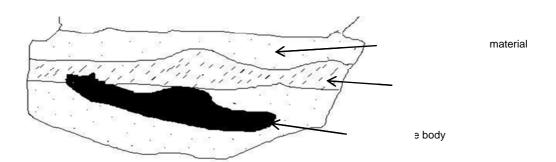
- 1.1 Does the Committee agree with the wording of the recognition principle in paragraph 6 of this paper?
- 1.2 Does the Committee have any further wording or phrasing suggestions in respect of this principle?

## Allocating costs between current and future benefits – bases of allocation

12. At the March 2011 Committee meeting, two methodologies for allocation of costs between current and future benefits were considered: the relative benefit (or value) approach and the residual cost approach. From the outreach performed, we understand that both approaches have their merits, depending on the nature of the mining operation. At the March meeting, the Committee did not express a strong preference for one approach over the other.

## Which approach?

13. Consider the following example: this is a theoretical representation of a mine pit, showing an identified ore body beneath a layer of waste (layer 1) and a layer of mixed waste and ore (layer 2). Assume that mining the entire ore body will be economic for the entity.



### 14. Assume also that:

- (a) Layer 1 is removed in the pre-production (development) phase. As is the accepted practice for mine stripping costs in the development phase, the costs of removing layer 1 would have been recognised as a long-term asset, to be amortised when production commences.
- (b) Layer 2 is removed in the current period. Layer 2 contains 15 tonnes of the total 100 tonnes of ore to be extracted (15%).
- (c) The standard cost of extracting a tonne of ore for this identified ore body is CU 6/tonne. The actual cost of removing layer 2 is CU 130.

- (d) Assume also that the market value per tonne of the ore to be extracted in the mine is CU 11 (assume a stable market price for the purposes of this example).
- 15. According to the recognition principle in the revised draft Interpretation (paragraph 6 of this paper), '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'. Therefore this cost needs to be allocated, as follows:
  - (a) Some must be allocated to the 15% of ore that has been extracted in the current period, to be accounted for according to IAS 2;
  - (b) The remainder of the costs will be deemed to be the cost of improving access to ore that will be extracted in the future.

## Illustrating how the two approaches would apply to the example

The residual cost approach

- 16. As a reminder, 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 recognised as a long-term asset.
- 17. Applying the residual cost approach to the above example, the entity will recognise the excess of the actual cost of CU 130 over the standard cost of extracting 15 tonnes of ore (CU 6/tonne x 15) of CU 90. Therefore CU 40 is deemed to be the cost of improving access to the ore that will be mined in the future the future benefit. This CU 40 will be recognised as the stripping cost asset under this approach.

### The relative benefit approach

- 18. As a reminder, this approach involves allocating 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.
- 19. Applying the relative benefit approach to the example: the sales value of the ore extracted is (15t x CU 11/t) CU 165. The sales value of the ore remaining in the ground is (85t x CU 11/t) CU 935. Therefore, CU 23 (165/935 x CU 130) is attributable to extracting the 15t of ore. The remaining costs of (CU 130 23) CU 107 is deemed to be the cost of improving access to the ore that will be mined in the future the future benefit. CU 107 will be recognised as the stripping cost asset under this approach.

## Summary and staff recommendation

- 20. As can be seen from the above example, the two approaches give very different results. The relative benefit approach would result in a higher stripping cost asset balance than the residual cost approach, and a lower amount would be accounted for according to IAS 2.
- 21. The market value input into the relative benefit approach in our example is fixed this is not likely to be the case in the real world. In order to make such an approach operational, an entity may apply a forward price curve to the market price to build in expected price variances, or may try applying more sophisticated weighting to the relative benefit calculation, to reflect the greater effort required to extract ore at deeper levels. The staff think that under the majority of circumstances, applying this approach would not be cost efficient for the benefit to be gained.
- 22. For this reason, we recommend that the draft Interpretation require that the residual cost approach is applied in allocating costs between the current and future periods.

23. At the March meeting, the Committee did not discuss the level of guidance that may be required in the draft Interpretation for the cost allocation approach. The Committee asked us to bring this discussion forward to the May meeting. We suggest offering guidance on the residual cost approach as follows (paragraphs 18 - 19 of the draft Interpretation):

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.

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.

## **Question 2 for the Committee**

- 2.1 Does the Committee agree with staff's recommendation to require the residual cost approach?
- 2.2 Does the Committee agree with the level of guidance on this approach that has been given in the draft Interpretation?

## Other topics

24. At the January 2011 meeting, the Committee did not discuss the issues of impairment, transition or whether the illustrative example should be included in the final Interpretation. The Committee asked us to bring these issues back for discussion at a future meeting. The discussion on these items that was included

in Agenda paper 2<sup>2</sup> of the January 2011 Committee meeting has been largely reproduced below.

### **Impairment**

25. Paragraph 19 of the Draft Interpretation stated the following:

An entity should consider the [stripping campaign component] for impairment in accordance with IAS 36. Suspension (or planned suspension) of the extraction of the ore that is specifically associated with the [stripping campaign component] is an indication that the component may be impaired.

- 26. In Agenda paper 2 of the January 2011 meeting, we stated that commentators suggested that the Committee should consider providing guidance on how a component is to be impaired, if that is what it meant. Some commentators said that the wording of paragraph 19 of the Draft Interpretation needs clarification. These commentators asked whether it was the stripping campaign component, or the cash generating unit (CGU) to which it belonged, that would be assessed for impairment.
- 27. We think that the alternatives here would be either to:
  - (a) Exclude any reference to impairment of the stripping cost asset in the Consensus, but mention it in the Basis for Conclusions, or
  - (b) To leave paragraph 19 worded as it is.
- 28. Our recommendation is alternative (a). We do not think that any additional guidance is needed in the Interpretation, and we would expect entities to apply IAS 36 to this asset in the usual manner. We have explained this in the Basis (paragraph BC20).

Question 3 for the Committee

<sup>&</sup>lt;sup>2</sup> http://www.ifrs.org/NR/rdonlyres/D44FC49C-6212-4176-942A-A63CA0E557EE/0/021101Obs02IAS16.pdf

Does the Committee agree with the staff's recommendation that impairment of the stripping cost asset be addressed in the Basis for Conclusions?

#### **Transition**

- 29. The transition guidance offered in the Draft Interpretation that was exposed for comment in August 2010 was stated as follows:
  - An entity shall apply this [draft] Interpretation to production stripping costs incurred on or after the beginning of the earliest period presented.
  - Each existing stripping cost asset balance as at the date from which this [draft] Interpretation is applied, that 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 expected useful life of the specific section of the ore body to which each stripping campaign component relates. If there is no identifiable section of the ore body to which that component can be directly associated, it shall be recognised in profit or loss at the beginning of the earliest period presented. Any existing stripping cost liability balances shall be recognised in profit or loss at the beginning of the earliest period presented.
- 30. In the comment letters received on the Draft Interpretation, there was broad support for paragraph 21 of the Draft Interpretation, although some commentators noted that the Committee should consider that 'on or after the beginning of the earliest comparative period' would require some retrospective adjustment, and possibly the use of hindsight. One commentator suggested that the Interpretation be prospectively applied from the beginning of the next annual reporting period, after it becomes effective.
- 31. We think the following are alternatives to consider in respect of the transition guidance in paragraph 21 of the Draft Interpretation:
  - (a) To continue with the requirements as proposed, that is that the entity shall apply the proposals to production stripping costs incurred on/after the beginning of the earliest period presented, or

- (b) To require prospective application, but from the beginning of the next annual reporting period after the Interpretation becomes effective.
- 32. We recommend alternative (a). We think this would provide useful comparative information, and, provided the mandatory applicable date of the final Interpretation is sufficiently far into the future, this should give entities enough time to prepare for any adjustment required, without needing to use hindsight.

### **Question 4 for the Committee**

Does the Committee agree with the staff's recommendation that the entity should apply the proposals to production stripping costs incurred on/after the beginning of the earliest period presented?

- 33. In respect of paragraph 22 of the Draft Interpretation, the majority of the commentators disagreed with recognising any existing stripping cost balances in profit or loss, if they cannot be directly associated with an identifiable section of the ore body. They argued that this is not in line with current requirements in IAS 8 *Accounting policies, Changes in Accounting Estimates and Errors*, and will cause unnecessary volatility in earnings.
- 34. Some commentators argued that it may be difficult and impractical to determine when and how existing stripping cost balances were incurred, and which ore body they relate to. Commentators suggested that if existing stripping cost balances cannot be directly associated with an identifiable section of the ore body, that they be recognised in retained earnings at the beginning of the earliest period presented, consistent with IAS 8, and not in profit or loss.
- 35. We think the following are alternatives to consider in respect of paragraph 22 of the Draft Interpretation:
  - (a) Continue with the requirements as proposed, that is to require that any existing stripping cost asset balances that cannot be directly associated with an identifiable section of the ore body, be recognised in profit or loss at the beginning of the earliest period presented, or
  - (b) Require that any existing stripping cost asset balances that cannot be directly associated with an identifiable section of the ore body, be

- recognised in opening retained earnings at the beginning of the earliest period presented, or
- (c) Require that any existing stripping cost asset balances that cannot be directly associated with an identifiable section of the ore body, be depreciated/amortised over the remaining life of the mine.
- 36. We recommend alternative (b) that any existing stripping cost balances at the date of transition should be recognised in retained earnings at the beginning of the earliest period presented, to be consistent with IAS 8. We do not agree with alternative (c), because this would not be consistent with the depreciation/amortisation principle of the draft Interpretation.
- 37. In addition, we found that the reference to stripping cost liability balances created confusion amongst the commentators, since they stated that they were not familiar with this practice. We decided therefore to remove the reference to liabilities.

#### **Question 5 for the Committee**

- 5.1 Does the Committee agree with the staff's recommendation of alternative (b), that any existing stripping cost balances at the date of transition should be recognised in retained earnings at the beginning of the earliest period presented, and not in profit or loss?
- 5.2 Does the Committee agree with excluding any reference to stripping cost liability balances in the transition paragraphs?

#### Inclusion of the Illustrative Example

- 38. There was broadly little support from the commentators on the Draft Interpretation for the illustrative example to be kept in the final Interpretation. They stated that it was too simplistic and was not representative of surface mines.
- 39. The illustrative example was included in the Draft Interpretation to assist readers in understanding the concept of the stripping campaign. Given that it would be impossible to design an illustrative example that took all possible surface mining

combinations into account, and the fact that the stripping campaign concept is no longer part of the revised draft Interpretation, we recommend that no Illustrative Example is included in the final Interpretation.

## **Question 6 for the Committee**

Does the Committee agree with the staff that no Illustrative Example is included in the final Interpretation?