

### Staff Paper

Date

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**Project Extractive Activities** 

Accounting for stripping costs in the production phase of a surface mine – comparison of Draft Interpretation to near final Interpretation: tracked changes

Topic

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

#### References

- <u>The Conceptual</u> Framework for the Preparation and Presentation of Financial Statements 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'.
- 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

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- or amortised over the life of the mine 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. Stripping costs in the production phase may be part of the routine costs incurred during production. Production stripping costs may also be incurred as part of a systematic effort to gain access to a specific section of the ore body. This [draft] Interpretation refers to such a concentrated production stripping effort as a 'stripping campaign'.
- 4. A stripping campaign is a systematic process undertaken to gain access to a specific section of the ore body, which is a more aggressive process than routine waste clearing activities. The stripping campaign is planned in advance and forms part of the mine plan. It will have a defined start date and it will end when the entity has completed the waste removal activity necessary to access the ore with which the campaign is associated. 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.
- 5. This 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) Is the definition of an asset met? recognition of production stripping costs as an asset;
  - (b) When should the stripping campaign component be recognised? <u>initial</u> measurement of the stripping activity asset; and
  - (c) How should the stripping campaign component be measured initially? subsequent measurement of the stripping activity asset.
  - (d) How should the stripping campaign component be measured subsequently?

#### Consensus

## Is the definition of an asset met? Recognition of production stripping costs as an asset

- 8. An entity creates a benefit by undertaking stripping activity (and incurring stripping costs). This benefit is improved access to the ore to be mined. An entity shall assess whether the benefit meets the definition of an asset set out in the *Framework*. Paragraph 49(a) of the *Framework* states that 'an asset is a resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity.' The benefit of improved access to the ore will qualify for recognition as part of (a component of) an existing asset when:
  - (a) an entity controls the benefit created by the stripping activity, by either owning the land that it is mining, or owning the rights to mine the land;
  - (b) the benefit arises as a result of stripping activity, and consequently 'as a result of past events'; and
  - (c) a future economic benefit will flow to an entity through improved access to the ore that is expected to be economically recoverable in the future.

An entity shall recognise production stripping costs as an asset if, and only if an entity can demonstrate all of the following:

- a) it is probable that the future economic benefit (improved access to the ore body) associated with the costs will flow to the entity;
- b) the entity can identify the component of the ore body for which access has been improved; and
- c) the costs relating to the improved access to that component can be measured reliably.
- 9. To the extent that the benefit is realised 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, the entity shall recognise these costs as a non-current asset. This Interpretation refers to this non-current asset as the 'stripping activity asset'. The costs of stripping activity that are part of a stripping campaign shall be accounted for as an addition to, or an enhancement of, an existing asset. In other words, this benefit will become a component of an existing asset, and is referred to in this [draft] Interpretation as the 'stripping campaign component'.
- 10. Routine stripping costs that are not incurred as part of a stripping campaign shall be accounted for as current costs of production in accordance with IAS 2. The stripping activity asset shall be accounted for as an addition to, or as an enhancement of, an existing asset. In other words, the stripping activity asset will be accounted for as *part* of an existing asset.
- 11. An entity shall classify the stripping <u>activity asset</u>eampaign component as tangible or intangible according to the nature of the existing asset <u>ofto</u> which it <u>becomes partrelates</u>.
- 12. The stripping campaign component shall be specifically associated with the section of ore that becomes directly accessible as a result of the stripping activity. [An entity shall recognise the stripping activity asset when the production stripping activity takes place and the costs are incurred.
- 13. Recognition of the stripping activity asset shall cease when the entity has completed the waste removal activity necessary to fully access the identified component of the ore body.]

### <u>Initial measurement of the stripping activity asset</u> When should the stripping campaign component be initially recognised?

- 14. An entity shall recognise the stripping campaign component when the stripping activity takes place and the costs of creating the stripping campaign component are incurred. The entity shall measure the stripping activity asset initially at cost, this being the accumulation of costs directly incurred to perform the stripping activity that benefits 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 incidental operations shall not be included in the cost of the stripping activity asset.
- 15. Recognition of the stripping campaign component shall cease when the entity has completed the waste removal activity necessary to access the ore with which the campaign is associated. When the costs of the stripping activity asset and of the inventory produced are not separately identifiable, the entity shall allocate the production stripping costs between the inventory produced and the stripping activity asset on a rational and consistent basis.
- 16. In deciding upon the appropriate basis for this allocation, the entity could use an allocation basis that is based on a relevant production measure, calculated for the identified component of the ore body, and used as a benchmark to identify the extent to which additional activity of creating a future benefit has taken place. Examples of such measures include:
  - (a) cost of inventory produced compared with expected cost;
  - (b) volume of waste extracted compared with expected volume, for a given volume of ore production; and
  - (c) mineral content of the ore extracted compared with expected mineral content to be extracted, for a given quantity of ore produced.

## How should the stripping campaign component be measured initially? <u>Subsequent</u> measurement of the stripping activity asset

- 17. After initial recognition, the stripping activity asset shall be carried at its cost less depreciation or amortisation, and less any impairment losses, in accordance with the existing asset of which it is a part. The entity shall measure the stripping campaign component initially at cost, being the accumulation of costs directly incurred to perform the stripping activity and an allocation of directly attributable costs.
- 18. Some incidental operations may take place at the same time as the stripping activity, but are not necessary for the stripping campaign to continue as planned. The costs associated with these activities shall not be included in the cost of the stripping campaign component. The stripping activity asseteampaign component shall be depreciated or amortised onin a rational and systematic basismanner, over the expected useful life of the identified component specific section of the ore body that becomes moredirectly accessible as a result of the stripping activity campaign. The units of production method is applied unless another method is more appropriate.
- 19. The expected useful life of the specific sectionidentified component of the ore body that is used to depreciate or amortise the stripping eampaign componentactivity asset maywill differ from the expected useful life that is used to depreciate or amortise the mine itself and the related life-of-mine assets, unlessbecause the stripping eampaignactivity provides improvedwill give access only to the whole of the a portion of the total ore body.
- 20. 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.

#### 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.

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

#### **Transition**

- 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 activity eost asset balance as at the date from which this [draft]-Interpretation is applied, that which resulted from stripping activity undertaken during the production phase, shall be reclassified as a component of the an existing asset to which the stripping activity relates d. Such balances shall be depreciated or amortised over the remaining expected useful life of the specific section-identified component of the ore body to which each stripping campaign component activity asset relates.
- A4 If there is no identifiable section component of the ore body to which that component can be directly associated stripping activity relates, it shall be recognised in profit or loss opening retained earnings 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.

### 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 that are 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 a draft Interpretation in response to that diversitygence in practice.
- BC4 The Committee decided to include the concept of the stripping campaign as the unit of account in the draft Interpretation. In practice, the deposit of ore in an open pit mine is usually exposed in a series of 'push-backs', where waste is stripped and the ore is mined in a phased manner. Mine planning will identify the number, extent and timing of push-backs required over the life of the mine.
- BC5 The number, timing and extent of the stripping campaigns will depend upon a number of factors, eg maximising the productivity of the capital equipment and

labour force, safety factors such as slope stability, characteristics of the ore body and scheduling of production to meet demand.

#### **Scope**

- BC4 The draft-Interpretation givesproposes guidance on the accounting for stripping costs incurred in surface mining activity. In developing the draft-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 accounting for such costs this regard.

#### **Consensus**

# Is the definition of an asset met? Recognition of production stripping costs as an asset

- BC6 The Committee decided that, by incurring costs to remove waste, an entity may create atwo benefits, namely by undertaking stripping activity (and incurring stripping costs). These two benefits are the extraction of the ore mined in the current period, and improved access to the mineral ore body. An ore body that has been cleared of waste is more valuable to be mined in a future period. The result of this is that the activity creates an inventory asset and a non-current asset.
- BC7 The asset recognition criteria included in paragraph 8 of the Interpretation are those referred to in paragraph 4.44 of the *Conceptual Framework for Financial Reporting*. An additional criterion is, however, also included in the Interpretation for recognition of the stripping activity asset that the entity can specifically identify the 'component' of the ore body for which access is being

- improved. All three criteria must be met for the costs to qualify for recognition as an asset. If the criteria are not met, the stripping costs will be recognised as an expense in profit or loss.
- SCS 'Component' refers to the specific volume of the ore body for which future access is to be improved by the stripping activity. The identified component of the ore body would typically be a subset of the total ore body of the mine. A mine may have several components, which are identified during the production phase. As well as providing a basis for measuring the costs reliably at recognition stage, identification of components of the ore body is necessary for the subsequent depreciation or amortisation of the stripping activity asset, which will take place as that identified component of the ore body is mined.
- BC9 <u>Identifying components of the ore body requires judgement. The Committee</u>

  <u>understands that an entity's mine plan will provide the information required to</u>

  allow these judgements to be made with reasonable consistency.
- BC10 The Interpretation also states that the stripping cost asset should be recognised as 'part' of an existing asset. 'Part' refers to the addition to, or improvement of, the existing asset to which the stripping activity asset relates. Where the access benefit created by the stripping activity meets the definition of an asset, the Committee decided took the view that the benefit created was stripping activity asset was more akin to an addition to, or improvement part of, an existing asset, than an asset in its own right. Practically, the benefit In an actual situation, the stripping activity 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.
- BC11 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 <u>existing</u> asset to which the benefit relates.
- BC12 The Committee decided that there is a difference between stripping activity that is 'routine', and stripping activity that takes the form of a systematic process to gain access to a specific section of the ore body—the latter is referred to in the draft Interpretation as a 'stripping campaign'.

#### **Routine stripping**

- BC13 Most surface mining operations will undertake routine stripping activity continuously just ahead of, or around, the ore currently being mined, to ensure that production continues without delay. The benefit created by routine stripping is unlikely to extend beyond the current reporting period, because the ore being uncovered as a result is likely to be mined in the current reporting period, and no potential future benefit to the entity exists. Routine stripping costs should therefore be accounted for as current costs of production.
- BC14 There will be some circumstances when routine stripping may create a benefit that will be realised in a future period. This may arise, for example, when stripping is performed continuously as part of routine operations, and continues into the following reporting period. The Committee decided that the costs of such routine stripping should not be recognised as part of an asset.

#### **Stripping campaign**

- BC15 By nature, a stripping campaign will involve a significant 'push back' or removal of waste material in order to widen or deepen an existing pit, or to create a new, satellite pit. This activity is likely to have an enduring benefit—the area that has been accessed as a result may be mined over a number of future periods—and consequently, the recognition criteria for an asset will usually be met.
- BC16 Distinguishing a stripping campaign from routine stripping activities will require judgement. The Committee believes, however, that entities generally plan for stripping campaigns well in advance and that such campaigns are typically well enough defined by an entity's mine plan for the determination, in practice, of whether particular activities are part of routine stripping or a stripping campaign, to be made with reasonable consistency.
- BC17 At the same time as the component is recognised, it is important that the entity should link the costs incurred to the section of the ore body that will be accessed as a result of the stripping campaign. This specific identification approach links the stripping activity to the benefit created, and is crucial to the subsequent depreciation or amortisation of the asset, which will take place as the ore is mined.

#### When should the stripping campaign component be recognised?

- BC18 The stripping campaign component is an accumulation of costs incurred, as a result of stripping activity, that meet asset recognition criteria (paragraph 49(a) of the *Framework*). Consequently, the component is recognised as the stripping activity takes place.
- BC19 The stripping campaign is in effect a subset of the total life of the mine. A mine may have one or more stripping campaigns planned into the production phase.
- IThe 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 campaign componentactivity asset should end. Paragraph 20 of IAS 16 states that recognition should 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 sectioncomponent of land is stripped to the extent required in order to achieve this objective, recognition of stripping costs relating to that sectioncomponent of land shouldall cease. Subsequent stripping costs should be separately assessed to determine whether they represent routine stripping, or a new stripping campaignment the criteria stated in this Interpretation to be recognised as a stripping activity asset.]

## How should the stripping campaign component be measured initially? <u>Initial</u> measurement of the stripping activity asset

- BC13 IAS 16 paragraph 16(b) states that the cost of an item of property, plant and equipment comprises 'any costs directly attributable to bringing the asset to the location and condition necessary...' Examples of the type of costs that the Committee would expect to be included as directly attributable overhead costs (paragraph 14 of the Consensus) would be items like salary costs of the mine supervisor overseeing that component of the mine, and an allocation of rental costs of any equipment which was hired specifically to perform the stripping activity.
- BC14 The Committee decided thought that it was important to followaddress incidental operations in the Consensus, similarly to the principle contained in

paragraph 21 of IAS 16. The Committee is aware that a number of other development activities will take place at the same time and in the same area as the stripping activity are carried out simultaneously in a mine operation and thought that it was important for the entity to be aware of what was production stripping activity, and what was not, when considering the measurement of the stripping activity asset. An example of such an incidental operation would be building an access road in the area in which the stripping campaign is taking place., but not be of a waste removal nature. The Committee was concerned that the costs relating to these ancillary activities would also be capitalised to the stripping campaign component. The Committee therefore decided that ancillary costs should not be capitalised as part of the stripping campaign component.

- BC15 The Committee noted that, when inventory is produced at the same time as the stripping activity asset is created, it may be difficult in practice to measure the separate cost of each benefit directly. The Committee agreed that an allocation basis would be needed in order to separate out the cost of the inventory produced and the cost of the stripping activity asset.
- BC16 In its discussions of the most appropriate allocation basis, the Committee rejected any basis that was based on sales values. The Committee understood that applying such a basis would involve practical difficulties and that it would be costly in comparison to the benefit that it would provide. From the outreach performed by the staff, the Committee understood that 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 complexities may arise when more than one mineral is present (whether by-products or joint products) when the ore is extracted.
- BC17 The Committee decided to require an allocation approach that was based in a relevant production measure. By using a production measure as a benchmark and comparing this to the actual level of that measure, the production measure basis requires an entity to recognise that a level of activity has taken place beyond what would otherwise be expected for the inventory production in the period, and that may have given rise to a future access benefit.

# How should the stripping campaign component be measured subsequently? Subsequent measurement of the stripping activity asset

- BC18 The Committee decided that the most-rational and systematicappropriate way of depreciating or amortising the cost of the stripping campaign componentactivity asset would be over the expected useful life of the sectionidentified component of the ore body that benefited from the campaignactivity. This is an application of the units of production method that is commonly used, but it is focused only on the sectionidentified component of the ore body for which that is directly accessed has been improved through the stripping campaignactivity. Because the life of the stripping campaignidentified component is expected to be only a part of usually a subset of the entire life of the mine, the stripping campaign componentactivity asset will be depreciated or amortised over a lessershorter period than the life of the mine. It is not expected that a stripping campaign would last the duration of the entire mine.
- BC19 The Committee also decided that there was no need for specific impairment guidance to be given and expects that the principles in IAS 36 *Impairment of Assets* would be applied to the existing asset of which the stripping activity asset is a part, and not at the level of the stripping activity asset itself.

#### **Transition**

- BC20 Because of the complex and lengthy nature of many mining operations, and the past 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 shouldall require prospective application to production stripping costs incurred on or after the beginning of the earliest period presented.
- BC21 The Committee also decided that any existing stripping costs asset balances should each be reclassified as components of 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 costs asset balances, the amounts should be recognised in profit or loss at the date of application of the proposed Interpretation. Any existing stripping

cost liability balances should be recognised in profit or loss at the beginning of the earliest period presented. The Committee decided to follow the principles in IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors and to require recognition of any existing stripping activity balances at transition date in opening retained earnings at the beginning of the earliest date presented, if such balances could not be identified with a remaining component of the ore body.

BC22 The Committee noted that any liability balances resulting from prior production stripping activity that existed at the transition date would not be recognised under the principles described in the Consensus. The Committee understood from the comments received on the Draft Interpretation that such balances were uncommon, and therefore did not think that it needed to provide any guidance on recognition of liability balances, because constituents may find it confusing.