First Impressions: Production stripping costs

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Changes in accounting for production stripping costs likely

In IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine, the IFRS Interpretations Committee sets out principles for the recognition of production stripping costs in the balance sheet. The interpretation recognises that some production stripping in surface mining activity will benefit production in future periods and sets out criteria for capitalising such costs.

The interpretation was issued in response to perceived diversity in practice in accounting for production stripping costs. A recent KPMG survey revealed that many companies capitalise costs, often using an average life-of-mine stripping ratio approach, while others expense such costs as incurred, or follow the US GAAP approach of allocating all production stripping costs to inventory produced in the period.

For companies that currently expense these costs, the interpretation will mean not only a change in accounting policy, but also a need to look at the processes required to capture the relevant data at the mine level. Companies that currently defer production stripping costs may also find that their current accounting is not in line with the interpretation. There are two areas to consider. Firstly, the interpretation specifies the costs to be capitalised, which may differ from current practice in some cases. Secondly, it requires companies to ensure that those costs are recognised in profit or loss over a period that in some cases may well be shorter than the period currently used. All in all we think that only a handful of mining companies will be able to conclude that their current accounting is completely in line with the interpretation.

Following adoption of this interpretation, we expect greater consistency between companies in the treatment of production stripping costs. However, there is a level of judgement in the identification of components of the ore body, and a degree of choice in cost allocation methods, that will limit this consistency.

We hope that this publication will assist you in gaining a greater understanding of the impact of this interpretation on your financial statements.
1. Highlights

The IASB published IFRIC 20 *Stripping Costs in the Production Phase of a Surface Mine*, an interpretation of the IFRS Interpretations Committee (Interpretations Committee), on 19 October 2011. The interpretation, which restricts the current diverse practices in accounting for production stripping in surface mining, has an effective date of annual periods beginning on or after 1 January 2013.

### Overview of the requirements

- Waste removal costs (stripping costs) incurred in the production phase of surface mining are accounted for in accordance with IAS 2 *Inventories* to the extent that they relate to current period production.

- Production stripping costs are recognised as a non-current asset (‘stripping activity asset’) if all of the following criteria are met:
  - it is probable that the future economic benefits will flow to the entity;
  - the entity can identify the component of the ore body to which access has been improved; and
  - the costs incurred can be measured reliably.

- When the costs of a stripping activity asset vs current period inventory are not separately identifiable, costs are allocated based on a production method.

- The stripping activity asset is recognised as a component of the larger asset (mining assets) to which it relates, which will be an item of property, plant and equipment or an intangible asset.

- On initial recognition, the stripping activity asset is measured at cost, which includes all directly attributable expenditure, but excludes costs related to incidental activities.

- Subsequent to initial recognition, the stripping activity asset is measured consistently with the asset of which it is a component (i.e. under the cost or revaluation model), and is depreciated/amortised over the useful life of the component of the ore body to which access has been improved.

- Application of the interpretation, by both existing users and first-time adopters of IFRS, is on a prospective basis, with transitional adjustments being recognised in opening retained earnings.
## 2. How this could affect you

<table>
<thead>
<tr>
<th>Key points</th>
<th>Potential impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalisation required if certain criteria met</td>
<td>There is no longer any choice in whether or not to defer production stripping costs that benefit future periods. Mining companies that have previously expensed such costs, or allocated all such costs to inventory, will need to develop a process to calculate the costs that need to be capitalised. See section 5.</td>
</tr>
</tbody>
</table>
| Components of the ore body drive the accounting                           | In applying the interpretation, the identification of the component of the ore body to which access has been improved will be important. Not only is this a criterion for recognition of an asset, but it will also determine the depreciation/amortisation period and therefore the profile of recognition in profit or loss.  
  The identification of components is likely to require judgement, particularly when multiple stripping campaigns are undertaken for one ore body. Companies should review their mine plans in identifying components and consider if those operational documents provide the information required. See section 6.  
  If stripping cost assets previously have been charged to profit or loss based on the life of the mine, then different lives for different components will result in a less uniform charge in profit or loss. This is illustrated in the examples in section 6.4. |
| Formula-based allocation of costs between non-current asset and inventory may be required | The interpretation requires that cost allocation between inventory and the stripping activity asset be based on a production measure, e.g. actual vs expected volume of waste extracted.  
  For some companies, this may mean a change in allocation processes. Companies that previously expensed costs as incurred will need to construct cost allocation models if the costs of inventory and the stripping activity asset are not separately identifiable.  
  Obtaining additional information to be able to identify and allocate costs may involve discussions with mine operators or mine management, appropriate training to ensure that the necessary information is obtained and the development of new processes, controls and systems. See section 6.2. |

### Insight – Changes in accounting/data collection are likely for most mining companies

A KPMG survey of the most recent financial statements of 26 mining companies revealed that a third of those that disclosed their accounting policy expensed production stripping costs as incurred for some or all of their mines. This means not only a change in accounting policy when these policies apply to surface mines, but it also has implications for the data collection processes. Companies deferring production stripping costs for some or all of their mines may also find that their current accounting is not completely in line with the interpretation. See section 3.
Reducing diversity in practice

The main challenge in accounting for stripping costs in the production phase is that the costs incurred may benefit both current and future periods in the form of current period production or improved access to ore for future production. The Interpretations Committee developed IFRIC 20 as a response to perceived diversity in practice in the accounting for such costs.

We think that only a handful of companies will be able to conclude that their current accounting is completely in line with the interpretation. A KPMG survey of the most recent financial statements of 26 mining companies revealed that just over half (15) disclosed their accounting policy for production stripping costs. Of these 15 companies, a third expensed such costs as incurred for some or all of their mines. This means not only a change in accounting policy for companies applying these policies to surface mines, but a real need to look at the processes required to capture the relevant data at the mine level. This may involve obtaining additional information from mine operators, and training mine management to ensure that the necessary information is obtained.

This does not mean that companies deferring production stripping costs can continue as they were under the new requirements. Of the 15 companies that disclosed a policy, 13 companies deferred production stripping costs for some or all of their mines, with almost all of those companies calculating the asset based on an average stripping ratio. The interpretation specifies the costs that may be capitalised, which may differ from current practice in some cases. Additionally, those costs will be recognised in profit or loss over a period that, in some cases, may well be shorter than the period currently used.

All in all, we think that only a handful of mining companies will be able to conclude that their current accounting is completely in line with the interpretation.

Insight – Less diversity in practice but a difference from US GAAP

Before IFRIC 20 there was no guidance in IFRS related specifically to the accounting for production stripping costs. As a result, there was diversity in practice in accounting for such costs.

The approach required by the interpretation will increase consistency in approach, although there will still be diversity in some areas of application. However, a significant difference from US GAAP will remain. Under ASC Subtopic 930-330 Extractive Activities – Mining – Inventory, production stripping costs are included in the cost of inventory produced in the period.
4. Scope of the interpretation is limited

IFRIC 20.6
The scope of IFRIC 20 is limited to production phase stripping costs incurred in surface mining activity.

IFRIC 20.2, BC5
Stripping costs incurred during the development (pre-production) phase of a mine are excluded from the scope of the interpretation. This is based on the Interpretations Committee's understanding that there is no significant diversity in practice in accounting for such costs. In our experience, pre-production stripping costs generally are capitalised and amortised over the productive life of the mine using the unit-of-production method. The interpretation also refers to this treatment of pre-production stripping costs.

IFRIC 20.BC4
The scope of IFRIC 20 is specifically limited to surface mines. The Interpretations Committee decided not to address underground mining activities or the question of whether oil sands extraction is a surface mining activity.

IFRIC 20.BC4
The interpretation applies to all types of natural resources that are extracted using a surface mining process. Although the interpretation refers to the extraction of 'ore', it applies equally to surface mining activities used to extract resources that may not be embedded in an ore deposit, for example coal.

Insight – Identification of production phase stripping costs may require judgement
There are many different types of surface mines and the ways in which stripping activity occurs in practice are diverse; this means that in some cases it may not be easy to distinguish between pre-production and production phase stripping costs.

Mines vary from single pits with a reasonably contained ore body, to complex multi-pit mines (in which stripping costs may be pre-production for the pit but not for the mine as a whole), to large single pits (in which the ore body is accessed in phases and the initial pre-production stripping may in part provide access to only a part of the ore body). There is no definition in IFRS of the production phase, and determining whether stripping activity is in the production or pre-production phase may require considerable judgement.

“Determining whether stripping activity is in the production or pre-production phase may require considerable judgement”

Insight – Potential application by analogy
Accounting for the costs of waste removal during the production phase in underground mines may be subject to similar accounting challenges as surface mines: costs incurred may provide benefits in future periods. The interpretation does not rule out application by analogy to such activities.

The question of whether oil sands extraction is a surface mining activity is not addressed by the interpretation. For many oil sands extractors the nature of operations, and the way in which oil sands are physically accessed, may mean that the interpretation is not directly relevant. However, oil sands companies will need to evaluate their extractive processes to determine whether they are consistent with surface mining as a first step in determining whether the interpretation might be relevant to their activities.
5. Improving access to the component of the ore body drives recognition

IFRIC 20.4 Two benefits can arise as a result of stripping activity in the production phase:

- usable ore that can be used to produce inventory; and
- improved access to materials that will be mined in future periods.

IFRIC 20.8 To the extent that benefits are realised in the form of inventory produced, the related costs are accounted for in accordance with IAS 2 Inventories.

IFRIC 20.8, 9 The benefit of improved access to ore is recognised as a non-current asset, referred to as a ‘stripping activity asset’ in the interpretation.

An entity recognises a stripping activity asset if, and only if, all of the following criteria are met:

1. it is probable that the future economic benefit (improved access to the ore body) associated with the stripping activity will flow to the entity;
2. the entity can identify the component of the ore body to which access has been improved; and
3. the costs relating to the stripping activity associated with that component can be measured reliably.

IFRIC 20.BC7 If all three criteria are not met, then the stripping costs are expensed as incurred.

The first and third of these asset recognition criteria are in line with the Conceptual Framework for Financial Reporting. However, the interpretation includes an additional criterion: that the entity can specifically identify the ‘component’ of the ore body to which the access is being improved.

IFRIC 20.BC8 The component of the ore body is a specific volume of the ore body that is made more accessible by the stripping activity. In general, the identified component will be a subset of the total ore body of the mine; this is illustrated in 6.4.

As well as providing a basis for measuring costs reliably at the recognition stage, the identification of the component of the ore body is necessary for the subsequent depreciation or amortisation of the stripping activity asset (see 6.3).
Insight – Identifying components of the ore body drives the accounting

Recognising a stripping activity asset requires identification of the component of the ore body to which access is improved by the stripping activity.

In practice the identification of components of the ore body will require judgement. Companies will need to put in place processes to identify these components as this will drive both initial recognition and subsequent measurement of the stripping activity asset.

Mine plans, as operational documents, should be considered in light of this interpretation to determine if the necessary information is contained within them, and whether this is in line with experience and expectations. The basis for conclusions to the interpretation itself refers to using the mine plan as a source of information.

Some stripping costs that are capitalised currently may not qualify for capitalisation under IFRIC 20 because the costs cannot be related to a specific component of the ore body. This will require adjustment on adopting the interpretation (see section 7).

Companies will need to put into place processes to identify these components.

Insight – No option to automatically expense production stripping costs

Currently, some companies expense production stripping costs or include them in the cost of inventory produced. Even companies with a policy of deferring production stripping costs when they are uneven over time sometimes have a policy of charging stripping costs directly to profit or loss when they are expected to be relatively constant over time. These approaches will no longer be acceptable.

When the cost per unit of ore truly is uniform over time (i.e. there are no additional costs for access to ore to be mined in the future), then the difference in the approach could be limited to amounts contained in unsold inventory; however, processes will need to be adopted to collect the relevant information and to consider the materiality of cost allocation.

Obtaining the necessary cost information and performing allocations may mean that companies need to discuss with the operators of their mines how this information is to be obtained. Additionally, as the information required is operational in nature, mine managers may need to be trained to understand the information required.

Performing allocations may mean that companies need to discuss with the operators of their mines how this information is to be obtained.

The stripping activity asset will be accounted for as part of the existing asset to which it relates. Accordingly, the asset will be classified as an item of property, plant and equipment or an intangible based on the nature of the existing asset of which it is a part.
Insight – Stripping activity assets likely to be classified as property, plant and equipment

In our experience, there is diversity in the classification of capitalised stripping costs. While the majority of companies classify capitalised stripping costs as property, plant and equipment, other classifications include as a separate non-current asset and as a separate current asset. Under the interpretation, the classification of stripping activity assets will be consistent with the classification of the larger asset, i.e. mining assets. In our experience, mining assets generally are classified as property, plant and equipment.

Classification of stripping activity assets will be consistent with the classification of the larger asset.

Insight – Component accounting already an integral part of IFRS

Component accounting is an integral part of accounting under IAS 16 Property, Plant and Equipment. The component approach of identifying significant parts and amortising them separately is not mentioned explicitly in IAS 38 Intangible Assets. However, in our experience component accounting is applied to intangible assets in a manner similar to property, plant and equipment in appropriate circumstances.

In our experience, component accounting is applied to intangible assets in a manner similar to property, plant and equipment in appropriate circumstances.
6. The component of the ore body drives measurement

6.1 Initial measurement based on costs incurred

IFRIC 20.12 The stripping activity asset is measured initially at cost. This includes costs directly incurred to perform the stripping activity that improves access to the component of the ore body, plus an allocation of directly attributable overheads.

IFRIC 20.12, BC13 Some incidental operations may take place at the same time as the production stripping activity, but are not necessary for the production stripping activity to continue as planned, e.g. building an access road in the area in which the stripping campaign is taking place. The costs associated with these incidental operations are not included in the cost of the stripping activity asset.

The basis for conclusions to the interpretation refers to the inclusion of directly attributable costs in property, plant and equipment as required by IAS 16. Other than the examples given in IFRIC 20, no further guidance on the meaning of directly attributable costs is given in the interpretation. However, since this principle is consistent with the initial measurement principles of IAS 16 and IAS 38, we would expect those standards to be used as guidance in determining directly attributable costs.

IAS 16 requires the cost of an item of property, plant and equipment to include ‘any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management’. IAS 16 gives examples of directly attributable costs, including employee benefit costs. Costs need not be external or incremental in order to be directly attributable to an item of property, plant and equipment. For example, when an existing employee works on a project for a specific period, in our view the employee’s costs during that period will be included in the cost of the asset even though the costs would have been incurred in any event.

IAS 38 also includes directly attributable costs in the measurement of an intangible asset. The principles relating to property plant and equipment apply equally to intangible assets.

Expenditure on training activities and clearly identified inefficiencies are expensed as incurred under both IAS 16 and IAS 38.

Assuming that the stripping activity asset is a qualifying asset, related borrowing costs will also be capitalised in accordance with IAS 23 Borrowing Costs.

This principle is consistent with the initial measurement principles of IAS 16 and IAS 38.
6.2 **Formula-based allocation between inventory and stripping asset may be required**

**IFRIC 20.13**

When the costs of the stripping activity asset vs the costs of the inventory produced are not separately identifiable, production stripping costs are allocated between inventory and the stripping activity asset. The company uses 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 has created a future benefit.

**IFRIC 20.BC15, BC16**

The Interpretations Committee decided to require a production-based allocation approach because it considered this to be a good indicator of the nature of the benefits that are generated. A company identifies when 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. In addition, the Interpretations Committee understood that applying a basis of allocation based on future sales values would involve practical difficulties and that it would be costly in comparison to the benefit that it would provide.

**IFRIC 20.13**

The following examples of allocation measures are given in the interpretation:

- actual vs expected cost of inventory produced;
- actual vs expected volume of waste extracted; and
- actual vs expected mineral content of ore extracted.

**Insight – Cost allocation process not a new concept**

The allocation of costs is a familiar concept. For example, IAS 2 requires the allocation of conversion costs between products on a ‘rational and consistent basis’ in certain circumstances. The interpretation specifies the general form of the approach to the allocation of stripping costs between inventory and the stripping activity asset. While restricting the allocation basis to production methods, there is still scope for a range of benchmarks to be applied in practice. A comparison of actual waste volume for a given quantity of ore to the expected average ratio is common in current accounting, but this approach will be applied to the identified component rather than to the whole mine, which may change the result for some companies.

The interpretation does not preclude the use of different allocation bases for different mines. However, in applying IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, care will be required to ensure that a consistent approach is applied in similar circumstances. When the characteristics of a mine mean that a different allocation approach would give more relevant and reliable information, use of a different allocation method, based on production, could be justified. For example, mineral content may be a more appropriate measure when the mineral content varies significantly over time.

“While restricting the allocation basis to production methods, there is still scope for a range of benchmarks to be applied in practice.”
6.3 Subsequent measurement depends on policy for related mining assets

IFRIC 20.14 After initial recognition, the stripping activity asset is carried at either its cost or its revalued amount less depreciation or amortisation and less impairment losses, in accordance with the existing asset of which it is part.

**Insight – Revaluation policy acceptable but rare in practice**

The interpretation allows subsequent measurement at a revalued amount; this takes into account the policy choice available in IAS 16 that does not require an active market for revaluation. However, in our experience mining assets, which will be the larger asset of which the stripping activity asset is a component, generally are measured using the cost model, i.e. at cost less accumulated depreciation and impairment losses.

IFRIC 20.15 The stripping activity asset is 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 unit-of-production method is applied unless another method is more appropriate.

IFRIC 20.16 Generally, the expected useful life of the identified component of the ore body that is used to depreciate or amortise the stripping activity asset will differ from the expected useful life that is used to depreciate or amortise the mine itself and the related life-of-mine assets. The only exception is when the stripping activity provides improved access to the whole of the remaining ore body.

IFRIC 20.BC18 There is no change in the application of IAS 36 *Impairment of Assets* to the existing asset of which the stripping activity asset is a part. Since the stripping activity asset is a component of that larger asset, it will not itself be tested for impairment.

**Insight – Unit-of-production depreciation/amortisation expected to be most common**

IAS 16 and IAS 38 require assets to be depreciated/amortised using a method that reflects the pattern of consumption of benefits generated by the asset. The systematic basis applied to the stripping activity asset will be in line with these requirements. In our experience, the unit-of-production method is the most commonly used approach to depreciating/amortising mining assets, which is consistent with the default presumption in the interpretation.

"The unit-of-production method is the most commonly used approach"

**Insight – Depreciation over the life of the component**

The interpretation expects that stripping activity assets will be depreciated/amortised over a period shorter than the life of the mine except in ‘limited circumstances’ when the stripping activity provides improved access to the whole of the remaining ore body.

For ‘simple’ one-pit mine structures it may be easier to demonstrate that the limited circumstances apply and that stripping activity provides improved access to the whole of the ore body; however, for mines with multiple pits, or one pit with the ore accessed in different phases, it is likely to be at least more difficult to demonstrate that those limited circumstances apply.
The interpretation gives an example of when stripping activity might provide improved access to the whole of the ore body: towards the end of a mine’s useful life when the identified component represents the final part of the ore body to be extracted.

A recent KPMG survey of the most recent financial statements of 26 mining companies revealed that 12 of the 13 companies that capitalised production stripping costs for some or all of their mines disclosed that they did so at least to the extent that actual stripping ratios exceeded average life-of-mine or life-of-pit stripping ratios.

We therefore expect there to be a change in accounting for many companies as stripping costs are depreciated/amortised over shorter periods under this interpretation than the life-of-mine basis. Additionally, depreciation/amortisation based on components of the ore body is likely to result in less uniform recognition of such costs in profit or loss through the life of the mine.

6.4 Worked examples highlight impact

The allocation methods noted in 6.3 may be similar to approaches used currently by some companies. For example, comparing the volume of waste per unit of production to the expected level of waste is similar to using an average stripping ratio.

However, depending on a company’s current approach, there will be differences between an average stripping ratio approach and the accounting under IFRIC 20; this might occur, for example, in respect of the treatment of costs when the ratio in the period is below the expected average ratio and the depreciation period.

Example 1 below assumes a single component to illustrate the difference between the requirements of IFRIC 20 and one possible approach currently being followed in practice. Example 2 then looks at the difference that having two components would make on the result; while the actual impact of IFRIC 20 will depend on the characteristics of the components of the ore body and the related stripping costs, the example shows that having different components will affect the result.

**Example 1 – One component**

This example makes a simplifying assumption that the ore body has only one component. This may apply, for example, towards the end of the life of a mine when there is only one component left to be mined. The implications of having more than one component are dealt with in Example 2.

This example assumes the following in relation to the current accounting for production stripping costs:

- Stripping costs are deferred to the extent that they exceed the average life-of-mine stripping ratio.
- The life-of-mine stripping ratio is calculated as the volume of waste divided by the volume of ore.
- When the stripping costs in the period are below the average life-of-mine stripping ratio, some of the deferred costs are written off.

This example also assumes that under IFRIC 20, production stripping costs will be allocated between inventory and the stripping activity asset based on the actual vs expected volume of waste extracted. This is on the basis that the stripping activity provides improved access to the ore body, but the costs attributable to each asset are not separately identifiable (see 6.2).
### Result under current accounting policy

<table>
<thead>
<tr>
<th>Period</th>
<th>Deferred stripping asset movement</th>
<th>Cumulative deferred stripping asset</th>
<th>Charged to profit or loss</th>
<th>Amount charged to profit or loss per unit of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,383</td>
<td>1,383</td>
<td>4,417</td>
<td>27.6</td>
</tr>
<tr>
<td>2</td>
<td>1,718</td>
<td>3,101</td>
<td>10,282</td>
<td>28.6</td>
</tr>
<tr>
<td>3</td>
<td>(576)</td>
<td>2,525</td>
<td>12,776</td>
<td>29.0</td>
</tr>
</tbody>
</table>

**Notes:**
1. Ore produced x (waste per unit of production - overall expected waste per unit of production) x (total cost incurred / (ore produced + waste produced)). This calculation includes some element of rounding.
2. Total cost incurred - movement in deferred stripping asset.
3. Amount charged to profit or loss / ore produced.

### Result under IFRIC 20

<table>
<thead>
<tr>
<th>Period</th>
<th>Allocated to inventory</th>
<th>Stripping activity asset additions</th>
<th>Stripping activity asset depreciation</th>
<th>Cumulative stripping activity asset</th>
<th>Amount charged to profit or loss</th>
<th>Amount charged to profit or loss per unit of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4,417</td>
<td>1,383</td>
<td>(96)</td>
<td>1,287</td>
<td>4,513</td>
<td>28.2</td>
</tr>
<tr>
<td>2</td>
<td>10,282</td>
<td>1,718</td>
<td>(503)</td>
<td>2,502</td>
<td>10,785</td>
<td>30.0</td>
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<tr>
<td>3</td>
<td>12,200</td>
<td>-</td>
<td>(615)</td>
<td>1,887</td>
<td>12,815</td>
<td>29.1</td>
</tr>
</tbody>
</table>

**Notes:**
1. Total cost incurred - movement in deferred stripping asset.
2. Ore produced x (waste per unit of production - overall expected waste per unit of production) x (total cost incurred / (ore produced + waste produced)). This calculation includes some element of rounding.
3. Stripping activity asset x (ore produced / reserves at the start of the period); assumes no change in total expected reserves.
4. Assumes that all production is sold in the period.

### Data used in Example 1
- **Total expected units of ore:** 2,310
- **Total expected units of waste:** 19,690
- **Overall expected waste per unit of production:** 8.52 (Rounded)

<table>
<thead>
<tr>
<th></th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ore produced:</td>
<td>160</td>
<td>360</td>
<td>440</td>
</tr>
<tr>
<td>Waste produced:</td>
<td>1,840</td>
<td>3,640</td>
<td>3,560</td>
</tr>
<tr>
<td>Waste per unit of production (rounded):</td>
<td>11.50</td>
<td>10.11</td>
<td>8.09</td>
</tr>
<tr>
<td>Cost of removing ore and waste:</td>
<td>5,800</td>
<td>12,000</td>
<td>12,200</td>
</tr>
</tbody>
</table>
Insight – IFRIC 20 method affects profit or loss differently

Example 1 illustrates that depreciating the stripping activity asset has an effect on profit or loss different from reducing the deferred amount based on the life-of-mine stripping ratio, even if there is only one component.

Example 2 – Two components

This example builds on Example 1 and illustrates the effect of applying IFRIC 20 when there are multiple components (two in this example), which is more realistic since the interpretation expects that the life of the component of the mine will be less than the life of the mine as a whole. The main impact for companies currently applying a life-of-mine approach will be in the recognition of depreciation, as seen below.

<table>
<thead>
<tr>
<th>Period</th>
<th>Allocated to inventory</th>
<th>Stripping activity asset additions</th>
<th>Stripping activity asset depreciation</th>
<th>Cumulative stripping activity asset</th>
<th>Amount charged to profit or loss</th>
<th>Amount charged to profit or loss per unit of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4,065</td>
<td>1,735</td>
<td>(206)</td>
<td>1,529</td>
<td>4,271</td>
<td>26.7</td>
</tr>
<tr>
<td>2</td>
<td>9,902</td>
<td>2,098</td>
<td>(556)</td>
<td>3,071</td>
<td>10,458</td>
<td>29.1</td>
</tr>
<tr>
<td>3</td>
<td>11,236</td>
<td>964</td>
<td>(860)</td>
<td>3,175</td>
<td>12,096</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Notes:
1. Total cost incurred - movement in deferred stripping asset.
2. Ore produced x (waste per unit of production - overall expected waste per unit of production) x (total cost incurred / ore produced + waste produced). This calculation includes some element of rounding.
3. Stripping activity asset x (ore produced / reserves at the start of the period); assumes no change in total expected reserves.
4. Assumes that all production is sold in the period.

Data used in Example 2

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expected units of ore:</td>
<td>1,350</td>
<td>960</td>
</tr>
<tr>
<td>Total expected units of waste:</td>
<td>10,470</td>
<td>9,220</td>
</tr>
<tr>
<td>Overall expected waste per unit of production:</td>
<td>7.76</td>
<td>9.60 (Rounded)</td>
</tr>
</tbody>
</table>

Component 1

<table>
<thead>
<tr>
<th></th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ore produced:</td>
<td>160</td>
<td>280</td>
<td>300</td>
</tr>
<tr>
<td>Waste produced:</td>
<td>1,840</td>
<td>2,220</td>
<td>1,900</td>
</tr>
<tr>
<td>Waste per unit of production (rounded):</td>
<td>11.50</td>
<td>7.93</td>
<td>6.33</td>
</tr>
<tr>
<td>Cost of removing ore and waste:</td>
<td>5,800</td>
<td>7,500</td>
<td>6,710</td>
</tr>
</tbody>
</table>
**Component 2**

<table>
<thead>
<tr>
<th></th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ore produced:</td>
<td>-</td>
<td>80</td>
<td>140</td>
</tr>
<tr>
<td>Waste produced:</td>
<td>-</td>
<td>1,420</td>
<td>1,660</td>
</tr>
<tr>
<td>Waste per unit of production (rounded):</td>
<td>-</td>
<td>17.75</td>
<td>11.86</td>
</tr>
<tr>
<td>Cost of removing ore and waste:</td>
<td>-</td>
<td>4,500</td>
<td>5,490</td>
</tr>
</tbody>
</table>

**Insight – Multiple components affect the result**

We see that the result in Example 2 is different from Example 1, even though the information used is the same for the mine as a whole. The amount of the stripping asset differs from Example 1 as the allocation between inventory and the stripping activity asset is based on the component. The depreciation charge is different as the remaining ore for each component is used in the calculation of the depreciation charge.

The information used in the examples is provided with each example. The amount of information required demonstrates that for companies who previously have not had processes for cost allocation, the information to be gathered and processes to be put in place could be extensive.
Prospective application

IFRIC 20.A1
IFRIC 20 is effective for annual periods beginning on or after 1 January 2013; early adoption is permitted.

IFRIC 20.A2
The interpretation should be applied prospectively to production stripping costs incurred on or after the beginning of the earliest period presented.

The following diagram sets out the timing of application, assuming a 31 December annual reporting date and one period of comparatives presented.

Two forms of adjustment may arise on transition.

IFRIC 20.A4
- Existing balances relating to production stripping activity (‘predecessor stripping assets’) that are not related to an identifiable component of the ore body will be written off to opening retained earnings.

IFRIC 20.A3
- Predecessor stripping assets associated with a remaining identifiable component of the ore body will be reclassified as part of an existing asset to which the stripping activity related. Such balances will be depreciated or amortised over the remaining expected useful life of the identified component of the ore body to which each predecessor stripping asset relates.

IFRIC 20.B2
A first-time adopter of IFRS may apply the transitional requirements of the interpretation.
Insight – Adjustments on transition depend on previous policy and the identified components of the ore body

On transition, existing balances relating to production stripping activity will be written off to opening retained earnings unless they are related to an identifiable component of the ore body at the date of transition.

The prospective nature of the transitional requirements means that recalculation of previous balances is not required; however, to determine whether an existing balance should be written off, companies will need to look at whether there is a remaining identified component of the ore body. When components have not previously been considered for accounting purposes, this will require analysis and judgement.

Companies that did not have asset balances relating to production stripping activity under their previous policy will not be able to create an asset on transition. The provisions of IFRIC 20 apply only to costs incurred after the date of transition.

“When components have not previously been considered for accounting purposes, this will require analysis and judgement.”
About this publication

This publication has been produced by the KPMG International Standards Group (part of KPMG IFRG Limited).

Content

Our First Impressions publications are prepared on the release of a new IFRS, interpretation or other significant amendment to the requirements of IFRS. They include a discussion of the key elements of the new requirements and highlight areas that may result in a change of practice. Examples are provided to assist in assessing the impact of implementation.

This edition of First Impressions considers the requirements of IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine. Further interpretation will be needed in order for an entity to apply this interpretation to its own facts, circumstances and individual transactions. Some of the information contained in this publication is based on the initial observations developed by the KPMG International Standards Group, and these observations may change as practice develops.

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A more detailed discussion of the accounting issues that arise from the application of IFRS can be found in our publication Insights into IFRS.

In addition, we have a range of publications that can assist you further, including:

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- New on the Horizon: Extractive Activities
- IFRS compared to US GAAP
- Illustrative financial statements
- IFRS Handbooks, which include extensive interpretative guidance and illustrative examples to elaborate or clarify the practical application of a standard
- New on the Horizon publications, which discuss consultation papers
- Newsletters, which highlight recent accounting developments
- IFRS Practice Issue publications, which discuss specific requirements of pronouncements
- First Impressions publications similar to this, which discuss new pronouncements
- Disclosure checklist.

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