

## IFRS Developments for Mining & Metals

# Accounting for waste removal costs

## A summary of IFRIC Interpretation 20

### What you need to know

- ▶ The Interpretation only applies to stripping costs incurred during the production phase of a surface mine
- ▶ Such costs are to be capitalised as part of an asset if certain criteria are met and will be referred to as the "stripping activity asset"
- ▶ The stripping activity asset is to be depreciated or amortised on a units of production (UOP) basis unless another method is more appropriate
- ▶ The Interpretation is effective for annual reporting periods beginning on or after 1 January 2013
- ▶ The Interpretation is to be applied to production stripping costs incurred on or after the beginning of the earliest comparative period presented

### What's happened?

The IFRS Interpretations Committee (the Committee) has finally issued its Interpretation on accounting for waste removal costs - IFRIC Interpretation 20 - *Stripping Costs in the Production Phase of a Surface Mine* (the Interpretation). This Interpretation is effective for annual periods beginning on or after 1 January 2013. Entities will be required to apply its requirements for production phase stripping costs incurred from the start of the earliest comparative period presented - which means many entities will need to start tracking the impacts of the Interpretation from at least 1 January 2012.

In this publication, we summarise the key requirements of the Interpretation and explore some of the challenges a mining entity may face when determining how to apply its requirements.

### What's the significance?

- ▶ The Interpretation only applies to stripping costs incurred during the production phase of a surface mine (production stripping costs).
- ▶ Costs incurred in undertaking stripping activities are considered to create two possible benefits - the production of inventory in the current period, and / or improved access to ore to be mined in a future period.
- ▶ Production stripping costs are to be capitalised as part of an asset, if an entity can demonstrate that it is probable future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of an ore body for which access has been improved. This asset is to be called the "stripping activity asset".
- ▶ Where costs cannot be specifically allocated between the inventory produced during the period and the stripping activity asset, the Interpretation requires an entity to use an allocation basis that is based on a relevant production measure.

### What is the scope of the Interpretation?

The Interpretation only applies to waste removal (stripping) costs incurred during the production phase of a surface mine (production stripping costs). Development phase stripping was not considered and will continue to be capitalised in accordance with IAS 16 *Property, Plant and Equipment*.

## How should production stripping costs be accounted for?

### *Recognition requirements*

The Interpretation states that an entity must recognise production stripping costs as part of an asset when all of the following criteria are met:

- ▶ It is probable that the future economic benefits (improved access to an ore body) associated with the stripping activity will flow to the entity
  - ▶ The entity can identify the component of an ore body for which access has been improved
- And
- ▶ The costs relating to the improved access to that component can be measured reliably

The Interpretation considers that production stripping activity may create two benefits, which include:

- ▶ Extraction of ore (inventory) in the current period
- And
- ▶ Improved access to an ore body to be mined in a future period

To the extent that the benefit is realised in the current period in the form of inventory produced, an entity must account for the associated production stripping costs in accordance with the principles of IAS 2 *Inventories*.

To the extent that the benefit creates improved access to ore to be mined in future periods, an entity must recognise these production stripping costs as a non-current asset, if the criteria above are met. The Interpretation refers to this non-current asset as the "stripping activity asset".

### *Classification of the stripping activity asset*

The Interpretation states that a stripping activity asset is more akin to an addition to, or improvement of, an existing asset, than an asset in its own right. Consequently, the stripping activity asset is to be accounted for as such and will be treated as "part" of an existing asset.

In practice, when determining the asset of which the stripping activity asset forms part, it is possible it may add to, or improve, a variety of existing assets. For example, such assets may include 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. Given this, the Interpretation does not specify what the nature of this asset would be. Instead, it simply states that the stripping activity asset is to be classified as tangible or intangible according to the nature of the existing asset to which it relates.

### How we see it

We expect that the stripping activity asset will often be classified as a tangible asset as it relates to mine properties (akin to land) or mineral reserves, both of which are usually classified as tangible assets. In rare circumstances, stripping costs may be incurred in relation to components of an ore body that are currently classified as a resource rather than a reserve. Costs associated with resources are often classified as an intangible asset.

### *Identifying the components of an ore body*

All three recognition criteria must be met for the costs to qualify for recognition as an asset. If the criteria are not met, a stripping activity asset cannot be recognised and the associated costs must be expensed as incurred. In meeting the recognition criteria an entity must be able to specifically identify the "component" of the ore body for which access has been improved.

The Interpretation notes that a component refers to the specific volume of the ore body for which future access is improved by the stripping activity. It then states it would be expected that the identified component of an ore body would typically be a subset of the total ore body of a mine. Refer below for further discussion of the potential issues associated with determining the component(s) of a mine.

### How we see it

The requirement to identify the component of the ore body for which access has been improved is a new requirement and differs from the life-of-mine average strip ratio approach, which is widely used in practice. While it is possible, in some instances, that the removal of waste at certain points may actually benefit the whole ore body, we understand that the Interpretations Committee did not expect this to typically be the case.

Therefore, an entity will need to exercise significant judgment to identify these components. Where an entity wishes to assert that the whole ore body is the component, then it must be prepared to support such an assertion with robust evidence.

## How should the stripping activity asset be initially measured?

The stripping activity asset must initially be measured at cost. This is the accumulation of costs directly incurred to complete the stripping activity that benefits the identified component of an ore body, and an allocation of directly attributable overhead cost. Such costs may include drill and blast costs, haulage costs, materials consumed, costs of plant employed, labour and fuel.

Some incidental operations may occur, at the same time as the production stripping activity occurs, to further prepare the mine for production, but which are not necessary for the stripping activity to continue as planned. The Interpretation cites the building of an access ramp in the area in which the stripping activity is taking place, as an example. The costs associated with these ancillary operations should not be included in the cost of the stripping activity asset. These ancillary costs must either be recognised as assets or expensed in accordance with other IFRSs.

### ***Allocation of costs between inventory and the stripping activity asset***

The Interpretation acknowledges that when inventory is produced at the same time as access to a component(s) of an ore body, to be mined in the future, is improved, it may be difficult in practice to separately identify the stripping costs associated with each. In these situations an entity is required to use an allocation basis based on a relevant production measure.

The use of a production-based allocation approach was required because it was considered that a production measure was a good indicator of the nature of the benefits being generated by the activity taking place at the mine.

The production measure is to be calculated for an identified component of an ore body. It is then to be used as a benchmark to identify when the actual level of activity is greater than would be expected for the inventory produced in that period. Such an excess would then be assessed to determine the extent to which this additional activity is creating a future benefit i.e., improved access to future ore.

The Interpretation provides a (non-exhaustive) list of some of possible examples of the production measures that may be used, which includes:

- ▶ Cost of inventory produced compared with expected cost
- ▶ Volume of waste extracted compared with expected volume, for a given volume of ore production
- ▶ Mineral content of the ore extracted compared with the expected mineral content to be extracted for a given quantity of ore produced

While this list is non-exhaustive, the Committee has made it clear that an allocation basis which uses sales value or relative sales value is not acceptable.

It is important to note that where actual stripping levels exceed those expected for the identified component, this will not automatically result in the recognition of a stripping activity asset.

An entity will need to assess whether the removal of such additional waste has actually resulted in a future economic benefit i.e., improved access to future ore. If not, such costs should not be capitalised as an asset, but instead recognised in profit or loss in the period incurred. For example, the mining of an unexpected fault or dyke should not be capitalised but instead expensed as incurred.

### ***Identifying the components of an ore body...again***

The allocation approach also has reference to the concept of a component. The Interpretation does not provide detailed guidance on how to identify the component(s) of an ore body. Nevertheless, it does state that such an identified component would typically be a subset of the total ore body of a mine. It then notes that a mine may have several components. Finally, it states that identifying components of an ore body will require judgment and that an entity's mine plan is expected to provide the information required to allow these judgments to be made with reasonable consistency.

### **How we see it**

While the allocation approaches may appear similar to the life-of-mine average strip ratio approach used by many entities today, the key difference is the level at which the expected level of activity should initially be determined. Given the wording of the Interpretation and the Basis for Conclusions, there is an expectation that these components would be at levels lower than the whole ore body.

While there is a lack of detailed guidance in the Interpretation as to exactly what an identified component is, and how it should be determined, it is our understanding that this was deliberate. Requiring entities to make such a determination based upon their mine plans was the Interpretations Committee's way of acknowledging that no two mines are the same. Therefore, they did not want to provide detailed guidance / specific rules about how to identify the component(s) of an ore body as this could have led to an unworkable model.

Given this, we also understand that the Interpretations Committee is not expecting entities to identify components of an ore body which are not already contemplated in their mine plans. Having said this, given the nature of some mine plans, this still may not be a straight forward exercise, and it will be particularly challenging for the more complex mines.

## How should the stripping activity asset be subsequently measured?

After initial recognition, the stripping activity asset must be carried at cost less depreciation or amortisation, and any impairment losses.

This asset must be depreciated or amortised on a systematic basis, over the expected useful life of the identified component of an ore body that becomes more accessible as a result of the stripping activities. The units of production method is to be used, unless another method is more appropriate.

The Interpretation states that the useful life of the identified component of an ore body used to depreciate or amortise the related stripping activity asset will differ from the expected useful life (i.e., the reserves) used to depreciate or amortise the mine itself and the related life-of-mine assets. While it does contemplate that the stripping activity asset may benefit the whole of the remaining ore body, the Interpretation indicates this is expected to occur in limited circumstances.

It is also worth noting that the identified component to be used for depreciation or amortisation purposes may be the same as the identified component used to initially determine the expected stripping activity levels described earlier, or it may be different. This will depend on the nature of the stripping activities. For example, where one identified component of an ore body (the "current" component) will take a number of years to extract, fluctuating waste volumes within that component, greater than the expected level, may result in a stripping activity asset that only relates to the remaining ore to be extracted from that current component. However, where advance stripping activities commence in relation to another component of the ore body while the entity is still mining from the current component, the complexity of the allocation process will increase. This is because the entity will need to determine what portion of the excess, above the expected level of the current component being mined, results in a stripping activity asset which relates to the current component and what portion relates to other components of the ore body to be mined at some future point.

### How we see it

The subsequent measurement requirements and the supporting Basis for Conclusions seem to indicate that the current life-of-mine average strip ratio approach is unlikely to be considered acceptable.

Also, determining which component(s) each stripping activity asset benefits will require significant judgment and an entity will need to be able to separately track these. However, as noted earlier, it's expected an entity should be able to obtain this information from their mine plans.

## Other considerations

Other areas of potential impact may include:

### *Profit or loss presentation*

Production stripping costs allocated to inventory will automatically end up in cost of goods sold within profit or loss. However, the depreciation or amortisation of a stripping activity asset will now form part of total depreciation, depletion and amortisation on mine properties. And such amounts may normally fall outside of many operating/EBITDA sub-totals. However, an entity may choose to present the depreciation or amortisation of a stripping activity asset as a part of cost of sales or elsewhere in profit or loss.

### *Cash flow presentation*

For the statement of cash flows, only cash payments that result in the creation of an asset can be classified as investing cash flows. Therefore, only those production stripping costs capitalised as a stripping activity asset could be classified as part of investing cash flows.

### *Systems and processes*

An entity will need to determine what impact IFRIC 20 will have on its systems, processes and related controls. The extent of impact will be influenced by the physical characteristics of the mineral deposit and an entity's mine plan.

For example, where the ratio between waste and ore extracted is expected to be relatively consistent over the life of the mine, for an entity that currently expenses stripping costs as incurred, it may still be acceptable to do so. This may be the case when an entity uses an extraction method, such as open cast (strip) mining, which only requires removal of overburden shortly before ore extraction. With such a mining method, advance stripping, and the period-to-period fluctuations of production stripping costs, may be relatively insignificant.

### *Cash cost reporting*

Cash costs are a common non-GAAP measure used in the mining industry. As a non-GAAP measure, the way these are calculated may not be consistent. However, some industry bodies have issued guidance on how to calculate cash costs to try and achieve some consistency. For example, the Gold Institute<sup>1</sup> defines total cash costs as including onsite mine production costs, transport and refinery costs, general and administrative costs, movement in production inventories and ore stockpiles, transfers to and from deferred stripping (where relevant), and royalties. Such amounts generally exclude non-cash costs such as depreciation, depletion and amortisation and other costs not incurred at the site level.

<sup>1</sup> The Gold Institute is a non-profit industry association comprising leading gold producers, refiners, bullion suppliers and manufacturers. This institute has now been incorporated into the National Mining Association.

As noted, such calculations will often be adjusted to take into account transfers to and from deferred stripping, where it is material and relevant. As a result of the requirements of IFRIC 20, the way in which production stripping costs may be capitalised as stripping activity assets and subsequently amortised may change from the way in which such costs are currently accounted. Therefore, an entity will need to determine what adjustments are required to calculate their cash costs for their mining operations on a go forward basis.

#### **Stakeholder communications**

The requirements of IFRIC 20 may change the way in which an entity allocates production stripping costs between inventory and the stripping activity asset(s) in any particular reporting period. Therefore, it may impact the earnings profile of an entity and also, as noted above, the adjustments required to calculate an entity's cash costs for the period.

Given this, an entity will need to ensure it fully explains the impact of these changes to key stakeholders, e.g., boards, audit committees, shareholders and analysts.

#### **Effective date and transition**

IFRIC 20 is effective for annual reporting periods beginning on or after 1 January 2013, with early adoption permitted. The Interpretation is to be applied prospectively to production stripping costs incurred on or after the earliest period presented i.e., from the start of the comparative period. For those entities who lodge in the US, the requirement for an additional year of comparatives will mean they will need to apply this to production stripping costs incurred from 1 January 2011.

#### **Previous deferred stripping balances**

For any production phase stripping costs incurred and capitalised up to the start of the earliest period presented, the "predecessor stripping asset", an entity is required to reclassify such a balance as part of an existing asset to which the stripping activity related, to the extent there remains an identifiable component of the ore body with which the stripping activity asset can be associated. These balances are to then be depreciated or amortised over the remaining expected useful life of the identified component of the ore body to which each existing asset balance relates.

However, where an entity is unable to identify the component of the ore body to which this predecessor stripping asset relates, it is required to write off this asset via opening retained earnings at the beginning of the earliest period presented.

#### **How we see it**

While it may seem appealing to simply write off any opening deferred stripping asset via opening retained earnings, as this will instantly reduce future depreciation / amortisation charges, this is not a decision that could (or should) be made without undertaking some detailed analysis first.

Depending on the nature and stage of a mine and the way the deferred stripping costs have previously been accumulated, it may be possible to reasonably identify the remaining component(s) of an ore body to which such an asset relates. Therefore, reclassification of some or all of the opening deferred stripping asset may be possible without undue cost.

Also, there may be other consequences to consider. For example consequential tax implications, which could include:

- ▶ **Deductibility of production stripping costs** - in some jurisdictions, the tax deductibility of some costs mirrors their accounting treatment. Therefore, derecognising such amounts via opening retained earnings may result in lost tax deductions
- ▶ **Deductibility of other expenses** - there may be other tax implications (where relevant), e.g., negative impacts on thin capitalisation calculations (which are usually based on a ratio of debt to equity and could impact the deductibility of interest charges on foreign debt).

#### **Final thoughts**

An entity will need to undertake detailed analysis to determine whether the requirements of this Interpretation will impact the accounting currently applied to production stripping costs. Such an assessment will depend upon the specific facts and circumstances of each mine - no two mines are the same. Therefore, each individual mine and the associated mine plan will need to be assessed to identify the components and consequential impact.

#### **How we see it**

As this Interpretation has only just been issued, most entities are still in the early stages of determining exactly what the impact will be. Therefore, we expect interpretations and practical implications will continue to develop up to the date of initial application.

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## Ernst & Young's Global Mining & Metals Center

With a strong but volatile outlook for the sector, the global mining and metals industry is focused on future growth through expanded production, without losing sight of operational efficiency and cost optimization. The sector is also faced with the increased challenges of changing expectations in the maintenance of its social license to operate, skills shortages, effectively executing capital projects and meeting government revenue expectations.

Ernst & Young's Global Mining & Metals Center brings together a worldwide team of professionals to help you achieve your potential – a team with deep technical experience in providing assurance, tax, transactions and advisory services to the mining and metals sector.

The Center is where people and ideas come together to help mining and metals companies meet the issues of today and anticipate those of tomorrow. Ultimately it enables us to help you meet your goals and compete more effectively. It's how Ernst & Young makes a difference.

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