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Effective for annual periods
beginning on or after 1 January 2013

HK (IFRIC) Interpretation 20

Stripping Costs in the Production Phase of a Surface Mine



Hong Kong Institute of
Certified Public Accountants
香港會計師公會

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BASIS FOR CONCLUSIONS

Hong Kong (IFRIC) Interpretation 20 *Stripping Costs in the Production Phase of a Surface Mine* (HK(IFRIC)-Int 20) is set out in paragraphs 1–16 and appendices A–B. HK(IFRIC)-Int 20 is accompanied by a Basis for Conclusions. The scope and authority of Interpretations are set out in the *Preface to Hong Kong Financial Reporting Standards*.

Hong Kong (IFRIC) Interpretation 20

Stripping Costs in the Production Phase of a Surface Mine

References

- *Conceptual Framework for Financial Reporting*
- *HKAS 1 Presentation of Financial Statements*
- *HKAS 2 Inventories*
- *HKAS 16 Property, Plant and Equipment*
- *HKAS 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'.
- 2 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 or amortised 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.
- 4 The material removed when stripping 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. This 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, as well as how to measure these benefits both initially and subsequently.

Scope

- 6 This Interpretation applies to waste removal costs that are incurred in surface mining activity during the production phase of the mine ('production stripping costs').

Issues

- 7 This Interpretation addresses the following issues:
- (a) recognition of production stripping costs as an asset;
 - (b) initial measurement of the stripping activity asset; and
 - (c) subsequent measurement of the stripping activity asset.

Conclusions

Recognition of production stripping costs as an asset

- 8 To the extent that the benefit from the stripping activity is realised in the form of inventory produced, the entity shall account for the costs of that stripping activity in accordance with the principles of HKAS 2 *Inventories*. To the extent the benefit is improved access to ore, the entity shall recognise these costs as a non-current asset, if the criteria in paragraph 9 below are met. This Interpretation refers to the non-current asset as the 'stripping activity asset'.
- 9 An entity shall recognise a stripping activity asset if, and only if, all of the following are met:
- (a) it is probable that the future economic benefit (improved access to the ore body) associated with the stripping activity 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 stripping activity associated with that component can be measured reliably.
- 10 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 The stripping activity asset's classification as a tangible or intangible asset is the same as the existing asset. In other words, the nature of this existing asset will determine whether the entity shall classify the stripping activity asset as tangible or intangible.

Initial measurement of the stripping activity asset

- 12 The entity shall initially measure the stripping activity asset at cost, this being the accumulation of costs directly incurred to perform the stripping activity that improves access to 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.

- 13 When the costs of the stripping activity asset and the inventory produced are not separately identifiable, the entity shall allocate the production stripping costs between the inventory produced and the stripping activity asset by using an allocation basis that is based on a relevant production measure. This production measure shall be calculated for the identified component of the ore body, and shall be used as a benchmark to identify the extent to which the 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.

Subsequent measurement of the stripping activity asset

- 14 After initial recognition, the stripping activity asset shall be carried at either its cost or its revalued amount less depreciation or amortisation and less impairment losses, in the same way as the existing asset of which it is a part.
- 15 The stripping activity asset shall be 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 units of production method shall be applied unless another method is more appropriate.
- 16 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 exception to this are those limited circumstances when the stripping activity provides improved access to the whole of the remaining ore body. For example, this might occur towards the end of a mine's useful life when the identified component represents the final part of the ore body to be extracted.

Appendix A

Effective date and transition

This appendix is an integral part of the Interpretation and has the same authority as the other parts of the Interpretation.

- A1 An entity shall apply this Interpretation for annual periods beginning on or after 1 January 2013. Earlier application is permitted. If an entity applies this Interpretation for an earlier period, it shall disclose that fact.
- A2 An entity shall apply this Interpretation to production stripping costs incurred on or after the beginning of the earliest period presented.
- A3 As at the beginning of the earliest period presented, any previously recognised asset balance that resulted from stripping activity undertaken during the production phase ('predecessor stripping asset') shall be reclassified as a part of an existing asset to which the stripping activity related, to the extent that there remains an identifiable component of the ore body with which the predecessor stripping asset can be associated. Such balances shall be depreciated or amortised over the remaining expected useful life of the identified component of the ore body to which each predecessor stripping asset balance relates.
- A4 If there is no identifiable component of the ore body to which that predecessor stripping asset relates, it shall be recognised in opening retained earnings at the beginning of the earliest period presented.

Appendix B

Amendment to HKFRS 1 *First-time Adoption of Hong Kong Financial Reporting Standards*

The amendments in this appendix shall be applied for annual periods beginning on or after 1 January 2013. If an entity applies this Interpretation for an earlier period these amendments shall be applied for that earlier period.

* * *

The amendments contained in this appendix when this Interpretation was issued have been incorporated into the relevant Standard.

Basis for Conclusions on HK(IFRIC)-Int 20 *Stripping Costs in the Production Phase of a Surface Mine*

This Basis for Conclusions accompanies, but is not part of, IFRIC 20.

HK(IFRIC)-Int 20 is based on IFRIC Interpretation 20 *Stripping Costs in the Production Phase of a Surface Mine*. In approving HK(IFRIC)-Int 20, the Council of the Hong Kong Institute of Certified Public Accountants considered and agreed with the IFRS Interpretations Committee's Basis for Conclusions on IFRIC Interpretation 20. Accordingly, there are no significant differences between HK(IFRIC)-Int 20 and IFRIC Interpretation 20. The IFRS Interpretations Committee's Basis for Conclusions is reproduced below. The paragraph numbers of IFRIC Interpretation 20 referred to below generally correspond with those in HK(IFRIC)-Int 20.

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 surface mine ('production stripping costs'). Accounting for production stripping costs is challenging, because the costs that are incurred may benefit both future and current period production, and there is no specific guidance in IFRSs that addresses 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), 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 an Interpretation in response to this diversity in practice.

Scope

BC4 This Interpretation gives guidance on the accounting for stripping costs incurred in the production phase of a surface mine. In developing the Interpretation, the Committee decided to focus only on surface mining activities and not on underground mining activities. This Interpretation applies to the activity of surface mining and therefore to all types of natural resources that are extracted using this process. Where this Interpretation refers to 'extraction of mineral ore', it applies equally to surface mining activities used to extract other natural resources that may not be embedded in an ore deposit but are nevertheless extracted using a surface mining activity, for example coal. However, the Committee decided not to address oil and natural gas extraction, including the question of whether oil sands extraction was a surface mining activity, when it determined the scope of this Interpretation.

BC5 The Committee decided not to include stripping costs incurred during the development phase of a surface mine because there is no significant diversity in practice in accounting for such costs. During the development phase of a surface mine (before production begins), stripping costs are usually capitalised as part of the depreciable cost of building, developing and constructing the mine if it is probable that these costs will be recovered through future mining activity. These capitalised costs are depreciated or amortised on a systematic basis, usually by using the units of production method, once production begins.

Consensus

Recognition of production stripping costs as an asset

- BC6 The Committee decided that an entity may create two benefits by undertaking stripping activity (and incurring stripping costs). These benefits are the extraction of the ore in the current period and improved access to the ore body for 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 9 of this Interpretation are those referred to in paragraph 4.44 of the *Conceptual Framework for Financial Reporting*. An additional criterion is, however, also included in this Interpretation for recognising 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, a stripping activity asset will not be recognised.
- BC8 ‘Component’ refers to the specific volume of the ore body that is made more accessible 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 mine planning stage. 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 Identifying components of the ore body requires judgement. The Committee understands that an entity’s mine plan will provide the information required to allow these judgements to be made with reasonable consistency.
- BC10 This Interpretation also states that the stripping cost asset should be recognised as ‘part’ of an existing asset. ‘Part’ refers to the addition to, or enhancement of, the existing asset that relates to the stripping activity asset. The Committee took the view that the stripping activity asset was more akin to being a part of an existing asset, rather than being an asset in its own right. 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 the stripping activity is tangible or intangible in nature—this will be determined from the nature of the related underlying existing asset.

Initial measurement of the stripping activity asset

- BC12 IAS 16 paragraph 16(b) states that the cost of an item of property, plant and equipment includes ‘any costs directly attributable to bringing the asset to the location and condition necessary...’. Examples of the types of costs that the Committee would expect to be included as directly attributable overhead costs (paragraph 12 of the Interpretation) would include an allocation of salary costs of the mine supervisor overseeing that component of the mine, and an allocation of rental costs of any equipment that was hired specifically to perform the stripping activity.

- BC13 The Committee thought that it was important to be guided by the principle contained in paragraph 21 of IAS 16 when addressing incidental operations in the Interpretation. The Committee is aware that a number of activities are carried out simultaneously in a mine operation, and it thought that it was important for the entity to be aware of what constitutes production stripping activity, and what does 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.
- BC14 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 differentiate between the cost of the inventory produced and the cost of the stripping activity asset.
- BC15 In its discussions of the most appropriate allocation basis, the Committee rejected any basis that was based on sales values. The Committee considered that such a basis in the context of stripping costs would be inappropriate because it was not closely linked to the activity taking place. Furthermore, if the current sales price of the relevant mineral was used in determining the allocation basis, the same current sales price would be applied to the volume of the mineral in both the extracted ore and the identified component. Hence the relevant variable would be the volume of mineral in both the extracted ore and the identified component, ie the current sales price would not change the allocation basis. The Committee understood that applying a future sales price 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 future 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.
- BC16 The Committee decided to require an allocation approach that was based on a relevant production measure, because a production measure was considered to be a good indicator of the nature of the benefits that are generated for the activity taking place in the mine. The production measure basis requires an entity to identify 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.

Subsequent measurement of the stripping activity asset

- BC17 The Committee decided that the cost of the stripping activity asset should be depreciated or amortised over the expected useful life of the identified component of the ore body that is made more accessible by the activity, on a basis that best reflects the consumption of economic benefits. The units of production method is commonly used, and would be focused only on the identified component of the ore body, the access to which has been improved by the stripping activity. Because the life of the identified component is expected to be only a part of the entire life of the mine, the stripping activity asset will be depreciated or amortised over a shorter period than the life of the mine, unless the stripping activity provides improved access to the whole of the remaining ore body, for example, towards the end of a mine's useful life when the identified component represents the final part of the ore body to be extracted.
- BC18 The Committee decided that the principles of this Interpretation would also be applicable to an entity that subsequently accounts for its mine assets at revaluation, although the Committee noted that this method was seldom used. The Committee decided that the subsequent measurement basis of the stripping activity asset should follow that of the existing asset of which it is a part, that is, if the existing asset is measured using a cost basis, then the stripping activity asset would also be measured using a cost basis. 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

- BC19 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 that would be gained from doing so. The Committee therefore decided that this Interpretation shall require prospective application to production stripping costs incurred on or after the beginning of the earliest period presented.
- BC20 The Committee decided to follow the principles in IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* on transition. It decided to require recognition of any predecessor stripping asset balances (see paragraph A3) as at the beginning of the earliest period presented, in opening retained earnings at that date, if such balances could not be identified with a remaining component of the ore body that was made more accessible by the stripping activity.
- BC21 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 Interpretation. 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.