

## Accounting for landfills

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### *Introduction*

A number of entities in the public sector are involved in waste disposal activities. These activities are regulated by legislative requirements that prescribe the licencing, operation, management, monitoring and closure of landfill sites. As concerns were raised about the inconsistent accounting practices for landfill sites and the related rehabilitation provision, the Board agreed to develop a Guideline. A proposed Guideline was issued by the ASB for comment in May 2018.

This article highlights the ASB's proposed accounting principles for land used in a landfill, the landfill site asset and the related landfill rehabilitation provision (hereafter referred to as the provision).

### *Applicability of the proposed Guideline*

The proposed Guideline applies to entities that are required to comply with the legislative requirements applicable to general and hazardous landfill sites. The guidance can, by analogy, also be applied by entities that recognise rehabilitation provisions other than those that arise from landfill sites. An entity should however be mindful of the specific legislation governing their rehabilitation obligations and provisions.

### *Accounting for land used in a landfill*

Land can only be recognised as an asset when the definition and recognition criteria are met. For the definition of an asset to be met, the entity needs to control the asset. To assess control, or joint control of land at, for example, a regional or central landfill site, the entity considers the criteria in IGRAP 18 on *Recognition and Derecognition of Land* and/or the principles in GRAP 8 on *Interests in Joint Ventures*.

Land used in a landfill is accounted for separately from the landfill site asset, and is classified as property, plant and equipment in accordance with GRAP 17 on *Property, Plant and Equipment* as it is (a) used to provide waste disposal services and (b) expected to be used during more than one reporting period. If the land is:

- existing land controlled by the entity, it is reclassified as property, plant and equipment following management's decision to use the land for landfilling if not yet classified as such. Following management's decision, the entity assesses if the land is impaired in accordance with GRAP 21 on *Impairment of Non-cash Generating Assets*, or GRAP 26 on *Impairment of Cash Generating Assets*;
- specifically acquired for landfilling, it is measured at cost on acquisition, unless it is acquired in a non-exchange transaction in which case the land is measured at fair value in accordance with GRAP 23 on *Revenue from Non-exchange Transactions (Taxes and Transfers)*; and
- acquired in a transfer of functions, it is accounted for in accordance with GRAP 105 on *Transfer of Functions Between Entities Under Common Control*, GRAP 106 on *Transfer of Functions Between Entities Not Under Common Control* or GRAP 107 on *Mergers*.

After initial recognition, the land is measured in accordance with the cost model or the revaluation model, and the principles in GRAP 21 or GRAP 26 are applied at each reporting date to assess impairment.

#### Depreciation of land

Land used in a landfill usually has an unlimited useful life as it needs to be rehabilitated when the landfill site stops receiving waste and the end-use plan is implemented, i.e. the plan indicating the purpose for which the area will be rehabilitated. As such, land in a landfill is not usually depreciated. There may however be exceptions, for example, where the land will not be rehabilitated, and therefore has no alternative use following closure of the landfill. As a result, the entity needs to apply judgement to assess if the land has a limited useful life.

#### Change in use of land when operation of the landfill has stopped

When the entity's end-use plan is implemented, the principles in the Standards of GRAP are applied to determine whether the land will continue to meet the definition of property, plant and equipment. If the land no longer meets the definition of property, plant and equipment, it needs to be reclassified to inventory, investment property, or heritage assets.

#### Accounting for the landfill site asset

As with the recognition of the land, the landfill site asset (hereafter referred to as the asset) is recognised when the definition and recognition criteria are met, and is classified as property, plant and equipment for the same reasons as outlined for land.

On initial recognition, the asset is either measured at cost, or fair value if acquired in a non-exchange transaction. When acquired in a transfer of functions, the principles in GRAP 105, GRAP 106 or GRAP 107 are applied.

After initial recognition, the entity either measures the asset in accordance with the cost model or the revaluation model. The principles in GRAP 21 or GRAP 26 are applied at each reporting date to assess impairment.

#### Accounting for costs incurred before, during and after development and construction of the asset

In accordance with GRAP 17, costs can only be capitalised to the carrying amount of an asset if it is probable that future economic benefits or service potential associated with the item will flow to the entity, and the cost or fair value can be measured reliably.

In applying this principle to costs incurred before approval is received from the licence authority to apply for a licence to operate a landfill site, an entity is unlikely to demonstrate that the landfill site will generate future economic benefits or service potential. As a result, these costs are expensed.

After obtaining the aforementioned approval, costs incurred to develop and construct the asset can either be expensed or capitalised. The decision to expense or capitalise costs is based on an entity's existing accounting policies. In addition, the following criteria may be considered:

- (a) it is probable that the asset will generate probable future economic benefits or service potential;
- (b) it is technically feasible that the licencing authority will approve the licence for the operation of the site so that it will be available for use;

- (c) the entity has, or will have, the ability to complete the asset and use it for waste disposal activities once approval for such operation is obtained;
- (d) the entity has adequate technical, financial and other resources available to complete the development and construction of the asset, and to undertake the rehabilitation and monitoring and inspection after closure as required; and
- (e) the entity is able to reliably measure the expenditure and other costs attributable to the asset during its development and construction.

Any costs incurred after development and construction can only be capitalised to the asset if the recognition criteria for an asset are satisfied. Day-to-day operating costs are recognised in surplus or deficit, as incurred.

#### Elements that comprise the cost of the landfill site asset

The cost of the asset comprises the following three elements:

- (a) The purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates. This element comprises costs incurred to acquire, develop and construct the asset and is the cash price equivalent of the assets acquired at recognition.
- (b) 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. Examples include internal and external site labour costs, cost of materials required for development and construction, cost of hiring equipment for development and construction, depreciation of plant used for development and construction, and general overhead costs that can be allocated to the development and construction of the asset.
- (c) The initial estimate of the costs of dismantling and removing the item, and restoring the site on which it is located. This element includes an estimate of the costs to be incurred for the development and construction of assets that are required for the final rehabilitation. When the assets that are required for final rehabilitation are constructed, the applicable Standard of GRAP is applied to account for them.

Assets that are used at the site to ensure its effective operation, for example, a guard house or recycling and material recovery facilities are accounted for as separate assets rather than as part of the landfill site asset.

#### Depreciation and impairment of the asset

Depreciation of the asset:

- (a) commences when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management; and
- (b) ceases on the date that the asset no longer receives any waste.

Each part of the asset with a cost that is significant in relation to the total cost is depreciated separately, while insignificant parts are grouped and depreciated together.

As the asset will only generate future economic benefits or service potential while the landfill site is in operation, the useful lives of the significant parts, and the individually insignificant parts, cannot exceed the useful life of the site. At each reporting date, an entity needs to

assess whether there is any indication that its expectations about the site's useful life have changed since the preceding reporting date.

An entity is required to assess the asset for impairment:

- (a) while it is under development and construction; and
- (b) at each reporting date while in use.

#### Derecognition of the asset

An entity derecognises an asset when it, or a part thereof, is no longer expected to generate future economic benefits or service potential. Judgement is applied in making this assessment. The asset should however be fully derecognised when the landfill site stops receiving waste and rehabilitation commences.

#### *Accounting for a landfill rehabilitation provision*

A provision is recognised when meeting the definition of a provision in GRAP 19 on *Provisions, Contingent Liabilities and Contingent Assets*. At larger landfill sites that operate on the basis of trenches or cells, a provision to rehabilitate the landfill site is recognised when the construction of the trench or cell commences. At smaller landfill sites, the provision will be recognised when the entity commences with landfilling.

#### Cash flows included in the provision

The cash flows included in the provision should be based on the following principles:

- the cash flows should represent the best estimate of the expenditure required to settle the present obligation at the reporting date, or to transfer it to a third party;
- the estimate of the expenditure should reflect any future events that may affect the amount required to settle the provision, to the extent that there is sufficient, objective evidence that the future event will occur; and
- the provision should be the present value of the expenditure expected to settle the obligation to take into account time value for money.

#### Discount rate applied to the cash flows

GRAP 19 does not prescribe a single discount rate that should be applied in measuring provisions. When an entity determines the most appropriate discount rate to measure the provision, it considers the following:

- the rate should be specifically associated with the risk of the liability and should be consistent with the term of the provision;
- the rate should be a pre-tax rate that reflects current market assessments of the time value of money;
- the rate should include inflation when the cash flows are expressed as a future price, or exclude inflation when the cash flows are expressed as a current price; and
- the rate should be adjusted for any other factors relevant to the asset.

An entity may consider a government bond rate, or a corporate bond rate to measure the provision. The entity should either adjust the cash flows or the discount rate with risk and uncertainties specific to the provision.

### Change in the estimated provision

An entity reviews the provision at each reporting date to reflect the current best estimate of the expenditure required to settle the obligation. Changes to the estimate are accounted for as follows:

- (a) During the operation of the landfill site, changes are added, or deducted from the asset, either as an adjustment to:
  - (i) the cost of the asset, when the cost model is applied to measure the asset; or
  - (ii) the revaluation surplus when the revaluation model is applied to measure the asset.The periodic unwinding of the discount is recognised in surplus or deficit.
- (b) After the closure of the landfill site, subsequent changes to the provision are recognised in surplus or deficit.

### Other considerations

#### Accounting for funding received for rehabilitation

Any funding received by the entity for rehabilitation is accounted for as non-exchange revenue in accordance with GRAP 23.

The entity accounts for funding provided to a third party for undertaking rehabilitation on its behalf as services-in-kind in accordance with GRAP 23 when the services are significant to its operations and/or service delivery objectives, and the recognition criteria are met. If the services received in-kind are not significant to its operations and/or service delivery objectives, and/or do not satisfy the recognition criteria, disclosure about the nature and type of the services in-kind received is provided.

#### Arrangements entered into for undertaking waste disposal activities

An entity needs to assess its interest in an arrangement when contracting with another party to undertake waste disposal activities. Based on the nature of the relationship, and the rights and obligations in the arrangement, an entity assesses if the interest constitutes:

- (a) control, in which case the principles in GRAP 6 on *Consolidated and Separate Financial Statements* are applied to prepare consolidated financial statements;
- (b) significant influence, in which case the principles in GRAP 7 on *Investments in Associates* are applied to the equity account for the investment in the associate; or
- (c) joint control, in which case the principles in GRAP 8 are applied to account for the interest in the jointly controlled operation, jointly controlled asset or jointly controlled entity.

When the arrangement is a service concession arrangement, an entity applies the principles in GRAP 32 on *Service Concession Arrangement: Grantor* to assess whether a service concession asset and a related liability need to be recognised.

The entity can also appoint a service provider to undertake waste disposal activities. Any payments made for the rendering of the services by the service provider are accounted for as and when the services are provided, or in accordance with the arrangement between the parties.

*Commenting on the proposed Guideline and next steps*

The proposed Guideline on *Accounting for Landfill Sites* (ED 166) can be accessed on the ASB's website at [www.asb.co.za](http://www.asb.co.za). Comment on the proposed Guideline is due on 30 November 2018. Upon the closure of the comment period, the Board will consider the comment received and assess whether any amendments should be made to the proposed Guideline. This is likely to be during the first quarter of 2019.