SECTION PS 3280
asset retirement obligations

Basis for Conclusions

FOR THOSE PUBLIC SECTOR ENTITIES THAT APPLY SOLID WASTE LANDFILL CLOSURE AND POST-CLOSURE LIABILITY, Section PS 3270, WHO CHOOSE NOT TO EARLY ADOPT THIS SECTION, see Section PS 3270 in Archived Pronouncements.

PURPOSE AND SCOPE

.01 This Section establishes standards on how to account for and report a liability for asset retirement obligations. Specifically, it:

(a) defines which activities would be included in a liability for retirement of a tangible capital asset;

(b) establishes when to recognize and how to measure a liability for an asset retirement obligation; and

(c) provides the related financial statement presentation and disclosure requirements.

.02 This Section provides guidance for applying the definition of liabilities set out in Chapter 8 of the Conceptual Framework and the general recognition and disclosure standards in LIABILITIES, Section PS 3200, in accounting for and reporting a liability for asset retirement obligations. It may be useful to read this Section in conjunction with LIABILITY FOR

CONTAMINATED SITES, Section PS 3260, CONTINGENT LIABILITIES, Section PS 3300, and CONTRACTUAL OBLIGATIONS, Section PS 3390. [Former paragraph PS 3280.02, amended by the Conceptual Framework, retained in Archived Pronouncements.]

.03 This Section defines which asset retirement activities would be included in the cost of a tangible capital asset. It may be useful to read this Section in conjunction with TANGIBLE CAPITAL ASSETS, Section PS 3150.

.04 This Section applies to legal obligations, including obligations created by promissory estoppel, associated with the retirement of a tangible capital asset that result from its acquisition, construction, development, or normal use.

.05 This Section applies to asset retirement obligations associated with tangible capital assets controlled by a public sector entity that are in productive use and those that are no longer in productive use. Tangible capital assets include leased tangible capital assets reported under PUBLIC SECTOR GUIDELINE, PSG-2, Leased Tangible Capital Assets.

.06 This Section does not deal with costs:

(a) to acquire, construct or develop the related tangible capital asset, its replacement and maintenance, which are covered in TANGIBLE CAPITAL ASSETS, Section PS 3150;

(b) related to remediation of contaminated sites, which are covered in LIABILITY FOR CONTAMINATED SITES, Section PS 3260;

(c) related to the improper use of a tangible capital asset;

(d) related to activities necessary to prepare a tangible capital asset for an alternative use;

(e) resulting from an unexpected event such as an unexpected contamination;

(f) related to obligations created by waste or by-products produced by a tangible capital asset such as sewage waste; and

(g) that arise solely from a plan to sell or otherwise dispose of a tangible capital asset.

.07 This Section does not deal with impairment of tangible capital assets, which is covered in TANGIBLE CAPITAL ASSETS, Section PS 3150.

DEFINITIONS

.08 The following terms are used in this Section with the meaning specified:

(a) **Accretion expense** is the increase in the carrying amount of a liability for asset retirement obligations due to the passage of time.

(b) **Asset retirement activities** include all activities related to an asset retirement obligation. These may include, but are not limited to:

(i) decommissioning or dismantling a tangible capital asset that was acquired, constructed or developed;

(ii) remediation of contamination of a tangible capital asset created by its normal use;

(iii) post-retirement activities such as monitoring; and

(iv) constructing other tangible capital assets to perform post-retirement activities.

(c) An **asset retirement cost** is the estimated amount required to retire a tangible capital asset.

(d) An **asset retirement obligation** is a legal obligation associated with the retirement of a tangible capital asset.

(e) **Productive use** means the tangible capital asset is held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets.

(f) **Promissory estoppel** is defined in *Black's Law Dictionary* as "the principle that a promise made without consideration may nonetheless be enforced to prevent injustice if the promisor should have reasonably expected the promisee to rely on the promise and the promisee did actually rely on the promise to his or her detriment." The Quebec Civil Code does not recognize the doctrine of promissory estoppel but Quebec courts have developed a similar concept known as *la fin de non-recevoir*.

(g) **Retirement of a tangible capital asset** is the permanent removal of a tangible capital asset from service. This term encompasses sale, abandonment or disposal in some other manner but not its temporary idling.

RECOGNITION OF ASSET RETIREMENT OBLIGATIONS

.09 *A liability should be recognized when, as at the financial reporting date:*

(a) there is a legal obligation to incur retirement costs in relation to a tangible capital asset;

(b) the past transaction or event giving rise to the liability has occurred;

(c) it is expected that future economic benefits will be given up; and

(d) a reasonable estimate of the amount can be made.

A liability for an asset retirement obligation cannot be recognized unless all of the criteria above are satisfied. When an asset retirement obligation is recognized as a liability it would be presented as a financial liability in the statement of financial position. [APRIL 2026] [Former paragraph PS 3280.09, amended by FINANCIAL STATEMENT PRESENTATION, Section PS 1202, retained in Archived Pronouncements.]

Legal obligations

.10 A legal obligation establishes a clear duty or responsibility to another party that justifies recognition of a liability. For purposes of this Section, a legal obligation can result from:

(a) agreements or contracts;

(b) legislation of another government;

(c) a government's own legislation; or

(d) a promise conveyed to a third party that imposes a reasonable expectation of performance upon the promisor under the doctrine of promissory estoppel.

.11 An agreement or contract could take the form of a licence governing the operation of a nuclear facility or a particular asset such as a reactor. The licence may contain legally enforceable obligations related to the retirement of the facility or the reactor. The entity, through the licence, agrees to those terms and conditions that may create a liability to incur the costs of retiring that facility or reactor.

.12 In other cases, another government's legislation may create a legally enforceable obligation. For example, a provincial ministry of environment may issue legislation and regulations setting out a stringent environmental approval process for landfill sites. That process may establish activities required when the site stops accepting waste. Under the environmental approval process, the entire landfill footprint may require approval or each phase may require separate approval. A landfill operator must agree to certain obligations prior to receiving environmental approval and accepting any waste. Those obligations include responsibility for closure and post-closure care of the approved site.

.13 A government's own legislation can also create a legally enforceable obligation. For example, a province may require its own coal-based, electricity-generating facility to be decommissioned and remediated upon retirement.

.14 Where an asset retirement obligation is established by agreement, contract or legislation, the obligation to incur costs to retire the tangible capital asset is legally enforceable and compliance is mandatory. Breaches may be enforced through prosecution, fines, jail and similar penalties, order or loss of permit.

.15 A public sector entity's promise to a third party may also create a legally enforceable obligation under the doctrine of promissory estoppel. For example, a third party may have purchased a property near a gravel pit relying on the promise of the entity to close and decommission its pit at the end of its productive life. In the case of a promise conveyed to a third party, facts and circumstances need to be considered carefully in determining whether that promise has imposed a legal obligation upon the promisor under the doctrine of promissory estoppel.

Past transaction or event

.16 A liability for an asset retirement obligation can be incurred due to:

(a) the acquisition, construction or development of a tangible capital asset; or

(b) normal use of a tangible capital asset.

.17 The existence of an agreement, contract, legislation or another legally enforceable obligation is not the event that creates the liability. It is the acquisition, construction, development or the subsequent use of the tangible capital asset that is the obligating event.

.18 In most circumstances, whether an obligation results from the acquisition, construction or development of a tangible capital asset is clear. For example, if a public sector entity acquires an X-ray machine, the obligation to retire it in a prescribed manner results from the acquisition of this equipment. Another example is when a public sector entity acquires a building that contains asbestos. Regulations require the entity to handle and dispose of the asbestos in a prescribed manner when it is disturbed, such as when the building undergoes renovations or is demolished. Although timing of the asbestos removal is conditional on the building undergoing renovations or being demolished, existing regulations create a legally enforceable obligation for the entity to remove and dispose of the asbestos. The ability to postpone the asbestos removal does not relieve the entity of the obligation. The asbestos will eventually need to be removed and disposed of because buildings have finite lives. The obligating event occurs when the entity acquires the building.

.19 Normal use of a tangible capital asset may result in an obligation to retire it. In some cases, the entire amount of the obligation may be incurred when the asset is initially put into production. For example, in the case of a landfill site, the obligation to complete closure activities under the environmental approval may arise when the site starts accepting waste, irrespective of the volume of waste accepted. In other cases, the obligation may be incurred incrementally with use if the events or transactions that create the obligation occur over more than one reporting period. For example, an environmental approval may require a landfill operator to complete certain post-closure activities that are directly linked to the volume of waste accepted.

.20 Obligations that result from the normal use of a tangible capital asset are predictable, likely to occur and unavoidable as a result of operations. On the other hand, costs resulting from a catastrophic event, such as a flood, are considered unexpected and are outside the scope of this Section.

.21 A change in circumstance during the life of the tangible capital asset may give rise to a new liability as a result of a past transaction or event. This could be the case when new legislation requires the public sector entity to dispose of a toxic material that was not previously required to be retired. Only when the change in circumstances occurs and the obligation arises would the costs be accounted for. They are not reported as a prior period adjustment as new legislation is a current period event.

.22 Obligations that arise solely from a plan to sell or otherwise dispose of a tangible capital asset are not in scope of this Section. For example, if a public sector entity commits to remove a building in connection with selling a parcel of land and it is not otherwise obligated to remove the building, the obligation to remove the building is outside the scope of this Section.

Existence uncertainty

.23 In some circumstances, a public sector entity may have doubts as to the existence of an asset retirement obligation. For example, a public sector entity may be uncertain whether it has incurred an obligation through the operation of the doctrine of promissory estoppel. The existence of any liability in such cases is contingent on a future determination by a court, a regulator or some other competent authority, or a future determination by the entity that it would be held liable. In these circumstances, CONTINGENT LIABILITIES, Section PS 3300, provides additional guidance. If a liability for an asset retirement obligation is recognized, this Section would be applied.

RECOGNITION AND ALLOCATION OF ASSET RETIREMENT COSTS

.24 *Upon initial recognition of a liability for an asset retirement obligation, a public sector entity should recognize an asset retirement cost by increasing the carrying amount of the related tangible capital asset (or a component thereof) by the same amount as the liability.* [APRIL 2022]

.25 *The public sector entity should allocate the asset retirement cost to expense in a rational and systematic manner over the useful life of the tangible capital asset (or a component thereof).* [APRIL 2022]

.26 Asset retirement costs are necessary and an integral part of owning and operating the related tangible capital asset. These costs, as defined in TANGIBLE CAPITAL ASSETS, Section PS 3150, increase the carrying amount of the related tangible capital asset (or a component thereof).

Allocation of asset retirement costs

.27 An asset retirement obligation may exist for component parts of a larger system. In some circumstances, the retirement of the component parts may be required before the retirement of the larger system to which the component parts belong. For example, consider a transformer station (network) to be retired after a 50-year period for which its power transformers (component) need to be retired every 25 years. Accounting for asset retirement costs at the network level would allocate the asset retirement costs for the transformer station, including the power transformers, over 50 years. Accounting for retirement costs at the component level would allocate these costs for the power transformers over 25 years.

.28 Whether a public sector entity records and accounts for its tangible capital assets at the component or the network level will be determined by the usefulness of the resulting information to the public sector entity compared to the cost of collecting and maintaining it. TANGIBLE CAPITAL ASSETS, Section PS 3150, provides further guidance regarding accounting and allocation of cost of a tangible capital asset.

.29 Application of a systematic and rational allocation method does not preclude an entity from capitalizing an asset retirement cost and allocating an equal amount to expense in the same accounting period. For example, assume an entity opens a landfill. As the landfill is operated, the entity incurs additional asset retirement obligations of equal amount each year. Application of a systematic and rational allocation method would not preclude that entity from capitalizing and then expensing the asset retirement costs incurred each year.

Obligations associated with fully amortized tangible capital assets

.30 An asset retirement obligation may exist in connection with a fully amortized tangible capital asset that is still in productive use. For example, a public sector entity may control a fully amortized school containing asbestos. Although the tangible capital asset is fully amortized, its cost basis exists and the liability for an asset retirement obligation related to the initial acquisition, construction or development of the tangible capital asset would increase the cost basis of that asset. The costs would be amortized over the revised estimate of the remaining useful life.

Obligations associated with unrecognized tangible capital assets

.31 An asset retirement obligation may arise in connection with a tangible capital asset that is not recognized. In this case, the asset retirement cost would be expensed as there is no cost basis of the underlying asset to which the asset retirement costs can be attached. This is consistent with the principle that asset retirement costs are not a separate asset because there is no specific and separate future economic benefit that results from them.

Obligations associated with tangible capital assets no longer in productive use

.32 An asset retirement obligation may arise for a tangible capital asset no longer in productive use. For example, a new legislation created after the tangible asset has been removed from service may now require its disposal in a prescribed manner and specific post-retirement activities. Given that there is no longer any period of future benefit associated with the asset retirement costs, these costs would be expensed.

MEASUREMENT

Initial measurement

.33 *The estimate of a liability should include costs directly attributable to asset retirement activities. Costs would include post-retirement operation, maintenance and monitoring that are an integral part of the retirement of the tangible capital asset. The estimate would include costs of tangible capital assets acquired as part of asset retirement activities to the extent those assets have no alternative use.* [APRIL 2022]

.34 Directly attributable costs would include, but are not limited to, payroll and benefits, equipment and facilities, materials, legal and other professional fees, and overhead costs directly attributable to the asset retirement activity. Costs would include only those related to the nature and extent of the asset retirement obligation in accordance with the agreement, contract, legislation or a legally enforceable obligation establishing the liability. On the other hand, costs related to obligations created by waste or by-products produced by a tangible capital asset are outside the scope of this Section as such costs are not associated with the retirement of a tangible capital asset but are costs of operations. For example, the use of a nuclear facility may result in radioactive waste requiring clean up. These costs are not associated with the retirement of a tangible capital asset but rather with the cleanup of waste or by-products.

.35 Similarly, routine replacement of a tangible capital asset is not an asset retirement obligation. For example, infrastructure assets such as roads, sewer systems and bridges are normally not permanently removed from service (i.e., retired). Rather, they are maintained and, when necessary, replaced at the end of their useful lives. However, if there is a particular agreement, contract, legislation or other circumstance that obligates the public sector entity to incur asset retirement costs, this Section applies.

.36 In some cases, asset retirement obligations involve ongoing activities such as the operating, maintenance and monitoring of a facility that has been shut down. These are part of the asset retirement activities rather than a separate future obligation. When ongoing operation, maintenance and monitoring are an integral part of the asset retirement activities, the estimate of the liability would include such post-retirement costs.

.37 Asset retirement activities may also involve the acquisition of another tangible capital asset. For example, as part of the ongoing monitoring of a retired wastewater treatment facility, additional groundwater monitoring wells may need to be installed. The cost of the asset required for asset retirement activities would be included in the estimate of the liability.

.38 Additionally, a tangible capital asset acquired as part of asset retirement activities may have an alternative use. For example, as part of the ongoing monitoring of a retired nuclear research facility, a laboratory may need to be constructed and operated to monitor the effects of radiation. The laboratory may also be used to monitor other activities not related to the retirement of the research facility. Only that portion of the asset used for retirement activities would be included in the estimate of the liability.

.39 *A liability for an asset retirement obligation should be estimated based on information available at the financial statement date.* [APRIL 2022]

.40 The estimate of the liability would be based on requirements in existing agreements, contracts, legislation or legally enforceable obligations, and technology expected to be used in asset retirement activities. The effect of new legislation would not be taken into consideration in estimating the liability until such legislation is enacted regardless of effective date.

.41 The amount of the liability may not necessarily become determinable at a specific point in time. The amount of the liability may become determinable over a continuum of events and activities as information becomes available. For example, new information regarding the eventual costs to be incurred may become available as the public sector entity retires similar tangible capital assets. The estimate of costs may become better known as the public sector entity completes the asset retirement activities. In the interim, the public sector entity would recognize the liability based on management's best estimate of future asset retirement costs.

.42 If new information becomes available between the financial statement date and the date of completion of the financial statements that would affect the estimates of a liability, this would be accounted for in accordance with SUBSEQUENT EVENTS, Section PS 2400.

.43 *Measurement of a liability for an asset retirement obligation should result in the best estimate of the amount required to retire a tangible capital asset (or a component thereof) at the financial statement date.* [APRIL 2022]

.44 The estimate of the liability would require professional judgment and could be supplemented by experience, third-party quotes and, in some cases, reports of independent experts.

.45 Professional judgment will be required in assessing the appropriate measurement technique that results in the best estimate of the amount required to retire a tangible capital asset. The appropriate measurement technique depends on such factors as the extent and complexity of the future costs, and time frame over which activities will occur.

.46 When the cash flows required to settle or otherwise extinguish a liability are expected to occur over extended future periods, a present value technique is often the best available technique with which to estimate the measure of a liability.

.47 A key input into a present value technique, such as a discounted cash flow calculation, is the discount rate. A discount rate reflects the time value of money and the risks specific to the liability for asset retirement obligations, for which future cash flow estimates have not been adjusted. The assumptions applied in the cash flows and the discount rate should be internally consistent. For example, if the cash flows include the effect of inflation, then the discount rate also incorporates the same inflation assumptions.

.48 The passage of time also affects the measurement of asset retirement obligations. As the liability for an asset retirement obligation approaches its settlement date, the liability balance increases as the discounting of the future cash flows decreases. This is often referred to as the unwinding of the discount or accretion.

Subsequent measurement

.49 *The carrying amount of a liability for an asset retirement obligation should be reconsidered at each financial reporting date.* [APRIL 2022]

.50 A liability for an asset retirement obligation is generally long term in nature and the measurement of the amount is likely to change as new information becomes available over the useful life of the tangible capital asset.

.51 When a present value technique is used, a public sector entity makes its best estimate of the appropriate discount rate, the amount of future retirement costs and their timing when initially measuring a liability. As more experience is acquired or as additional information is obtained, those estimates need to be updated. At each financial reporting date, the discount rate used should be reviewed to assess its ongoing appropriateness. A public sector entity would apply a consistent methodology to determine the discount rate.

.52 A liability for an asset retirement obligation continues to be recognized until it is settled or otherwise extinguished.

.53 *In periods subsequent to initial measurement, a public sector entity should recognize period-to-period changes in a liability resulting from:*

- *(a) revisions to either the timing, the amount of the original estimate of undiscounted cash flows or the discount rate, as part of the cost of the related tangible capital asset; and*
- *(b) the passage of time as an accretion expense.* [APRIL 2022]

.54 *The revised carrying amount of the related tangible capital asset (or a component thereof) should be amortized in a rational and systematic manner on a go-forward basis.* [APRIL 2022]

.55 *Once the related tangible capital asset (or a component thereof) is no longer in productive use, all subsequent changes in the estimate of the liability for asset retirement obligations should be recognized as an expense in the period they are incurred.* [APRIL 2022]

.56 Asset retirement costs are necessary and an integral part of owning and operating the related tangible capital asset. These costs increase its carrying amount. As asset retirement costs on their initial recording are capitalized and amortized over the period of benefit, changes in their estimate would be accounted for similarly.

.57 A change in measurement resulting from the passage of time (i.e., accretion expense) results from events of the accounting period. It would be expensed in the period and reported in the statement of operations. An entity will measure and incorporate changes due to the passage of time into the carrying amount of the liability before measuring changes resulting from a revision to either the timing, the amount of the original estimate of undiscounted cash flows or the discount rate.

Measurement uncertainty

.58 In certain cases, there may be an indeterminate settlement date for the asset retirement obligation. For example, a public sector entity may be uncertain when the cash flows associated with an asset retirement obligation will occur. Uncertainty about the timing and amount of settlement of the asset retirement obligation does not remove that obligation but will affect the measurement of the liability.

.59 Uncertainties affecting the measurement of a liability for an asset retirement obligation are disclosed in accordance with MEASUREMENT UNCERTAINTY, Section PS 2130.

RECOVERIES

.60 *A recovery related to asset retirement obligation should be recognized when:*

- *(a) the recovery can be appropriately measured;*
- *(b) a reasonable estimate of the amount can be made; and*
- *(c) it is expected that future economic benefits will be obtained.*

A recovery should not be netted against the liability. [APRIL 2022]

.61 *A contingent recovery should be disclosed in accordance with CONTINGENT ASSETS, Section PS 3320.* [APRIL 2022]

.62 Recoveries of asset retirement obligations may result when a public sector entity is able to recover asset retirement costs from a third party. Accounting for recoveries depends on whether they meet the definition of an asset or a contingent asset (see ASSETS, Section PS 3210, and CONTINGENT ASSETS, Section PS 3320).

DISCLOSURE

.63 *A public sector entity should disclose the following information:*

- *(a) a general description of the liability for an asset retirement obligation and the associated tangible capital asset (or a component thereof);*
- *(b) the amortization method used for the asset retirement costs;*

(c) the basis for the estimate of the liability, including the estimated total undiscounted expenditures, the time period over which the undiscounted expenditures are to be incurred, the estimated timing of settlement of these expenditures and the discount rate used;

(d) a reconciliation of the beginning and ending aggregate carrying amount of the liability showing separately the changes attributable to:

(i) the liability incurred in the current period;

(ii) the liability settled in the current period;

(iii) the change resulting from the passage of time (i.e., accretion expense); and

(iv) revisions in estimated cash flows;

(e) how any requirements for financial assurance and funding associated with asset retirement obligations, if legally required, are being met;

(f) when a reasonable estimate of the amount of an asset retirement obligation cannot be made, that fact and the reasons therefor; and

(g) the estimated recoveries. [APRIL 2022]

.64 When deciding the level of detail to disclose, entities consider the usefulness of the information to readers in assessing the nature and extent of an entity's liability for asset retirement obligations. It may be useful to group similar items together.

.65 If a public sector entity is subject to legal requirements to provide financial assurance and funding associated with asset retirement obligations by setting aside assets designated for payment of such obligations, the entity would disclose that fact.

.66 In extremely rare cases, a public sector entity may not be able to make a reasonable estimate of the amount of the liability. When a reasonable estimate of the amount of the liability cannot be made, this fact should be disclosed in accordance with LIABILITIES, Section PS 3200.

EFFECTIVE DATE AND TRANSITIONAL PROVISIONS

.67 This Section applies to fiscal years beginning on or after April 1, 2022. Earlier adoption is permitted.

.68 This Section may be applied using:

(a) retroactive application in accordance with ACCOUNTING CHANGES, Section PS 2120;

(b) modified retroactive application in accordance with the transitional provisions described in paragraphs PS 3280.69-.71; or

(c) prospective application in accordance with the transitional provisions described in paragraphs PS 3280.72-.73.

.68A FINANCIAL STATEMENT PRESENTATION, Section PS 1202, issued in October 2023, amended paragraph PS 3280.09. The amendment is applicable at the same time as Section PS 1202, for fiscal years beginning on or after April 1, 2026. Earlier adoption is permitted if Section PS 1202 is also early adopted. Prior period amounts would need to be restated to conform to the requirements for comparative financial information in Section PS 1202.

Modified retroactive application

.69 As of the beginning of the fiscal year in which a public sector entity first applies this Section, the entity removes from its statement of financial position any liability for an asset retirement obligation and associated asset retirement costs and recognizes:

(a) a liability for any existing asset retirement obligations, adjusted for accumulated accretion to that date;

(b) an asset retirement cost capitalized as an increase to the carrying amount of the related tangible capital assets;

(c) accumulated amortization on that capitalized cost; and

(d) an adjustment to the opening balance of the accumulated surplus / deficit.

.70 Entities with asset retirement obligations associated with assets no longer in productive use should recognize a liability and a corresponding adjustment to the opening accumulated surplus / deficit.

.71 Those amounts are measured using information, assumptions and discount rates that are current at the beginning of the fiscal year in which this Section is first applied. The amount recognized as an asset retirement cost is measured as of the date the asset retirement obligation was incurred. Accumulated accretion and amortization are measured for the period from the date the liability would have been recognized had the provisions of this Section been in effect to the date as of which this Section is first applied. The information presented for comparative purposes should be restated unless the necessary financial data are not reasonably determinable. Appendix B demonstrates the application of the modified retroactive transitional provision option.

Prospective application

.72 For the purposes of prospective application the entity would recognize:

(a) asset retirement obligations where the event giving rise to the obligation (i.e., acquisition, construction, development or normal use) occurred on or after April 1, 2022;

(b) asset retirement obligations where the event giving rise to the obligation arose prior to April 1, 2022 and the obligation has not been previously recognized; and

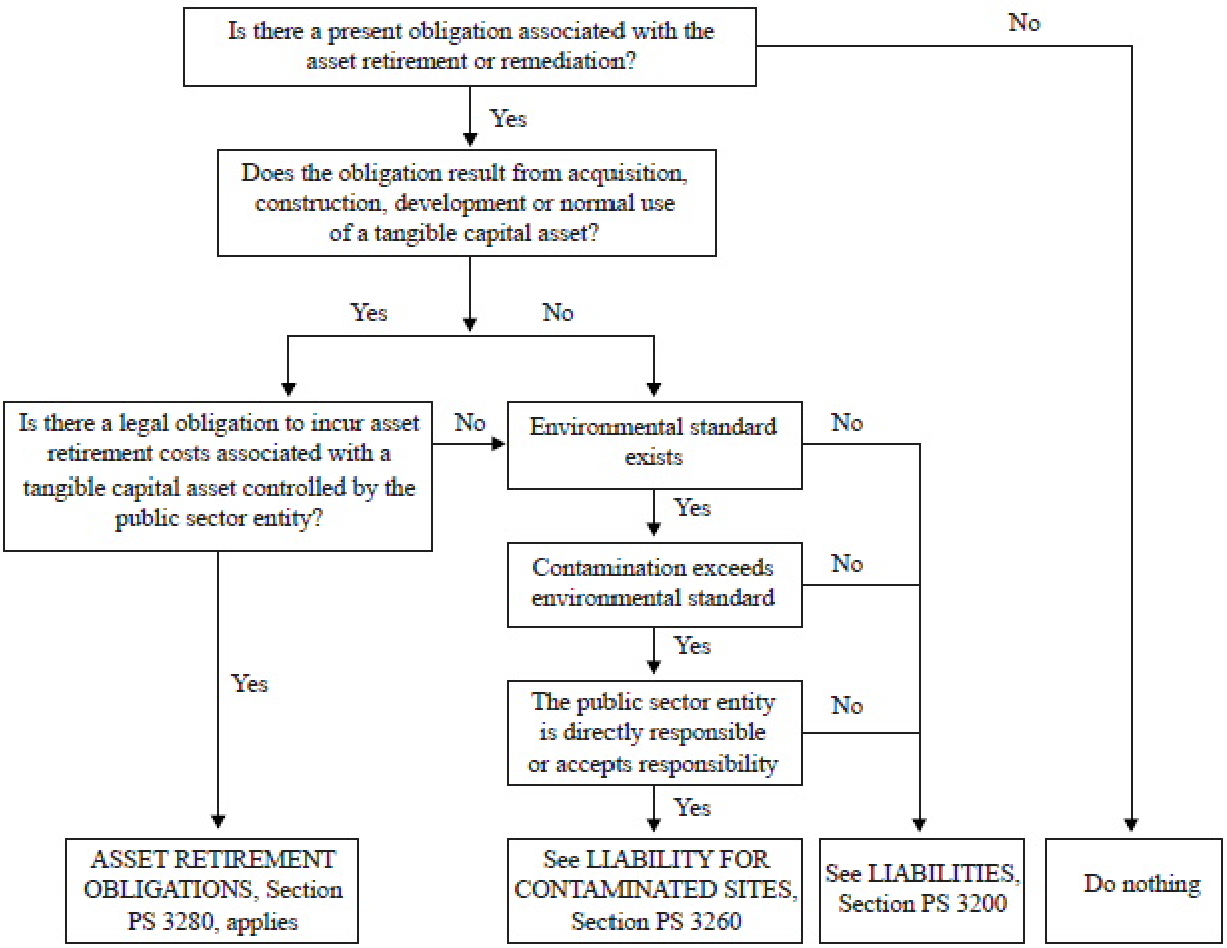
(c) asset retirement obligations where the event giving rise to the obligation arose prior to April 1, 2022, and the previously recognized obligation requires adjustment in applying this standard.

.73 For asset retirement obligations associated with tangible capital assets in productive use, the entity would increase the carrying amount of the related tangible capital asset (including those that have been fully amortized) by the same amount as the liability. For asset retirement obligations associated with tangible capital assets no longer in productive use, the entity would recognize an expense of the same amount as the liability.

APPENDIX A
DECISION TREE — SCOPE OF APPLICABILITY

This material is illustrative only.

The decision tree illustrates the boundaries between this Section and LIABILITY FOR CONTAMINATED SITES, Section PS 3260. Matters of principle relating to particular situations should be decided in the context of this Section. While illustrative, this Appendix is a primary source of GAAP, as identified in GENERALLY ACCEPTED ACCOUNTING PRINCIPLES, paragraph PS 1150.03(d)(iii).



APPENDIX B
ILLUSTRATIVE EXAMPLES

This material is illustrative only.

These examples illustrate how the accounting treatment specified in this Section might be applied in particular situations. Matters of principle relating to particular situations should be decided in the context of this Section. While illustrative, this Appendix is a primary source of GAAP, as identified in GENERALLY ACCEPTED ACCOUNTING PRINCIPLES, paragraph PS 1150.03(d)(iii).

Unless otherwise stated, the examples assume that it is expected that future economic benefits will be given up and a reasonable estimate of the amount can be made.

The facts and circumstances of each situation that may require recognition of a liability for an asset retirement obligation need to be considered carefully in applying the Section.

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RECOGNITION AND MEASUREMENT PROVISIONS

IE.01 The following two examples illustrate the recognition and measurement provisions. Example 1 illustrates initial measurement of a liability for an asset retirement obligation (ARO liability) and subsequent measurement assuming that there are changes in the estimated cash flows and the discount rate. Example 2 illustrates the recognition and measurement provisions to solid waste landfill closure and post-closure costs.

Example 1 — Purchase of a building containing asbestos

IE.02 A public sector entity purchases a building containing asbestos for $6 million on April 1, 2X21.

IE.03 Significant assumptions in the example are as follows:

(a) The remaining useful life of the building is 10 years.

(b) The entity plans to demolish the building at the end of its useful life and the relevant legislation requires that asbestos be removed in a prescribed manner.

(c) The estimated cost of this removal in 2X31 is $1 million.

(d) The appropriate discount rate to compute the present value is three percent.

(e) The public sector entity amortizes the building over its useful life using a straight-line method.

(f) As at March 31, 2X26, the entity revised the estimated cost of removal to $1.2 million and the discount rate to four percent.

IE.04 The journal entries and calculations below deal only with the asset retirement costs (i.e., exclude capitalization and amortization of the underlying tangible capital asset).

Initial Measurement of the ARO Liability

Present value of the ARO liability at April 1, 2X21	$744,094

Subsequent Measurement of the ARO Liability Reflecting Changes in the Estimated Cash Flows and the Discount Rate

Present value of the ARO liability at March 31, 2X26 – before revision	$862,609
Present value of the ARO liability at March 31, 2X26 – after revision	$986,313
Present value of the incremental liability at March 31, 2X26	$123,704

Interest Method of Allocation

Year	Liability balance April 1	Accretion	Change in estimate	Liability balance Mar. 31
2X21-2X22	$ 744,094	$ 22,323	$ —	$ 766,417
2X22-2X23	766,417	22,992	—	789,409
2X23-2X24	789,409	23,683	—	813,092
2X24-2X25	813,092	24,392	—	837,484
2X25-2X26	837,484	25,125	123,704	986,313
2X26-2X27	986,313	39,452	—	1,025,765
2X27-2X28	1,025,765	41,031	—	1,066,796
2X28-2X29	1,066,796	42,671	—	1,109,467
2X29-2X30	1,109,467	44,379	—	1,153,846
2X30-2X31	1,153,846	46,154	—	1,200,000

Schedule of Expenses

Year end	Accretion expense	Amortization expense	Total expense
2X22	$22,323	$74,409	$ 96,732
2X23	22,992	74,409	97,401
2X24	23,683	74,409	98,092
2X25	24,392	74,409	98,801
2X26	25,125	74,409	99,534
2X27	39,452	99,150	138,602
2X28	41,031	99,150	140,181
2X29	42,671	99,150	141,821
2X30	44,379	99,150	143,529
2X31	46,154	99,150	145,304

Journal entries

April 1, 2X21:		
Dr. Tangible capital asset	744,094	
Cr. ARO liability		744,094
To record the initial ARO liability		
March 31, 2X26:		
Dr. Tangible capital asset	123,704	
Cr. ARO liability		123,704
To record the subsequent change in ARO liability		
March 31, 2X22-2X31:		
Dr. Amortization expense	Per schedule	
Cr. Accumulated amortization		Per schedule
To record amortization on the asset retirement cost		
Dr. Accretion expense	Per schedule	
Cr. ARO liability		Per schedule
To record accretion expense on the ARO liability		
March 31, 2X31:		
Dr. ARO liability	1,200,000	
Cr. Cash		1,200,000
To record settlement of the ARO liability		

Example 2 — Landfill site opened

IE.05 A public sector entity opens a landfill site. Regulations require that the entity perform closure and post-closure activities upon retirement of the site. Closure activities include all activities related to closing the site. These include final cover and vegetation and completing facilities for activities such as monitoring and recovery of gas. Post-closure activities include all activities related to monitoring the site once it can no longer accept waste and include activities such as monitoring ground water and surface water. Only the expenditures relating to those activities required when the site stops accepting waste are included in the closure and post-closure care liability.

IE.06 Significant assumptions in the example are as follows:

(a) The land was purchased on April 1, 2X20, for $2 million.

(b) The cost incurred to ready the property for use as a landfill site (land improvements, installation of the leachate collection system, roads, etc.), before considering asset retirement costs, was $500,000. The landfill site's construction started on April 1, 2X21, and completed on March 31, 2X22.

(c) The estimated closure costs related to final cover and vegetation in 2X33 are $100,000. Environmental approval requires that final cover and vegetation be put in place irrespective of landfill site use. Therefore, in this specific case the liability is incurred on construction.

(d) The estimated closure costs in 2X33 related to completion of facilities for monitoring and recovery of gas are $250,000. The post-closure care period is expected to be five years (April 1, 2X32 – March 31, 2X37) at $10,000 per year. Environmental approval requires the same closure and post-closure activities irrespective of volume of waste accepted. Therefore, in this specific case, the liability is incurred when the site starts accepting waste because the cost of these activities does not vary incrementally with use.

(e) The landfill site starts accepting waste on April 1, 2X22.

(f) The estimated useful life of the landfill site is 10 years (April 1, 2X22 – March 31, 2X32). The estimated capacity of the site is 100,000 tonnes of garbage. The level of usage is expected to be constant over the life of the site.

(g) All cash outflows are incurred at the end of the year.

(h) The appropriate discount rate to compute the present value is three percent.

IE.07 The journal entries and calculations below deal only with the asset retirement costs (i.e., exclude capitalization and amortization of the underlying tangible capital asset).

Payment Schedule

2X33	2X34	2X35	2X36	2X37
$100,000	$ —	$ —	$ —	$ —
250,000	—	—	—	—
10,000	10,000	10,000	10,000	10,000
$360,000	$10,000	$10,000	$10,000	$10,000
=======	======	======	======	======

Interest Method of Allocation — Closure Costs Related to Final Cover and Vegetation

Year	Liability balance April 1	Change in estimate	Liability balance Mar. 31	
2X21-2X22	$ —	$ —	$72,242	(a)
2X22-2X23	72,242	2,167	74,409	
2X23-2X24	74,409	2,233	76,642	
2X24-2X25	76,642	2,299	78,941	
2X25-2X26	78,941	2,368	81,309	
2X26-2X27	81,309	2,439	83,748	
2X27-2X28	83,748	2,513	86,261	
2X28-2X29	86,261	2,588	88,849	
2X29-2X30	88,849	2,665	91,514	
2X30-2X31	91,514	2,746	94,260	
2X31-2X32	94,260	2,827	97,087	
2X32-2X33	97,087	2,913	—	(b)

(a) $72,242 = present value of $100,000, 3%, 11 years.

(b) Balance reflects settlement of liability.

Interest Method of Allocation — Closure Costs Related to Completion of Facilities and Post-closure Costs

Year	Liability balance April 1		Accretion	Liability balance Mar. 31
2X22-2X23	$214,683	(a)	$6,440	$221,123
2X23-2X24	221,123		6,634	227,757

2X24-2X25	227,757	6,833	234,590	
2X25-2X26	234,590	7,037	241,627	
2X26-2X27	241,627	7,249	248,876	
2X27-2X28	248,876	7,466	256,342	
2X28-2X29	256,342	7,691	264,033	
2X29-2X30	264,033	7,921	271,954	
2X30-2X31	271,954	8,158	280,112	
2X31-2X32	280,112	8,404	288,516	
2X32-2X33	288,516	8,655	37,171	(b)
2X33-2X34	37,171	1,115	28,286	(b)
2X34-2X35	28,286	849	19,135	(b)
2X35-2X36	19,135	574	9,709	(b)
2X36-2X37	9,709	291	—	(b)

(a) $214,683 = present value of $250,000, 3%, 11 years + present value of $50,000 payable over five years from 2X33 to 2X37.

(b) Balance reflects settlement of liability.

Schedule of Expenses — Closure Costs
Related to Final Cover and Vegetation

Year end	Accretion expense	Amortization expense		Total expense
2X23	$2,167	$7,224	(a)	$ 9,391
2X24	2,233	7,224		9,457
2X25	2,299	7,224		9,523
2X26	2,368	7,224		9,592
2X27	2,439	7,224		9,663
2X28	2,513	7,224		9,737
2X29	2,588	7,224		9,812
2X30	2,665	7,224		9,889
2X31	2,746	7,224		9,970
2X32	2,827	7,224		10,051
2X33	2,913	—		2,913

(a) $7,224 = [72,242 × (10,000 tonnes ÷ 100,000 tonnes)]

Schedule of Expenses — Closure Costs
Related to Completion of Facilities and Post-closure Costs

Year end	Accretion expense	Amortization expense		Total expense
2X23	$6,440	$21,468	(a)	$27,908
2X24	6,634	21,468		28,102
2X25	6,833	21,468		28,301
2X26	7,037	21,468		28,505
2X27	7,249	21,468		28,717
2X28	7,466	21,468		28,934

2X29	7,691	21,468	29,159
2X30	7,921	21,468	29,389
2X31	8,158	21,468	29,626
2X32	8,404	21,468	29,872
2X33	8,655	—	8,655
2X34	1,115	—	1,115
2X35	849	—	849
2X36	574	—	574
2X37	291	—	291

(a) $21,468 = [214,683 × (10,000 tonnes ÷ 100,000 tonnes)]

Journal entries

March 31, 2X22:		
Dr. Tangible capital asset	72,242	
Cr. ARO liability		72,242
To record the ARO liability related to closure activities (final cover and vegetation)		
April 1, 2X22:		
Dr. Tangible capital asset	214,683	
Cr. ARO liability		214,683
To record the ARO liability related to closure activities (facilities) and post-closure activities		
March 31, 2X23-2X32:		
Dr. Amortization expense	Per schedule	
Cr. Accumulated amortization		Per schedule
To record amortization on the asset retirement cost		
March 31, 2X23-2X37:		
Dr. Accretion expense	Per schedule	
Cr. ARO liability		Per schedule
To record accretion expense on the ARO liability		
March 31, 2X33-2X37:		
Dr. ARO liability	Per schedule	
Cr. Cash		Per schedule
To record settlement of the ARO liability		

TRANSITIONAL PROVISIONS

IE.08 This example illustrates the modified retrospective application transitional provisions described in paragraphs PS 3280.69-.71 assuming that this Section is adopted on April 1, 2022. Therefore, for measurement purposes, the example uses information and assumptions to derive cash flow estimates related to an asset retirement obligation at April 1, 2022.

IE.09 This example depicts a public sector entity that did not recognize an asset retirement obligation in the past.

IE.10 Significant assumptions in the example are as follows:

(a) The tangible capital asset to which the asset retirement obligation relates was acquired on April 1, 2005, and is estimated to have a useful life of 20 years.

(b) The entity incurred 100 percent of the asset retirement obligation on acquisition (April 1, 2005).

(c) The entity uses straight-line amortization.

(d) As at April 1, 2022, undiscounted expected cash flows that will be required to satisfy the asset retirement obligation on March 31, 2025, are $250 million.

(e) The April 1, 2022, discount rate is three percent.

IE.11 The journal entries and calculations below deal only with the asset retirement costs (i.e., exclude capitalization and amortization of the underlying tangible capital asset).

($ thousands)

Interest Method of Allocation

Year	Liability balance April 1	Accretion	Liability balance Mar. 31	
2021-2022	$222,121	$6,664	$228,785	(a)
2022-2023	228,785	6,864	235,649	
2023-2024	235,649	7,069	242,718	
2024-2025	242,718	7,282	250,000	

(a) $228,785 = present value of $250,000, 3%, 3 years.

Transitional Amounts Required by the Provisions of this Section

Asset — April 1, 2022:	
Capitalized April 1, 2005	$ 138,419
(Present value of $250,000, 3%, 20 years)	
Accumulated amortization — April 1, 2021:	
Capitalized April 1, 2021	$110,735
[($138,419 ÷ 20) × 16]	
Amortization expense	6,921
($138,419 ÷ 20)	
Accumulated amortization — March 31, 2022	$117,656
	=======

Journal entry required at transition (April 1, 2022)

Dr. Opening accumulated surplus / (deficit)	208,022	
Dr. Tangible capital asset	138,419	
Cr. Accumulated amortization		117,656
Cr. Liability for an asset retirement obligation		228,785

The March 31, 2022, balance sheet amounts are adjusted as indicated in the journal entry above in providing comparative figures in the March 31, 2023, financial statements. Previously reported March 31, 2022, operating surplus or deficit is reduced by $6,664 of accretion expense and $6,921 of additional amortization expense for a net reduction of $13,585 in operating surplus or deficit. The opening balance of accumulated surplus or deficit as at April 1, 2021, is decreased by $194,437.

Footnotes

1. Editorial change, paragraph renumbering only (February 2025).