ASSURANCE AND ACCOUNTING

ASSET RETIREMENT OBLIGATIONS (ARO): A PRACTICAL APPROACH TO SECTION PS 3280

Section PS 3280, Asset Retirement Obligations, was issued by the Public Sector Accounting Standards Board (PSAB or the "Board") August 2018. It is effective for fiscal years beginning on or after April 1, 2022 which means March 31, 2023 and December 31, 2023 will be the first year ends impacted. Section PS 3280 applies to all public sector entities following Public Sector Accounting Standards (PSAS). The standard provides guidance on how to account for and report a liability for asset retirement obligations (AROs). This publication will walk through a practical approach to applying Section PS 3280 including: how to determine whether an item is within the scope of this standard; the criteria that need to be met to recognize an asset retirement obligation; how to measure such an obligation; the impact of this standard on landfill liabilities; and the different options available to entities on transition.

Three Step Approach

The three steps in this approach are as follows:

Step 1: Identification	**Identify items that are within the scope of Section PS 3280**
Step 2: Recognition	**For each item in scope, determine if it meets the recognition criteria in paragraph PS 3280.09**
Step 3: Measurement	**For each item that meets the recognition criteria, determine an appropriate estimate of the asset retirement obligation**

Let's look at each step in more detail.

Step 1: Identify Items that are within the Scope of Section PS 3280

Step 1 is the most important step, since if it is skipped there is the potential for a lot of unnecessary work to be completed on items that are not actually within the scope of Section PS 3280. To know what is in scope, we first need to understand what is meant by the term asset retirement obligation. Section PS 3280 defines an **asset retirement obligation** as a *legal obligation associated with the retirement of a tangible capital asset*. It is important to note that the standard only applies to legal obligations, including obligations created by promissory estoppel.

What Types of Tangible Capital Assets could be Impacted?

Tangible capital assets that could be impacted include those that are **controlled** by the public sector entity (including leased assets), assets that are currently **in productive use**, as well as, assets **no longer in productive use**. Examples of some costs related to tangible capital assets that would be in and out of the scope of the standard include:

Costs in Scope	Costs out of Scope
Solid waste landfill closure and post closure liabilities	Routine replacement / maintenance
Removal of asbestos	Improper use of a tangible capital asset
Retirement of X-ray machines	Remediation of contaminated sites related to unexpected events
	Waste and by-products produced by tangible capital assets, such as radioactive waste from use of a nuclear facility
	Preparing a tangible capital asset for an alternative use
	Selling or disposal

AROs Related to Landfills are Included

As noted above, obligations related to landfills will be within the scope of Section PS 3280. In the past, these obligations have been accounted for in accordance with Section PS 3270, Solid Waste Landfill Closure and Post-closure Liability. However, once Section PS 3280 becomes effective, Section PS 3270 will be removed from the PSAS Handbook and all asset retirement obligations related to landfills will be accounted for under Section PS 3280. We will discuss the impact this will have on landfill obligations later in this publication.

What is an ARO vs. a Contaminated Site?

From the examples above, you may be wondering how to differentiate between items that would be accounted for under Section PS 3280 vs. Section PS 3260, Liability for Contaminated Sites. Determining which standard to apply requires professional judgment, but there are three main distinguishing factors to keep in mind: the cause of the retirement or remediation obligation, the type of obligation and the extent of contamination.

	ARO Section PS 3280 Applies	Contaminated Sites Section PS 3260 Applies
Cause of retirement or remediation obligation	Arises from the **acquisition**, **construction**, **development** and **normal use** of an asset. Does **not** need to be associated with contamination	Arises from an **unexpected event** or **improper use** and contamination must exist.
Type of obligation	Restricted to **legal** obligations related to tangible capital assets **controlled** by the entity.	All liabilities, including those arising from both **direct** responsibility and **assumed** responsibility.
Extent of contamination	**Does not** need to exceed an environmental standard.	**Must** exceed an environmental standard.

In addition, refer to the flow chart in Appendix A for a series of questions to consider in determining which liability standard applies for a given situation.

The Right Team

In order to identify potential asset retirement obligations, it is important to put together a team of knowledgeable people from different areas of the organization including finance, public works, asset management, engineering, legal, etc., as well as, any external experts needed. In this first step, the team's goal is to put together a complete list of all potential asset retirement obligations, as well as a list of all key laws and regulations that could impact the organization's assets. While creating this list the team should keep in mind, the most important items to identify are those that could result in a material misstatement to the financial statements.

The team should consider the following as they compile the list of potential items that fall within the scope of PS 3280:

- ☐ Are there any known assets that require retirement or remediation?
- ☐ Does the entity control any landfills?
- ☐ Does the entity control any buildings or structures that contain asbestos?
- ☐ Are there any assets (including leased assets) with known contracts, agreements or legislation requiring clean up or retirement?
- ☐ Are there any assets not in productive use that require clean up or retirement?
- ☐ Has any new legislation come into effect that would require the retirement of any assets?
- ☐ Are there any other items not yet included on the list where asset retirement obligations may exist?

Once all the items that fall within the scope of PS 3280 have been identified, it is time to move onto the next step to determine if each item meets the criteria for recognition.

Step 2: For Each Item in Scope, Determine if it Meets the Recognition Criteria in Paragraph PS 3280.09

Paragraph PS 3280.09 outlines the criteria for recognition and explains that a liability for asset retirement would be recognized when **all** of the following are met at the financial reporting date:

- There is a **legal** obligation to incur retirement costs in relation to a tangible capital asset;
- The **past transaction or event** giving rise to the liability has occurred;
- It is expected that **future economic benefits** will be given up; and
- A **reasonable estimate** of the amount can be made.

Let's look at a few of these in more detail.

Legal Obligations

As previously discussed, Section PS 3280 only applies to legal obligations. A legal obligation establishes a clear duty or responsibility to another party. Legal obligations can result from agreements or contracts, a government's own legislation or that of another government, or a promise conveyed to a third party that imposes a reasonable expectation of performance upon the promisor under the doctrine of promissory estoppel.

Past Transaction or Event

The existence of an agreement, legislation or any other legally enforceable obligation by itself is not what creates the liability. Instead, the obligating event is the acquisition, construction, development or subsequent use of the tangible capital asset, combined with an agreement, legislation or other legally enforceable obligation requiring remediation of the tangible capital asset. For example when an X-ray machine is purchased by a hospital, the event that creates the asset retirement obligation is the acquisition of the machine. There are also obligations that result from an assets normal use; these are normally predictable and unavoidable, such as a landfill. The obligation to close the landfill site under environmental regulations occurs when the landfill is put into use.

FAQs	
Question: When is an asset retirement obligation for the clean up of asbestos recognized?	**Answer:** When an entity acquires a building that contains asbestos, existing regulations across all jurisdictions in Canada require the entity to handle and dispose of it in a prescribed manner when the building undergoes renovations or is demolished. Although timing of the removal of the asbestos 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. As a result, paragraph PS 3280.18 has made it very clear that **the obligating event occurs when the entity acquires the building**. The ability to defer settlement does not relieve the entity of the obligation, since the asbestos will eventually need to be removed and disposed of because the tangible capital asset containing the asbestos has a finite life. Even if the tangible capital asset containing asbestos were sold, the price would reflect the obligation to retire it.
Question: When is an asset retirement obligation recognized when new legislation imposes an obligation for an existing asset that did not previously require retirement?	**Answer:** When the change in circumstance occurs (i.e. the new legislation is effective), at that point the asset retirement obligation arises. The obligation is not recorded as a prior period adjustment, since the change results from a current period event.

Uncertainty

Uncertainty about the timing of settlement of an asset retirement obligation does not remove the obligation from the scope of Section PS 3280. Instead, it would affect the measurement of the liability.

In determining whether the recognition criteria are met for each item identified in Step 2, the team should consider:

- ☐ Have all laws, legislation, regulations and any potential promises under promissory estoppel, that the entity must comply with been identified?
- ☐ Is the entity legally responsible for retiring the asset?
- ☐ Have all past transactions or events that give rise to an asset retirement obligation been identified?
- ☐ Is there uncertainty that an asset retirement obligation exists?
    - What needs to be decided for this uncertainty to be realized?
    - Have legal counsel or other relevant experts been consulted?
- ☐ Are there any situations where the entity is unable to come up with a reasonable estimate of the amount of the liability? If so, what is the reason why this amount cannot be estimated?

Recognition of the Liability and Allocation of Related Asset Retirement Costs

Once the above recognition criteria have been met, a public sector entity will recognize a liability (credit side of the entry) measured in accordance with the requirements set out in Step 3 below. When the related tangible capital asset is in productive use and not yet fully amortized, the entity will add a corresponding amount (debit side of the entry) to the cost of the asset. The public sector entity will then expense the asset retirement costs in a rational and systematic manner over the remaining useful life of the tangible capital asset.

What happens if the related tangible capital asset is already fully amortized, is no longer in productive use, or was never recognized? Let's take a look at the following frequently asked questions to find out.

FAQs	
Question: How are asset retirement costs related to a tangible capital asset that is still in productive use, but already fully amortized (e.g. a fully amortized building containing asbestos) recognized?	**Answer:** Although the tangible capital asset is fully amortized, its historical cost basis still exists. As a result, the asset retirement costs would be added to the asset's existing cost base and expensed over the revised estimate of the asset's remaining useful life.
Question: How are asset retirement costs related to a tangible capital asset that is no longer in productive use (e.g. new legislation comes into effect requiring disposal of the asset in a prescribed manner) recognized?	**Answer:** When an asset has been removed from productive use, there is no longer any period of future benefit associated with the asset retirement costs. As a result, the asset retirement costs would be expensed immediately.
Question: How are asset retirement costs relate to an unrecognized asset (e.g. such as for an asset that was expensed when purchased) accounted for?	**Answer:** In this case, there is no cost basis to which the asset retirement costs can be attached and asset retirement costs are not a separate asset by themselves, since there is no separate economic benefits resulting from them. As a result, the asset retirement costs would be expensed immediately.

Step 3: For Each Item that Meets the Recognition Criteria, Determine an Appropriate Estimate of the Asset Retirement Obligation

Initial Measurement

Under Section PS 3280, the estimate of the liability should include costs **directly attributable** to asset retirement activities. Such costs would include:

- Amounts spent on post-retirement operation or maintenance and monitoring that are an integral part of the retirement of the asset; and
- Costs of tangible capital assets acquired as part of asset retirement activities to the extent the assets have no alternative use. For example, if an entity purchased a backhoe to assist with the retirement of a landfill and the backhoe had no alternative use to the entity, then its cost would be included in the asset retirement obligation for the landfill.

When measuring a liability for an asset retirement obligation, it should result in the **best estimate** of the amount required by the entity to retire the tangible capital asset at the financial statement date. Professional judgment, previous experience, third party quotes and the use of experts may be needed in determining the best estimate.

FAQ	
Question: Should the liability estimated be based on the effect of legislation that is not yet effective?	**Answer:** No, the effect of new legistlation is not taken into consideration in estimating a liability until it has been enacted, regardless of its the effective date. Similarly, the liabilty should be based on the requirements of existing agreements, legally enforcable obligations and technology that is expected to be used to retire the asset as of the financial statement date.

Section PS 3280 does not include prescriptive guidance on the appropriate technique to use to measure the liaiblity. As a result, professional judgment will be required to determine the technique that is most appropriate in the circumstances. When the cash flows required to settle the liability will occur over future periods, a present value technique is often the best method to use in estimating the liability. A key input into the present value technique is the discount rate. The discount rate used should consider any risks specific to the liability. Both the discount rate and any assumptions used should be internally consistent.

FAQ	
Question: Can a recovery be netted against the liability for an asset retirement obligation?	**Answer:** A recovery related to an asset retirement obligations may result when a public sector entity is able to recover asset retirement costs from a third party. However, a recovery **cannot** be netted against the liability. Instead, a recovery must be recorded as a separate asset when the criteria for recognition are met. Additionally, when Section PS 3280 was issued, an amendment was also made to Section PS 3260 (which previously required recoveries to be netted against the liability for contaminated sites), **prohibiting** the netting of recoveries, to ensure the guidance in both Sections was consistent. This amendment will impact public sector entities who previously recognized recoveries under Section PS 3260 by netting them against the liability for contaminated sites.

Subsequent Measurement

The carrying amount of the liability must be reassessed at each financial reporting date. This includes taking into account new information and the appropriateness of the discount rate and other assumptions used. Period to period changes in the liability are accounted for differently depending on how they came about and the state of the asset being retired as outlined below:

Changes Resulting from:	Tangible Capital Asset in Productive Use	Tangible Captial Asset No Longer in Productive Use
Revisions to either the: **– Timing;** **– Amount of original estimate of undiscounted cash flows; or** **– Discount rate**	Added to cost of the related tangible capital asset and susequently amortized in a rational and systematic manner	Expensed in period incurred
Passage of time	Accounted for as an accretion expense	Expensed in period incurred

The liability for an asset retirement obligation must continue to be recognized until it is settled or otherwise extinguished.

In Step 3, the team's goal is to ensure that the estimate for the asset retirement obligation is reasonable. In doing so, the team should consider:

- ☐ Was the information used in estimating the liability available at the financial statement date?
- ☐ Are the costs included in the estimated liability directly attributable to the retirement of the asset?
- ☐ Have all directly attributable costs been considered (e.g. an asset purchased to facilitate the retirement activities that has no alternative use)?
- ☐ Was an appropriate measurement technique used to estimate the liability?
- ☐ Has the consistency of information across similar asset retirement obligations been evaluated?
- ☐ Has an appropriate expert been used? If not, is an expert needed?
- ☐ Have any expected recoveries been recorded separate from the liability?

Impact of Section PS 3280 on Landfills

As previously discussed, once Section PS 3280 comes into effect, all landfills will need to be accounted for under this standard. The Board decided landfills should be included within Section PS 3280 as they are asset retirement obligations and the Board believes all asset retirement obligations should be accounted for consistently. The following table provides an overview of the main differences entities will experience in the accounting for landfills under Section PS 3280 compared to previous Section PS 3270:

	Section PS 3280 – AROs	Section PS 3270 - Landfills
Liability	Recognized when obligation incurred = earlier recognition	Recognized incrementally as landfill used = later recognition
Total Liability Overall	Generally the same	
Assets	Asset retirement costs capitalized	N/A
Net Debt	Earlier increase in net debt	Later increase in net debt
Total Expenses	Generally the same	
Annual Expenses	Difference in annual expenses are due to differences in methodology used	

The sample statement of financial position below illustrates some of these differences:

Statement of Financial Position—comparison

As at March 31 2x23	ARO standard	PS 3270
Financial assets		
Cash and cash equivalents	$ 600,000	$ 600,000
Taxes receivable	165,000	165,000
Portfolio investments	495,000	495,000
	1,260,000	1,260,000
Liabilities		
Accounts payable	300,000	300,000
Long-term debt	2,000,000	2,000,000
Asset retirement obligation—landfill	**295,532**	**29,451**
	2,595,532	2,329,451
Net financial debt	**(1,335,532)**	**(1,069,451)**
Non-financial assets		
Tangible capital assets	**10,258,233**	**10,000,000**
Prepaid expenses	15,000	15,000
	10,273,233	10,015,000
Accumulated surplus (deficit)	$8,937,701	$8,945,549

Disclosure

At this point in the process, the asset retirement obligation will be recognized and presented in the financial statements. To assist financial statement users in understanding the obligation, certain information would be disclosed in the notes including: a description of the liability and related tangible capital asset; the amortization method used; the basis for the estimate of the liability; a reconciliation of the beginning and ending liability balances; and any estimated recoveries. In the rare case where an entity is not able to make a reasonable estimate of the liability this fact and the reasons why must be disclosed.

Transition

As previously discussed, Section PS 3280 comes into effect for fiscal years beginning on or after April 1, 2022, with earlier adoption permitted. To make transitioning to the new standard easier, three transitional options are provided: prospective application, retrospective application with restatement and modified retrospective application with restatement. The table below provides a high level comparison of these options:

	Prospective Application	Retrospective Application with Restatement	Modified Retrospective Application with Restatement
Impact on Comparative Figures	Not restated	Restated	Restated
Date Liability Measured	Measured as of the date the legal obligation was incurred	Measured as of the date the legal obligation was incurred	Measured as of the date the legal obligation was incurred
Date of Discount Rate and Assumptions Used	Discount rate and assumptions used are those as of the date the legal obligation was incurred	Discount rate and assumptions used are those as of the date the legal obligation was incurred	Discount rate and assumptions used are those as of the first date of the current period (i.e. April 1, 2022)
Impact on Opening Comparative Figures (April 1, 2021)	No impact	Recorded as an adjustment to opening accumulated surplus	Recorded as an adjustment to opening accumulated surplus
Impact on Opening April 1, 2022 Figures	Asset retirement liability and related asset retirement costs initially recognized	Rolled forward from restated comparative figures	Rolled forward from restated comparative figures

The transitional option chosen must be applied consistently to all of an entity's asset retirement obligations.

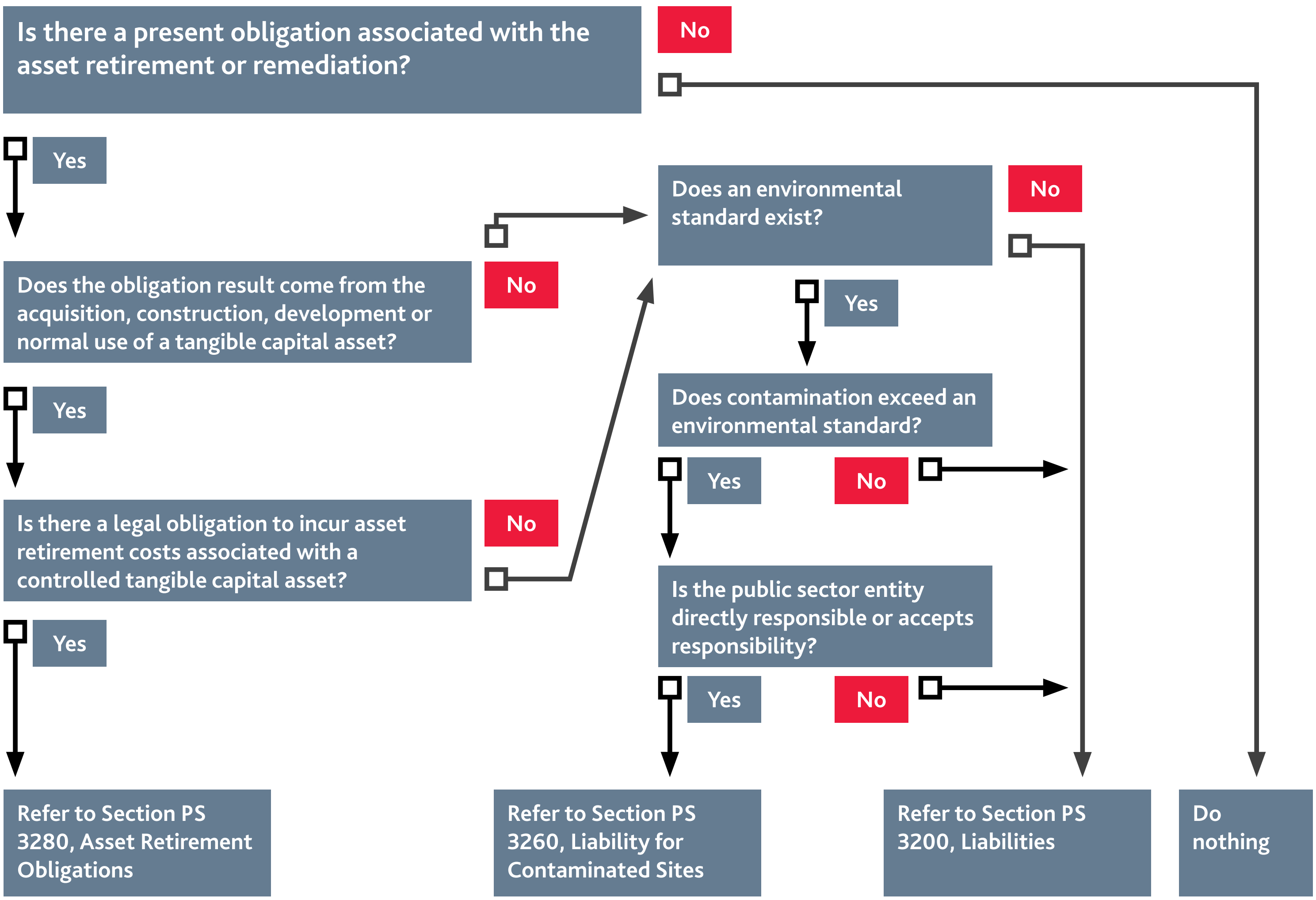
FAQ	
Question: Which transitional option is the best?	**Answer:** No one option is the best. Each entity would need to consider the information it is able to gather in regards to discount rates and assumptions, as well as, the importance of comparability to financial statement users in determining which option to choose. One point to note is that the modified retrospective method allows an entity to use information and assumptions as at the beginning of the year the entity adopts Section PS 3280, instead of having to go back and determine this information as of the date the liability was incurred. As a result, this option may be more practical to apply than full retrospective restatement. Refer to Appendix C for an example of each of the transitional options.

Conclusion

Applying Section PS 3280 can seem overwhelming at first, but by assembling the right team and following the steps in this publication, the standard can be applied in an efficient manner. If you have questions about how this standard affects your entity contact your BDO advisor today.

Appendix A—Determine which Section Applies

The following flowchart can be used to help determine which standard an entity should look to for guidance in accounting for an obligation.



Appendix B—Three Step Approach Checklist

The following checklist outlines items to consider at each step in the process of applying Section PS 3280.

Step 1: Identify Items that are within the Scope of Section PS 3280

- ☐ Are there any known assets that require retirement or remediation?
- ☐ Does the entity control any landfills?
- ☐ Does the entity control any buildings or structures that contain asbestos?
- ☐ Are there any assets (including leased assets) with known contracts, agreements or legislation requiring clean up or retirement?
- ☐ Are there any assets not in productive use that require clean up or retirement?
- ☐ Has any new legislation come into effect that would require the retirement of any assets?
- ☐ Are there any other items not yet included on the list where asset retirement obligations may exist?

Step 2: For Each Item in Scope, Determine if it Meets the Recognition Criteria in Paragraph PS 3280.09

- ☐ Have all laws, legislation, regulations and any potential promises under promissory estoppel, that the entity must comply with been identified?
- ☐ Is the entity legally responsible for retiring the asset?
- ☐ Have all past transactions or events that give rise to an asset retirement obligation been identified?
- ☐ Is there uncertainty that an asset retirement obligation exists?
  - What needs to be decided for this uncertainty to be realized?
  - Have legal counsel or other relevant experts been consulted?
- ☐ Are there any situations where the entity is unable to come up with a reasonable estimate of the amount of the liability? If so, what is the reason why this amount cannot be estimated?

Step 3: For Each Item that Meets the Recognition Criteria, Determine an Appropriate Estimate of the Asset Retirement Obligation

- ☐ Was the information used in estimating the liability available at the financial statement date?
- ☐ Are the costs included in the estimated liability directly attributable to the retirement of the asset?
- ☐ Have all directly attributable costs been considered (e.g. an asset purchased to facilitate the retirement activities that has no alternative use)?
- ☐ Was an appropriate measurement technique used to estimate the liability?
- ☐ Has the consistency of information across similar asset retirement obligations been evaluated?
- ☐ Has an appropriate expert been used? If not, is an expert needed?
- ☐ Have any expected recoveries been recorded separate from the liability?

Appendix C—Transitional Options Examples

The following fact pattern will be used to illustrate the journal entries required based on the transitional method chosen by the public sector entity.

Scenario: Public Sector Entity A previously did not recognize any asset retirement obligations. In preparing to adopt Section PS 3280, which became effective April 1, 2022, the entity has determined that it has one asset retirement obligation. The entity is preparing its March 31, 2023 financial statements. The main assumptions related to the asset retirement obligation are as follows:

- The tangible capital asset to which the asset retirement obligation relates was acquired April 1, 2005, and is estimated to have a 20 year useful life
- The entity incurred 100 percent of the asset retirement obligation upon acquisition of the tangible capital asset (April 1, 2005)
- The entity uses straight-line amortization
- At April 1, 2022, the undiscounted expected cash flows that will be required to satisfy the asset retirement obligation on March 31, 2025 are $250,000
- On April 1, 2005 the discount rate was 5%
- On April 1, 2022 the discount rate is 3%
- The discount rate held consistent at 5% until the change on April 1, 2022 to 3%.

Prospective Application:

Recall that under prospective application, comparatives are not restated, the liability is measured as of the date it was incurred (April 1, 2005) and the discount rate and assumptions used are those as of the date the obligation was incurred. However, when a present value technique is used, Section PS 3280 requires an entity to reassess the appropriateness of the discount rate at each reporting period, and since the discount rate has changed to 3% as of April 1, 2022, that would be the discount rate used when calculating the asset retirement liability.

In addition to the original facts provided above, it has been determined that the present value of the asset retirement liability at April 1, 2022 using a 3% discount rate is $228,785. Therefore, the journal entry to record the liability and the associated asset retirement costs on this date would be:

Dr. Tangible Capital Asset	228,785	
Cr. Asset Retirement Obligation		$228,785

Then at the year end date of March 31, 2023 the entity would need to record the accretion of the liability for the year, which has been determined to be $6,864 and the amortization for the 2023 year, which is $76,262 ($228,785 / 3 years). The journal entry would be:

Dr. Amortization Expense	76,262	
Dr. Accretion Expense	6,864	
Cr. Accumulated Amortization		76,262
Cr. Asset Retirement Obligation		6,864

Note that the annual amortization expense is higher under this method than it will be under the other methods, since there is no adjustment made to opening accumulated amortization.

Retrospective Application:

Recall that under full retrospective application, comparatives are restated, an adjustment is made to opening accumulated surplus, the liability is measured as of the date it was incurred (April 1, 2005) and the discount rate and assumptions used are those as of the date the obligation was incurred.

In addition to the original facts provided, it has been determined that:

- The present value of the asset retirement liability (and the related asset retirement costs) at April 1, 2005 using a 5% discount rate was $94,222
- The present value of the asset retirement liability at April 1, 2021 using a 5% discount rate is $205,676
- The present value of the asset retirement liability at April 1, 2022 using a 3% discount rate is $228,785

Therefore, the journal entry to record the asset retirement obligation on April 1, 2021 would be:

Dr. Tangible Capital Asset	94,222	
Dr. Opening Accumulated Surplus	186,832	
Cr. Asset Retirement Obligation		205,676
Cr. Accumulated Amortization ($94,222 / 20 years x 16 years)		75,378

Then at the year end date of March 31, 2022 the entity would need to record the accretion of the liability for the 2022 year, which has been determined to be $10,284 and the amortization expense for the year, which is $4,711 ($94,222 / 20 years). The journal entry would be:

Dr. Amortization Expense	4,711	
Dr. Accretion Expense	10,284	
Cr. Accumulated Amortization		4,711
Cr. Asset Retirement Obligation		10,284

Then for the March 31, 2023 year end the entity would first need to adjust the liability and the asset retirement costs for the change in the discount rate to 3%, since when a present value technique is used an entity is required to reassess the value of the discount rate at each reporting period:

Dr. Tangible Capital Asset	12,826	
Cr. Asset Retirement Obligation ($228,785 – ($205,676 + $10,284))		12,826

Then the entity would need to record the accretion of the liability for the 2023 year, which has been determined to be $6,864, and the amortization expense for the year, which is $8,986 (($94,222 – 75,378 – 4,711 + 12,826)/3 years). The journal entry would be:

Dr. Amortization Expense	8,986	
Dr. Accretion Expense	6,864	
Cr. Accumulated Amortization		8,986
Cr. Asset Retirement Obligation		6,864

Modified Retrospective Application:

Recall that under modified retrospective application, comparatives are restated, an adjustment is made to opening accumulated surplus, and the liability is measured as of the date it was incurred (April 1, 2005). However, the discount rate and assumptions used are those as of the beginning of the fiscal year Section PS 3820 is first applied (April 1, 2022) (i.e. the discount rate of 3% is used).

In addition to the original facts provided, it has been determined that:

- The present value of the asset retirement liability (and the related asset retirement costs) at April 1, 2005 using a 3% discount rate was $138,419
- The present value of the asset retirement liability at April 1, 2021 using a 3% discount rate is $222,122

Therefore, the journal entry to record the asset retirement obligation on April 1, 2021 would be:

Dr. Tangible Capital Asset	138,419	
Dr. Opening Accumulated Surplus	194,438	
Cr. Asset Retirement Obligation		222,122
Cr. Accumulated Amortization ($138,419 / 20 years x 16 years)		110,735

Then at the year end date of March 31, 2022 the entity would need to record the accretion of the liability for the 2022 year, which has been determined to be $6,664 and the amortization expense for the year, which is $6,921 ($138,419 / 20 years). The journal entry would be:

Dr. Amortization Expense	6,921	
Dr. Accretion Expense	6,664	
Cr. Accumulated Amortization		6,921
Cr. Asset Retirement Obligation		6,664

Then the entity would need to record the accretion of the liability for the 2023 year, which has been determined to be $6,864 and the amortization expense for the year. The journal entry would be:

Dr. Amortization Expense	6,921	
Dr. Accretion Expense	6,864	
Cr. Accumulated Amortization		6,921
Cr. Asset Retirement Obligation		6,864

Comparison of Impact of the Three Transitional Methods:

The following table provides a side-by-side comparison of the impact of the initial journal entry to record the asset retirement obligation under each of the three transitional methods, as well as, a comparison of the balances of the asset and liability at March 31, 2023.

	Prospective Application	Retrospective Application with Restatement	Modified Retrospective Application with Restatement
Initial Journal Entry			
	April 1, 2022	**April 1, 2021**	**April 1, 2021**
Tangible Capital Asset (net book value)	228,785	18,844	27,684
Asset Retirement Obligation	(228,785)	(205,676)	(222,122)
Opening Accumulated Surplus Impact	-	186,832	138,419
Balances as of March 31, 2023			
Tangible Capital Asset (net book value)	152,523	17,973	13,842
Asset Retirement Obligation	(235,650)	(235,650)	(235,650)

The above comparison illustrates that the asset retirement obligation ends up at the same amount at March 31, 2023 under each of the three methods. However, there are significant differences in the net book value of the tangible capital asset. This is because under prospective application, the tangible capital asset is initially recorded at the same value as the related liability so there is no impact on opening accumulate surplus or accumulated amortization. As a result, the net book value of the tangible capital asset is significantly higher than under the other two methods. This also results in a significantly higher annual amortization expense over the asset's remaining three year useful life under the prospective method (approximately $76,000) than under the retrospective methods (approximately $7,000). Refer to the journal entries for each method above for a detailed breakdown.