



# **ASC Insights Series:** **Guide to Accounting** **Standards**

Accounting Standards Codification 410-20  
Asset Retirement Obligations;  
Accounting Standards Codification 410-30  
Environmental Obligations

**July 2024**

1. Foreword

2. Purpose

3. Background

4. Summary of Topic

5. Key Issues/  
Considerations

6. Comparison with  
IFRS

# Foreword

Welcome to our “**Uniquis’ ASC Insights Series: Guide to Accounting Standards**”, where we combine our collective wisdom to understand various Accounting Standard Codifications (ASCs) comprehensively and in a crisp manner. This series is an invaluable tool for accounting professionals, offering detailed explanations, illustrative examples, and our expert point of view. Designed to support your professional journey, this guide helps you navigate complex accounting scenarios and deepen your knowledge.

This is the third publication in our “Uniquis’ ASC Insights Series: Guide to Accounting Standards”, focusing on “**ASC 410-20, Asset Retirement Obligations and ASC 410-30, Environmental Obligations**”. In this installment, we delve into the specifics of ASC 410-20 and ASC 410-30, exploring its implications, key considerations, and practical applications. Through clear illustrations and expert commentary, we aim to make the standard accessible and actionable for practitioners.

ASC 410-20 provides guidance on accounting for asset retirement obligations (AROs) prescribing the principles for recognition, measurement, and disclosure of liability relating to asset retirement obligations. ASC 410-30 provides guidance on measuring an estimated environmental remediation liability including which type of costs to include in the estimate, how to consider the effects of future developments, and how to allocate the liability between involved parties.

We hope you enjoy reading this document and find this series valuable!

Thank you.

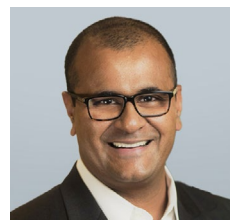
Yours faithfully

For Uniquis Consultech Inc.



**Sandip Khetan**

*Co-Founder and Global Head,  
Accounting & Reporting Consulting*



**Avinash Ramkumar**

*Partner, Accounting &  
Reporting Consulting*

1. Foreword

2. Purpose

3. Background

4. Summary of Topic

5. Key Issues/  
Considerations

6. Comparison with  
IFRS

# Purpose

With changes in laws and regulations relating to environmental remediation and protection, it has become very important for entities to recognize the losses or costs that they are likely to incur as a measure of environment remediation and assets restoration. Accounting for asset retirement obligations (AROs) and environmental obligations will vary depending on the laws and regulations governing such obligations.

This publication provides an overview of the key accounting considerations and implementation matters relating to the accounting of asset retirement obligations and Environmental remediation liabilities as per the principles of ASC 410-20 and ASC 410-30 respectively. The technical views and accounting positions on the framework continue to improve depending on the results of further technical evaluations.

We sincerely hope you find the enclosed publication informative. We will be happy to participate in any discussions to clarify our views, which are enclosed in the attached publication. We look forward to hearing from you.



# Background

## 1. Foreword

## 2. Purpose

FASB has issued specific guidance on accounting for asset retirement obligations (AROs) and Environmental obligations in ASC 410.

## 3. Background

## 4. Summary of Topic

### ASC 410-20

**“ARO”** Legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development and/or the normal operation of such assets.

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

### ASC 410-30

**“Environmental obligations”** Environmental remediation liabilities resulting from the improper operation of a long-lived asset.

### Asset retirement obligations

The FASB’s guidance on accounting for asset retirement obligations is included in sub-topic ASC 410-20, which prescribes the principles for recognition, measurement, and disclosure of liability relating to asset retirement obligations. The recognition of ARO is dependent upon existence of an unconditional obligation related to the retirement of a tangible, long-lived asset used under normal operations by the entity. It represents an obligation to be settled by a party arising due to an existing or enacted law, statute, ordinance, or written or oral contractual terms or based on a promise and an expectation of performance (e.g., under the doctrine of promissory estoppel).

### Environmental remediation liabilities

The FASB’s guidance on accounting for environmental remediation liabilities is included in sub-topic ASC 410-30. This topic prescribes the principles of the measuring an estimated environmental remediation liability, including which type of costs to include in the estimate, how to consider the effects of future developments, and how to allocate the liability between involved parties. The recognition and disclosure guidance is principally based on a framework defined by the guidance on loss contingencies in ASC 450-20.

ASC 410-30 provides guidance for recognizing liability for obligations associated with environmental remediation liabilities, including a specific type of contingent liability that arises from state, federal, and local environmental regulations or, in some instances, international treaties related to contamination in groundwater, soil, sediment, and surface water.

# Summary of Topic

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

## 01 Accounting for Asset Retirement Obligations

### 1. Scope of ASC 410-20

The guidance in ASC 410-20 applies to all entities (including not-for-profit entities and rate-regulated entities) that incur **legal obligations** for the retirement of tangible long-lived assets. This includes all AROs incurred any time during the life of an asset and not just those incurred during the acquisition and early operation stages.

The existence of legal obligation is a primary condition for the recognition of ARO. As per the guidance, “legal obligation” can be established by:

- A government action, such as a law, statute, or ordinance.
- An agreement between entities, such as a written or oral contract.
- A promise conveyed to a third party that imposes a reasonable performance expectation upon the promisor under the doctrine of promissory estoppel.

For an obligation to fall within the scope of ASC 410-20, it must have following characteristics:

- Obligation must be legally unavoidable,
- Obligation must be associated with the retirement of a tangible long-lived asset, resulting from the acquisition, construction, or development and/or normal operation of that asset.
- Obligation must arise from the normal operation of the asset and not from improper use or accidents.

#### Scope exclusions

ASC 410-20 scopes out the following obligations:

- a. Obligations that arise solely from a plan to sell or otherwise dispose of a long-lived asset.
- b. An environmental remediation liability that results from the improper operation of a long-lived asset.<sup>1</sup>
- c. Activities necessary to prepare an asset for alternative use as they are not associated with the retirement of the asset.
- d. Historical waste held by private households.

<sup>1</sup> An environmental remediation liability that results from the normal operation of a long-lived asset and that is associated with the retirement of that asset (e.g., the obligation to decontaminate a nuclear power plant site or cap a landfill) is an ARO within the scope of ASC 410-20. However, an environmental remediation liability that results from other-than-normal operation of a long-lived asset falls within the scope of ASC 410-30. For example, an environmental remediation liability that relates to pollution arising from some past act that will be corrected without regard to retirement is not considered an ARO.

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

- e. Obligations of a lessee in connection with an underlying asset, whether imposed by a lease or by a party other than the lessor, that meet the definition of either lease payments or variable lease payments in Subtopic 842-10.
- f. An obligation for asbestos removal that results from the other-than-normal operation of an asset.
- g. Costs associated with complying with funding or assurance provisions.
- h. Obligations associated with maintenance, rather than retirement, of a long-lived asset.
- i. The cost of a replacement part that is a component of a long-lived asset.

Following is the illustrative list of examples which are included and excluded from ARO:

### Included in the Scope of ASC 410-20

- Cost associated with Cleanup of contamination from landfills, plugged and abandoned injection wells, water wells, and wastewater treatment facilities as per law.
- Removal of leasehold improvements installed by lessees.
- Certain amount of spillage inherent in the normal operation of a fuel storage facility and obligations arising from such normal operation.

### Excluded from the Scope of ASC 410-20

- Plans to remove a machine at the end of its useful life and replace it with a new model, and there is no legal obligation to remove the asset, the removal costs do not constitute an ARO because there is no legal obligation to remove the old model.
- If a reporting entity is obligated to transfer a plant and the associated fixed assets before the end of the useful lives, those transfer costs would not be within the scope of ASC 410-20 because those costs are not associated with the retirement of the plant and the fixed assets.
- Obligation arising from a Catastrophic accident caused by non-compliance with an entity's safety procedures is excluded, since it arises from accidents.

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS



The determination of whether a legal obligation exists is clearer and more unambiguous if it results from law or contractual terms. The existence of legal obligations should be assessed based on existing laws and regulations (including related interpretations), contractual terms, and facts and circumstances.

The Entity should not forecast and consider the changes in laws or interpretations of such laws and regulations. Changes in laws or regulations and their impact should be considered in the period in which such laws or regulations are enacted.

On the other hand, whether a promise to a third party, about its intentions to undertake asset retirement activities shall be considered a legal obligation requires significant judgment and critical evaluation of facts and circumstances. This may require an entity to support its conclusion based on legal opinion.

## 2. Recognition and measurement principles of AROs

|                                                                                                                                                                                                                                                                                                                                                                                                    | Balance Sheet                                                                                                                                                                                                                                                                                                                                                             | Income Statement                                                                                                                                                 | Statement of Cash flows                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Initial recognition:</b> Liability for ARO is initially recognized in the period in which they are incurred, if a reasonable estimate of fair value can be made.                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                  |                                                                                                                                                            |
| <b>Measurement Principles</b>                                                                                                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>• AROs are initially recognized as a liability at fair value, which is determined under <i>ASC 820 Fair value Measurements</i>.</li> <li>• Asset retirement cost (ARC) is recorded as an increase to the carrying value of the related long-lived asset.</li> </ul>                                                                | No impact on initial recognition.                                                                                                                                | No impact on initial recognition.                                                                                                                          |
| <b>Subsequent measurement:</b> After initial measurement, a reporting entity should recognize changes in the ARO that result from (a) the passage of time and (b) revisions made to the timing or amount of future cash flows. Estimates of cashflows relating to AROs should be reassessed at each reporting period to determine whether such estimates remain appropriate or require adjustment. |                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                  |                                                                                                                                                            |
| <b>Passage of time</b>                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Increase the ARO through periodic accretion expense using the interest method. Entity should use the credit-adjusted risk-free rate applied when the liability was initially measured.</li> <li>• Allocate the ARC to expense using a systematic and rational method over the related long-lived asset's useful life.</li> </ul> | <ul style="list-style-type: none"> <li>• Record accretion expense as a component of operating expense.</li> <li>• Record ARC expense as depreciation.</li> </ul> | <ul style="list-style-type: none"> <li>• Classify accretion and depreciation as non-cash adjustments to net income within operating cash flows.</li> </ul> |

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

|                                   | Balance Sheet                                                                                                                                                                                                                                                                                                                                     | Income Statement                                                                                                                                                                                                   | Statement of Cash flows                                                                                                                                                                                                            |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Revision to the timing and amount | <ul style="list-style-type: none"> <li>Changes in the estimate of timing and cost to settle the obligation due to continued use of the asset, changes in available technology, or other factors are recognized in the period of change by increasing or decreasing (as applicable) the carrying amount of the ARO and the related ARC.</li> </ul> | <ul style="list-style-type: none"> <li>No immediate impact of revision.</li> <li>Revision will impact the prospective amortization and accretion expense.</li> </ul>                                               | <ul style="list-style-type: none"> <li>No immediate impact of revision.</li> <li>Classify accretion and depreciation as non-cash adjustments to operating cash flows.</li> </ul>                                                   |
| Retirement                        | <ul style="list-style-type: none"> <li>Derecognize ARO once the asset associated with an ARO is retired or the remediation of the ARO occurs<sup>(a)</sup>.</li> <li>Derecognize any unamortized ARC.</li> </ul>                                                                                                                                  | <ul style="list-style-type: none"> <li>Recognize the difference between the actual cost of settling the ARO and the recorded liability as a gain or loss.</li> <li>Recognize Unamortized ARC as a loss.</li> </ul> | <ul style="list-style-type: none"> <li>Classify cash outflows for settlement of the ARO in operating cash flows.</li> <li>Any settlement difference is a non-cash adjustment to net income within operating cash flows.</li> </ul> |

a. If settlement occurs over time, derecognition of the ARO should occur over time.

For initial recognition of ARO, entities need to evaluate the facts and circumstances underlying each individual ARO to determine the appropriate period for recognition. If a reasonable estimate of fair value cannot be made, recognition should occur when a reasonable estimate of fair value can be made.

As per ASC 410-20-25-6 sufficient information exists to estimate the fair value of an ARO reasonably in the following situations:

- When it is evident that the fair value of the ARO has been included in the asset's purchase price.
- When an active market exists for the transfer of the ARO to a third party.
- When there is sufficient information to apply an expected present value technique, i.e.
  - When "the settlement date and method of settlement for the obligation have been specified [in] the law, regulation, or contract that gives rise to the [ARO]."
  - When information is available to reasonably estimate (1) the "settlement date or the range of potential settlement dates," (2) the "method of settlement or potential methods of settlement," and (3) the "probabilities associated with the potential settlement dates and potential methods of settlement."

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS



Generally, Entities have sufficient information to estimate a range of potential settlement dates, the potential methods of settlement, and the related probabilities based on an analysis of the factors listed above. Therefore, in our view, it would not be appropriate for an entity to delay recognition of the liability merely on the basis that management does not intend to perform the asset retirement activities in the near future. ASC 410-20-25-8 clarifies that the timing of liability recognition under ASC 410-20 should not be based on when the retirement activities are probable of being performed; rather, any uncertainty concerning timing of settlement should be incorporated into the measurement of the obligation.

In circumstances in which sufficient information does not exist, an entity must disclose that fact and explain why an estimate could not be made. This may also require consulting with accounting advisers and independent auditors to ensure the appropriateness of the conclusion.

## 3. Conditional Asset Retirement Obligation

Conditional ARO refers to a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are **conditional on a future event** that may or may not be within the entity's control. In the case of Conditional ARO even though uncertainty exists about the timing and/or method of settlement, but an obligation to perform the asset retirement activity is unconditional. Therefore, the liability for the fair value of a conditional asset retirement obligation should be recognized if, the fair value of the liability can be reasonably estimated. The uncertainty about the timing and/or method of settlement of a conditional asset retirement obligation should be factored into the measurement of the liability when sufficient information exists.



## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

# 02 Accounting for Environmental Obligations

## 1. Scope of ASC 410-30

Although ASC 410-30 is written in the context of a reporting entity with operations in the United States, the guidance applies to all reporting entities applying US GAAP. Concerning environmental remediation obligations in addition to United States Federal laws, state laws, and regulations shall also be considered by a reporting entity, if applicable.

ASC 410-30-15-2 indicates that the recognition and measurement criteria for environmental obligations should be applied site-by-site. Therefore, the unit of account when recognizing and measuring environmental obligations should be at the individual site level.

### Scope exclusions

ASC 410-30 scopes out the following obligations:

- a. Environmental contamination incurred through the “**normal operation**” (including the acquisition, construction, or development) of a long-lived asset. These are within the scope of ARO’s guidance.
- b. Pollution control costs with respect to current operations or on accounting for costs of future site restoration or closure that are required upon **the cessation of operations or sale of facilities**.
- c. **Voluntary environmental remediation actions** are undertaken at management’s sole discretion as there is no legal or regulatory obligation to incur these costs.
- d. Recognizing liabilities of **insurance entities** for unpaid claims.
- e. **Natural resource** damage and toxic torts.
- f. Asset impairment issues.



Principles of **ASC 410-30** do not apply to voluntary environmental remediation actions that are undertaken by management at its sole discretion, as there exist no legal or regulatory obligation to incur these costs. Decisions undertaken by an entity to incur the costs of performing environmental remediation activities in the future do not result in present liability since the entity has considerable discretion to change its plans and avoid expenditures.

Therefore, determination of the fact that whether an action undertaken by an entity relating to environmental remediation is voluntary or required by the threat of litigation, is a key consideration for applicability of ASC 410-3. This involves considerable judgment and shall be based on all relevant facts and circumstances.

1. Foreword

2. Purpose

3. Background

4. Summary of Topic

4.1. Accounting for Asset Retirement Obligations

1. Scope of ASC 410-20

2. Recognition and measurement principles of AROs

3. Conditional Asset Retirement Obligation

4.2. Accounting for Environmental Obligations

1. Scope of ASC 410-30

2. Initial Recognition Environmental Remediation Liabilities

3. Initial Measurement of Environmental Remediation Liabilities

4. Subsequent Measurement of Environmental Remediation Liabilities

5. Key Issues/ Considerations

6. Comparison with IFRS

2. Initial Recognition Environmental Remediation Liabilities

Environmental remediation liabilities arise when a reporting entity is, or was previously, associated with a site at which remedial actions must take place. Such an **association** can be through number of activities including:



Recognition criteria's

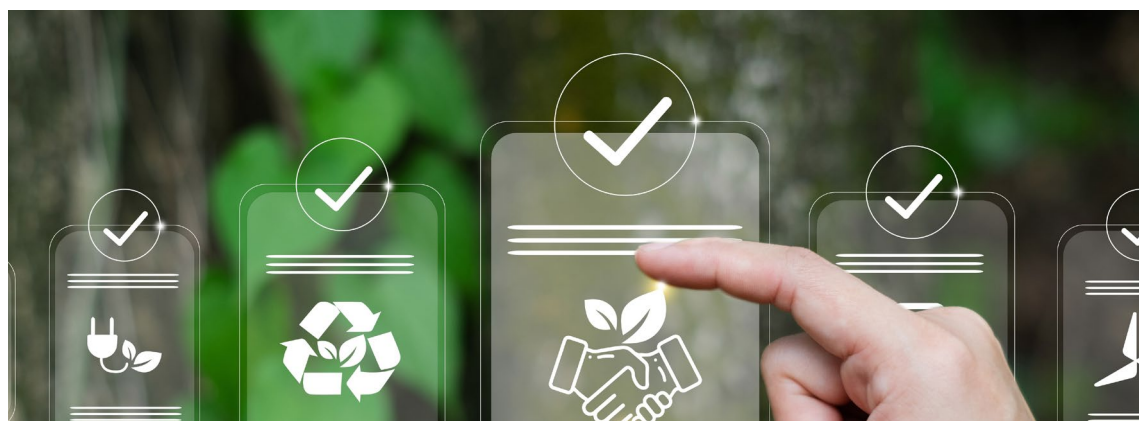
Liability for an environmental remediation obligation shall be recognized when following conditions are fulfilled:

- (a) On or before the reporting date, one of the types of association illustrated above have occurred,
- (b) It is probable that a loss has been incurred (**Probability criterion**), and
- (c) The amount of that loss can be reasonably estimated. (**Estimable criterion**)

The recognition principles are based on the framework defined by loss contingencies guidance in ASC 450-20.

Probability criterion evaluation

Generally, the determination of whether it is probable that a liability has been incurred (i.e., whether the probability criterion is met) is a factual matter. That is, if an environmental site has been identified for remediation and available evidence connects a reporting entity with that site, the probability criterion is generally met. The following flowchart summarizes the guidance of ASC 410-30 as to whether the "probable" criterion is met.



# 1. Foreword

# 2. Purpose

# 3. Background

# 4. Summary of Topic

## 4.1. Accounting for Asset Retirement Obligations

### 1. Scope of ASC 410-20

### 2. Recognition and measurement principles of AROs

### 3. Conditional Asset Retirement Obligation

## 4.2. Accounting for Environmental Obligations

### 1. Scope of ASC 410-30

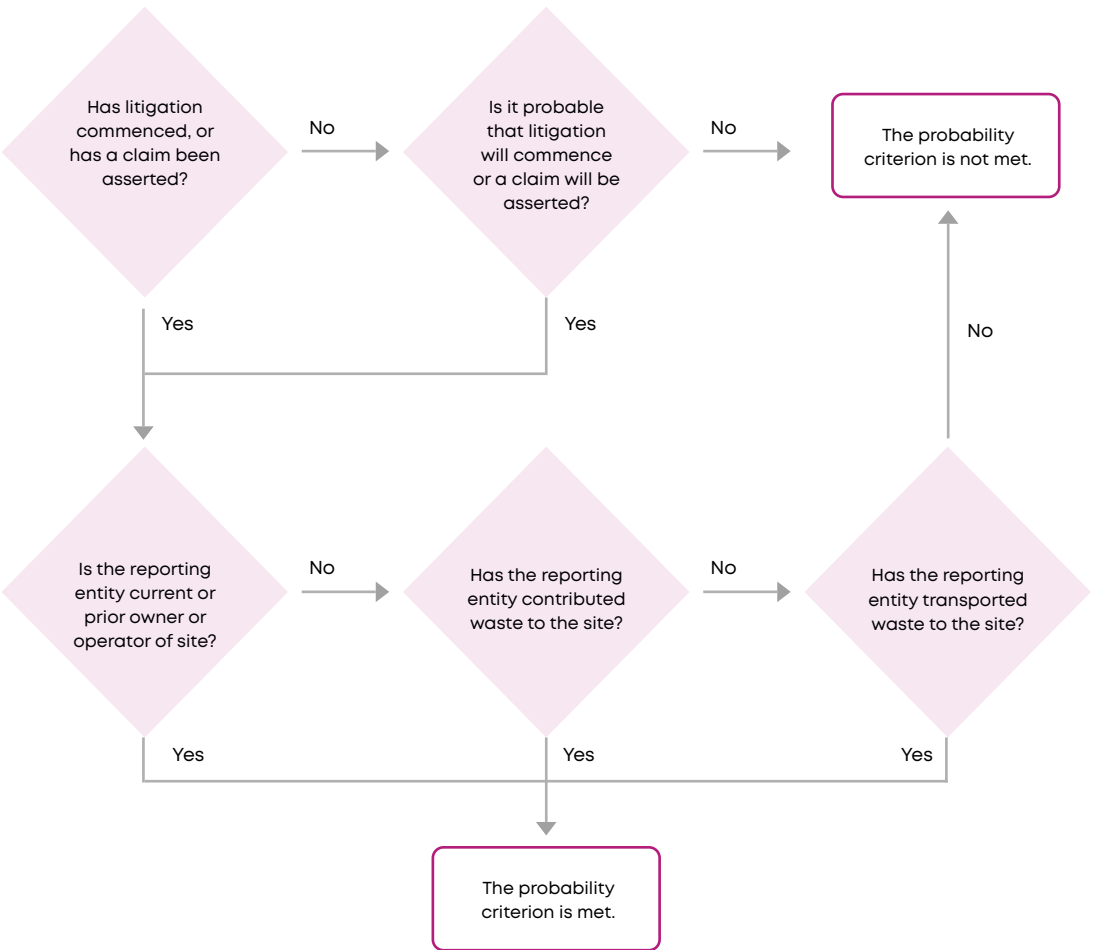
### 2. Initial Recognition Environmental Remediation Liabilities

### 3. Initial Measurement of Environmental Remediation Liabilities

### 4. Subsequent Measurement of Environmental Remediation Liabilities

# 5. Key Issues/ Considerations

# 6. Comparison with IFRS



In our view, the probability criterion is generally met once an entity has received a general or special notice letter from the Environment Protection Agency (EPA) identifying it as a Potentially Responsible Parties (PRP). Such notification represents the assertion of a claim or assessment, as well as evidence that an entity is associated with the site.

However, even before notification proceedings are initiated, the entity needs to have well-defined process in place to evaluate the following key considerations to assess whether the probability criterion is met-

1. whether pollution or contamination has occurred at a particular site because of the entity's current or prior involvement with the site and,
2. whether remediation will probably be required for that site.

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

### Estimable criterion evaluation

Once the probability criterion is met, an entity needs to estimate the amount of Liability for an environmental remediation obligation that needs to be recognized.

ASC 410-30-25-7 indicates that given the nature of liability and cost involved, it is often difficult for an entity to estimate the total cost of environmental remediation, especially in the early remediation process. However, such difficulty during the estimation process does not preclude recognition of a liability. Rather, a reporting entity must attempt to estimate the cost of the environmental remediation once it is concluded that the probability criterion is met. As per guidance, the following factors shall be considered for developing cost estimates:

- The extent and types of hazardous substances at a site to be remediated.
- The range or type of technologies that can be used for remediation of site.
- Evolving standards of what constitutes acceptable remediation.
- The number of other potentially responsible parties and their financial condition, along with their responsibility for the remediation (that is, the extent and types of hazardous substances contributed by other potentially responsible parties to the site).

Given the nature of environmental obligations, a “point” estimate of the total cost for remediation is often difficult to determine. Generally, it is not determinable in the early stages of the remediation process and becomes estimable over time as more information becomes available as a result of performing the required remediation steps.

Liability for environmental remediation comprises several components. The overall liability may be determined as the sum of all the components in the following manner:

| Components for which facts indicate               | The overall liability may be based on                                                                                                             |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Best estimate within range.                       | Amounts representing the best estimate within the range.                                                                                          |
| There may be no best estimate within the range.   | Amounts representing the low ends within the range. Even when the range is very wide, at a minimum, the lower end of the range should be accrued. |
| There may be no reasonable estimate of the range. |                                                                                                                                                   |



1. Foreword

2. Purpose

3. Background

4. Summary of Topic

4.1. Accounting for Asset Retirement Obligations

1. Scope of ASC 410-20

2. Recognition and measurement principles of AROs

3. Conditional Asset Retirement Obligation

4.2. Accounting for Environmental Obligations

1. Scope of ASC 410-30

2. Initial Recognition Environmental Remediation Liabilities

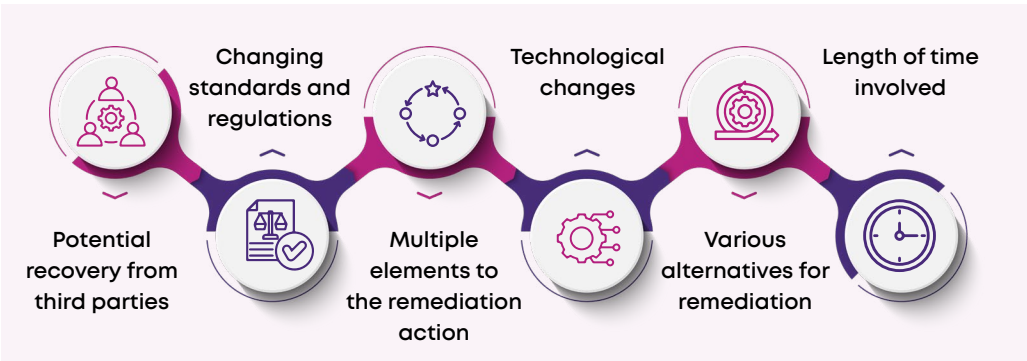
3. Initial Measurement of Environmental Remediation Liabilities

4. Subsequent Measurement of Environmental Remediation Liabilities

5. Key Issues/ Considerations

6. Comparison with IFRS

Following are some of the factors that may make estimating an environmental remediation liability difficult:



Considering the fact that, environmental remediation liability typically is derived by combining estimates of various components of the liability, and even if any one component of the environmental remediation liability is reasonably estimable, that estimate should be used as the minimum in the range of total costs of remediation. Therefore, in our view even though it will be difficult, an entity can reasonably estimate the environmental remediation liability (i.e., the estimable criterion will be met) in the early stages of the remediation process based on the costs of completing a particular component of the liability, which the entity can use to establish a minimum amount. The estimate provided by a specialist or expert may be the best estimate of the remediation liability.

Regardless of the determination of the amount representing the best estimate, an entity should thoroughly document key judgments, significant assumptions, and its support for determining the recorded amount.

**Recognition Benchmark**

ASC 410-30 lists specific benchmarks that an entity must consider when evaluating (1) the probability that a loss has been incurred and (2) the extent to which any loss related to an environmental obligation is reasonably estimable for recognition of environment remediation liability. A reporting entity is required, at a minimum, to evaluate its estimates of environmental remediation liabilities upon the occurrence of each of these benchmarks. The diagram below illustrates the relationship between the recognition benchmarks and the probability and reasonably estimable criteria for the recognition of Environmental remediation liabilities:

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

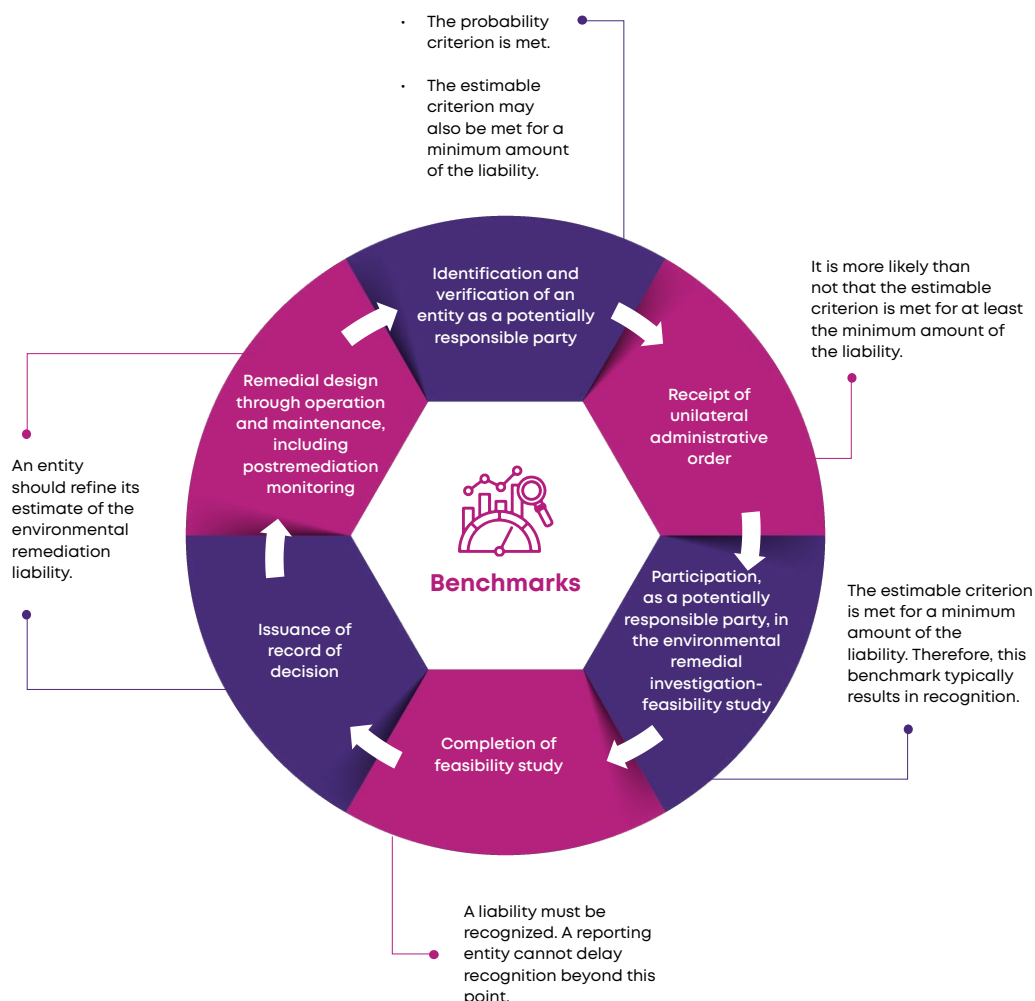
#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS



For an entity to decide when the liability for environmental remediation obligation should be recognized is not easy and requires an element of judgment and critical evaluation of various factors. The Entity needs to have a process in place to identify the events that are indicative of the fact that loss has probably been incurred and the amount of loss can be reasonably estimated. The fact that the proceedings have not been initiated or difficulty in reasonably estimating the cost of remediation activities (such as the total cost of the entire remediation effort is not reasonably estimable or the reporting entity's allocable share of an environmental remediation obligation is uncertain, since it is one of several PRPs), cannot be considered as a plea to defer the recognition of environment remediation liability.

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

## 3. Initial Measurement of Environmental Remediation Liabilities

As per the principles of ASC 410-30, measurement of environmental remediation liabilities includes (a) incremental direct costs of the remediation effort, and (b) costs of compensation and benefits for employees to the extent of time expected to be spent directly on the remediation effort. Moreover, the remediation effort should be evaluated site-by-site when recognizing and measuring an environmental remediation liability. Following are some of the costs that are included in the measurement of an environmental remediation liability:

- a. Legal costs related to:  
Determining the extent of remedial actions that are required.  
Determining the type of remedial actions to be used.  
Determining the allocation of costs among PRPs.
- b. Costs related to completing a remedial investigation and feasibility study.
- c. Fees to outside engineering and consulting firms for site investigations and the development of remedial action plans and remedial designs.
- d. Fees to contractors for performing remedial actions.
- e. Governmental oversight costs and past costs (e.g., costs incurred by the EPA or any other governmental authority dealing with a site).
- f. The cost of machinery and equipment that are dedicated to the remedial actions and do not have an alternative use.
- g. Assessments by a PRP group covering costs incurred by the group in dealing with a site.
- h. Costs of operation and maintenance of the remedial action, including the costs of post-remediation monitoring required by the remedial action plan.
- i. Costs of compensation and benefits for employees who are expected to devote a significant amount of time directly to the remediation effort (to the extent of the time expected to be spent directly on the remediation effort).

The determination of the amount of an environmental remediation liability should be independent of any potential claim for recovery. Asset relating to the recovery shall be recognized only when the realization of the claim for recovery is deemed probable, which involves significant judgment and should be based on all relevant facts and circumstances<sup>2</sup>.

*2. As per guidance the loss arising from the recognition of an environmental liability be reduced only when a claim for recovery from third parties is probable of realization. Further, the guidance stipulates that a rebuttable presumption exists that recovery is not probable of realization in instances when the recovery claim is the subject of litigation.*

As per the principles of ASC 410-30-35-12, to reflect the time value of money, the reporting entities are permitted, but not required, to discount environmental liabilities if both of the following criteria are met:

The amount of the obligation and

01

The timing of payments

02

are fixed or reliably determinable.

**Note — In situations when the related liability is discounted, the measurement of the potential recovery should also incorporate the time value of money (i.e., discounting).**

### Determination (Allocation) of Environmental Remediation Costs for the existence of multiple PRP

Environmental remediation liability is comprised of two elements: (1) the allocable share of the liability for a specific site and (2) the amounts related to the site that will not be paid by other PRPs or the government (when the liability is joint and severable).

When more than one PRP has been identified for a particular site, the total costs associated with remediating the site may be allocated among the various PRPs. As per the guidance of ASC 410-30, the amount recorded by a reporting entity should be its allocable share of the total environmental remediation liability (or a component of the environmental remediation liability). However, when an environmental remediation liability is joint and several, each PRP may be held responsible for the entire cost of the remediation effort regardless of the amount of waste the PRP contributed to the site. Therefore, estimating the reporting entity's allocable share of a joint and several liabilities requires significant judgment, particularly in the early stages of remediation. However, uncertainty about a reporting entity's share of a joint and several liability does not preclude liability recognition. Determination of allocable share of remediation cost requires following three steps:-



## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

### 4.1. Accounting for Asset Retirement Obligations

#### 1. Scope of ASC 410-20

#### 2. Recognition and measurement principles of AROs

#### 3. Conditional Asset Retirement Obligation

### 4.2. Accounting for Environmental Obligations

#### 1. Scope of ASC 410-30

#### 2. Initial Recognition Environmental Remediation Liabilities

#### 3. Initial Measurement of Environmental Remediation Liabilities

#### 4. Subsequent Measurement of Environmental Remediation Liabilities

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

## 4. Subsequent Measurement of Environmental Remediation Liabilities

The environmental remediation liability is recognized as per best possible estimate considering fact and circumstances existing on the date of initial recognition. Given the nature of environmental remediation liabilities, a reporting entity's estimated liability will often evolve over time, as additional information relating to the liability becomes known. Circumstances that may result in changes to the recorded amount of an environmental remediation liability include the following:

- Additional phases of the remediation process that become estimable as progress is made.
- Changes in underlying cost estimates for completion of each phase of the cleanup (e.g., the cost of compensation and employee benefits).
- Changes in laws and regulations.
- Changes in technology used for applying the approved method.

Changes to estimated amounts resulting from new information should be considered as changes in accounting estimates under ASC 250, and should be recognized in the period in which they occur. On the other hand, errors in the Entity's previously recorded environmental remediation liabilities shall not be considered as changes in estimates and should be evaluated under the framework of ASC 250 accordingly.



# Key Issues/ Considerations

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

## 5. Key Issues/ Considerations

### 5.1. Recognition of Conditional ARO

### 5.2. Recognition of Environmental remediation liability- Probability criterion

### 5.3. Recognition of Environmental remediation liability- Estimable criterion

## 6. Comparison with IFRS

## 01 Recognition of Conditional ARO

ABC Inc., a telecom operator owns and operates a communication network that uses wood poles treated with certain chemicals. There is no legal requirement to remove the poles from the ground, although the operator may replace the poles periodically for operational reasons. However, existing legislation requires special disposal procedures for the poles in the state where the entity operates. Once the poles are removed from the ground, they may be disposed of, sold, or reused as part of other activities.

Whether liability for the required disposal procedures is within the scope of ARO. When the liability shall be recorded?

### Analysis:

As per the facts of the given case, existing legislation requires special disposal procedures for the poles. Even though uncertainty exists about the timing and/or method of settlement, an obligation to perform the asset retirement activity is unconditional. In other words, the timing of the performance of the asset retirement activity is conditional on the entity removing the poles and disposing of them, an obligating event occurs on the date of purchase because of the existing legislation requiring special disposal procedures. Therefore, liability for the required disposal procedures is within the scope of ASC 410-20 as Conditional ARO, and the liability should be recognized when its fair value can be reasonably estimated. Because the legal requirement relates only to the disposal of the treated poles, the liability recorded at the date of purchase would include the costs of disposal but not the costs to remove the poles.

Assuming that at the date of purchase, the entity has information from established industry practice to estimate a range of potential settlement dates, methods of settlement, and probabilities associated with them, the liability shall be recognized.

1. Foreword

2. Purpose

3. Background

4. Summary of Topic

5. Key Issues/  
Considerations

5.1. Recognition of  
Conditional ARO

5.2. Recognition of  
Environmental  
remediation liability-  
Probability criterion

5.3. Recognition of  
Environmental  
remediation liability-  
Estimable criterion

6. Comparison with  
IFRS

## 02 Recognition of Environmental remediation liability - Probability criterion

ABC Inc., a US-based entity, is aware of contamination at the Site resulting from the release of hazardous substances for which the entity had arranged disposal. The site is owned by the entity and there is no evidence of contamination of the site by any other person. As per State environmental regulations, the entity is obliged to remediate the contamination. However, no actions have been taken against the entity. No site study has been prepared to assess the cost of remediation. Instead, the entity plans to wait until it is forced by the state regulatory agencies to remediate the contamination, which it believes is likely where the agency becomes aware of the contamination.

Has the “probable” criterion under ASC 410-30 been met?

### Analysis:

As per the fact of the given case, ABC Inc. is legally responsible for remediation under currently enacted law, and it is probable that a claim would be asserted if state regulators were to discover the contamination.

In this scenario, we believe that the probability criterion has been met because:

(1) The Entity is legally obligated to clean up the Site and

(2) It is probable that the regulators would assert a claim or assessment against the entity and thereby require it to clean up the Site if they were aware of the contamination. Since the Entity was directly involved in arranging for the disposal of hazardous substances at the Site.

Assuming the claim or assessment would be unfavorable, the entity shall recognize the environment remediation liability if estimable. Entity should also consult with legal counsel to evaluate all facts in determining that the “probable” criterion has been met.

The fact that neither proceeding has been initiated by the regulators nor the entity has initiated the site study or cost estimation does not restrict the entity to conclude that the probability criterion is not met.

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

## 5. Key Issues/ Considerations

### 5.1. Recognition of Conditional ARO

### 5.2. Recognition of Environmental remediation liability- Probability criterion

### 5.3. Recognition of Environmental remediation liability- Estimable criterion

## 6. Comparison with IFRS

# 03 Recognition of Environmental remediation liability- Estimable criterion

XYZ Inc. receives notification from the Environmental Protection Agency (EPA) that it is a Potentially Responsible Party (PRP) at Site M because of its role as a transporter of waste to the site.

XYZ Inc. is one of many entities identified as PRPs at Site M, and as of the date XYZ Inc. received the notice from the EPA, no site study has been initiated or prepared. Upon receiving notice from the EPA, XYZ Inc. concludes that the cost of performing the remediation effort at Site M is not estimable. However, based on XYZ Inc.'s prior experience with similar environmental remediation obligations, it estimates that the remedial investigation or feasibility study costs will range from USD 10 million to USD 15 million. Further, given the Entity's previous work at similar sites and its role in the contamination at Site M, it expects to be responsible for only 2 percent to 5 percent of the total cleanup costs at Site M.

What are the provisions relating to recognizing liability when XYZ Inc.'s allocable share of an environmental remediation obligation (when the entity is one of several PRPs) is uncertain.

### Analysis:

**a. Assessment of Probability criteria:** As per the facts of given case, EPA has issued notice identifying XYZ Inc. as one of the PRP's at Site M because of its role as a transporter of waste to the site, it can be concluded that an environmental site has been identified for remediation and available evidence connects a reporting entity with that site, therefore the probability criterion is met.

**b. Assessment of Estimable criteria:** As per the facts of the given case, based on the Entity's prior experience with similar environmental remediation obligations,

- Estimated cost of the remedial investigation or feasibility study ranges from USD 10 million to USD 15 million and
- Entity's previous work at similar sites and its role in the contamination at Site M, it expects to be responsible for only 2 percent to 5 percent of the total cleanup costs at Site M.

Therefore, it is not appropriate to conclude that the estimable criterion is not met on the ground that the cost of performing the entire remediation effort at Site M is not reasonably estimable. As per ASC 410-30 principles, if the total liability, or a component of the liability, can be estimated, the reporting entity should estimate its allocable share.

Therefore, XYZ Inc. should measure its liability using the low end of the range and record a liability of USD 200,000 (USD 10 million × 2%).

# Comparison with IFRS

## 1. Foreword

## 2. Purpose

## 3. Background

## 4. Summary of Topic

## 5. Key Issues/ Considerations

## 6. Comparison with IFRS

### 1. Asset Retirement Obligations

| Key Provisions                        | U.S. GAAP                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IFRS Accounting Standard                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicable Accounting guidance        | The principles related to accounting of obligations associated with the retirement of tangible long-lived assets are primarily prescribed by subtopic ASC 410-20.                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Principles related to accounting for costs of dismantling and removing an item of PPE and restoring the site on which the item is located when the obligations of dismantlement, removal, and restoration are incurred are prescribed under IAS 16.</li> <li>Principles of the measurement of decommissioning, restoration, and similar liabilities are prescribed under IAS 37.</li> </ul> |
| Initial measurement principles        | The fair value of an ARO liability is recognized in the period in which it is incurred, provided a reasonable estimate of fair value can be made. When estimation of the liability is based on a present value technique, the risk-free interest rate adjusted for the effect of the entity's credit standing shall be used as a discount rate. Probability is factored into the measurement of an ARO but is not factored into the recognition of an ARO. | ARO liability is the best estimate of the expenditure to settle the obligation or transfer the obligation to a third party as of the balance sheet date. When a present value technique is used to estimate the liability, the discount rate will be a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.                                                   |
| Asset recognition arising from an ARO | Upon initial recognition of a liability as an ARO, an entity increases the related long-lived asset by the same amount.                                                                                                                                                                                                                                                                                                                                    | The initial estimate of ARO shall be included in the PPE. However, if incurred during a period in which the property was used to produce inventory, the ARO would be added to the carrying amount of the inventory.                                                                                                                                                                                                                |

1. Foreword

2. Purpose

3. Background

4. Summary of Topic

5. Key Issues/  
Considerations

6. Comparison with  
IFRS

| Key Provisions                    | U.S. GAAP                                                                                                                                                                                                                                                                                                                                            | IFRS Accounting Standard                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subsequent measurement principles | Periodical revisions to either the timing or amount of the original estimate of undiscounted cash flows are considered as separate layers of the obligation. In case of upward revisions, an entity should discount by using the current credit-adjusted risk-free rate and for downward revision apply the original credit-adjusted risk-free rate. | At each balance sheet date, ARO should be adjusted for <ul style="list-style-type: none"> <li>• changes in the estimate of expected undiscounted cash flows or</li> <li>• changes in discount rate.</li> </ul> The entire obligation shall be remeasured by using an updated discount rate reflecting current market conditions as of the balance sheet date. |

**2. Environmental obligations**

Under U.S. GAAP, ASC 410-30 provides accounting guidance on environmental remediation liabilities which is principally based on the framework defined in ASC 450-20.

Under IFRS Accounting Standards, no explicit standard specifically provides the guidance on accounting for environmental remediation liabilities. Rather, entities reporting under IFRS accounting framework account for environmental remediation liabilities in accordance with IAS 37, which is the primary source of guidance on contingencies.



# A TEAM THAT YOU CAN TRUST TO DELIVER



**Jamil Khatri**

Co-Founder & CEO  
[jamilkhatri@uniquus.com](mailto:jamilkhatri@uniquus.com)



**Sandip Khetan**

Co-Founder, Global Head of ARC  
[sandip.khetan@uniquus.com](mailto:sandip.khetan@uniquus.com)



**Avinash Ramkumar**

Partner, ARC  
[avinash@uniquus.com](mailto:avinash@uniquus.com)



**Sharad Chaudhry**

Partner, ARC  
[schaudhry@uniquus.com](mailto:schaudhry@uniquus.com)



**Sagar Lakhani**

Partner, ARC  
[sagarlakhani@uniquus.com](mailto:sagarlakhani@uniquus.com)



**Akash Loonia**

Partner, ARC  
[akashloonia@uniquus.com](mailto:akashloonia@uniquus.com)



**Ashish Gupta**

Partner, ARC  
[ashishgupta@uniquus.com](mailto:ashishgupta@uniquus.com)



**Puneet Chowdhary**

Director, ARC  
[puneetchowdhary@uniquus.com](mailto:puneetchowdhary@uniquus.com)



**Manshi Mehla**

Associate Director, ARC  
[mananmodi@uniquus.com](mailto:mananmodi@uniquus.com)

To know more about us, please visit [www.uniquus.com](http://www.uniquus.com)