April 2016

Office of the Chief Accountant
Financial Reporting Bulletin
Abandonment and Reclamation Costs
Purpose

The following discussion paper, illustrations, and example have been prepared by staff of the Office of the Chief Accountant (OCA) of the Alberta Securities Commission (ASC) for educational purposes. The intent of this paper is to consider the requirements of National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities in relation to abandonment and reclamation costs used in impairment calculations under International Accounting Standard 36 Impairment of Assets.

The example within this document is simplified in order to illustrate the primary issues and potential impacts. The objective of this bulletin is to provide helpful and educational information for consideration by reporting issuers and their advisors. Reporting issuers are encouraged to discuss these matters with their advisors.

The Issue


In the Amendments, definitions for abandonment and reclamation costs and future net revenue were added to section 1.1 of NI 51-101. Prior to this, a different definition for future net revenue was included in CSA Staff Notice 51-324 Revised Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities, while the term abandonment and reclamation costs was undefined. These new definitions are as follows:

**Abandonment and reclamation costs** – means all costs associated with the process of restoring a reporting issuer’s property that has been disturbed by oil and gas activities to a standard imposed by applicable government or regulatory authorities.

**Future net revenue** – means a forecast of revenue, estimated using forecast prices and costs or constant prices and costs, arising from the anticipated development and production of resources, net of the associated royalties, operating costs, development costs, and abandonment and reclamation costs.
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Item 2.1(2) of Form 51-101F1 *Statement of Reserves Data and Other Oil and Gas Information* (Form 51-101F1) requires disclosure of the net present value of future net revenue (forecast case). This disclosure is to occur by country and in aggregate for future net revenue attributable to the reserves categories referred to in Item 2.1(1), which includes both developed and undeveloped proved reserves and probable reserves. The definition of future net revenue specifies that future net revenue is net of associated abandonment and reclamation costs.

Form 51-101F1 requires disclosure of abandonment and reclamation costs in different forms. This has been illustrated in the tables on page 5 – 7.

1. **Item 2.1(3)(b)** requires disclosure of elements of future net revenue, including abandonment and reclamation costs by country and in aggregate for the reserves categories specified in 2.1(3)(a).

2. **Item 5.2** requires identification and discussion of significant abandonment and reclamation costs that affect particular components of reserves data, which may include those costs attributed to oil and gas pipelines and facilities.

3. **Item 6.2.1** requires identification and discussion of significant abandonment and reclamation costs that affect the anticipated development or production activities on properties with no attributed reserves, which may include those costs attributed to oil and gas pipelines and facilities.

For upstream oil and gas properties, cash flow inputs used in impairment calculations under IAS 36, *Impairment of Assets*, generally should be consistent with those used in the independent reserves report. The reserves report forms the basis for the disclosures required in Item 2.1 of Form 51-101F1. Estimates of future net revenue are not intended to represent fair market value (NI 51-101 section 5.6). However, the reserves report includes undiscounted estimates of future revenues, royalties, operating expenses, development costs, and abandonment and reclamation costs, by product type and reserves category, which should be considered in preparing a discounted cash flow (DCF) model used to calculate Fair Value Less Costs of Disposal (FVLCD) or Value in Use (VIU).

There is diversity in practice as to how decommissioning provisions are considered in an impairment analysis. One approach is to **exclude** cash outflows relating to the settlement of abandonment and reclamation costs in calculating the recoverable amount using a DCF model, and **also** exclude the decommissioning provision recognized within the financial statements from the carrying amount of an asset or cash-generating unit (CGU). A second approach is to **include** cash outflows relating to the settlement of abandonment and reclamation costs in calculating the recoverable amount, and **reduce** the carrying amount by the decommissioning provision. Both approaches may utilize abandonment and reclamation costs from the reserves report as inputs in a DCF model.

Staff are concerned that using inputs from the reserves report and accounting records without proper adjustment may lead to the recoverable amount not being determined on a basis consistent with the CGU, which could potentially lead to an overstatement of cash flows that shelter impairment losses.

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**Did you know?**

The OCA supports the ASC in promoting high-quality financial reporting by market participants. OCA staff advise the ASC on financial reporting, auditing, and related policy issues. The OCA works with external stakeholders including auditors, public company representatives and external committees to ensure a common understanding of aspects of securities law relating to novel or complex accounting and auditing.
## Findings

The following table summarizes the specific issues that may arise in practice:

<table>
<thead>
<tr>
<th>Approach</th>
<th>Potential Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach 1 – Exclude ARO in carrying value and discounted cash flow model</td>
<td>The recoverable amount is determined using inputs derived from future net revenues from the reserves report, adding back the abandonment and reclamation costs used to calculate future net revenues to ‘exclude’ these cash outflows. The recoverable amount would consider cash inflows and outflows from proved and probable reserves (and in some cases, resources other than reserves). The carrying amount recognized in the financial statements would only include those costs capitalized as part of an asset in accordance with IAS 16 and IAS 37. The obligation to abandon and reclaim undeveloped reserves or resources other than reserves is not recognized until there is a legal or constructive obligation. An adjustment will need to be made to include all cash outflows for unrecognized liabilities i.e. abandonment and reclamation costs for all non-developed properties (wells, gathering systems, pipelines and facilities) that have not yet been recognized under IAS 16, but where related cash inflows have been considered within the recoverable amount (IAS 36 paragraphs 42, 75 and 76).</td>
</tr>
<tr>
<td>Approach 2 – Include ARO in carrying value and discounted cash flow model</td>
<td>Reporting issuers will need to ensure they are appropriately applying amendments to NI 51-101 to include all abandonment and reclamation costs for each property with reserves assigned. If the recoverable amount is determined using inputs derived from future net revenues from the reserves report, an adjustment will need to be made to include cash outflows for abandonment and reclamation costs associated with wells without reserves, pipelines, and facilities that relate to the asset or CGU. These may not have been included in the underlying data given the separate disclosure requirement in Form 51-101F1 Items 5.2 and 6.2.1 (see Frequently Asked Questions). It is important for reporting issuers to understand how and where abandonment and reclamation costs are reported in the reserves report and the NI 51-101 disclosure in calculating impairment.</td>
</tr>
</tbody>
</table>

While it is recognized that determination of the recoverable amount is subject to estimation uncertainty, it is important to understand how components of recoverable amount and carrying amount have been determined in order to achieve a result that is not inconsistent with the requirements of IAS 36.
Illustrative Tables

The following is a snapshot of a producing property with planned additional development to extract proved and probable reserves to demonstrate the interaction of Form 51-101F1 disclosures and the decommissioning obligation recognized in the financial statements on the face of the balance sheet (B/S).

<table>
<thead>
<tr>
<th>Entire obligation over life of property</th>
<th>Decommissioning obligation on B/S</th>
<th>Item 2.1 Form 51-101F1</th>
<th>Item 5.2 Form 51-101F1</th>
<th>Item 6.2.1 Form 51-101F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>All abandonment and reclamation costs incurred for a property over the life of the asset(s)</td>
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<td>Significant abandonment and reclamation for resources other than reserves</td>
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</tr>
<tr>
<td>Recognized obligation (e.g. wells, facilities and pipelines)</td>
<td>Wells - undeveloped reserves</td>
<td>Wells - developed reserves</td>
<td>Significant abandonment and reclamation costs affecting particular components of reserves data</td>
<td>Significant abandonment and reclamation costs affecting reserves data</td>
</tr>
<tr>
<td></td>
<td>Facilities and pipelines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wells, facilities and pipelines developed with no reserves</td>
<td></td>
<td>Wells, facilities and pipelines developed with no reserves</td>
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</tr>
</tbody>
</table>

(1) The Unrecognized portion represents future abandonment and reclamation costs where a provision has not yet been recognized as the entity does not have a present legal or constructive obligation.

(From the document: All abandonment and reclamation costs incurred for a property over the life of the asset(s) in the table.)

Types of resources:
- Resources other than reserves including contingent and prospective resources
- Proved and probable reserves
- No longer has reserves or resources other than reserves attributed

Illustrative Tables

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(1) The Unrecognized portion represents future abandonment and reclamation costs where a provision has not yet been recognized as the entity does not have a present legal or constructive obligation.
Approach 1: Exclude ARO liability from carrying value and recoverable amounts

In an impairment analysis, an adjustment will need to be made to include all cash outflows for unrecognized liabilities i.e. abandonment and reclamation costs for all non-developed properties where related cash inflows have been considered with recoverable amount.

### Entire obligation over life of property

<table>
<thead>
<tr>
<th>Decommissioning obligation on B/S</th>
<th>Item 2.1 Form 51-101F1</th>
<th>Should be deducted from recoverable amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrecognized (1)</td>
<td>Abandonment and reclamation for resources other than reserves</td>
<td>Significant abandonment and reclamation for resources other than reserves</td>
</tr>
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<td>Recognized obligation (e.g. wells, facilities and pipelines)</td>
<td>Wells - undeveloped reserves</td>
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</tbody>
</table>

(1) The Unrecognized portion represents future abandonment and reclamation costs where a provision has not yet been recognized as the entity does not have a present legal or constructive obligation.
Approach 2: Include ARO liability in carrying value and recoverable amounts

In an impairment analysis, an adjustment will need to be made to include all cash outflows for abandonment and reclamation costs associated for wells without reserves, pipelines, and facilities.

<table>
<thead>
<tr>
<th>Entire obligation over life of property</th>
<th>Decommissioning obligation on B/S</th>
<th>Item 2.1</th>
<th>Item 5.2</th>
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</tr>
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<td></td>
<td>Recognized obligation (e.g. wells, facilities and pipelines)</td>
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<td>Wells - developed reserves</td>
<td>Wells, facilities and pipelines developed with no reserves</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Should also be deducted in recoverable amount.

(1) The Unrecognized portion represents future abandonment and reclamation costs where a provision has not yet been recognized as the entity does not have a present legal or constructive obligation.
Simplified Illustrative Example

A company operates a CGU where cumulative costs to drill and tie in the wells and surrounding facilities were $100. The company has recognized an obligation to abandon the wells and facilities and reclaim the land around the CGU, which has a present value of $30. The company has therefore capitalized $130 in assets, and has recognized $30 in decommissioning liabilities. The company’s external reserves report for the CGU indicates future net revenue as follows:

<table>
<thead>
<tr>
<th>Reserves category</th>
<th>Revenue</th>
<th>Royalties</th>
<th>Operating Costs</th>
<th>Development costs</th>
<th>Abandonment and reclamation costs</th>
<th>Future net revenue before income taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved plus probable reserves</td>
<td>$215</td>
<td>$25</td>
<td>$40</td>
<td>$20</td>
<td>$20</td>
<td>$110</td>
</tr>
</tbody>
</table>

Management has estimated that as a result of additional development that still needs to be undertaken to extract the probable reserves, there will also be $5 in additional decommissioning obligations (not disclosed separately in Form 51-101F1, but included within the above table of $20). Management has also estimated that there is an additional $12 in abandonment and reclamation costs not included in the above table, which comprise costs associated with the pipelines and facilities disclosed under Item 5.2 of Form 51-101F1. Management has disclosed under Item 6.2.1 of Form 51-101F1 that there is an additional $3 in abandonment and reclamation costs of properties without reserves but which relate to the CGU (i.e. properties that are no longer producing and have no economic reserves).

**Approach 1 - Exclude ARO in carrying value and discounted cash flow model**

Management would prepare the following impairment analysis:

- Carrying value: $130 ($130 asset, no deduction for the recognized liability)
- Recoverable amount: $125 ($110 future net revenue from reserves report plus $20 abandonment and reclamation from reserves report less $5 decommissioning on future development activities using management’s best estimates).
- Impairment: $5

**Approach 2 - Include ARO in carrying value and discounted cash flow model**

Management would prepare the following impairment analysis:

- Carrying value: $100 ($130 asset less $30 liability)
- Recoverable amount: $95 ($110 future net revenue including abandonment and reclamation costs less $15 in additional abandonment and reclamation costs not included within Item 2.1 of the reserves report)
- Impairment: $5

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1 For the purpose of this simplified example, **discounting, taxes, disposal costs, and working capital allocations** have been ignored to illustrate the interaction of the reserves report and inputs in an impairment model regardless of a FVLCD or VIU model.

2 Management has appropriately applied the amendments to NI 51-101 and these costs include both surface reclamation and down hole well abandonment.
Frequently Asked Questions

Q. How do I know if I have an issue?

It is important to be able to understand and reconcile abandonment and reclamation recognized within the financial statements under IAS 37, and compare that to the assumptions used in preparing an impairment calculation within IAS 36 (and therefore understanding inputs from the reserves report). IAS 36.75 is clear that the carrying value of a CGU should be determined on a basis consistent with the recoverable amount. Although how this is accomplished is dependent on how recognized liabilities are considered in determining the recoverable amount of a CGU (see Approach 1 and Approach 2), the key is consistency.

All reporting issuers should discuss this with their accounting and reserves staff (both internal and external). We expect the Illustrative Tables within this publication to be helpful in those discussions. However, reporting issuers that have the following may want to consider this matter more closely:

- Large base of undeveloped proved and probable reserves
- Significant abandonment and reclamation associated with facilities, pipelines or abandoned properties

Q. The decommissioning obligation recognized within my financial statements does not match the abandonment and reclamation disclosure for NI 51-101 due to different assumptions, such as discounting. Why is this?

Form 51-101F1 requires disclosure of estimates of future net revenue with a 5, 10, 15 and 20 percent discount rate applied. Reporting issuers would look to IFRS for the discount rates to be applied when measuring financial statement items. Depending on the reporting issuer’s policy under IAS 37 on discount rates, there may be a mismatch between the discount rates used under IAS 37 and those used to calculate the recoverable amount under IAS 36. This was discussed by the IFRS Discussion Group in May 2015 (see Additional Resources below). The Simplified Illustrative Example excludes discounting in order to effectively demonstrate where there could be potential gaps in the underlying cash flows.

Assumptions on abandonment and reclamation in the reserves report should be consistent with those underlying the decommissioning obligation (timing, undiscounted costs, etc.). When it is clear what is or is not included in each, this will facilitate the impairment calculation analysis to ensure appropriate cash outflows for abandonment and reclamation are considered and are compliant with IAS 36.

Q. The Illustrative Example and Diagrams Indicate Pipelines and Facilities are not included in Item 2.1 of Form NI 51-101, but are instead discussed under Item 5.2 or Item 6.2.1. Is it acceptable to present significant pipelines and facilities within Item 2.1?

Item 2.1(2) requires the disclosure of future net revenue for the various reserves categories referred to in Item 2.1(1). Item 2.1(3) requires disclosure of elements of future net revenue, which includes abandonment and reclamation costs. Reserves, or recoverable volumes, are attributed to wells, and therefore abandonment and reclamation costs associated with wells should be included in this disclosure.

Instruction (5) of Form 51-101F1 states that the form sets out the minimum disclosure requirements. A reporting issuer may provide additional information providing that it is not misleading and not inconsistent with the requirements of NI 51-101. It is important for reporting issuers to ensure that there is sufficient understanding as to what costs have been included in each disclosure item in Form 51-101F1 and how these costs have been recognized in the financial statements. The Illustrative Tables and Example presented herein should help to facilitate that understanding, and the minimum disclosure requirements under Form 51-101F1.
OCA Consultations

As part of its on-going efforts to promote high quality financial reporting, the Office of the Chief Accountant communicates with entities and their advisors by providing consultations, in advance of filing financial statements with the ASC, on unusual or complex technical accounting issues, and financial statement disclosure. Our expectation is that entities and their advisors have reached agreement on an issue prior to consultation.

Please refer any questions you may have to:

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**Lara Gaede**  
Chief Accountant and CFO  
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Email: lara.gaede@asc.ca

NI 51-101 Matters

For more information regarding NI 51-101 matters:

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Email: craig.burns@asc.ca

Additional Resources

**CSA Staff Notice**

The CSA Staff Notice 51-345, *Disclosure of Abandonment and Reclamation Costs in National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities and Related Forms*, was published on November 5, 2015. This Staff Notice, along with the National Instrument 51-101, related forms and companion policies, can be found on the ASC’s website at [www.albertasecurities.com](http://www.albertasecurities.com).

**IFRS Discussion Group**

The Canadian Accounting Standards Board established the IFRS Discussion Group to implement and maintain a regular public forum to discuss issues that arise in Canada when applying IFRSs.

The IFRS Discussion Group discussed the calculation of recoverable amount under IAS 36 in May 2015, addressing differences between the discount rate used to measure a liability that is included in the carrying amount of a cash generating unit and the discount rate used to measure the recoverable amount. Non-authoritative report summaries and audio webcasts of the IFRS Discussion Group's discussion are available online at [www.frascanada.ca](http://www.frascanada.ca).