



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

April 12, 2013

Via E-Mail

Mr. Grant Isaac
Chief Financial Officer
Cameco Corporation
2121-11th Street West
Saskatoon
Saskatchewan, Canada S7M 1J3

Re: Cameco Corporation
Form 40-F for the Year Ended December 31, 2012
Filed February 22, 2013
File No. 001-14228

Dear Mr. Isaac:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 40-F for the Year Ended December 31, 2012

Exhibit 99.2 – Consolidated Audited Financial Statements

Notes to Consolidated Financial Statements, page 9

6. Accounting for Kintyre, page 25

1. We note your disclosures related to your accounting for the Kintyre exploration project and understand that you are only recording your proportionate interest in the assets and liabilities of this project. Please clarify whether you consider the Kintyre project as a jointly controlled asset and explain why you do not disclose the proportional amounts recorded in your balance sheet related to this project in your disclosures at Note 34.

24. Income Taxes, page 36

A. Significant components of deferred tax assets and liabilities, page 36

2. We note your tabular disclosure of income taxes by jurisdiction on page 38 indicates that your Canadian operations have experienced a history of pre-tax losses and that your pre-tax earnings are generated in foreign tax jurisdictions. Please quantify the deferred tax assets that you have recorded related to the Canadian jurisdiction and describe the evidence you considered in concluding that sufficient taxable profit will be available to realize these assets in accordance with paragraphs 34 through 37 of IAS 12. In addition, please disclose the nature of the evidence supporting your recognition of these assets to comply with paragraph 82 of IAS 12.

33. Group Entities, page 59

3. We note your disclosure indicating that the entities listed in the table under this heading are your “principal subsidiaries, associates and jointly-controlled entities.” However, we also note that you only list subsidiaries and associates in the table and include a separate footnote for your jointly controlled entities. Please confirm that you will revise your disclosure in future filings to clearly identify your subsidiaries, associates and jointly controlled entities.
4. We note that you no longer report the following entities as principal subsidiaries or associates of the company:
 - Cameco Royalty Inc.
 - Cameco India Limited
 - alphaNuclear Inc.
 - Northern Basins Uranium Ltd.
 - Cameco Global Exploration II Ltd.
 - Cameco Fuel Holdings Inc.
 - Cameco Property Holdings Inc.
 - Cameco UFP Holdings Canada Ltd.
 - Cameco U.S. Holdings, Inc.
 - Cameco UFP Holdings LLC
 - Cameco Ireland Company
 - Cameco Uranium Inc.
 - Cameco Luxembourg S.A.
 - Cameco Investments AG
 - Cameco Insurance Services Inc.
 - Cameco Global South America Inc.
 - Netherlands International Uranium B.V. Cameco Mongolia LLC
 - Cameco Kazakhstan LLP

- CamFin OY
- Huron Wind
- Minergia S.A.C.
- UrAmerica Ltd.

Please tell us why these entities are no longer included in your list of subsidiaries or associates of the Company, and describe the changes in facts and circumstances that occurred during the year ended December 31, 2012 that led to their exclusion in your disclosures.

37. Acquisitions, page 62

5. We note your disclosures related to your acquisition of the Yeelirrie project in Australia and understand that you have accounted for the purchase as an asset acquisition. We also note that your description of the property at page 91 of Management's Discussion and Analysis includes quantification of mineral content on the property. Please tell us how you considered paragraphs B7 through B12 of IFRS 3 in determining that your purchase of Yeelirrie was not an acquisition of a business.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Mr. Grant Isaac
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You may contact Brian McAllister at (202) 551-3341 or Craig Arakawa at (202) 551-3650 if you have questions regarding the accounting comments. Please contact me at (202) 551-3871 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins
Senior Assistant Chief Accountant
Office of Beverages, Apparel, and
Mining