



DIVISION OF
CORPORATION FINANCE
MAIL STOP 4628

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

May 4, 2010

Via U.S. Mail and Facsimile to (306) 956-6312

Mr. O. Kim Goheen
Chief Financial Officer
Cameco Corporation
2121 – 11th Street West
Saskatoon, Saskatchewan Canada
S7M1J3

**Re: Cameco Corporation
Form 40-F for the Fiscal Year Ended December 31, 2009
Filed March 31, 2010
File No. 001-14228**

Dear Mr. Goheen:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 40-F for the Fiscal Year Ended December 31, 2009

Exhibit 99.2 2009 Consolidated Financial Statements

2. Significant Accounting Policies

(g) Property, Plant and Equipment, page 9

1. Your disclosure under this section indicates, in part, that development and other costs related to the mining property are deferred based on the assessment of the commercial viability of the property. Please tell us how the determination of commercial viability corresponds to the establishment of proven and probable reserves under US GAAP as defined in SEC Industry Guide 7. We also note that deferred costs will be depleted by charges against earnings from future mining operations. Please expand your disclosure to describe the depletion base for your deferred costs related to your mining properties.

Engineering Comments

Form 40-F for the Fiscal Year Ended December 31, 2009

Reserves and Resources page 55

2. In future filings please include an appropriate level of disclosure regarding the Gas Hills-Peach and North Butte-Brown Ranch properties.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Suying Li at (202) 551-3335, Kim Calder, Assistant Chief Accountant, at (202) 551-3701, or Chris White, Branch Chief, at (202) 551-3461 if you have questions regarding comments on the financial statements and related matters. You may contact John Coleman, Mining Engineer, at (202) 551-3610 with questions about engineering comments. Please contact me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director