



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0405

November 8, 2006

Ms. Hansine Ullberg
Chief Financial Officer
Birch Mountain Resources LTD
Suite 300, 250 – 6th Avenue S.W.
Calgary, Alberta T2P 3H7
Canada

**Re: Birch Mountain Resources LTD
Form 20-F for Fiscal Year Ended December 31, 2005
March 29, 2006
Response Letter Dated October 24, 2006
File No. 1-32475**

Dear Ms. Ullberg:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our 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.

Form 20-F for the Fiscal Year Ended December 31, 2005

Cover page

1. Please note, your Commission file number is 001-32475. Please modify your cover page accordingly.

Risk Factors

Birch is Currently in the Development Stage, page 8

2. We note your response to our prior comment number two. While we are aware of the guidance contained in AcG 11, in filings made with the Commission, we believe you should characterize your enterprise consistent with your mining industry stage as defined in NI 43-101. Based on your response to certain engineering comments, it appears you are an exploratory stage company under both Canadian and U.S. standards of disclosure for mineral projects. Please remove references to the development stage including those contained in your financial statement headers to avoid investor confusion, as the term “development” has specific meaning in your industry. Please refer to Part 1-Definitions and Interpretation of NI 43-101, and SEC Industry Guide 7.

Operating and Financial Review and Prospects

Operating Results

General and Administrative Expenses, page 30

3. We note your response to our prior comment number three. It continues to appear that certain amounts you are adjusting are recurring in nature. Please refer to Item 10(e)(i) & (ii) of Regulation S-K and tell us why you believe this presentation is appropriate.

Controls and Procedures

Changes in Internal Control over Financial Reporting, page 52

4. We note your response to our prior comment number six. Please modify your disclosure to indicate if there were any changes in the Company’s internal controls during the year or subsequent to your evaluation.

Financial Statements

Consolidated Balance Sheet, page 4

5. We note your response to our prior comment number ten and are unable to agree with your conclusion. It continues to appear that your restricted cash balance should be reflected as long-term. Please modify your presentation accordingly.

Note 13 – Deficit, page 70

6. We note your response to our prior comment number 15. Please modify your presentation of “Shareholders’ Equity – U.S. GAAP” in Note 22, to include the adjustments relating to your reduction of stated capital.

Note 22 – Material differences between Canadian and United States generally accepted accounting principles, page 75

7. Please refer to SFAS 154, and modify your disclosures to present the amounts as previously reported and as restated. Also disclose the per share impacts of your adjustments.

Engineering Comments

Birch is currently in the development stage, page 8

8. We note your response to comment 22 and it appears that you do not have a feasibility study as defined by National Instrument 43-101. A review of definitions found in Part 1, Section 1.1 of N. I. 43-101, indicates a “bankable feasibility study” or a feasibility study with sufficient detail to support a final decision by a financial institution financing the development is necessary to change the status of an exploration property to development. Please explain the rationale for your status change from exploration to development under N.I. 43-101.
9. We also note your response regarding increased disclosure explaining the Canadian and U.S. GAAP differences. Please provide a draft of this additional disclosure and please ensure this disclosure states you are an exploration company due to the absence of proven and/or probable reserves as defined under Industry Guide 7 for U.S. reporting purposes.

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.

Ms. Hansine Ullberg
Birch Mountain Resources LTD
November 8, 2006
page 4

You may contact Kevin Stertz at (202) 551-3723, or me at (202) 551-3683 if you have questions regarding comments on the financial statements and related matters. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments

Sincerely,

Jill Davis
Branch Chief