



DIVISION OF
CORPORATION FINANCE
Mail Stop 7010

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

September 18, 2008

By US Mail and Facsimile

Mr. Douglas J. Newby
Chief Financial Officer
PolyMet Mining Corporation
1177 West Hastings St. Suite 1003
Vancouver, BC V6E 2K3

Re: PolyMet Mining Corp.
Amended Form 20-F for the year ended January 31, 2008
Filed August 28, 2008
File No. 0-18701
Supplemental Response filed August 15, 2008

Dear Mr. Newby:

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.

General

1. Confirm for us that you will provide the following information contained in your prior letters to us in an amendment to your Form 20-F for the fiscal year ended January 31, 2008:
 - from your letter dated February 29, 2008—the response to comment 3 describing material changes made to internal controls,

and the response to comment 4 regarding the audit report of the predecessor auditor;

- from your letter dated April 21, 2008—the first two paragraphs of your response; and
- from your letter dated June 12, 2008—the response to comment 4 describing how the related party agreements were approved, how you determine that the services are provided per any oral agreements, whether the agreements are arm's length and if they will continue. This disclosure should be expanded to address all of the contracts discussed in the related party section, and specifically state, for each one, whether it is on terms obtainable from a third party.

Related Party Transactions, page 42

2. We note your response to our prior comment 3 and reissue it in part. Please delete the introductory clause in Appendix A that states "In addition to transactions disclosed elsewhere in these financial statements," and confirm to us that you have disclosed all of the related party transactions required to be disclosed under Item 7.B of Form 20-F in this section of the Form 20-F. Summarize the material terms of, and services provided under, the oral contract to pay rent and office charges to Baja Mining Corp. of which Mr. Murray is a director. We also note the payments made to Group 4, an affiliate of Mr. Murray disclosed in note 5 to the compensation table on page 35 of the amended Form 20-F. Similarly, summarize the material terms of your agreement with Group 4 and, if it is written, file it as an exhibit.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your 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.

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In connection with responding to our comments, please provide, in writing, a 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.

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 Nasreen Mohammed at (202) 551-3773 or, in her absence Kim Calder at (202) 511-3701 if you have questions regarding financial statements and related matters. You may contact George K. Schuler, Mining Engineer, at (202) 551-3718 with questions related to engineering issues. Please contact Donna Levy at (202) 551-3292 or, in her absence, me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director

Cc: D. Levy
N. Mohammed
K. Schuler