



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

June 15, 2006

Mr. Ramiro G. Peru
Executive Vice President and Chief Financial Officer
Phelps Dodge Corporation
One North Central Avenue
Phoenix, AZ 85004

**Re: Phelps Dodge Corporation
Form 10-K for the Fiscal Year Ended December 31, 2005
Filed February 27, 2006
Supplemental Response filed June 2, 2006
File No. 001-00082**

Dear Mr. Peru:

We have reviewed your Form 10-K for the Fiscal Year Ended December 31, 2005 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.

General

1. We understand you would prefer to limit compliance with many of our comments to future filings. We are currently considering your request.

Form 10-K for the Fiscal Year Ended December 31, 2005

4. Special Items and Provisions, page 110

2. We have reviewed the revised disclosures provided in response to comments 5 and 6 of our letter dated May 18, 2006. We note you have removed the subtotals and per-share amounts from the revised footnote disclosures. However, certain amounts are not easily reconciled to your financial statements as it appears you have selected these amounts from within line items presented on your consolidated statements of income. For example, it is unclear how the amounts included in the provision for taxes on income, minority interests in consolidated subsidiaries and discontinued operations sections reconcile to the line items presented in the consolidated statements of income. Please revise your disclosures to remove the subtotals within each section noted as these amounts appear to be non-GAAP financial measures.

Engineering Comments

General

3. In regard to your response to our comment (Response 10.2), please note that maps and drawings should include the following:
 - A legend or explanation showing, by means of pattern or symbol, every pattern or symbol used on the map or drawing.
 - A graphical bar scale should be included. Additional representations of scale such as "one inch equals one mile" may be utilized provided the original scale of the map has not been altered.
 - A north arrow.
 - An index map showing where the property is situated in relationship to the state or province, etc., in which it was located.
 - A title of the map or drawing, and the date on which it was drawn.
 - In the even interpretive data is submitted in conjunction with any map, the identity of the geologist or engineer that prepared such data.
 - Any drawing should be simple enough or of sufficiently large scale to clearly show all features on the drawing.

See the Instructions to paragraph (c)(1) of Industry Guide 7.

4. In regard to your response to our comment (Response 10.4), Industry Guide 7, paragraph (b) (5) specifically states that the filing include a brief description of the rock formations and mineralization of existing or potential economic significance on the property, including the identity of the principal metallic or other constituents. Please include your brief descriptions of the deposit genesis

along with the rock formations, mineralization, and the principal metallic constituents within the filing.

Sierrita, page 3

5. Please disclose, within the filing, the amount of Copper Sulfate Pentahydrate produced at the Sierrita Mine, the amount of product sold, and the average sales price.

Ore Reserves, page 14

6. Please disclose, within the filing, the cutoff grade used to distinguish between ore and waste rock at your operating properties. Please distinguish between the crushed leach, ROM leach, and milling ores. Please disclose within in the filing, relevant economic factors and in the event a copper equivalent cutoff grade is used, disclose within the filing, the parameters and/or factors that were used in that calculation. These disclosures may be placed within the property descriptions, footnotes to the reserves tables, or in a separate table.
7. Please note combining the proven and probable reserve categories, is contrary to the explicit guidance of Industry Guide 7 paragraph (5) (b), which provides that reserves may be combined as "proven/probable" only if proven and probable reserves cannot be readily segregated. Please provide a clarifying statement within the filing.

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.

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You may contact Shannon Buskirk at (202) 551-3717, or April Sifford, Branch Chief, at (202) 551-3684 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. Please contact me at (202) 551-3740 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director