



DIVISION OF
CORPORATION FINANCE
MAIL STOP 4628

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

May 6, 2010

Mr. Oscar Gonzalez Rocha
President and Chief Executive Officer
Southern Copper Corporation
11811 North Tatum Blvd. Suite 2500
Phoenix, Arizona 85028

Re: Southern Copper Corporation
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed February 26, 2010
File No. 1-14066

Dear Mr. Rocha:

We have reviewed your filing and have the following comments. Please provide a written response to our comments. 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 10-K for Fiscal Year Ending December 31, 2009 filed February 26, 2010

Engineering Comments

Risk Factors page 23

1. In your statement of risk factors we note you indicate your company complies with certain “safety and occupational health” standards at your Peruvian and Mexican operations. In future filings, please expand your disclosure by discussing the “safety and occupational” requirements in the countries you operate and the safety programs your company employs to achieve these requirements. With a view towards possible disclosure, provide us with the matrixes that you use to measure those items including any that you report to the relevant government authorities such as a lost-time injury frequency rate and a fatal injury frequency rate.

Reserves page 70

2. Please note that proven and probable reserves presented in accordance with Industry Guide 7 may be combined as “proven and probable” only if the difference in the degree of assurance between the two classes of reserves cannot be readily defined. Absent this condition, proven and probable reserves cannot be readily segregated. Please disclose your reserves at your various operations as “proven” reserves or “probable” reserves.

Cananea Strike page 82

3. We note your discussion of the present status of your Cananea operation. Please expand your filing to include a discussion of your estimated expenditures required to restore the operation to a producing operation after you regain control of the mine. Additionally, please expand your discussion of your San Martin and Taxco properties to include relevant information regarding the status of these operations which are experiencing work stoppages as well.

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.

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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:

- 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 John Coleman at (202) 551-3610 with questions about engineering comments. Please contact me at (202) 551-3740 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director