

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

DIVISION OF CORPORATION FINANCE MAIL STOP 4628

May 5, 2010

Ms. Laurie Brlas Executive Vice President and Chief Financial Officer Cliffs Natural Resources Inc. 200 Public Square Cleveland, Ohio 44114-2315

> Re: Cliffs Natural Resources Inc. Form 10-K for the Fiscal Year Ended December 31, 2009 Filed February 18, 2010 File No. 1-8944

Dear Ms.Brlas:

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 the Fiscal Year Ended December 31, 2009

Engineering Comments

Iron Ore Reserves page 35

1. In your description of the Amapa project you use the terms "measured," "indicated," and "inferred" in reference to quantity estimates. The provisions in Industry Guide 7 preclude the use of any terms other than proven or probable reserves for disclosure in SEC documents. Please confirm you will remove this reference in future filings. Ms. Brlas Cliffs Natural Resources May 5, 2010 Page 2

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.

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