

May 12, 2010

VIA EDGARSecurities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549Attention: H. Roger Schwall
John Coleman**Re: Cliffs Natural Resources Inc.
Form 10-K for the Fiscal Year ended December 31, 2009
Filed February 18, 2010
File No. 1-8944**

Ladies and Gentlemen:

Cliffs Natural Resources Inc., an Ohio corporation (collectively, the "Company" or "we," "us" or "our"), is submitting this letter in response to the comment letter from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), dated May 5, 2010 (the "Comment Letter"), with respect to the Company's Form 10-K for the fiscal year ended December 31, 2009.

Below are the Company's responses. For the convenience of the Staff, we have repeated each of the Staff's comments before the corresponding response.

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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.*

Response: The Company acknowledges the requirements of SEC Industry Guide 7, which specifies that estimates other than proved (measured) or probable (indicated) reserves, and

any estimated values of such reserves should not be disclosed unless, among other things, such information is required to be disclosed by foreign or state law. Accordingly, the Company will remove the reference to measured, indicated and inferred resources from future filings. Set forth below is a revised version of the disclosure from the Company's most recent Form 10-K incorporating the Staff's comment, which is intended to be used by the Company as a template for disclosure in future filings.

Ore reserves for Amapá, in which we have a 30 percent ownership interest, have not been estimated by Cliffs. The ore reserve estimation process is controlled and managed by Anglo as the parent company and mine operator. Sufficient technical data on the processing of Amapá mineralized material does not exist at this time, precluding estimation of recoverable product and grade, and therefore economic reserves as defined by SEC Industry Guide 7.

* * *

In connection with the Company's responses to the staff's comments, the Company acknowledges 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.

If you have any questions regarding these matters, please do not hesitate to contact the undersigned at 216-694-4822 or by facsimile at 216-694-4880.

Sincerely,

/s/ Laurie Brlas

Laurie Brlas
Executive Vice President and
Chief Financial Officer

Cc: Kelly Tompkins, Cliffs Natural Resources Inc.
Michael Solecki, Jones Day