

CUSIP No.: 18683K101

1. NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

The Vanguard Group - 23-1945930

2. CHECK THE APPROPRIATE [LINE] IF A MEMBER OF A GROUP

A. B.
 X

3. SEC USE ONLY

4. CITIZENSHIP OF PLACE OF ORGANIZATION

Pennsylvania

(For questions 5-8, report the number of shares beneficially owned by each reporting person with:)

5. SOLE VOTING POWER

200,949

6. SHARED VOTING POWER

7. SOLE DISPOSITIVE POWER

10,112,709

8. SHARED DISPOSITIVE POWER

193,249

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10,305,958

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

N/A

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

6.73%

12. TYPE OF REPORTING PERSON

IA

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G
Under the Securities Act of 1934

Check the following [line] if a fee is being paid with this statement N/A

Item 1(a) - Name of Issuer:

Cliffs Natural Resources Inc

Item 1(b) - Address of Issuer's Principal Executive Offices:

200 Public Square
Suite 3300
Cleveland, Ohio, 44114

Item 2(a) - Name of Person Filing:

The Vanguard Group - 23-1945930

Item 2(b) - Address of Principal Business Office or, if none, residence:

100 Vanguard Blvd.
Malvern, PA 19355

Item 2(c) - Citizenship:

Pennsylvania

Item 2(d) - Title of Class of Securities:

Common Stock

Item 2(e) - CUSIP Number

18683K101

Item 3 - Type of Filing:

This statement is being filed pursuant to Rule 13d-1. An investment adviser in accordance with §24M jBM

Glenn Booraem, pursuant to a Power of Attorney filed September 9, 2013, see File Number 005-56905, Incorporated by Reference

Appendix A

Vanguard Fiduciary Trust Company ("VFTC"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 193,249 shares or .12% of the Common Stock outstanding of the Company as a result of its serving as investment manager of collective trust accounts.

Vanguard Investments Australia, Ltd. ("VIA"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 7,700 shares or .00% of the Common Stock outstanding of the Company as a result of its serving as investment manager of Australian investment offerings.

By /s/ F. William McNabb III*

F. William McNabb III

President and Chief Executive Officer

*By: /s/ Glenn Booraem

Glenn Booraem, pursuant to a Power of Attorney filed September 9, 2013, see File Number 005-56905, Incorporated by Reference