SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934 (Amendment No.:0)*

Name of issuer: Cliffs Natural Resources Inc

Title of Class of Securities: Common Stock

CUSIP Number: 18683K101

Date of Event Which Requires Filing of this Statement: December 31, 2011

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

(X) Rule 13d-1(b)

() Rule 13d-1(c)

() Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on the following page(s))

CUSIP No.: 18683K101

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

THE VANGUARD GROUP, INC. - 23-1945930

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

A. B. <u>X</u>

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

202,673

6. SHARED VOTING POWER

7. SOLE DISPOSITIVE POWER

7,514,623

8. SHARED DISPOSITIVE POWER

202,673

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

7,717,296

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

5.39%

12. TYPE OF REPORTING PERSON

IA

SECURITIES AND

Appendix A

Pursuant to the instructions of Item 7 of Schedule 13G, Vanguard Fiduciary Trust Company ("VFTC"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 202,673 shares or .14% of the Common Stock outstanding of the Company as a result of its serving as investment manager of collective trust accounts. VFTC directs the voting of these shares.

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 on January 29, 2010, see File Number 005-81485, Incorporated by Reference