UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

Cliffs Natural Resources Inc.

(Exact name of registrant as specified in its charter)

Ohio	34-1464672
(State of incorporation or organization)	(I.R.S. Employer Identification No.)
200 Public Square, Suite 3300	
Cleveland, Ohio	44114-2315
(Address of principal executive offices)	(Zip code)
Securities to be registered pursuant to Section 12(b) of the Act:	
Title of each class	Name of each exchange on which
to be so registered	each class is to be registered
Depositary Shares, each representing a 1/40th ownership interest in a share of 7.00% Series A Mandatory Convertible Preferred Stock, Class A	The New York Stock Exchange
If this form relates to the registration of a class of securities pursuant to Section 12(b) of the following box. \square	e Exchange Act and is effective pursuant to General Instruction A.(c), please check
If this form relates to the registration of a class of securities pursuant to Section 12(g) of the following box. \Box	e Exchange Act and is effective pursuant to General Instruction A.(d), please check
Securities Act registration statement file number to which this form relates: Commission F	ile No. 333-186617
Securities to be registered pursuant to Section 12(g) of the Act: None	

Item 1. Description of Registrant's Securities to be Registered.

The securities to be registered hereby are Depositary Shares, each representing a 1/40th interest in a share of 7.00% Series A Mandatory Convertible Preferred Stock, Class A, without par value (the "Mandatory Convertible Preferred Stock"), of Cliffs Natural Resources Inc. (the "Company"). The descriptions of the Depositary Shares and the underlying Mandatory Convertible Preferred Stock are contained in the sections captioned "Description of Mandatory Convertible Preferred Stock" and "Description of Depositary Shares" in the Company's prospectus supplement, dated February 14, 2013, and the section captioned "Description of Capital Stock—Class A Preferred Stock" in the Company's prospectus, dated February 12, 2013, each of which constitutes a part of the Registration Statement on Form S-3 (Registration No. 333-186617), filed by the Company with the Securities and Exchange Commission on February 12, 2013. Such sections are incorporated herein by reference.

Item 2. Exhibits.

A list of exhibits filed with this registration statement on Form 8-A is set forth in the Exhibit Index and is incorporated herein by reference.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

CLIFFS NATURAL RESOURCES INC.

By: /s/ Carolyn E. Cheverine
Name: Carolyn E. Cheverine
Title: Vice President, General Counsel &

Secretary

Dated: February 22, 2013

EXHIBIT INDEX

Exhibit Number	Description
3.1	Second Amended Articles of Incorporation, as amended, of Cliffs Natural Resources Inc. (as filed with the Secretary of State of the State of Ohio on May 25, 2011) (incorporated by reference to Exhibit 3(b) to Cliffs Natural Resources Inc.'s Quarterly Report on Form 10-Q (File No. 001-08944) for the quarterly period ended June 30, 2011)
3.2	Regulations of Cleveland-Cliffs Inc. (incorporated by reference to Exhibit 3.2 to Cliffs Natural Resources Inc.'s Annual Report on Form 10-K (File No. 001-08944) for the period ended December 31, 2011)
4.1	Certificate of Amendment to the Second Amended Articles of Incorporation, as amended, of Cliffs Natural Resources Inc. (including Form of Certificate of 7.00% Series A Mandatory Convertible Preferred Stock, Class A, without par value) (as filed with the Secretary of State of the State of Ohio on February 20, 2013) (incorporated by reference to Exhibit 3.1 to Cliffs Natural Resources Inc.'s Current Report on Form 8-K (File No. 001-08944) filed on February 21, 2013)
4.2	Deposit Agreement, dated as of February 21, 2013, by and between Cliffs Natural Resources Inc. and Wells Fargo Bank, N.A., as Depositary (including Form of Depositary Receipt) (incorporated by reference to Exhibit 4.1 to Cliffs Natural Resources Inc.'s Current Report on Form 8-K (File No. 001-08944) filed on February 21, 2013)
4.3	Form of Common Share Certificate (incorporated by reference to Exhibit 4.1 to Cliffs Natural Resources Inc.'s Quarterly Report on Form 10-Q (File No. 001-08944) for the quarterly period ended September 30, 2012)