As filed with the Securities and Exchange Commission on May 21, 2015

	Registration No
UNITED STATES	
SECURITIES AND EXCHANGE COMMISSION	
Washington, DC 20549	

FORM S-8

REGISTRATION STATEMENT Under The Securities Act of 1933

Cliffs Natural Resources Inc.

(Exact Name of Registrant as Specified in Its Charter)

Ohio

34-1464672

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification No.)

200 Public Square, Suite 3300, Cleveland, Ohio 44114-2315 (Address of Principal Executive Offices Including Zip Code)

Cliffs Natural Resources Inc. 2015 Equity and Incentive Plan

(Full Title of the Plan)

James D. Graham, Esq.
Executive Vice President, Chief Legal Officer and Secretary
Cliffs Natural Resources Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114-2315
(216) 694-5700

(Name and Address, and Telephone Number, including Area Code, of Agent For Service)

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	X	Accelerated filer	
Non-accelerated filer		Smaller reporting company	
(Do not check if a smaller reporting company)			

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽²⁾	Amount of Registration Fee
Common Shares, \$0.125 par value per share	12,900,000	\$4.90	\$63,210,000.00	\$7,345.00

- (1) Represents common shares, par value \$0.125 per share, ("Common Shares"), of Cliffs Natural Resources Inc. (the "Registrant") issuable pursuant to the Cliffs Natural Resources Inc. 2015 Equity and Incentive Compensation Plan (the "Plan") being registered hereon. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such additional Common Shares as may become issuable pursuant to the anti-dilution provisions of the Plan.
- (2) Estimated solely for the purposes of determining the amount of the registration fee, pursuant to paragraphs (c) and (h) of Rule 457 under the Securities Act, on the basis of the average of the high and low sale prices of the Common Shares on the New York Stock Exchange on May 20, 2015, a date that is within five business days prior to filing.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The information specified in Items 1 and 2 of Part I of the Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act and the introductory note to Part I of the Form S-8. The documents containing the information specified in Part I will be delivered to the participants in the Plan covered by this Registration Statement on Form S-8 (the "*Registration Statement*") as required by Rule 428(b) (1).

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant is subject to the informational and reporting requirements of Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), and, in accordance therewith, files reports, proxy statements and other information with the Securities and Exchange Commission (the "*Commission*"). The following documents, which are on file with the Commission, are incorporated into this Registration Statement by reference:

- (a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2014 (Commission File No. 001-08944), filed with the Commission on February 25, 2015;
- (b) The Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 2015 (Commission File No. 001-08944), filed with the Commission on May 6, 2015;
- (c) The Registrant's Current Reports on Form 8-K (Commission File No. 001-08944), filed with the Commission on January 6, 2015, January 28, 2015, February 2, 2015, March 19, 2015, March 19, 2015, March 23, 2015, March 25, 2015, April 1, 2015, April 2, 2015, May 20, 2015 and May 21, 2015; and
- (d) The description of the Common Shares contained in the Current Report on Form 8-K/A (Commission File No. 001-08944) filed with the Commission on May 21, 2008, and all amendments and reports filed with the Commission for the purpose of updating such description.

All documents filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the effective date of this Registration Statement and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold, will be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein will be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded will not be deemed, except as modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

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Item 6. Indemnification of Directors and Officers.

The Registrant will indemnify, to the full extent permitted by law, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director, officer, employee or agent of the Registrant, or is or was serving at the Registrant's request as a director, trustee, officer, employee or agent of another corporation, domestic or foreign, nonprofit or for profit, partnership, joint venture, trust or other enterprise; provided, however, that the Registrant will indemnify any such agent (as opposed to any director, officer or employee) of the Registrant to an extent greater than required by law only if and to the extent that the Registrant's directors may, in their discretion, so determine. The indemnification the Registrant gives will not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any law, the Registrant's Third Amended Articles of Incorporation or any agreement, vote of shareholders or of disinterested directors or otherwise, both as to action in official capacities and as to action in another capacity while such person is a Registrant director, officer, employee or agent, and shall continue as to a person who has ceased to be a Registrant director, trustee, officer, employee or agent and shall inure to the benefit of heirs, executors and administrators of such a person.

The Registrant may, to the full extent permitted by law and authorized by the Registrant's directors, purchase and maintain insurance on behalf of any persons described in the paragraph above against any liability asserted against and incurred by any such person in any such capacity, or arising out of the status as such, whether or not the Registrant would have the power to indemnify such person against such liability.

Under the Ohio Revised Code, Ohio corporations are authorized to indemnify directors, officers, employees and agents within prescribed limits and must indemnify them under certain circumstances. The Ohio Revised Code does not provide statutory authorization for a corporation to indemnify directors, officers, employees and agents for settlements, fines or judgments in the context of derivative suits. However, it provides that directors (but not officers, employees or agents) are entitled to mandatory advancement of expenses, including attorneys' fees, incurred in defending any action, including derivative actions, brought against the director, provided that the director agrees to cooperate with the corporation concerning the matter and to repay the amount advanced if it is proved by clear and convincing evidence that the director's act or failure to act was done with deliberate intent to cause injury to the corporation or with reckless disregard for the corporation's best interests.

The Ohio Revised Code does not authorize payment of judgments to a director, officer, employee or agent after a finding of negligence or misconduct in a derivative suit absent a court order. Indemnification is permitted, however, to the extent such person succeeds on the merits. In all other cases, if a director, officer, employee or agent acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, indemnification is discretionary except as otherwise provided by a corporation's articles, code of regulations or by contract except with respect to the advancement of expenses of directors.

Under the Ohio Revised Code, a director is not liable for monetary damages unless it is proved by clear and convincing evidence that his or her action or failure to act was undertaken with deliberate intent to cause injury to the corporation or with reckless disregard for the best interests of the corporation. There is, however, no comparable provision limiting the liability of officers, employees or agents of a corporation. The statutory right to indemnification is not exclusive in Ohio, and Ohio corporations may, among other things, procure insurance for such persons.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits

 4.1 Third Amended Articles of Incorporation of Cliffs (as filed with the Secretary of State of the State of Ohio on May 13, 2013 (filed as Exhibit 3.1 to Cliffs' Form 8-K on May 13, 2013 and incorporated herein by reference) 4.2 Regulations of Cliffs (filed as Exhibit 3.2 to Cliffs' Form 10-K for the period ended December 31, 2011 and incorporated herein by reference) 4.3 Form of Common Share Certificate (filed as Exhibit 4.1 to Cliffs' Form 10-Q for the period ended September 30, 2014 and incorporated herein by reference) 4.4 Cliffs Natural Resources Inc. 2015 Equity and Incentive Compensation Plan (filed as Exhibit 10.1 to Cliffs' Form 8-K on May 21, 2015 and incorporated herein by reference) 5.1 Opinion of Jones Day 23.1 Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm 23.2 Consent of Jones Day (included in Exhibit 5.1) 24.1 Power of Attorney 	Exhibit Number	Exhibit Description
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	23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
24.1 Power of Attorney	23.2	Consent of Jones Day (included in Exhibit 5.1)
	24.1	Power of Attorney

Item 9. Undertakings

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on this 21st day of May, 2015.

CLIFFS NATURAL RESOURCES INC.

By: /s/ James D. Graham

James D. Graham Executive Vice President, Chief Legal Officer and Secretary Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities indicated as of May 21, 2015.

<u>Signature</u>	
*	Chairman, President and Chief Executive Officer and Director
C. L. Goncalves	(Principal Executive Officer)
*	Executive Vice President and Chief Financial Officer
P. K. Tompkins	(Principal Financial Officer)
*	Vice President, Corporate Controller and Chief Accounting
T. K. Flanagan	Officer (Principal Accounting Officer)
*	Diseases
J. T. Baldwin	- Director
*	D'
R. P. Fisher, Jr.	- Director
*	D'
S. M. Green	- Director
*	D'
J. A. Rutkowski, Jr.	- Director
*	D'
J. S. Sawyer	- Director
*	D'
M. D. Siegal	- Director
*	D'
G. Stoliar	- Director
*	751
D. C. Taylor	- Director

DATED: May 21, 2015 By: /s/ James D. Graham

James D. Graham, attorney-in-fact

^{*} The undersigned, by signing his name hereto, does hereby sign this Registration Statement on Form S-8 on behalf of each of the officers and directors of the Registrant identified above pursuant to a Power of Attorney executed by the officers and directors identified above, which Power of Attorney is filed with this Registration Statement on Form S-8 as Exhibit 24.1.

EXHIBIT INDEX

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23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
23.2	Consent of Jones Day (included in Exhibit 5.1)
24.1	Power of Attorney

JONES DAY

NORTH POINT • 901 LAKESIDE AVENUE • CLEVELAND, OHIO 44114.1190
TELEPHONE: +1.216.586.3939 • FACSIMILE: +1.216.579.0212

May 21, 2015

Cliffs Natural Resources Inc. 200 Public Square, Suite 3300 Cleveland, Ohio 44114-2315

Re: Registration Statement on Form S-8 Filed by Cliffs Natural Resources Inc.

Ladies and Gentlemen:

We have acted as counsel for Cliffs Natural Resources Inc., an Ohio corporation (the "Company"), in connection with the Cliffs Natural Resources Inc. 2015 Equity and Incentive Compensation Plan (the "Plan"). In connection with the opinion expressed herein, we have examined such documents, records and matters of law as we have deemed relevant or necessary for purposes of such opinion. Based on the foregoing, and subject to the further limitations, qualifications and assumptions set forth herein, we are of the opinion that the 12,900,000 common shares (the "Shares"), par value \$0.125 per share, of the Company that may be issued or delivered and sold pursuant to the Plan and the authorized forms of stock option, restricted stock or other applicable award agreements thereunder (the "Award Agreements") will be, when issued or delivered and sold in accordance with the Plan and the Award Agreements, validly issued, fully paid and nonassessable, provided that the consideration for the Shares is at least equal to the stated par value thereof.

The opinion expressed herein is limited to the laws of the State of Ohio, as currently in effect, and we express no opinion as to the effect of the laws of any other jurisdiction on the opinion expressed herein. In addition, we have assumed that the resolutions authorizing the Company to issue or deliver and sell the Shares pursuant to the Plan and the Award Agreements will be in full force and effect at all times at which the Shares are issued or delivered and sold by the Company, and that the Company will take no action inconsistent with such resolutions. In rendering the opinion above, we have assumed that each award under the Plan will be approved by the Board of Directors of the Company or an authorized committee of the Board of Directors.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement on Form S-8 filed by the Company to effect the registration of the Shares under the Securities Act of 1933 (the "Act"). In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Very truly yours,

/s/ Jones Day

ALKHOBAR • AMSTERDAM • ATLANTA • BEIJING • BOSTON • BRUSSELS • CHICAGO • CLEVELAND • COLUMBUS • DALLAS
DUBAI • DÜSSELDORF • FRANKFURT • HONG KONG • HOUSTON • IRVINE • JEDDAH • LONDON • LOS ANGELES • MADRID
MEXICO CITY • MIAMI • MILAN • MOSCOW • MUNICH • NEW YORK • PARIS • PERTH • PITTSBURGH • RIYADH • SAN DIEGO
SAN FRANCISCO • SÃO PAULO • SHANGHAI • SILICON VALLEY • SINGAPORE • SYDNEY • TAIPEI • TOKYO • WASHINGTON

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports dated February 25, 2015, relating to the consolidated financial statements and financial statement schedule of Cliffs Natural Resources Inc. and subsidiaries, and the effectiveness of Cliffs Natural Resources Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of Cliffs Natural Resources Inc. for the year ended December 31, 2014.

/s/ DELOITTE & TOUCHE LLP

Cleveland, Ohio May 21, 2015

REGISTRATION STATEMENT ON FORM S-8

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each of the undersigned directors and officers of Cliffs Natural Resources Inc., an Ohio corporation (the "Registrant"), does hereby constitute and appoint each of C. Lourenco Goncalves, James D. Graham and Traci L. Forrester, or any of them, each acting alone, as the true and lawful attorney-in-fact or attorneys-in-fact for each of the undersigned, with full power of substitution and resubstitution, and in the name, place and stead of each of the undersigned, to execute and file (1) one or more Registration Statements on Form S-8 (the "Form S-8 Registration Statement") with respect to the registration under the Securities Act of 1933 of the Registrant's Common Shares issuable in connection with the Cliffs Natural Resources Inc. 2015 Equity and Incentive Compensation Plan, (2) any and all amendments, including post-effective amendments, supplements and exhibits to the Form S-8 Registration Statement and (3) any and all applications or other documents to be filed with the Securities and Exchange Commission or any state securities commission or other regulatory authority or exchange with respect to the securities covered by the Form S-8 Registration Statement, with full power and authority to do and perform any and all acts and things whatsoever necessary, appropriate or desirable to be done in the premises, or in the name, place and stead of the said director and/or officer, hereby ratifying and approving the acts of said attorneys and any of them and any such substitute.

This Power of Attorney may be executed in multiple counterparts, each of which shall be deemed an original with respect to the person executing it.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands as of the 21st day of May, 2015.

Director

/s/ C. L. Goncalves	/s/ P. K. Tompkins
C. L. Goncalves Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)	P. K. Tompkins Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ T. K. Flanagan	/s/ J. T. Baldwin
T. K. Flanagan Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	J. T. Baldwin Director
/s/ R. P. Fisher, Jr.	/s/ S. M. Green
R. P. Fisher, Jr. Director /s/ J. A. Rutkowski, Jr.	S. M. Green Director /s/ J. S. Sawyer
J. A. Rutkowski, Jr. Director /s/ M. D. Siegal	J. S. Sawyer Director /s/ G. Stoliar
M. D. Siegal Director	G. Stoliar Director
/s/ D. C. Taylor	
D. C. Taylor	