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

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): February 22, 2017

Cliffs Natural Resources Inc.

(Exact name of registrant as specified in its charter)

Ohio (State or Other Jurisdiction of Incorporation) 1-8944 (Commission File Number) 34-1464672 (IRS Employer Identification Number)

200 Public Square, Suite 3300 Cleveland, Ohio (Address of Principal Executive Offices)

44114-2315 (Zip Code)

Registrant's telephone number, including area code: (216) 694-5700

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On February 22, 2017, the Board of Directors of Cliffs Natural Resources Inc. (the "Company") elected R. Christopher Cebula, 46, to assume the duties of Vice President, Corporate Controller & Chief Accounting Officer of the Company. Mr. Cebula most recently was the Senior Director, Corporate Planning & Analysis of the Company, a position he held since April 2013. He previously served the Company as Senior Director, Enterprise Risk Management (April 2010 to April 2013).

In connection with his appointment as Vice President, Corporate Controller & Chief Accounting Officer of the Company, Mr. Cebula will be entitled to receive an increased base salary, increased target short-term annual incentive opportunity as a percentage of base salary and increased target long-term incentive opportunity as a percentage of base salary.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CLIFFS NATURAL RESOURCES INC.

Date: February 28, 2017

By: /s/ James D. Graham

 Name:
 James D. Graham

 Title:
 Executive Vice President, Chief Legal Officer & Secretary