

**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) March 8, 2010

Cliffs Natural Resources Inc.

(Exact Name of Registrant as Specified in Charter)

Ohio
**(State or Other Jurisdiction
of Incorporation)**

1-8944
**(Commission
File Number)**

34-1464672
**(IRS Employer
Identification No.)**

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

44114-2315
(Zip Code)

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

(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.

Award Grant

On March 8, 2010, the Compensation and Organization Committee of the Board of Directors of Cliffs Natural Resources Inc. (the “Company”) approved a target grant of 12,480 performance shares to Joseph Carrabba, Chairman, President and Chief Executive Officer of the Company (the “Grant”). The size of the Grant was determined using the 60-day average closing market price of the Company’s common shares ending on March 8, 2010 of \$48.11 per share. The Grant expires on December 31, 2013.

The terms of the Grant are the same as the 2009 Strategic Initiative Grant, except that the Grant is contingent upon shareholder approval of an amendment to the Company’s 2007 Incentive Equity Plan to increase the number of common shares available thereunder. Under the terms of the Grant, the first condition to earn the performance shares may be triggered anytime between the date of the Grant and December 31, 2013 if the Company’s aggregate value, defined as market capitalization, increases by 50% or more for a period of 60 consecutive days over the aggregate value as of the last 60 trading days of 2009 (the “Performance Trigger”). If the Performance Trigger occurs, then the Grant would be eligible to pay out at the end of the term of the Grant, assuming Mr. Carrabba is still employed by the Company at that time. If the Performance Trigger does not occur, or if Mr. Carrabba voluntarily terminates his employment before December 31, 2013, then there would be no payout under the Grant.

Assuming the Performance Trigger occurs, the number of shares paid out would be determined by the Compensation and Organization Committee of the Board of Directors based on Mr. Carrabba’s achievement of certain performance factors evaluated in the Committee’s discretion, specifically:

- aggregate value of the Company relative to its peers;
- increase in the Company’s equity trading multiples;
- degree of diversification of the Company into minerals other than iron ore and metallurgical coal; and
- other factors to be determined by the Compensation and Organization Committee, such as timing of results relative to goals, sustainability of market values, and quality of new commodities and operations.

Pursuant to the terms of the Grant, the Compensation and Organization Committee may exercise negative discretion to reduce the size of the payout under the Grant based on Mr. Carrabba’s performance relative to these performance factors. The target payout under the Grant is \$600,000, with a maximum payout of \$900,000.

Election of New Director

On March 9, 2010, the Board of Directors of the Company elected James F. Kirsch (age 52) to the Board, increasing the size of the Board from eleven to twelve directors. The Board of Directors has determined that Mr. Kirsch has no material relationship with the Company (either directly or as a partner, shareholder or officer of an organization that has a relationship with the Company) and is independent within the Company’s director independence standards, which reflect exactly the New York Stock Exchange’s director independence standards as currently in effect.

Mr. Kirsch was elected Chairman of Ferro Corporation’s (NYSE:FOE) Board of Directors on December 14, 2006. He was appointed Chief Executive Officer and a director of Ferro in November 2005. Mr. Kirsch joined Ferro in October 2004 as its President and Chief Operating Officer. Prior to joining Ferro, Mr. Kirsch served as President of Premix Inc. and Quantum Composites, Inc., manufacturers of thermoset molding compounds, parts and sub-assemblies for the automotive, aerospace, electrical and HVAC industries. Prior to that, from 2002 through 2004, he served as President of Quantum Composites, Inc. From 2000 through 2002, he served as President and director of Ballard Generation Systems and Vice President for Ballard Power Systems in Burnaby, British Columbia, Canada. Mr. Kirsch started his career with The Dow Chemical Company, where he spent 19 years and held various positions of increasing responsibility, including global business director of Propylene Oxide and Derivatives and Global Vice President of Electrochemicals.

As a non-employee director, Mr. Kirsch will receive compensation in the same manner as the Company's other non-employee directors, which compensation the Company previously disclosed in its definitive proxy statement on Schedule 14A filed with the SEC on March 23, 2009. In particular, Mr. Kirsch will participate in the Company's Nonemployee Directors' Compensation Plan (Amended and Restated as of December 31, 2008) (the "Plan"), a copy of which is included as Exhibit 10(a) to this Current Report on Form 8-K and is incorporated herein by reference. Pursuant to the Plan, Mr. Kirsch has received a prorated annual equity grant of 222 restricted shares.

The Company also expects to enter into an Indemnification Agreement with Mr. Kirsch, the form of which is attached as Exhibit 10(b) to this Current Report on Form 8-K and is incorporated herein by reference. The Indemnification Agreement provides that, to the extent permitted by Ohio law, the Company will indemnify Mr. Kirsch against all expenses, costs, liabilities, and losses (including attorneys' fees, judgments, fines or settlements) incurred or suffered by him in connection with any suit in which he is a party or otherwise involved as a result of his service as a member of the Board. The foregoing discussion of the terms of the Indemnification Agreement is qualified in its entirety by reference to the full text of the Indemnification Agreement.

A copy of the press release relating to the appointment of Mr. Kirsch is attached hereto as Exhibit 99(a) and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
10(a)	Cliffs Natural Resources Inc. Nonemployee Directors' Compensation Plan (Amended and Restated as of December 31, 2008) (filed as Exhibit 10(nnn) to Form 10-K of Cliffs Natural Resources Inc. on February 26, 2009 and incorporated by reference)
10(b)	Form of Indemnification Agreement between Cliffs Natural Resources Inc. (formerly Cleveland-Cliffs Inc.) and Directors (filed as Exhibit 10(f) to Form 10-K of Cliffs Natural Resources Inc. on February 2, 2001 and incorporated by reference)
99(a)	Press Release dated March 9, 2010

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.

By: /s/ George W. Hawk, Jr.
Name: George W. Hawk, Jr.
Title: General Counsel and Secretary

Date: March 10, 2010

Exhibit Index

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NEWS RELEASE

**James F. Kirsch Joins Cliffs Natural Resources Inc.
Board of Directors**

CLEVELAND—March 9, 2010—Cliffs Natural Resources Inc. (NYSE: CLF) (Paris: CLF) today announced that its Board of Directors has elected James F. Kirsch as a director. Mr. Kirsch also currently serves as chairman, president and chief executive officer of Ferro Corporation (NYSE: FOE).

Joseph A. Carrabba, chairman, president and chief executive officer of Cliffs, said: “Jim brings to our board over 25 years’ experience in technology-based materials, with broad-based knowledge acquired from such well-known industrial names as Ferro Corporation and The Dow Chemical Company. He is a proven strategic leader, highly accomplished executive and known change-agent. His insight will be extremely valuable to our board as we continue the execution of our strategic plans.”

Mr. Kirsch, age 52, joined Ferro in 2004 as president and chief operating officer. He became president and chief executive officer in 2005 and added responsibilities as chairman in 2006.

Prior to joining Ferro, Mr. Kirsch served as president of Premix Inc. and Quantum Composites, manufacturers of thermoset molding compounds, parts and sub-assemblies for the automotive, aerospace, electrical and HVAC industries. Earlier, he served as president and a director for Ballard Generation Systems and vice president for Ballard Power Systems in Burnaby, British Columbia, Canada. Mr. Kirsch began his career with The Dow Chemical Company, where he spent 19 years in positions of increasing responsibility, including global business director of propylene oxide and derivatives and global vice president of electrochemicals.

“I am enthusiastic about joining Cliffs’ board and being part of the Company’s exciting growth story,” said Mr. Kirsch. “I believe my experience in the materials space and with industrial companies will complement what I consider to be a very insightful and determined group of directors.”

CLIFFS NATURAL RESOURCES INC. • 200 PUBLIC SQUARE • SUITE 3300 • CLEVELAND, OH 44114-2544

Mr. Kirsch received a bachelor's degree in marketing from Ohio State University. In addition to Cliffs, he currently serves as a member of the board of directors of the Greater Cleveland Partnership and John Carroll University in University Heights, Ohio.

To be added to Cliffs Natural Resources' e-mail distribution list, please click on the link below <http://www.cpg-llc.com/clearsite/clf/emailoptin.html>

ABOUT CLIFFS NATURAL RESOURCES INC.

Cliffs Natural Resources Inc. is an international mining and natural resources company. A member of the S&P 500 Index, we are the largest producer of iron ore pellets in North America, a major supplier of direct-shipping lump and fines iron ore out of Australia and a significant producer of metallurgical coal. With core values of environmental and capital stewardship, our colleagues across the globe endeavor to provide all stakeholders operating and financial transparency as embodied in the Global Reporting Initiative (GRI) framework. Our Company is organized through three geographic business units:

The North American business unit is comprised of six iron ore mines owned or managed in Michigan, Minnesota and Canada and two coking coal mining complexes located in West Virginia and Alabama. The Asia Pacific business unit is comprised of two iron ore mining complexes in Western Australia and a 45% economic interest in a coking and thermal coal mine in Queensland, Australia. The Latin American business unit includes a 30% interest in the Amapá Project, an iron ore project in the state of Amapá in Brazil.

Other projects under development include a biomass fuel production plant in Michigan and Ring of Fire chromite properties in Ontario, Canada. Over recent years, Cliffs has been executing a strategy designed to achieve scale in the mining industry and focused on serving the world's largest and fastest growing steel markets.

News releases and other information on the Company are available on the Internet at: <http://www.cliffsnaturalresources.com> or www.cliffsnaturalresources.com/Investors/Pages/default.aspx?b=1041&l=1.

Follow Cliffs on Twitter at: <http://twitter.com/CliffsIR>.

SOURCE: Cliffs Natural Resources Inc.

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