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):

May 11, 2010

Cliffs Natural Resources Inc.

(Exact name of registrant as specified in its charter)

Ohio

1-8944 (Commission

File Number)

(State or other jurisdiction of incorporation)

200 Public Square, Suite 3300, Cleveland, Ohio

(Address of principal executive offices)

Registrant's telephone number, including area code:

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))

34-1464672

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

44114-2315

(Zip Code)

216-694-5700

Item 8.01 Other Events.

Cliffs Natural Resources Inc. published a press release on May 11, 2010 as follows:

Cliffs Natural Resources Announces 60% Increase to Cash Dividend

Company's Board Sets Quarterly Payout of \$0.14 per share, Up From \$0.0875

CLEVELAND – May 11, 2010 – Cliffs Natural Resources Inc. (NYSE: CLF) (Paris: CLF) today announced that its Board of Directors voted to increase the quarterly cash dividend on the Company's common shares by 60% to \$0.14 per share. The increased cash dividend will be payable on June 1, 2010, to shareholders of record as of the close of business on May 14, 2010.

Laurie Brlas, Cliffs' executive vice president and chief financial officer, said, "Cliffs' outlook for cash flow generation has improved substantially with the rebounding demand for steelmaking raw materials. This provides the Company increased confidence to increase its cash payouts to Cliffs' shareholders, while at the same time continuing to pursue strategic objectives."

As previously announced on March 9, 2010, the Company's Board redeemed the rights that had accompanied its common shares under its Shareholder Rights Plan. The redemption price of \$0.001 per right is being paid as part of the common share dividend on June 1, 2010. Accordingly, \$0.001 of the quarterly dividend of \$0.14 per common share will be allocated to pay the redemption price of the rights.

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&1=1.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995

This news release contains predictive statements that are intended to be made as "forward-looking" within the safe harbor protections of the Private Securities Litigation Reform Act of 1995. Although we believe that our forward-looking statements are based on reasonable assumptions, such statements are subject to risk and uncertainties.

Actual results may differ materially from such statements for a variety of reasons, including the inability to obtain necessary court approvals for the acquisition. Other factors that could impact actual results include the following: demand for ferrochrome by global integrated steel producers; the impact of consolidation and rationalization in the steel industry; availability of capital equipment and component parts; availability of rail and float capacity; availability and cost of capital; ability to maintain adequate liquidity and access capital markets; events or circumstances that could impair or adversely impact the viability and carrying value of the Freewest assets; inability to achieve expected production levels; reductions in current resource estimates; impacts of increasing governmental regulation, including failure to receive or maintain required environmental permits; problems with productivity, third-party contractors, labor disputes, disputes with indigenous tribes in the area, weather conditions, fluctuations in ore grade and changes in other cost factors, including energy costs and transportation.

Reference is also made to the detailed explanation of the many factors and risks that may cause such predictive statements to turn out differently, set forth in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and previous news releases filed with the Securities and Exchange Commission, which are publicly available on Cliffs Natural Resources' website. The information contained in this document speaks as of the date of this news release and may be superseded by subsequent events.

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

SOURCE: Cliffs Natural Resources Inc.

INVESTOR AND FINANCIAL MEDIA CONTACTS:

Steve Baisden Director, Investor Relations and Corporate Communications (216) 694-5280 steve.baisden@cliffsnr.com

Christine Dresch Manager – Corporate Communications (216) 694-4052 christine.dresch@cliffsnr.com

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.

May 12, 2010

Cliffs Natural Resources Inc.

By: Traci L. Forrester

Name: Traci L. Forrester Title: Assistant Secretary