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):

August 15, 2011

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.

On August 15, 2011, the Board of Directors of Cliff Natural Resources Inc. (the "Company") approved a new share repurchase plan pursuant to which the Company may purchase up to four million of its outstanding common shares. The new share repurchase plan replaces the Company's existing share repurchase plan. Under the new share repurchase plan, the Company may purchase its common shares from time to time in open market purchases or privately negotiated transactions and may make all or part of the purchases pursuant to accelerated share repurchases or Rule 10b5-1 plans. The new share repurchase plan expires on December 31, 2012.

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.

August 15, 2011

Cliffs Natural Resources Inc.

By: /s/ P. Kelly Tompkins

Name: P. Kelly Tompkins Title: Executive Vice President - Legal, Government Affairs and Sustainability & Chief Legal Officer