FORM 4

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

OMB APPROVAL
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

	pe Response														
1. Name and Address of Reporting Person* GREEN SUSAN MIRANDA				2. Issuer Name and Ticker or Trading Symbol CLIFFS NATURAL RESOURCES INC. [CLF]						5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X_ Director					
5917 RY	t) 'LAND DI	(First) RIVE	(Middle)	3. Date of Ear 10/01/2010		Transac	tion (N	Ionth/Day	y/Year)						
(Street) BETHESDA, MD 20817				4. If Amendm	4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting PersonForm filed by More than One Reporting Person				
(City		(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned											
1.Title of Security (Instr. 3)			2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date any (Month/Day/Y	e, if	(Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Followin Reported Transaction(s) (Instr. 3 and 4)		Following	6. Ownership Form: Direct (D)	7. Nature of Indirect Beneficial Ownership
				(Month Bay) 1	carj	Code	V	Amoun	(A) or (D)	Price	or In		or Indirect	(Instr. 4)	
Common	n Stock		10/01/2010			A ⁽¹⁾		75.097	$\begin{array}{c c} 76 & A & 6 \end{array}$	6 6.58	7,273.3	73 (2)		D	
							cor	ıtained i	n this forr	n are			pond unle	ss	1474 (9-02)
			Table II -	- Derivative Sec	curiti	es Acqu					•	OMB com	roi numbe	r.	
	1			(e.g., puts, call	s, wa	rrants,	ired, I	Disposed s, conver	of, or Bene	eficiall	ly Owned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security		on 3A. Deemed Execution D any	(e.g., puts, call	tion	rrants, o	ired, I option 6. 1 and (M	Disposed	of, or Bene tible secur cisable on Date	ficiallities) 7. Ti Amo Undo	•		9. Number	of 10. Owners Form of Derivati Security Direct (or Indire	Beneficia Ownersh (Instr. 4)

Reporting Owners

	Relationships				
Reporting Owner Name / Address	Director	10% Owner	Officer	Other	
GREEN SUSAN MIRANDA					
5917 RYLAND DRIVE	X				
BETHESDA, MD 20817					

Signatures

Traci L. Forrester by Power of Attorney	10/04/2010
**Signature of Reporting Person	Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- Reflects number of Common Shares credited to the account of the Reporting Person in payment of the Reporting Person's Required Quarterly Retainer for the fourth quarter (1) of 2010 under the Cliffs Natural Resources Inc. Nonemployee Directors Compensation Plan ("Plan"). Full shares earned pursuant to the Plan in 2010 will be issued effective January 2, 2011.
- On July 13, 2010, Cliffs Natural Resources Inc. (the "Company") declared a dividend of \$0.14 per share, payable to all holders of record as of August 13, 2010 of common (2) stock payable on September 1, 2010. The amount shown reflects 4.7425 common shares acquired pursuant to a Dividend Reinvestment and Stock Purchase Plan for the Company's Common Stock.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints James D. Graham, Traci L. Forrester, Nancy Watts and Keirsten Riedel and each of them, as the true and lawful attorney or attorneys-in-fact, with full power of substitution and revocation, for the undersigned and in the name, place and stead of the undersigned, in any and all capacities, to execute, on behalf of the undersigned, any and all statements or reports considered necessary or advisable under Section 16(a) of the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder, as amended from time to time ("Exchange Act") with respect to the beneficial ownership of shares of Common Stock, par value \$.125 per share, of Cliffs Natural Resources Inc. ("Company"), including, without limitation, all initial statements of beneficial ownership on Form 3; all statements of changes in beneficial ownership on Form 4; all annual statements of beneficial ownership on Form 5; and all notices of proposed sale of securities on Form 144; and any and all other documents that may be required, from time to time, to be filed with the Securities and Exchange Commission, to execute any and all amendments or supplements to any such statements or forms, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorney or attorneys-in-fact, and each of them, full power and authority to do so and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorney or attorneys-in-fact or any of them or their substitutes, may lawfully do or cause to be done by virtue hereof.

The undersigned acknowledges that neither the Company nor such attorney-in-fact assumes (i) any liability for the undersigned's responsibility to comply with the requirement of the Exchange Act, (ii) any liability of the undersigned for any failure to comply with such requirements, or (iii) any obligation or liability of the undersigned for profit disgorgement under Section 16(b) of the Exchange Act. This Power of Attorney does not relieve the undersigned from responsibility for compliance with the undersigned's obligations under the Exchange Act, including without limitation the reporting requirements under Section 16 of the Exchange Act.

This Power of Attorney shall remain in full force and effect as long as the undersigned is subject to the reporting requirements of Section 16 with respect to the undersigned's holdings and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 13th day of July, 2010.

/s/ Susan M. Green
Susan M. Green
Director