CLOUD PEAK ENERGY INC.
Form 4
December 21, 2010

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

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).

(Print or Type Responses)

1. Name and Address of Reporting Person *
RIO TINTO PLC

(Last) (First) (Middle)

2 EASTBOURNE TERRACE

(Street)

LONDON, X0 W2 6LG

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
CLOUD PEAK ENERGY INC. [CLD]

3. Date of Earliest Transaction (Month/Day/Year)
12/21/2010

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)
__X__ Director
_____ Officer (give title below)
__X__ 10% Owner
_____ Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)
___ Form filed by One Reporting Person
_X_ Form filed by More than One Reporting Person

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, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	12/21/2010		C		29,400,000	A	(1)	29,400,000	I	See footnote (2)
Common Stock	12/21/2010		S		29,400,000	D	$ 19.5	0	I	See footnote (2)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(*e.g.*, puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount Underlying Securiti (Instr. 3 and 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amou Numb Share
Common Membership Units	(1)	12/21/2010		C			29,400,000	(1)	(1)	Common Stock, par value $0.01 per share, of CLD	29,4

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
RIO TINTO PLC 2 EASTBOURNE TERRACE LONDON, X0 W2 6LG	X	X		
RIO TINTO EUROPEAN HOLDINGS LTD 2 EASTBOURNE TERRACE LONDON, X0 W2 6LG	X	X		
RIO TINTO WESTERN HOLDINGS LTD 2 EASTBOURNE TERRACE LONDON, X0 W2 6LG	X	X		
RIO TINTO AMERICA HOLDINGS INC 4700 DAYBREAK PARKWAY SOUTH JORDAN, UT 84095	X	X		
RIO TINTO AMERICA INC 4700 DAYBREAK PARKWAY SOUTH JORDAN, UT 84095	X	X		
RIO TINTO ENERGY AMERICA INC 4700 DAYBREAK PARKWAY SOUTH JORDAN, UT 84095	X	X		
KENNECOTT MANAGEMENT SERVICES CO 4700 DAYBREAK PARKWAY SOUTH JORDAN, UT 84095	X	X		

Signatures

RIO TINTO plc, By: /s/ Ben Mathews (Secretary)	12/21/2010
**Signature of Reporting Person	Date
RIO TINTO EUROPEAN HOLDINGS LIMITED, By: /s/ Ben Mathews (Director)	12/21/2010
**Signature of Reporting Person	Date
RIO TINTO WESTERN HOLDINGS LIMITED, By: /s/ Ben Mathews (Director)	12/21/2010
**Signature of Reporting Person	Date
RIO TINTO AMERICA HOLDINGS INC., By: /s/ James Berson (Attorney in Fact)	12/21/2010
**Signature of Reporting Person	Date
RIO TINTO AMERICA, By: /s/ James Berson (Attorney in Fact)	12/21/2010
**Signature of Reporting Person	Date
RIO TINTO ENERGY AMERICA, By: /s/ James Berson (Operating Officer)	12/21/2010
**Signature of Reporting Person	Date
KENNECOTT MANAGEMENT SERVICES COMPANY, By: /s/ James Berson (Operating Officer)	12/21/2010
**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).

(1) For text of footnote 1, see Exhibit 99.1.

(2) For text of footnote 2, see Exhibit 99.1.

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