Freudenthal David D.
Form 4
February 27, 2012

FORM 4

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

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

(Print or Type Responses)

1. Name and Address of Reporting Person * Freudenthal David D.	2. Issuer Name **and** Ticker or Trading Symbol ARCH COAL INC [ACI]	5. Relationship of Reporting Person(s) to Issuer
(Last)　(First)　(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 02/23/2012	(Check all applicable) __X__ Director 　_____ 10% Owner _____ Officer (give title 　_____ Other (specify below)　 below)
ONE CITYPLACE DRIVE, SUITE 300		
(Street)	4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person ___ Form filed by More than One Reporting Person
ST. LOUIS, MO 63141		
(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, 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			

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	2. Conversion or Exercise	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any	4. Transaction Code	5. Number of Derivative Securities	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Pr Deriv Secu

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(Instr. 3)	Price of Derivative Security		(Month/Day/Year)	(Instr. 8)		Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)						(Instr
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	
Restricted Stock Units	$ 13.93		02/23/2012	A		2,500		(1)	(2)	Common Stock	2,500	$

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Freudenthal David D. ONE CITYPLACE DRIVE SUITE 300 ST. LOUIS, MO 63141	X			

Signatures

/s/ Jon S. Ploetz, Attorney-in-Fact	02/27/2012
**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)   The reporting person received 2500 restricted stock units on February 23, 2012. The restricted stock units vest upon the retirement of the reporting person.

(2)   The resricted stock units do not expire.

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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