PEUGH DAVID B
Form 4
February 27, 2007

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
OMB Number: 3235-0287
Expires: January 31, 2005
Estimated average burden hours per response... 0.5

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 *
PEUGH DAVID B

(Last) (First) (Middle)

ONECITYPLACE DRIVE

(Street)

ST. LOUIS, MO 63141

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
ARCH COAL INC [ACI]

3. Date of Earliest Transaction (Month/Day/Year)
02/23/2007

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
Vice President - Bus Dev

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ 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	02/23/2007		A		384	A	(1)	24,255	D	
Common Stock	02/26/2007		A		1,151	A	(2)	25,406	D	
Common Stock								2,167	I	By 401(k) Plan

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

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SEC 1474 (9-02)

number.

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 Securitie (Instr. 3 and 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amou or Numb of Sha
Restricted Stock Units	(3)	02/23/2007		M			384	(4)	(5)	Common Stock	384
Restricted Stock Units	(3)	02/26/2007		M			1,151	(6)	(5)	Common Stock	1,15
Employee Stock Option (right to buy)	$ 32.99	02/22/2007		A		49,100		(7)	02/21/2007	Common Stock	49,1

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
PEUGH DAVID B ONECITYPLACE DRIVE ST. LOUIS, MO 63141			Vice President - Bus Dev	

Signatures

/s/ Gregory A. Billhartz, Attorney-in-Fact	02/27/2007
**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 2,300 restricted stock units on February 23, 2006. The restricted stock units vest ratably over a three-year period. Upon vesting of 768 restricted stock units on February 23, 2007, the reporting person received 384 shares of common stock and deferred receipt of 384 shares of common stock pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.

(2) The reporting person received 4,600 restricted stock units on February 24, 2005. The restricted stock units vest ratably over a three-year period. Upon vesting of 1,534 restricted stock units on February 26, 2007, the reporting person received 1,151 shares of common stock and deferred receipt of 383 shares of common stock pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.

(3) Each restricted stock unit represents a right to receive one share of common stock unless otherwise deferred, at the reporting person's election, pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.

(4) The reporting person received 2,300 restricted stock units on February 23, 2006. The restricted stock units vest ratably over a three-year period. On February 23, 2007, 768 restricted stock units vested.

(5) The restricted stock units do not expire.

(6) The reporting person received 4,600 restricted stock units on February 24, 2005. The restricted stock units vest ratably over a three-year period. On February 26, 2007, 1,534 restricted stock units vested.

(7) The option vests in three equal annual installments beginning on February 22, 2008.

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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