## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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

### MENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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

1. Name and Address of Reporting Person*  PEUGH DAVID B						2. Issuer Name <b>and</b> Ticker or Trading Symbol ARCH COAL INC [ ACI ]									k all applic Directo	or	g Perso	10% Ow	wner	
(Last)	(Fi	•	(Middle)			3. Date of Earliest Transaction (Month/Day/Year) 02/23/2006												Other (s below) Bus Dev	респу	
(Street) ST. LOU			63141		4. If	f Ame	nendment, Date of Original Filed (Month/Day/Year)							6. Indi Line) X	,					
(City)	(S:		(Zip)		<u> </u>															
Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transa Date (Month/D							2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transa	action	4. Securities Acquired (A) Disposed Of (D) (Instr. 3,			) or 5. Amou Securiti Benefic Owned		nt of es ally Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership	
							Code	v	Amount	(A) (D)	or Pri	ice	Reported Transact (Instr. 3	ion(s)			Instr. 4)			
Common Stock 02/24						/2006			A		383	A		(1)	9,	9,508		D		
Common Stock													1,	1,040		I 4	3y 401(k) Plan			
		T	able II -								osed of onverti				Owned			,		
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deeme Execution if any (Month/Day	Date,	4. Transactior Code (Instr. 8)				6. Date Exercis: Expiration Date (Month/Day/Yea			7. Title and Amount of Securities Underlying Derivative Securi (Instr. 3 and 4)		S (I	. Price of erivative ecurity nstr. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transactio (Instr. 4)	y	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	(A)		Date Exercisal		expiration Pate	Title	Amor or Numl of Share	ber						
Restricted Stock Units	(2)	02/23/2006			A		1,150		(3)		(4)	Common Stock	1,15	50	(2)	1,150		D		
Restricted Stock	(2)	02/24/2006			M			383	(1)		(4)	Common	1,91	17	(1)	1,533		D		

#### **Explanation of Responses:**

- 1. The reporting person received 2,300 restricted stock units on February 24, 2005. The restricted stock units vest ratably over a three-year period. Upon vesting of 767 restricted stock units on February 24, 2006, the reporting person received 383 shares of common stock and deferred receipt of 384 shares of common stock pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.
- 2. 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
- 3. The restricted stock units vest ratably over a three-year period.
- 4. The restricted stock units do not expire.

# Remarks:

/s/ Gregory A. Billhartz, 02/24/2006 Attorney-in-Fact

\*\* Signature of Reporting Person Date

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

- \* 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).

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

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