## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

OMB APPROVAL OMB Number: 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). 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* <u>Taylor Wes M</u>						2. Issuer Name <b>and</b> Ticker or Trading Symbol ARCH COAL INC [ ACI ]									elationship eck all appl X Direct	icable)	Person(s) to I	
(Last) (First) (Middle) ONE CITYPLACE DRIVE						3. Date of Earliest Transaction (Month/Day/Year) 03/14/2008									Office below	r (give title )	Other below	(specify )
(Street) ST. LOU (City)	ST. LOUIS MO 6314		63141 (Zip)		4. If								Line	ndividual or Joint/Group Filing (Check Applicable e)  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. Transac Date (Month/Date)						tion 2A. Deemed Execution Da			3. 4 Transaction Code (Instr. 5		Dispose	4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5)				es ially Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
								Code	v	Amount	(A) or (D) Pr		Price	Reporte Transac (Instr. 3	tion(s)		(Instr. 4)	
	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 I if any (Month/Day	Date, 1	1. Fransa Code (1		of		6. Date Ex Expiration (Month/Da		7. Title and Amount of Securities Underlying Derivative Securi (Instr. 3 and 4)			8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4	Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisab		xpiration ate	Title	Amo or Nun of Sha					
Phantom Stock	(1)	03/14/2008			A		13		(2)		(2)	Common	1	.3	\$0.00	8,081	D	

## **Explanation of Responses:**

- 1. Each share of phantom stock represents a right to receive the value in cash of one share of Arch Coal, Inc. common stock. The shares of phantom stock are held by the director through the Arch Coal, Inc. Deferred Compensation Plan for Non-Employee Directors (the "Plan"). The shares of phantom stock acquired by the director represent dividends attributable to amounts that the director elected to defer under the Plan into a hypothetical investment in shares of Arch Coal, Inc. common stock.
- 2. Shares of phantom stock are payable in cash following termination of the director's service as a director of Arch Coal, Inc. The director may transfer amounts held in the phantom stock account into an alternative investment account at any time.

## Remarks:

/s/ Gregory A. Billhartz, Attorney-in-Fact

03/18/2008

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.