## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPRO	DVAL
OMB Number:	3235-0287
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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).

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

Name and Address of Reporting Person*     Warnecke David N					2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ]								heck all appl Direct	icable)	Person(s) to Is 10% O Other (	wner
(Last) (First) (Middle) CITYPLACE ONE SUITE 300					3. Date of Earliest Transaction (Month/Day/Year) 03/16/2009								below	)	below) g & Trading	Specify
(Street) ST. LOUIS MO 63144				4.	4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Lir	Individual or Joint/Group Filing (Check Applicable ne)  X Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City)	(SI		Zip)	rivativ	0 500	riti	os A	oquirod D	icnoco	d of o	r Por	oficia	Ily Owno			
Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transac Date (Month/Da					2A. Deemed Execution Date,			3. Transact Code (Ins	4. Securities Acquired (A Disposed Of (D) (Instr. 3, 5)			d (A) or r. 3, 4 an	5. Amount of 6 Securities Feneficially (		o. Ownership Form: Direct D) or Indirect I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (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		3A. Deemed Execution Date, if any (Month/Day/Year	Code				6. Date Exercisable and Expiration Date (Month/Day/Year)		Amor Secu Unde Deriv	7. Title and Amount of Securities Underlying Derivative Securit (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)		Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	n Title		Amount or Number of Shares				
Phantom Stock	(1)	03/16/2009		A		19		(2)	(2)	Comi		19	\$13.71 <sup>(1)</sup>	2,926	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 executive officer through the Arch Coal, Inc. Deferred Compensation Plan (the "Plan"). The shares of phantom stock acquired by the executive officer represent amounts that the executive officer 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 on the date or dates elected by the executive officer, subject to the terms of the Plan. The executive officer may transfer any and all of the phantom stock account into an alternative investment account at any time.

## Remarks:

/s/ Gregory A. Billhartz, 03/18/2009 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.