FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL									
OMB Number:	3235-0287								
Estimated average burden									
hours per response:	0.5								
	OMB Number: Estimated average burd								

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* PERRY A MICHAEL						2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI]									elationship eck all appli Directo	cable)	g Pers	son(s) to Iss 10% Ov	
(Last) ONE CI	(FI	,	(Middle)			. Date of Earliest Transaction (Month/Day/Year) 3/31/2010										Officer (give title below)		Other (sbelow)	specify
(Street) ST. LOU (City)		tate)	(Zip)	n-Deriv	04/02/2010 Line) X Fo) K Form f Form f Persor								
1. Title of Security (Instr. 3) 2. Transa Date (Month/E					ction 2A. Deemed Execution Date,			3. 4. Securities Acquired (A Disposed Of (D) (Instr. 3. 5)				, 4 and Securit Benefic Owned		ies Fo cially (D Following (I)		n: Direct r Indirect istr. 4)	7. Nature of Indirect Beneficial Ownership		
									Code	v	Amount	(A) or (D)		rice	Reporte Transac (Instr. 3	ction(s)			(Instr. 4)
		7	able II -						uired, D , option						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/Da	Date,	4. Fransaction Code (Instr. B)		n of		6. Date Exercisabl Expiration Date (Month/Day/Year)		•	le and 7. Title and Amount of Securities Underlying Derivative Se (Instr. 3 and 4		urity	8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	e s ally	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Code		v	(A)	(D)	Date Exercisab		Expiration Date	Title	or	ount nber res					
Phantom Stock	(1)	03/31/2010			A		656 ⁽²⁾		(3)		(3)	Common Stock	65	6 ⁽²⁾	\$22.85	27,483 ⁽²	2)	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") and represent past compensation that the director elected to defer under the Plan into a hypothetical investment in shares of Arch Coal, Inc. common stock and/or dividends attributable to such deferred amounts.
- 2. The number of securities reported previously were inadvertently misstated.
- 3. 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 certain portions of the phantom stock account into an alternative investment account at any time.

Remarks:

/s/ Jon S. Ploetz, Attorney-in-

Fact

Date

04/07/2010

** Signature of Reporting Person

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.