FORM 4

obligations may continue. See Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT	OF CHANGES	IN BENEFICIAL	OWNERSHIP

OMB APPRO	DVAL
OMB Number:	3235-0287
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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* BOYD JAMES R				2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI]									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
BUYD	JAMES.	<u>K</u>			-					,				:	X Direct	or		10% O	vner
(Last) (First) (Middle) ONECITYPLACE DRIVE				3. Date of Earliest Transaction (Month/Day/Year) 06/15/2012									Office below	r (give title)		Other (sbelow)	specify		
					4. 11	f Ame	ndmen	t, Date	of Origina	Filed	(Month/E	Day/Year)		6. Ir		Joint/Group	Filing	(Check Ap	plicable
(Street) ST. LOU	IIS M	0	63141											1	X Form	filed by One		Ü	
(City)	(S	tate)	(Zip)												Perso	n			
		Tab	le I - Nor	า-Deriv	ative	e Se	curiti	es A	cquired	Dis	posed	of, or B	enef	icial	ly Owne	d			
Date					2A. Deemed Execution Date if any (Month/Day/Yea			Code (Instr. 5)				Benefic Owned	ies For ially (D) Following (I) (rm: Direct) or Indirect (Instr. 4)	7. Nature of Indirect Beneficial Ownership			
							Code	v	Amoun	(A) or (D)		Price	Reporte Transac (Instr. 3	tion(s)		(Instr. 4)			
		Т	able II - I (uired, [s, optio						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,	Code (In				6. Date Exercisal Expiration Date (Month/Day/Year			Amount of Securities Underlying Derivative	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	/ G	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Cod	Code	v	(A)	(D)	Date Exercisab		xpiration ate	Title	or	ount nber res					
Phantom Stock	(1)	06/15/2012			Α		565		(2)		(2)	Common Stock	50	65	\$6.01	113,723		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/ Jon S. Ploetz, Attorney-in-

Fact

** Signature of Reporting Person

Date

06/18/2012

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.