SEC Form 4	
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### FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

1. Name and Addre	ss of Reporting Perso HENRY JR	n*	2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ]		tionship of Reporting Per all applicable) Director Officer (give title	son(s) to Issuer 10% Owner Other (specify
(Last) ONE CITYPLA SUITE 300	(First) CE DRIVE	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 11/19/2008		below) Senior VP-Strate	below) egic Dev.
(Street) ST. LOUIS (City)	MO (State)	63141 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	idual or Joint/Group Filin Form filed by One Rep Form filed by More tha Person	orting Person

### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transa Code ( 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported	(D) or Indirect	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(1150.4)

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 Date, if any (Month/Day/Year)	4. Transa Code ( 8)		of		Expiration Date (Month/Day/Year)		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(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Phantom Stock	(1)	11/19/2008		Ι		2,284		(2)	(2)	Common Stock	2,284	\$12.8 <sup>(1)</sup>	8,251	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 transfer into a hypothetical investment in shares of Arch Coal, Inc. common stock pursuant to the Plan.

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:**

<u>/s/ Gregory A. Billhartz,</u> <u>Attorney-in-Fact</u>

11/20/2008

Date

\*\* Signature of Reporting Person

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

 $\ast$  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.