FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden	

0.5

hours per response:

Following

Reported Transaction(s)

(Instr. 4)

40,427

06/18/2007

(I) (Instr. 4)

D

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 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person ARCH COAL INC [ACI] **HUNT DOUGLAS H** Director 10% Owner Officer (give title Other (specify 3. Date of Earliest Transaction (Month/Day/Year) below) below) (Last) (First) (Middle) 06/15/2007 ONECITYPLACE DRIVE 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) (Street) Form filed by One Reporting Person ST. LOUIS MO 63141 Form filed by More than One Reporting (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) 1. Title of Security (Instr. 3) 2. Transaction 2A. Deemed 5. Amount of 6. Ownership 7. Nature Transaction Execution Date. Securities Form: Direct of Indirect (Month/Day/Year) Code (Instr. 8) (D) or Indirect if any Beneficially Beneficial (Month/Day/Year) Owned Following Ownership (I) (Instr. 4) Reported (Instr. 4) (A) or (D) Code Amount Price (Instr. 3 and 4) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 1. Title of 3A. Deemed 5. Number 6. Date Exercisable and 7. Title and 9. Number of 11. Nature 3. Transaction 8. Price of 10. Ownership Expiration Date (Month/Day/Year) Derivative Conversion **Execution Date** Transaction Derivative derivative of Indirect (Month/Day/Year) Derivative Securities Securities Security Code (Instr. Beneficial or Exercise if any Security Form: Direct (D) (Instr. 3) (Month/Day/Year) Underlying Derivative Security Price of 8) Securities (Instr. 5) **Beneficially** Ownership Acquired Owned (Instr. 4)

Explanation of Responses:

(1)

Security

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.

Exercisable

(2)

(A) or Disposed

(D)

of (D) (Instr. 3, 4 and 5)

(A)

72

v

Code

A

Remarks:

Phantom

Stock

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

Amount or Number

Shares

72

\$39.07

(Instr. 3 and 4)

Title

Stock

Expiration

Date

** 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).

06/15/2007

** 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.

^{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 certain portions of the phantom stock account into an alternative investment account at any time.