FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to |
|--|
| Section 16. Form 4 or Form 5 |
| obligations may continue. See |
| Instruction 1(h) |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

| OMB APPROVAL | | | | | | | | |
|-----------------------|-----------|--|--|--|--|--|--|--|
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| | | or Section 30(h) of the Investment Company Act of 1940 | | | | | | |
|--|---------------------|--|---|---|--|--|--|--|
| ss of Reporting F | Person* | 2. Issuer Name and Ticker or Trading Symbol <u>ARCH COAL INC</u> [ACI] | | 5. Relationship of Reporting Person(s) to Iss (Check all applicable) X Director 10% Ow | | | | |
| (Last) (First) (Middle) ONE CITYPLACE DRIVE (Street) ST. LOUIS MO 63141 (City) (State) (Zip) | | 3. Date of Earliest Transaction (Month/Day/Year) 06/30/2006 | | Officer (give title below) | Other (specify below) | | | |
| | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) X | vidual or Joint/Group Filing (Check Applicab Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| | (First) CE DRIVE | (First) (Middle) CE DRIVE MO 63141 | ss of Reporting Person* 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI] 3. Date of Earliest Transaction (Month/Day/Year) (First) (Middle) ICE DRIVE 4. If Amendment, Date of Original Filed (Month/Day/Year) MO 63141 | ss of Reporting Person* 2. Issuer Name and Ticker or Trading Symbol 5. Rela ARCH COAL INC [ACI] 3. Date of Earliest Transaction (Month/Day/Year) 5. Rela (First) (Middle) 06/30/2006 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. India MO 63141 5. Rela 5. Rela | ss of Reporting Person* 2. Issuer Name and Ticker or Trading Symbol 5. Relationship of Reporting Person* M ARCH COAL INC [ACI] 5. Relationship of Reporting Person* (First) (Middle) CE DRIVE 3. Date of Earliest Transaction (Month/Day/Year) 6. Individual or Joint/Group Fill MO 63141 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Fill MO 63141 Year Year Year | | | |

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

| 1. Title of Security (Instr. 3) | Date (Month/Day/Year) | | Transaction Code (Instr. | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------|--|-----------------------------|---|---|---------------|-------|--|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | Reported Transaction(s) (Instr. 3 and 4) | | (1130.4) |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| (3, pare,, -pare,,, | | | | | | | | | | | | | | | |
|---|---|--|---|------------------------------|---|--|--|---------------------|---|-----------------|---|---------|--|--|--|
| 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) | | 5. Nu of Deriv Secu Acqu (A) o Dispo of (D (Insti and S | Expiration Date (Month/Day/Year) irred 3, 4 | | Expiration Date Amount of Month/Day/Year) Securities Underlying | | Amount of Derivative Security (Instr. 5) 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) | 06/30/2006 | 07/06/2006 | Α | | 531 | | (2) | (2) | Common Stock | 531 | \$42.37 | 3,575 ⁽³⁾ | 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. 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.

3. The director's phantom stock account has been adjusted for the two-for-one stock dividend in the form of a 100% stock dividend, payable by Arch Coal, Inc. on May 15, 2006 to all holders of record of common stock on May 5, 2006.

Remarks:

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

07/07/2006

** 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.

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| Person | |
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