## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

| wasnington, | D.C. | 20549 |  |
|-------------|------|-------|--|
|             |      |       |  |

| STATEMENT | OF ( | CHANGES | IN RENE | FICΙΔΙ | OWNERS | ΗΙΡ |
|-----------|------|---------|---------|--------|--------|-----|
| STATEMENT | OF ( | SHANGES |         | FICIAL | OWNERS | ПІГ |

OMB APPROVAL

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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*  JENNINGS BRIAN J                       |  |               |         |  | 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ] |   |     |  |  |   |   |                         | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)    |  |                      |  |   |                                       |      |
|--|--|---------------|---------|--|---|---|-----|--|--|---|---|-------------------------|--|--|----------------------|--|---|---------------------------------------|------|
| <u>JEININI</u>   | NGS BRI  | <u>.AIN J</u> |         |  |   |   |     |  |  | , |   |                         |  | X  | Direct               | or   |   | 10% Ov                                | vner |
| (Last) ONE CIT   | (Fi  | ,             | Middle) |  |   | 3. Date of Earliest Transaction (Month/Day/Year) 03/14/2008 |     |  |  |   |   |                         |  | Office<br>below                                    | r (give title<br>)   |  | Other (s<br>below)  | specify                               |      |
| (Street)   |  |               |         |  | 4. If   |   |     |  |  |   |   | 6. Ind<br>Line)         | 6. Individual or Joint/Group Filing (Check Applicable .ine)                |  |                      |  | ·   |                                       |      |
| ST. LOU  | IS M   | 0             | 53141   |  |   |   |     |  |  |   |   | X                       | X Form filed by One Reporting Person Form filed by More than One Reporting |  |                      |  |   |                                       |      |
| (City)   | (St  | ate) (        | Zip)    |  |   |   |     |  |  |   |   |                         |  |  | Perso                | n  |   |                                       |      |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |  |               |         |  |   |   |     |  |  |   |   |                         |  |  |                      |  |   |                                       |      |
| Date   |  |               |         |  | ction 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year  |   |     | Code (I  | Transaction Disposed Of (D) (Instr. 3, 4 |   |   | and Securiti<br>Benefic |  | ies Form<br>cially (D)<br>Following (I) (I         |                      | n: Direct<br>r Indirect<br>istr. 4)                              | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |                                       |      |
|  |  |               |         |  |   |   |     |  | Code                                     | v | Amount  | (A) (D)                 | PI   | rice   | Transac<br>(Instr. 3 | tion(s)  |   |                                       | ()   |
|  | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |               |         |  |   |   |     |  |  |   |   |                         |  |  |                      |  |   |                                       |      |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)                              | Derivative Conversion Date Execution Date, or Exercise (Month/Day/Year) if any   |               |         |  | ransaction of ode (Instr. Derivative                              |   |     | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |  |   | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative Secur<br>(Instr. 3 and 4) |                         | S (1   | B. Price of<br>Derivative<br>Gecurity<br>Instr. 5) |                      | Ownershij<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4 | Ownership<br>Form:  | Beneficial<br>Ownership<br>(Instr. 4) |      |
|  |  |               |         |  | Code  | v   | (A) | (D)  | Date<br>Exercisable                      |   | opiration   | Title                   | Amou<br>or<br>Numl<br>of<br>Share  | ber  |                      |  |   |                                       |      |
| Phantom<br>Stock   | (1)  | 03/14/2008    |         |  | A   |   | 7   |  | (2)                                      |   | (2)   | Common<br>Stock         | 7  |  | \$45.13              | 4,828  |   | 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 amounts held in the phantom stock account into an alternative investment account at any time.

## Remarks:

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

\*\* Signature of Reporting Person Date

03/18/2008

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

- $^{\star}$  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.