FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

|   | OMB APPRO                | VAL       |  |  |  |  |  |  |  |
|---|--------------------------|-----------|--|--|--|--|--|--|--|
|   | OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |
| l | Estimated average burden |           |  |  |  |  |  |  |  |
| l | hours per response:      | 0.5       |  |  |  |  |  |  |  |

|   | Check this box if no longer subject to |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|
| ١ | Section 16. Form 4 or Form 5           |  |  |  |  |  |  |  |  |  |
| ı | obligations may continue. See          |  |  |  |  |  |  |  |  |  |
|   | Instruction 1(h)                       |  |  |  |  |  |  |  |  |  |

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*  Morris George C III |   |  |  |         |                           | 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ] |   |      |                                    |                                      |                     |   |                |                         |   | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  |   |  |   |  |  |
|   |   |  |  |         |                           |   |   |      |                                    | _                                    |                     |   |                |                         | Compared to the compared to | or   |   | 10% O  | wner  |  |  |
| (Last) (First) (Middle) ONE CITYPLACE DRIVE                   |   |  |  |         |                           | 3. Date of Earliest Transaction (Month/Day/Year) 03/07/2012       |   |      |                                    |                                      |                     |   |                |                         | Office<br>below   | r (give title<br>)   |   | Other (sbelow)   | specify   |  |  |
|   |   |  |  |         |                           |   |   |      |                                    |                                      |                     |   |                |                         |   |  |   |  |   |  |  |
| SUITE 300   |   |  |  |         |                           | 4. If Amendment, Date of Original Filed (Month/Day/Year)          |   |      |                                    |                                      |                     |   |                |                         | 6. Individual or Joint/Group Filing (Check Applicable Line)   |  |   |  |   |  |  |
| (Street)  |   |  |  |         | 1                         |   |   |      |                                    |                                      |                     |   |                | - 1                     | ,   | filed by One   | e Rep   | orting Perso   | on  |  |  |
| ST. LOUIS MO 63141  |   |  |  |         |                           |   |   |      |                                    |                                      |                     |   |                |                         | Form filed by More than One Reporting Person  |  |   |  |   |  |  |
| (City)  | (S  | tate) (                                    | (Zip)  |         |                           |   |   |      |                                    |                                      |                     |   |                |                         |   |  |   |  |   |  |  |
|   |   | Tab  | le I - Noi   | n-Deriv | ative                     | Sec   | curitie   | s Ac | quired                             | Dis                                  | posed o             | of, or E  | ene            | ficial                  | y Owne  | d  |   |  |   |  |  |
| 1. Title of Security (Instr. 3)  2. Transac Date (Month/Da    |   |  |  |         |                           | ar) E   | A. Deemed<br>xecution Date,<br>any<br>Month/Day/Year) |      | Code                               | Transaction Disposed Code (Instr. 5) |                     |   |                |                         | 5. Amou<br>Securiti<br>Benefic<br>Owned<br>Reporte  | es<br>ially<br>Following   | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) |  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |
|   |   |  |  |         |                           |   |   |      |                                    | v                                    | Amount              | (A)<br>(D)  | or             | Price                   | Transac<br>(Instr. 3  | ction(s)   |   |  | (111301.4)  |  |  |
| Common Stock 03/07/2  |   |  |  |         |                           | /2012   |   | P    |                                    | 8,400 A S                            |                     | \$11.8  | 9 19           | 19,053                  |   | D  |   |  |   |  |  |
|   |   | Т  | able II -  |         |                           |   |   |      |                                    |                                      | osed of<br>converti |   |                |                         | Owned   |  |   |  |   |  |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)           | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Dat<br>if any<br>(Month/Day/Yo | Date,   | Date, Transac<br>Code (Ir |   |   |      | 6. Date E<br>Expiratio<br>(Month/D | n Date                               |                     | e and 7. Title and Amount of Securities Underlying Derivative Secu (Instr. 3 and 4) |                |                         | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)   | 9. Number<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction<br>(Instr. 4) | ly  | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>t (Instr. 4)                           |  |  |
|   |   |  |  |         | Code                      | v   | (A)   | (D)  | Date<br>Exercisa                   |                                      | Expiration<br>Date  | Title   | or<br>Nu<br>of | nount<br>imber<br>iares |   |  |   |  |   |  |  |
| Restricted  | ¢11.85  | 03/07/2012                                 |  |         | Δ                         |   | 2 500   |      | (1)                                |                                      | (2)                 | Commo   | 1 2            | 500                     | \$0.00  | 2 500  |   | D  |   |  |  |

## **Explanation of Responses:**

- 1. The reporting person received 2,500 restricted stock units on March 7, 2012. The restricted stock units vest upon the retirement of the reporting person.
- 2. The restricted stock units do not expire.

## Remarks:

Units

/s/ Jon S. Ploetz, Attorney-in-Fact 03/09/2012

\*\* Signature of Reporting Person Date

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.