FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| STATEMENT | OF CHAN | GES IN F | RENEEICIAI | OWNERSHIP |
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OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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* $\underline{HUNT\ DOUGLAS\ H}$ | | | | | 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI] | | | | | | | | | ck all appl | , | g Perso | n(s) to Iss | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------|-------------------------------------------------------------|-----------------|--------------------------------------------------------------------------|--------|---------|-----------------------------------------------------------|---------------------|----------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|
| (Last) (First) (Middle) ONECITYPLACE DRIVE | | | 3. Date of Earliest Transaction (Month/Day/Year) 06/30/2011 | | | | | | | | | _ | r (give title | | Other (s | · | | | |
| (Street) ST. LOU (City) | | | 63141 (Zip) | | 4. If | f Amei | ndment | t, Date | of Original | Filed | (Month/E | Oay/Year) | | 6. Inc Line) | Form | Joint/Group filed by One filed by More n | Report | ing Perso | n |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date) | | | | Execution Date, | | | Code (I | Transaction Disposed Of (D) (Instr. 3, 4) Code (Instr. 5) | | | 4 and Securit | | es ially Following | 6. Owner Form: D (D) or Ir (I) (Insti | Direct ndirect r. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | Code | v | Amount | (A) or (D) | | rice | Transac (Instr. 3 | tion(s) | | | (11150.4) | | |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| Derivative Conversion Date | | 3. Transaction Date (Month/Day/Year) | e Execution | | Date, Transaction Code (Instr | | n of | | Expiration | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | |] | 3. Price of Derivative Security Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transactior (Instr. 4) | Ov Fo Di or (I) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | (A) | (D) | Date Exercisable | | opiration | Title | Amo or Num of Shar | ber | | | | | |
| Phantom Stock | (1) | 06/30/2011 | | | A | | 788 | | (2) | | (2) | Common Stock | 78 | 8 | \$26.66 | 59,897 | | 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/ Jon S. Ploetz, Attorney-in-

07/01/2011

Fact

** 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.