FORM 4

Check this box if no longer subjection 16. Form 4 or Form 5

obligations may continue. See

Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

| wasnington, | D.C. | 20549 |
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| t to | STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP |
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| OMB APPROVAL | | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | |
| Estimated average burden | | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | |

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person* Cochran Kenneth D. | | | | | 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI] | | | | | | | heck all app | tor | 10% O | |
|--|---|----------------------|---|-------------|--|--------|--|--|----------------------------|--|--|---|---|---|---|
| (Last) (First) (Middle) ONE CITYPLACE DRIVE SUITE 300 | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 11/26/2014 | | | | | | | | Officer (give title below) Othe below Sr. VP - Operations | | |
| (Street) ST. LOU (City) | | | 63141 (Zip) | 4. | If Amer | ndment | t, Date | e of Original Fi | led (Month | /Day/Year) | | ne) X Form | Joint/Group Fi filed by One R filed by More t on | eporting Perso | on |
| (- 9) | | | le I - Non-D | erivativ | e Sec | uritie | es A | cquired, D | isposed | l of, or B | eneficia | ılly Owne | d | | |
| 1. Title of Security (Instr. 3) 2. Transact Date | | | | Transaction | action 2A. Deemed Execution Date, | | | 3. Transact Code (Ins | 4. Sec Dispo str. 5) | urities Acqui sed Of (D) (Ir | ired (A) or nstr. 3, 4 ar | 5. Amo Securit Benefic Owned Reporte Transac | 5. Amount of Securities Beneficially (D) Owned Following Reported Transaction(s) (Instr. 3 and 4) | | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | Т | able II - Der (e.g | | | | | quired, Dis s, options | | | | y Owned | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | ise (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | Code | Transaction Code (Instr. | | vative rities lired rosed) r. 3, 4 | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title an Amount of Securities Underlyin Derivative (Instr. 3 a | of s ig e Security | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | ı Title | Amount or Number of Shares | | | | |
| Phantom Stock | (1) | 11/26/2014 | | A | | 215 | | (2) | (2) | Common Stock | 215 | \$2.41 | 20,989 | 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 Executive Officer through the Arch Coal, Inc. Deferred Compensation Plan (the "Plan") and represent past compensation, the vested portion of restricted stock awards and/or payouts under other incentive compensation arrangements that the Executive Officer elected to defer under the Plan into a hypothetical investment in shares of Arch Coal Common stock and/or dividends paid with respect to such deferral amounts.
- 2. Shares of phantom stock are payable in cash on the date or dates elected by the executive officer, subject to the terms of the Plan. The executive officer may transfer any and all of the phantom stock account into an alternative investment account at any time.

Remarks:

/s/ Jon S. Ploetz, Attorney-in-

<u>Fact</u>

** Signature of Reporting Person

Date

12/01/2014

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.