# INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES 

| OMB APPROVAL |
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| OMB Number: <br> Estimated average burden <br> hours per response: |


| 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 ${ }^{*}$ Vogel Scott D. | 2. Date of Event Requiring Statement (Month/Day/Year) 10/05/2016 |  | 3. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ARCH ] |  |  |  |  |
| (Last) (First) (Middle) |  |  | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) |  |  | 5. If Amendment, Date of Original Filed (Month/Day/Year) |  |
| ONE CITYPLACE DRIVE, SUITE 300 |  |  |  |  |  |  |  |
|  |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line) |  |  |
| (Street) <br> ST. LOUIS <br> MO <br> 63141 |  |  | X Form filed by One Reporting Person <br> Form filed by More than One Reporting Person |  |  |  |
| (City) (State) (Zip) |  |  |  |  |  |  |
| Table I - Non-Derivative Securities Beneficially Owned |  |  |  |  |  |  |  |
|  |  |  | 2. Amount of Securities <br> Beneficially Owned (Instr. 4) 3. Ownership <br> Form: Direct (D) <br> or Indirect (I) <br> (Instr. 5) |  |  | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |  |
| Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |  |  |  |  |  |  |  |
| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) |  | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) |  | 4. Conversion or Exercise Price of Derivative Security | 5. <br> Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|  | Date Exercisable | Expiration Date | Title | Amount or Number of Shares |  |  |  |

## Explanation of Responses:

## Remarks:

No securities are beneficially owned.

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 5 (b)(v).
** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. $78 \mathrm{ff}(\mathrm{a})$
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.

The undersigned appoints the following individuals with full power to each of them to act alone, as his true and lawful attorneys-in-fact and agents to execute and file on behalf of the undersigned (i) a Form ID, and any amendments thereto; and (ii) all Forms 3, 4 and 5, and any amendments thereto, that the undersigned may be required to file with the Securities and Exchange Commission, and any stock exchange or similar authority, as a result of the undersigned's ownership of or transactions in securities of Arch Coal, Inc. The authority of the following individuals under this Power of Attorney shall continue until the undersigned is no longer required to file Forms 3, 4 and 5 with regard to the undersigned's ownership of or transactions in securities of Arch Coal, Inc., unless earlier revoked in writing. The undersigned acknowledges that the following individuals are not assuming any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

The following Officers of Arch Coal, Inc.:
Secretary of Arch Coal, Inc.
Assistant Secretary of Arch Coal, Inc.
General Counsel of Arch Coal, Inc.
IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 6th day of September, 2016.

/s/ Scott D. Vogel

