

ARCH COAL INC  
Form 4  
December 16, 2008

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

Check this box  
if no longer  
subject to  
Section 16.  
Form 4 or  
Form 5  
obligations  
may continue.  
*See* Instruction  
1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF  
SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

## OMB APPROVAL

OMB  
Number: 3235-0287  
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2005  
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response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Warnecke David N

(Last) (First) (Middle)

CITYPLACE ONE, SUITE 300

(Street)

ST. LOUIS, MO 63144

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading  
Symbol  
ARCH COAL INC [ACI]

3. Date of Earliest Transaction  
(Month/Day/Year)  
12/15/2008

4. If Amendment, Date Original  
Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_\_X\_\_ Officer (give title \_\_\_\_ Other (specify  
below) below)

VP-Marketing &amp; Trading

6. Individual or Joint/Group Filing(Check  
Applicable Line)  
\_\_X\_\_ Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting  
Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of<br>Security<br>(Instr. 3) | 2. Transaction Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 3. Transaction<br>Code<br>(Instr. 8) | 4. Securities<br>Acquired (A) or<br>Disposed of (D)<br>(Instr. 3, 4 and 5) | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4) | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I)<br>(Instr. 4) | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|---------------------------------------|-----------------------------------------|-------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------|
|                                       |                                         |                                                             | Code                                 | V                                                                          | Amount                                                                                                             | (D)                                                                  | Price                                                             |

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

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SEC 1474  
(9-02)

**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 | 2. Conversion<br>or Exercise | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date, if<br>any | 4. Transaction<br>Code | 5. Number<br>of | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) | 7. Title and Amount of<br>Underlying Securities<br>(Instr. 3 and 4) | 8. Price of<br>Derivative<br>Security |
|---------------------------------------|------------------------------|-----------------------------------------|-----------------------------------------|------------------------|-----------------|----------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------|
|---------------------------------------|------------------------------|-----------------------------------------|-----------------------------------------|------------------------|-----------------|----------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------|

# Edgar Filing: ARCH COAL INC - Form 4

| (Instr. 3)       | Price of<br>Derivative<br>Security | (Month/Day/Year) | (Instr. 8) | Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3,<br>4, and 5) | (Instr. 5) |     |                     |                    |                 |                                        |                 |
|------------------|------------------------------------|------------------|------------|-------------------------------------------------------------------------------------------------|------------|-----|---------------------|--------------------|-----------------|----------------------------------------|-----------------|
|                  |                                    |                  | Code       | V                                                                                               | (A)        | (D) | Date<br>Exercisable | Expiration<br>Date | Title           | Amount<br>or<br>Number<br>of<br>Shares |                 |
| Phantom<br>Stock | (1)                                | 12/15/2008       | I          |                                                                                                 | 17         |     | (2)                 | (2)                | Common<br>Stock | 17                                     | \$ 15.56<br>(1) |

## Reporting Owners

| Reporting Owner Name / Address                                        | Relationships |           |                        |       |
|-----------------------------------------------------------------------|---------------|-----------|------------------------|-------|
|                                                                       | Director      | 10% Owner | Officer                | Other |
| Warnecke David N<br>CITYPLACE ONE<br>SUITE 300<br>ST. LOUIS, MO 63144 |               |           | VP-Marketing & Trading |       |

## Signatures

/s/ Gregory A. Billhartz,  
Attorney-in-Fact  
12/16/2008

\*\*Signature of Reporting Person

Date

## Explanation of Responses:

\* 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).

- (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"). The shares of phantom stock acquired by the executive officer represent amounts that the executive officer elected to defer under the Plan into a hypothetical investment in shares of Arch Coal, Inc. common stock.
- (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.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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