

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

| OMB APPROVAL | |
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| OMB Number: | 3235-0104 |
| 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

| | | | |
|--|---|---|---|
| 1. Name and Address of Reporting Person* <u>Drexler John T.</u> (Last) (First) (Middle) ONE CITY PLACE SUITE 300 (Street) ST. LOUIS MO 63141 (City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year) 05/01/2008 | 3. Issuer Name and Ticker or Trading Symbol <u>ARCH COAL INC [ACI]</u> | |
| | | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) Sr. V.P. and CFO | 5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Beneficially Owned

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| Common Stock | 951 | D | |

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. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|-----------------|---|--|--|---|
| | Date Exercisable | Expiration Date | | | | |
| Employee Stock Options (right to buy) | (1) | 02/29/2012 | Common Stock | 2,074 | 9.08 | D |
| Employee Stock Options (right to buy) | (2) | 04/25/2012 | Common Stock | 2,074 | 11.3 | D |
| Employee Stock Options (right to buy) | (3) | 07/22/2014 | Common Stock | 5,400 | 16.1 | D |
| Employee Stock Options (right to buy) | (4) | 02/22/2017 | Common Stock | 8,700 | 32.99 | D |
| Employee Stock Options (right to buy) | (5) | 02/21/2018 | Common Stock | 4,650 | 52.69 | D |
| Employee Stock Options (right to buy) | (6) | 04/24/2018 | Common Stock | 34,400 | 56.84 | D |

Explanation of Responses:

- The reporting person received 10,700 stock options on February 28, 2002. As of the date of this report, the reporting person has 2,074 stock options remaining which vested on February 28, 2006.
- The reporting person received 10,700 stock options on April 25, 2002. As of the date of this report, the reporting person has 2,074 stock options remaining which vested on April 25, 2006.
- The reporting person received 6,000 stock options on July 22, 2004. As of the date of this report, the reporting person has 5,400 stock options remaining. The stock options vested as follows: 2,000 stock options vested on July 22, 2005; 2,000 stock options vested on July 22, 2006; and 2,000 stock options vested on July 22, 2007.
- The reporting person received 8,700 stock options on February 22, 2007. The stock options vest as follows: 2,900 stock options vested on February 22, 2008; 2,900 stock options vest on February 22, 2009; and 2,900 stock options vest on February 22, 2010.
- The reporting person received 4,650 stock options on February 21, 2008. The stock options vest as follows: 1,550 stock options vest on February 21, 2009; 1,550 stock options vest on February 21, 2010; and 1,550 stock options vest on February 21, 2011.
- The reporting person received 34,400 non-qualified stock options on April 24, 2008. The stock options vest as follows: 11,467 stock options vest on April 24, 2009; 11,467 stock options vest on April 24, 2010; and 11,466 stock options vest on April 24, 2011.

Remarks:

/s/ Gregory A. Billhartz, 05/07/2008
Attorney-in-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 5 (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.

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