

PEUGH DAVID B
Form 4
September 13, 2005

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

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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

(Print or Type Responses)

1. Name and Address of Reporting Person *
PEUGH DAVID B

(Last) (First) (Middle)
ONECITYPLACE DRIVE
(Street)

ST. LOUIS, MO 63141

(City) (State) (Zip)

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

3. Date of Earliest Transaction
(Month/Day/Year)
09/09/2005

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 below) ___ Other (specify below)

Vice President - Bus Dev

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 Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	(A) or (D)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	Price		
Common Stock	09/09/2005		M		19,388	A \$ 18.15	0	D
Common Stock	09/09/2005		M		19,388	A \$ 22.6	0	D
Common Stock	09/09/2005		S		28,776	D \$ 63.351	7,698	D
Common Stock	09/09/2005		S		10,000	D \$ 63.514	1,027	I
								By 401(k) plan

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

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(9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	Amount or Number of Shares
Employee Stock Options	\$ 18.15	09/09/2005		M	19,388	(1) 02/29/2012	Common Stock	19,388
Employee Stock Options	\$ 22.6	09/09/2005		M	19,388	(2) 04/25/2012	Common Stock	19,388

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
PEUGH DAVID B ONECITYPLACE DRIVE ST. LOUIS, MO 63141			Vice President - Bus Dev	

Signatures

/s/ Janet L. Horgan,
Attorney-in-Fact
Date: 09/13/2005

**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) 6,463 shares vested on February 28, 2003; 6,463 shares vested on February 29, 2004; and 6,462 shares vested on February 28, 2005.

(2) 6,463 shares vested on April 25, 2003; 6,463 shares vested on April 25, 2004; and 6,462 shares vested on April 25, 2005.

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

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.