SEC	Form	4
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FORM 4

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

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response: 0.5

1. Name and Address of Reporting Person*			2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
LEER STEV	<u>EIN F</u>			X	Director	10% Owner			
(Last) (First) (Middle)		(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 02/21/2008	x	Officer (give title below)	Other (specify below)			
ONECITYPLACE DRIVE			02/21/2000		Chairman and CEO				
(Street)			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line)	idual or Joint/Group Filing (Check Applicable			
ST. LOUIS	MO	63141		X	Form filed by One Report	ting Person			
					Form filed by More than (Person	One Reporting			
(City)	(State)	(Zip)			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. Transa Code (8)	ction	4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and			5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(Instr. 4)

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. Transa Code (8)		5. Numbo Derivativ Securitie Acquired or Dispo of (D) (In 3, 4 and	e s I (A) sed str.	6. Date Exerc Expiration Da (Month/Day/Y	te	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Transaction(s) (Instr. 4)		
Employee Stock Options (right to buy)	\$ 52.69	02/21/2008		A		127,100		(1)	02/21/2018	Common Stock	127,100	\$0.00	127,100	D	
Employee Stock Options (right to buy)	\$ 52.69	02/21/2008		A		64,100		(2)	02/21/2018	Common Stock	64,100	\$0.00	64,100	D	
Restricted Stock Units	(3)	02/21/2008		А		32,550		(4)	(5)	Common Stock	32,550	(3)	32,550	D	

Explanation of Responses:

1. The option vests in three equal annual installments beginning on February 21, 2009.

2. The option vests in two equal installments as follows: 32,050 shares vest on February 21, 2011 and 32,050 shares vest on February 21, 2012.

3. Each restricted stock unit represents a right to receive one share of common stock unless otherwise deferred, at the reporting person's election, pursuant to the Arch Coal, Inc. Executive Deferred Compensation Plan.

4. The reporting person received 32,550 restricted stock units on February 21, 2008. The restricted stock units vest ratably over a two year period beginning on February 21, 2011.

5. The restricted stock units do not expire.

Remarks:

<u>/s/ Gregory A. Billhartz,</u> <u>Attorney-in-Fact</u>

02/25/2008

** 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 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.