FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

l	OMB APPRO	VAL				
l	OMB Number:	3235-0287				
l	Estimated average burde	en				
l	hours per response:	0.5				

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

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 ar <u>Strobel</u>		2. Issuer Name <b>and</b> Ticker or Trading Symbol ARCH COAL INC [ ACI ]									k all applic Directo	cable) r	g Pers		0% Owner				
(Last) (First) (Middle) ONE CITYPLACE DRIVE							3. Date of Earliest Transaction (Month/Day/Year) 02/28/2013									Officer (give title below)  Vice Pres, Bus D		Other (s below) & Strategy	
(Street) ST. LOUIS MO 63141  (City) (State) (Zip)					4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person					
(City)	(5		-4:	ive Securities Acquired, Disposed of, or Benefic									O						
1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)						ction 2A. Deemed Execution Date,			3. Transaction Code (Instr.		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4			or 5. Amou Securiti Benefic Owned		int of es ally Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership
									Code V	,	Amount	(A) or (D)		се	Reported 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 D if any (Month/Day/	ate, T	ransac Code (I				6. Date Exercisa Expiration Date (Month/Day/Year			7. Title and Amor of Securities Underlying Derivative Secur (Instr. 3 and 4)			3. Price of Derivative Security Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	e s Illy	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				c	Code	v	(A)	(D)	Date Exercisable	Exp Dat	piration te	Title	Amou or Numb of Share	oer					
Employee Stock Options	\$5.23	02/28/2013			A		90,200		(1)	02/	/28/2023	Common Stock	90,2	00	\$0.00	90,200	)	D	
Restricted Stock Units	\$5.23	02/28/2013			A		43,650		(2)		(3)	Common	43,6	50	\$0.00	61,650	)	D	

## **Explanation of Responses:**

- 1. The options vest ratably over 3 years as follows: 30,067 shares vest on February 28, 2014; 30,067 shares vest on February 28, 2015; and 30,066 shares vest on February 28, 2016.
- 2. The reporting person received 43,650 restricted stock units on February 28, 2013. The restricted stock units vest on February 28, 2016.
- 3. The restricted stock units do not expire.

## Remarks:

/s/ Jon S. Ploetz, Attorney-in-03/01/2013 **Fact** 

\*\* Signature of Reporting Person

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.