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/h)

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: 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* Kelley Allen R.						2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ARCH]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify				
(Last) (First) (Middle) ONE CITYPLACE DRIVE SUITE 300					3. Date of Earliest Transaction (Month/Day/Year) 11/23/2016								7	X Officer (give title Other (specify below) VP - Human Resources				
(Street) ST. LOUIS MO 63141 (City) (State) (Zip)			63141 (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)									S. Individual or Joint/Group Filing (Check Applicable ine) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City)	(5		le I - Non-	Deriva	tive :	Sec	urities	S Ac	auired. Di	ispos	sed o	f. or Bei	neficiall	v Owned				
1. Title of Security (Instr. 3) 2. Transa Date (Month/Date)					ction 2A. Deemed Execution Date			3. Transactic Code (Ins 8)	4. Securi Disposed (Instr. 5)		ties Acquire I Of (D) (Ins (A) or (D)	ed (A) or tr. 3, 4 and	5. Amour Securitie Beneficia Owned F Reported Transact	5. Amount of Securities Beneficially		: Direct Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (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/	Co	ransaction code (Instr.		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 Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	is Blly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Co	ode V	,	(A)	(D)	Date Exercisable	Expii Date	iration	Title	Amount or Number of Shares					
Restricted Stock Units	(1)	11/23/2016		I	A		6,750		(2)	((2)	Class A Common Stock	6,750	\$0.00	6,750		D	
Restricted Stock Units	(1)	11/23/2016		I	A		10,125		(3)	11/23	3/2019	Class A Common Stock	10,125	\$0.00	10,125	5	D	

Explanation of Responses:

- 1. Each restricted stock unit represents a contingent right to receive one share of Class A Common Stock of Arch Coal, Inc.
- 2. The restricted stock units vest in three equal annual installments beginning November 23, 2017. Vested shares are scheduled to be delivered to the reporting person on November 23, 2019.
- 3. The restricted stock units vest on November 23, 2019 based on the volume weighted average price of a share over any period of 90 consecutive days during the three-year performance period, with 25% of the units vesting if the share price is \$65 and 100% of the units vesting if the share price is \$125 (subject to straight-line interpolation between these two share prices).

Remarks:

/s/ Rosemary L. Klein, 11/28/2016 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 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.