FORM 3

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF **SECURITIES**

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 Sect	ion 30(n) oi	the investment Company Act of 19	40				
Kelley Allen R.			2. Date of Event Requiring Statement (Month/Day/Year) 03/03/2014		3. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ]					
(Last) (First) (Middle) ONE CITYPLACE DRIVE		Relationship of Reporting Perso (Check all applicable)     Director			10% Owne	r (Mo	If Amendment, Date of Original Filed (Month/Day/Year)      Individual or Joint/Group Filing (Check Applicable Line)			
SUITE 300					X Officer (give title below)	Other (spe- below)			, loʻi	
(Street)					VP - Human Resources			X Form filed by One Reporting Person		
ST. LOUIS	MO	63141	63141					Form filed by More than One Reporting Person		
(City)	(State)	(Zip)								
Table I - Non-Derivative Securities Beneficially Owned										
1. Title of Security (Instr. 4)					Beneficially Owned (Instr. 4)			ature of Indirect Beneficial Ownership tr. 5)		
Common Stock					400	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	5. Ownership Form:	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
			Date Exercisable	Expiration Date	n Title	Amount or Number of Shares	Price of Derivative Security	Direct (D) or Indirect (I) (Instr. 5)		
Employee Stock Options			(1)	02/22/2017	7 Employee Stock Options	4,150	32.99	D		
Employee Stock Options			(2)	02/21/2018	Employee Stock Options	2,250	52.69	D		
Employee Stock Options			(3)	02/19/2019	Employee Stock Options	3,750	14.05	D		
Employee Stock Options			(4)	02/18/2020	Employee Stock Options	2,800	22.65	D		
Employee Stock Options			(5)	02/24/2023	Employee Stock Options	2,300	32.49	D		
Employee Stock Options			(6)	02/23/2022	Employee Stock Options	3,750	13.93	D		
Employee Stock Options			(7)	02/28/2023	Employee Stock Options	7,400	5.23	D		
Resticted Stock Units			(8)	(9)	Restricted Stock Units	1,500	13.93	D		
Restricted Stock Units			(10)	(9)	Restricted Stock Units	3,600	5.23	D		

## **Explanation of Responses:**

- 1. The reporting person received 4.150 stock options on February 22, 2007. All the stock options vested on February 22, 2010.
- 2. The reporting person received 2,250 stock options on February 21, 2008. All the stock options vested on February 21, 2011.
- 3. The reporting person received 3,750 stock options on February 19, 2009. All the stock options vested on February 19, 2013.
- 4. The reporting person received 2,800 stock options on February 18, 2010. All stock options vested on February 18, 2014.
- 5. The reporting person received 2,300 stock options on February 24, 2011. All the stock options vested on February 24, 2014.
- 6. The reporting person received 3,750 stock options on February 23, 2012. The stock options vest ratably over 3 years as follows: 1,250 shares vested on February 23, 2013; 1,250 shares vested on February 23, 2014; and 1,250 shares will vest on February 23, 2015.
- 7. The reporting person received 7,400 stock options on February 28, 2013. The options vest ratably over 3 years as follows: 2,467 shares vested on February 28, 2014; 2,467 shares will vest on February 28, 2015; and 2,466 shares will vest on February 28, 2016.
- 8. The reporting person received 1,500 restricted stock units on February 23, 2012. All of these restricted stock units vest on February 23, 2015.
- 9. The restricted stock units do not expire.
- 10. The reporting person received 3,600 restricted stock units on February 28, 2013. All of these restricted stock units vest on February 28, 2016.

## Remarks:

/s/ Jon S. Ploetz, Attorney-in-

03/05/2014

Fact

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.

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.

The undersigned, appoints the following individuals, with full power to each of them to act alone, as his true and lawful attorneys-in-fact and agents to execute and file on behalf of the undersigned all Forms 3, 4 and 5, and any amendments thereto, that the undersigned may be required to file with the Securities and Exchange Commission, and any stock exchange or similar authority, as a result of the undersigned's ownership of or transactions in securities of Arch Coal, Inc. The authority of the following individuals under this Power of Attorney shall continue until the undersigned is no longer required to file Forms 3, 4 and 5 with regard to the undersigned's ownership of or transactions in securities of Arch Coal, Inc., unless earlier revoked in writing. The undersigned acknowledges that the following individuals are not assuming any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

The following Officers of Arch Coal, Inc.:

Secretary of the Corporation

Assistant Secretary of the Corporation

General Counsel of the Corporation

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 27th day of February, 2014.

/s/ Allen R. Kelley Allen R. Kelley