FORM 3

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

OMB APPROVAL							
OMB Number: 3235-0104							
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

Jones J. Thomas		Date of Event equiring Staten Month/Day/Year 7/21/2010	nent	3. Issuer Name <b>and</b> Ticker or Trading Symbol ARCH COAL INC [ ACI ]							
(Last) ONE CITYPL	(First) ACE DRIVE	(Middle)			4. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director 10% Owner			(1)	5. If Amendment, Date of Original Filed (Month/Day/Year)		
SUITE 300						Officer (give title below)	Other (specify below)		Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person		
(Street) ST. LOUIS	MO	63141								y More than One	
(City)	(State)	(Zip)									
Table I - Non-Derivative Securities Beneficially Owned											
1. Title of Security (Instr. 4)					ially Owned (Instr. 4)			4. Nature of Indirect Beneficial Ownership (Instr. 5)			
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)											
1. Title of Derivative Security (Instr. 4)  2. Date Exercisable a Expiration Date (Month/Day/Year)		ate	3. Title and Amount of Securi Underlying Derivative Securi		ty (Instr. 4) Conve		se Form:	6. Nature of Indirect Beneficial Ownership (Instr. 5)			
			Date Exercisable	Expiration Date	n Title	e	Amount or Number of Shares	Price of Derivative Security	Direct (D) or Indirect (I) (Instr. 5)		

**Explanation of Responses:** 

## Remarks:

No securities are beneficially owned.

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

**Fact** 

\*\* Signature of Reporting Person

Date

07/23/2010

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 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 21st day of July, 2010.

/s/ J. Thomas Jones J. Thomas Jones