FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Check this box if no longer subject to Section 16. Form 4 or Form 5	STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP
obligations may continue. See	
Instruction 1(b).	Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

OMB APPROVAL OMB Number:

Estimated average burden hours per response: 0.5

Date (Month/Day/Year) Disposed of (D) (Instr. 3, 4 and 5) Disposed of (D) (Instr. 3, 4 and 6) Disposed of (D) (Instr. 3, 4 and 6, a						or	Section	on 30(h)	of the	Ínvestm	ent Co	ompar	ny Act o	of 194	40							
(Last) (First) (Middle) ONE CITYPLACE DRIVE 4. If Amendment, Date of Original Filed (Month/Day/Year) (Street) ST. LOUIS MO 63141 Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 1. Title of Security (Instr. 3) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned Table II - Derivative Securities Acquired, Disposed of, or																						
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City ST. LOUIS MO 63141 ST. LOUIS MO Ferson More than One Reporting Person Form filed by More than One Reported Fo																					specify	
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and 5) Amount	Derivative Security	Conversion or Exercise Price of Derivative	Date	Execution Date, T		ransa Code (ransaction of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4			Expiration Date			Amount of Securities Underlying Derivative Secu (Instr. 3 and 4)			1)	Derivative Security	derivative Securities Beneficial Owned Following Reported	ly	Ownership Form: Direct (D) or Indirect	11. Nature of Indirect Beneficial Ownership (Instr. 4)	

Explanation of Responses:

(1)

1. Each share of phantom stock represents a right to receive the value in cash of one share of Arch Coal, Inc. common stock. The shares of phantom stock are held by the director through the Arch Coal, Inc. Deferred Compensation Plan for Non-Employee Directors (the "Plan") and represent past compensation that the director elected to defer under the Plan into a hypothetical investment in shares of Arch Coal, Inc. common stock and/or dividends attributable to such deferred amounts.

Exercisable

(2)

Date

(2)

2. Shares of phantom stock are payable in cash following termination of the director's service as a director of Arch Coal, Inc. The director may transfer amounts held in the phantom stock account into an alternative investment account at any time.

Remarks:

Phantom

Stock

/s/ Robert G. Jones, Attorney-

Number

Shares

1,798

\$22,25

01/04/2010

39,363

D

in-Fact

Title

Commor

Stock

** 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).

12/31/2009

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Code ٧

A

(A)

1,798

(D)

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.