FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

## MENT 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* <u>EAVES JOHN W</u>					2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ ACI ]											eck all appli Directo	ationship of Reporting all applicable)  Director		10% O	wner			
(Last) ONE CIT		3. Date of Earliest Transaction (Month/Day/Year) 07/28/2005											below)		Other below		specify						
(Street) ST. LOU (City)			63141 (Zip)		4. II	4. If Amendment, Date of Original Filed (Month/Day/Year)										dividual or Joint/Group Filing (Check Applicable  Form filed by One Reporting Person  Form filed by More than One Reporting  Person							
		Tab	le I - Nor	-Deriv	ative	e Se	curities	s Ac	quir	red, D	isp	osed o	f, or	Ben	eficiall	y Owned							
Date				2. Transa Date (Month/E		ear)	2A. Deemed Execution Date, if any (Month/Day/Year		,   Т С	Code (Instr. 5)			ties Ad I Of (D	cquirec ) (Instr	I (A) or : 3, 4 and	5. Amou Securitie Benefici Owned F Reporte	es ally Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)			
									С	ode	,	Amount		(A) or (D)	Price	Transaci (Instr. 3	ction(s)			(111501.4)			
		-	Table II - I									sed of, onvertil				Owned			,	•			
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution I if any (Month/Day	Date, T	ransaction ode (Instr.				Expi	6. Date Exercisable ai Expiration Date (Month/Day/Year)			7. Title and Am of Securities Underlying Derivative Sec (Instr. 3 and 4)			8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	lly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)			
				C	Code	v	(A)	(D)	Date Exer	e rcisable		xpiration ate	Title		Amount or Number of Shares								
Phantom	(1)	07/28/2005	08/01/20	05	Α		53,300			(2)	1	2/31/2008	Com	mon	53,300	(1)	53,300	)	D				

## **Explanation of Responses:**

- 2. The Phantom Stock will vest in the event the Company's common stock hits target prices of \$70.00 or \$80.00 and the Company's financial performance meets certain targets at such time.

## Remarks:

/s/ Janet L. Horgan, Attorneyin-Fact

08/01/2005

\*\* 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.