SEC Form 4	
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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(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPRO	VAL
OMB Number:	3235-0287
Estimated average burde	en
hours per response:	0.5

1. Name and Address of Reporting Person [*] BESTEN C HENRY JR			2. Issuer Name and Ticker or Trading Symbol <u>ARCH COAL INC</u> [ACI]	5. Relationship of Reporting Perso (Check all applicable) Director	on(s) to Issuer 10% Owner
(Last) (First) (Middle) ONE CITYPLACE DRIVE SUITE 300		(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 02/24/2005	X Officer (give title below) Senior VP-Strateg	Other (specify below) ic Dev.
(Street) ST. LOUIS (City)	MO (State)	63141 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Line) X Form filed by One Report Form filed by More than (Person	ting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)			4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(1150.4)	
Common Stock	02/24/2005		М		4,680	A	\$18.15	15	I	By 401(k) Plan	
Common Stock	02/24/2005		S		4,680	D	\$42.5	1,717	D		

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 Date, if any (Month/Day/Year)	4. Transa Code (8)		of Expiration Date Derivative (Month/Day/Year) Securities		and 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Employee Stock Options	\$18.15	02/24/2005		М			4,680	02/29/2004	02/29/2012	Common Stock	4,680	\$18.15	2,345	D	

Explanation of Responses:

Remarks:

<u>/s/ Janet L. Horgan, Attorney-</u> <u>in-Fact</u>

02/25/2005

** 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.