FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | |
| Estimated average burden | | | | | | | | |
| hours per response: | 0.5 | | | | | | | |

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

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* FELDMAN SHEILA B | | | | | | 2. Issuer Name and Ticker or Trading Symbol ARCH COAL INC [ACI] | | | | | | | | | k all appli Directo | cable) or | g Person(s) to Issue | | vner |
|-----------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------|---------------------------------------------|---------|------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------|---------------------------------|------------------------------------|----------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------|------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------|---------------------------------------|
| (Last) ONECIT | (Fi | * | (Middle) | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/03/2005 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | below) | | Other (spe below) an Resources | | specify |
| (Street) ST. LOU (City) | | | 63141 (Zip) | | - 4. I | | | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable ine) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| | | Tab | le I - No | on-Deri | vative | Sec | uriti | ies Ac | quired | , Di | sposed o | of, or Be | enefic | cially | Owned | i | | | |
| Date | | | 2. Transa Date (Month/D | | Exe) if ar | 2A. Deemed Execution Date, if any (Month/Day/Year) | | 3. Transac Code (li 8) | | 4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a | | | and 5) Securition Benefici Owned I | | es ially Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | Code | v | Amount | (A) or (D) | Price | ! | | eported ansaction(s) estr. 3 and 4) | | | (Instr. 4) |
| Common | on Stock 03/03/2005 M 3,333 A \$17.44 0 | | | | | | | 0 | | D | | | | | | | | | |
| Common | Stock | | | 03/03/ | /2005 | | | | S | | 3,333 | D | \$44. | .9056 | | 0 D | | | |
| | | Т | able II | | | | | | | | oosed of converti | | | | wned | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deel Execution if any (Month/I | | 4. Transa Code (8) | | ion of | | 6. Date E Expiratio (Month/D | n Dai | | 7. Title and Amount of Securities Underlying Derivative Secur (Instr. 3 and 4) | | D Sc (li | Price of erivative ecurity nstr. 5) | 9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4) | ly OF | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | (A) | (D) | Date Exercisal | ole | Expiration Date | Title | Amou or Numl of Share | ber | | | | | |
| Employee Stock Options | \$17.44 | 03/03/2005 | | | M | | | 3,333 | 02/03/20 | 05 | 02/03/2013 | Common Stock | 3,33 | 33 | \$17.44 | 6,667 | | D | |

Explanation of Responses:

Remarks:

/s/Janet L. Horgan, Attorney-

03/04/2005

in-Fact

** 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.