

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-B

REGISTRATION OF SECURITIES OF CERTAIN SUCCESSOR ISSUERS
FILED PURSUANT TO SECTION 12(b) OR (g) OF THE
SECURITIES EXCHANGE ACT OF 1934

ARCH MINERAL CORPORATION
(to be renamed ARCH COAL, INC.)
(Exact name of registrant as specified in its charter)

Delaware
(State or other Jurisdiction of
incorporation or organization)

43-0921172
(I.R.S. Employer Identification No.)

CityPlace One, Suite 300
Creve Coeur, Missouri 63141
(Address, including zip code, of principal executive offices)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered -----	Name of each exchange on which which each class is to be registered -----
Common Stock, par value \$0.01 per share	New York Stock Exchange, Inc.

Securities to be registered pursuant to Section 12(g) of the Act:
NONE

INFORMATION REQUIRED IN REGISTRATION STATEMENT

ITEM 1. GENERAL INFORMATION.

(a) The registrant was organized as Arch Mineral Corporation on June 20, 1969 as a Delaware corporation. Upon consummation of the succession transaction (the "Merger") described in Item 2 below, the registrant will change its name to Arch Coal, Inc.

(b) The registrant's fiscal year ends on December 31.

ITEM 2. TRANSACTION OF SUCCESSION.

(a) Prior to consummation of the Merger, Ashland Coal, Inc., a Delaware corporation and the predecessor to the registrant ("Ashland Coal"), had securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended.

(b) Reference is made to the description of the Merger under the captions "THE MERGER" and "THE MERGER AGREEMENT" in the Proxy Statement/Prospectus filed with the Securities and Exchange Commission as part of the registrant's Registration Statement on Form S-4 (No. 333-28149) (the "Proxy Statement/Prospectus"), which description is incorporated herein by reference.

ITEM 3. SECURITIES TO BE REGISTERED.

The registrant is presently authorized to issue up to 100,000,000 shares of Common Stock, \$0.01 par value per share ("Common Stock"). Prior to the

effectiveness of the Merger, 20,948,463 shares of Common Stock were issued and outstanding. Upon the effectiveness of the Merger, up to 19,337,043 shares of Common Stock will be issued in exchange for all issued and outstanding shares of Common Stock, par value \$0.01 per share, of Ashland Coal and all issued and outstanding shares of Class B Preferred Stock, par value \$100 per share, and Class C Preferred Stock, par value \$100 per share, of Ashland Coal. No shares of Common Stock are held by or for the account of the registrant.

ITEM 4. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED.

Reference is made to the description of the Common Stock to be registered hereby under the caption "DESCRIPTION OF COMPANY CAPITAL STOCK" in the Proxy Statement/Prospectus, which description is incorporated herein by reference.

ITEM 5. FINANCIAL STATEMENTS AND EXHIBITS.

(a) Financial Statements.

Pursuant to Instruction (b) to "Instructions as to Financial Statements," no financial statements are filed herewith.

Reference is made to the financial statements of the registrant appearing following "INDEX TO COMPANY FINANCIAL STATEMENTS" in the Proxy Statement/Prospectus and to the unaudited pro forma financial information appearing under the caption "UNAUDITED PRO FORMA FINANCIAL INFORMATION" in the Proxy Statement/Prospectus.

(b) Exhibits.*

- 2.1 Proxy Statement of Ashland Coal, Inc./Prospectus of Arch Mineral Corporation, dated May 30, 1997
- 2.2 Form of Voting Agreement between Arch Mineral Corporation and each of Ashland Inc. and Carboex International, Ltd.
- 3.1 Restated Certificate of Incorporation of Arch Mineral Corporation
- 3.2 Form of Restated Certificate of Incorporation of Arch Coal, Inc.
- 3.3 Bylaws of Arch Mineral Corporation
- 3.4 Form of Restated and Amended Bylaws of Arch Coal, Inc.
- 4.1 Stockholders Agreement, dated as of April 4, 1997, among Carboex International, Ltd., Ashland Inc., and Arch Mineral Corporation
- 4.2 Registration Rights Agreement, dated as of April 4, 1997, among Arch Mineral Corporation, Ashland Inc., Carboex International, Ltd. and the entities listed on Schedules I and II thereto
- 4.3 Agreement Relating to Nonvoting Observer, executed as of April 4, 1997, among Carboex International, Ltd., Ashland Inc., Ashland Coal, Inc. and Arch Mineral Corporation
- 4.4 Agreement for Termination of the Arch Mineral Corporation Voting Agreement and for Nomination of Directors, dated as of April 4, 1997, among Hunt Coal Corporation, Petro-Hunt Corporation, each of the trusts listed on Schedule I thereto, Ashland Inc. and Arch Mineral Corporation
- 10.1 Coal Off-Take Agreement executed April 4, 1997, among Arch Mineral Corporation, Carboex International, Ltd., and Ashland Coal, Inc.
- 10.2 Sales Agency Agreement, executed as of April 4, 1997, among Arch Mineral Corporation, Ashland Coal, Inc., and Carboex S.A.
- 10.3 Assignment, Assumption and Amendment of Coal Sales Agency Agreement, executed April 4, 1997, among Arch Mineral Corporation, Ashland Coal, Inc., Saarbergwerke AG, and Carboex International, Ltd.
- 10.4 Shareholder Services Contract, executed as of April 4, 1997, among Arch Mineral Corporation, Ashland Coal, Inc., Carboex International, Ltd., and Ashland Inc.
- 10.5 Lease between Pocahontas Land Corporation and Ark Land Company, dated January 31, 1994, as amended as of October 2, 1995, Partial Release and Surrender of Lease dated February 1, 1996, as amended October 21, 1996
- 10.6 Lease Contract by and between William C. Francis and Mountain Land and Reclamation, Inc. (predecessor to Ark Land Company), dated November 16, 1988; Supplemental Leases dated May 16, 1989, August 25, 1991, Assignment of Lease dated September 13, 1991, amended as of December 23, 1992, September 1, 1995, and March 17, 1997
- 10.7 Lease Contract by and between Virgil Eversole Estate and Mountain Land and Reclamation, Inc. (predecessor to Ark Land Company), dated November 21, 1988, Assignment of Lease dated September 13, 1991 amended as of December 23, 1992, November 11, 1994 and August 26, 1995
- 10.8 Deed of Lease and Agreement between Dingess-Rum Coal Company and Amherst Coal Company (predecessor to Ark Land Company), dated June 1, 1962, as supplemented January 1, 1968, June 1, 1973, July 1, 1974, November 12, 1987, Lease Exchange Agreement dated July 2, 1979 amended as of January 1, 1984 and January 7, 1993, February 24, 1993; Partial Release dated May 6, 1988; Assignments dated March 15, 1990, October 5, 1990
- 10.9 Agreement of Lease by and between Shonk Land Company, Limited Partnership and Lawson Hamilton (predecessor to Ark Land Company), dated February 8, 1983, as amended October 7, 1987, March 9, 1989, April 1, 1992, October 31, 1992, December 5, 1992, February 16, 1993, August 4, 1994, October 1, 1995, July 31, 1996 and November 27, 1996

- 10.10 United States Department of the Interior Bureau of Land Management Modified Coal Lease with Medicine Bow Coal Company, effective September 1, 1981
- 10.11 Amended and Restated Mining Lease by and between Rock Springs Royalty Company and Ark Land Company, dated December 13, 1988 amended June 23, 1994, January 1, 1996 and February 20, 1996
- 10.12 Employment Agreement between Arch Mineral Corporation and Steven F. Leer, dated March 1, 1992
- 10.13 Consulting Agreement between Arch Mineral Corporation and Ronald E. Samples, effective September 1, 1992, as amended by letter agreements dated October 6, 1992, September 1, 1993, September 1, 1994, September 1, 1995, August 31, 1996 and March 30, 1997
- 10.14 Form of At Will Employee Retention/Severance Agreement
- 10.15 Form of Indemnity Agreement between Arch Coal, Inc. and Indemnatee (as defined therein)
- 10.16 Arch Mineral Corporation 1993 Incentive Compensation Plan; as amended by Amendment No. 1 dated December 12, 1995
- 10.17 Arch Mineral Corporation Deferred Compensation Plan
- 10.18 Arch Coal, Inc. Deferred Compensation Plan for Directors' Fees
- 10.19 Arch Coal, Inc. 1997 Stock Incentive Plan
- 10.20 Arch Mineral Corporation 1996 ERISA Forfeiture Plan
- 21.1 List of Subsidiaries of Arch Mineral Corporation

* Incorporated by reference from the Registration Statement on Form S-4 (No. 333-28149)

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

ARCH MINERAL CORPORATION

By: /s/ Steven F. Leer

Steven F. Leer
President and Chief Executive
Officer

Date: June 17, 1997