

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Arch Coal, Inc.
(Name of issuer)

Common Stock
(Title of class of securities)

039380100
(CUSIP number)

Thomas L. Feazell
Senior Vice President,
General Counsel and Secretary
Ashland Inc.
1000 Ashland Drive
Russell, KY 41169
(606) 329-3333

(Name, address and telephone number of person
authorized to receive notices and communications)

July 1, 1997
(Date of event which requires filing of this statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box ____.

Page 1 of 6 pages

CUSIP No. 043906 10 6 13D

- 1 NAME OF REPORTING PERSONS Ashland Inc.
S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS
61-0122250
- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)
N/A (b)
- 3 SEC USE ONLY
- 4 SOURCE OF FUNDS 00 (See Item 3)
- 5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT
TO ITEM 2(d) or 2(e)
- 6 CITIZENSHIP OR PLACE OF ORGANIZATION
Kentucky
- | | | |
|---|----|--------------------------------------|
| NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH | 7 | SOLE VOTING POWER
21,382,387 |
| | 8 | SHARED VOTING POWER
0 |
| | 9 | SOLE DISPOSITIVE POWER
21,382,387 |
| | 10 | SHARED DISPOSITIVE POWER
0 |
- 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
21,382,387 shares of common stock
- 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
- 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

54.0% of the shares of common stock

14

TYPE OF REPORTING PERSON
CO

Securities and Exchange Commission
Washington, D.C. 20549
Schedule 13D

Item 1. Security and Issuer

Ashland Inc. ("Ashland") currently owns 21,382,387 shares of common stock ("common stock"), par value \$.01 per share, of Arch Coal, Inc. ("Arch Coal").

Arch Coal is a Delaware corporation with its principal executive offices located at City Place One, Suite 300, Creve Coeur, Missouri 63141.

Item 2. Identity and Background

(a), (b) and (c) Ashland is a Kentucky corporation with its principal executive offices located at 1000 Ashland Drive, Russell, KY 41169. Ashland is a large U.S. independent refiner and independent crude oil gatherer and marketer; a regional retail marketer of gasoline and merchandise; and a motor oil and automotive chemical marketer in the U.S. and other countries. In addition, Ashland is a large distributor of chemicals and plastics in North America; a supplier of specialty chemicals worldwide; a large U.S. highway contractor; and a producer of crude oil.

The executive officers and directors of Ashland and their principal occupations are shown on the attached Schedule I. The business address of each executive officer is shown on Schedule I. Each director's business address is Ashland Inc., c/o Office of the Secretary, 1000 Ashland Drive, Russell, KY 41169.

(d-e) During the last five years, neither Ashland nor any of the persons listed in Schedule I hereto, has been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or state securities laws or finding any violation with respect to such laws.

(f) Each executive officer and director is a U.S. citizen.

Item 3. Source and Amount of Funds or Other Consideration
Not applicable - See item 4.

Item 4. Purpose of Transaction

This filing is being made due to the merger of Ashland Coal, Inc. and a wholly-owned subsidiary of Arch Mineral Corporation pursuant to which Ashland converted 150 shares of Class B preferred stock of Ashland Coal, Inc. to 3,075,000 shares of Arch Coal common stock, converted 6,923,000 shares of common stock of Ashland Coal, Inc. to 6,923,000 shares of Arch Coal common stock, and converted 648,307 shares of common stock of Ashland Coal, Inc. held in the Ashland Coal, Inc. Dividend Reinvestment Plan to 648,307 shares of Arch Coal common stock held in the Arch Coal DRIP. In addition, Ashland Inc. owns 10,736,080 shares of Arch Coal common stock resulting from the 338.0857-for-one split of the common stock of Arch Mineral Corporation effected on April 4, 1997.

Ashland, as a shareholder of Arch Coal has no plans or proposals which relate to or would result in: (a) except as noted below, the acquisition by any person of additional securities of Arch Coal, or the disposition of securities of Arch Coal; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving Arch Coal or any of its subsidiaries; (c) a sale or transfer of a material amount of assets of Arch Coal or any of its subsidiaries; (d) any change in the present board of directors or management of Arch Coal, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board; (e) any material change in the present capitalization or dividend policy of Arch Coal; (f) any other material change in Arch Coal's business or corporate structure; (g) changes in Arch Coal's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of Arch Coal by any person; (h) causing a class of securities of Arch Coal to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) a class of equity securities of Arch Coal becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or (j) any

action similar to any of those enumerated above. However, Ashland currently anticipates that it will continue to acquire shares of Arch Coal common stock through the Arch Coal DRIP.

Item 5. Interest in Securities of the Issuer

I. Ashland

(a) Ashland presently owns 21,382,387 shares of Arch Coal common stock which represents approximately 54.0% of the total issued and outstanding stock of Arch Coal.

(b) Ashland has sole voting power and the sole power to dispose or to direct the disposition of any shares of the common stock of Arch Coal.

(c) Neither Ashland nor any of the persons listed in Item 2 hereof has effected any transaction relating to Arch Coal common stock within the last 60 days except as noted above.

(d) Not applicable.

(e) Not applicable.

II. Executive Officers and Directors of Ashland

The beneficial ownership of the common stock of Arch Coal of certain executive officers and directors of Ashland Inc. is listed on Schedule II. If not listed on Schedule II, the executive officer or director does not beneficially own Arch Coal common stock.

Item 6. Contracts, Arrangements or Understandings with Respect to Securities of the Issuer
None

Item 7. Material to be Filed as Exhibits
None

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

July 9, 1997

(Date)

/s/ Thomas L. Feazell

Thomas L. Feazell
Senior Vice President, General Counsel
and Secretary

Schedule I
DIRECTORS AND EXECUTIVE OFFICERS
OF
ASHLAND INC.
PRINCIPAL OCCUPATIONS AND BUSINESS ADDRESSES

DIRECTORS	PRINCIPAL OCCUPATION*
Jack S. Blanton	Chairman of the Board of Houston Endowment, Inc. and President of Eddy Refining Company, Houston, Texas
Thomas E. Bolger	Chairman of the Executive Committee of the Board of Bell Atlantic Corporation, Philadelphia, Pennsylvania
Samuel C. Butler	Partner of Cravath, Swaine & Moore, Attorneys, New York, New York
Frank C. Carlucci	Chairman of the Board of the Carlyle Group, Washington, D.C.
Paul W. Chellgren	Chairman of the Board and Chief Executive Officer of Ashland Inc., Ashland, Kentucky
James B. Farley	Retired Chairman and Current Trustee of Mutual of New York, New York
Ralph E. Gomory	President of the Alfred P. Sloan Foundation, New York, New York
Mannie L. Jackson	Majority owner and Chairman of the Harlem Globetrotters, International
Patrick F. Noonan	Chairman of the Board of The Conservation Fund, Arlington, Virginia
Jane C. Pfeiffer	Management Consultant, Greenwich, Connecticut
Michael D. Rose	Chairman of the Board of Promus Hotel Corporation, Memphis, Tennessee
William L. Rouse, Jr.	Investments, Naples, Florida
Dr. Robert B. Stobaugh	Professor, Emeritus Harvard Business School, Boston, Massachusetts

* For business addresses, see Item 2.

EXECUTIVE OFFICERS -----	OFFICE ADDRESS -----	TITLES -----
Paul W. Chellgren	P. O. Box 391 Ashland, KY 41114	Chairman of the Board and Chief Executive Officer
John A. Brothers	P. O. Box 391 Ashland, KY 41114	Executive Vice President and Group Operating Officer
James R. Boyd	P. O. Box 391 Ashland, KY 41114	Senior Vice President and Group Operating Officer
J. Marvin Quin	P. O. Box 391 Ashland, KY 41114	Senior Vice President and Chief Financial Officer
Thomas L. Feazell	P. O. Box 391 Ashland, KY 41114	Senior Vice President, General Counsel and Secretary
Robert E. Yancey, Jr.	P. O. Box 391 Ashland, KY 41114	Senior Vice President and Group Operating Officer; President, Ashland Petroleum Company
Harry M. Zachem	P. O. Box 391 Ashland, KY 41114	Senior Vice President, External Affairs
David J. D'Antoni	P. O. Box 2219 Columbus, OH 43216	Senior Vice President; President, Ashland Chemical Company
John F. Pettus	P. O. Box 14000 Lexington, KY 40512	Senior Vice President; President, SuperAmerica Group
Charles F. Potts	900 Ashwood Parkway Suite 700 Atlanta, GA 30338-4780	Senior Vice President; President, APAC, Inc.
James J. O'Brien	P. O. Box 14000 Lexington, KY 40512	Senior Vice President; President, The Valvoline Company
John W. Dansby	P. O. Box 391 Ashland, KY 41114	Administrative Vice President; Treasurer
Kenneth L. Aulen	P. O. Box 391 Ashland, KY 41114	Administrative Vice President; Controller
Philip W. Block	P. O. Box 391 Ashland, KY 41114	Administrative Vice President
Fred E. Lutzeier	P. O. Box 391 Ashland, KY 41114	Auditor
William R. Sawran	P.O. Box 14000 Lexington, KY 40512	Vice President; Chief Information Officer; President, Ashland Services Company

SCHEDULE II

EXECUTIVE OFFICER -----	SHARES -----
Kenneth L. Aulen	400 Shares - Joint with Wife
James R. Boyd	1,000 Shares - Direct
John A. Brothers	3,000 Shares - Direct 187 Shares - Held in the Arch Coal Dividend Reinvestment Plan ("DRIP")
Paul W. Chellgren	4,000 Shares - Direct 289 Shares - Direct - DRIP 500 Shares - Indirect - Son 36 Shares - Indirect - Son - DRIP 500 Shares - Indirect - Daughter 36 Shares - Indirect - Daughter - DRIP
Thomas L. Feazell	500 Shares - Direct 173 Shares - DRIP
J. Marvin Quin	500 Shares - Direct
Robert E. Yancey, Jr.	1,000 Shares - Direct
Harry M. Zachem	200 Shares - Direct