#### SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D

#### UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. 5)

Arch Coal, Inc. (Name of Issuer)

Common Stock (Title of class of Securities)

> 039380100 (CUSIP Number)

David L. Hausrath Vice President and General Counsel Ashland Inc. 50 E. RiverCenter Boulevard P.O. Box 391 Covington, KY 41012-0391 (606) 815-3333

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

February 24, 2000 (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 |\_|.

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CUSIP No. 039380100

13D

NAME OF REPORTING PERSONS Ashland Inc. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS 61-0122250 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) [ ] (b) [ ] N/A SEC USE ONLY 3 SOURCE OF FUNDS 00 (See Item 3) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO 5 ITEM 2(d) or 2(e) [ ] CITIZENSHIP OR PLACE OF ORGANIZATION Kentucky NUMBER OF SOLE VOTING POWER **SHARES** 22,123,273 BENEFICIALLY SHARED VOTING POWER OWNED BY EACH 0 REPORTING PERSON WITH 9 SOLE DISPOSITIVE POWER 22,123,273 10 SHARED DISPOSITIVE POWER 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN

TYPE OF REPORTING PERSON 14

[ ]

SHARES

11

12

13

CO

22,123,273 shares of common stock

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 58.0% of the shares of common stock

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

# Item 1. Security and Issuer

Ashland Inc. ("Ashland") currently owns 22,123,273 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

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(a), (b) and (c) Ashland is a Kentucky corporation with its principal executive offices located at 50 E. RiverCenter Blvd., P. O. Box 391, Covington, Kentucky 41012-0391. Ashland is a diversified company with wholly owned operations in distribution, specialty chemicals, motor oil and car care products, and highway construction. Ashland also has a 38-percent equity interest in Marathon Ashland Petroleum LLC and a 58-percent equity interest in Arch Coal.

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, 50 E. RiverCenter Boulevard, P. O. Box 391, Covington, KY 41012-0391.

business address is Ashland Inc., c/o Office of the Secretary, 50 E. RiverCenter Boulevard, P. O. Box 391, Covington, KY 41012-0391.

(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.

On June 22, 1999, Ashland, as a shareholder of Arch Coal, announced that it had retained the investment banking firm of Goldman Sachs to help Ashland explore strategic alternatives for its investment in Arch Coal

On October 5, 1999, Ashland announced that it was making progress on its study to explore strategic alternatives for its investment in Arch Coal and that, at that point, a tax-free spin-off to its shareholders seemed to be its preferred alternative. Ashland also announced that it had submitted a proposal to Arch Coal and had begun discussions with a special committee of the Arch Coal Board of Directors regarding such a spin-off transaction. Such a spin-off would be subject, among other things, to a negotiated agreement with the special committee of the Arch Coal Board of Directors, approval by the Arch Coal shareholders, a favorable ruling from the Internal Revenue Service, and approval by Ashland's Board of Directors.

On January 24, 2000, Ashland announced that it was continuing to pursue spin-off alternatives for its investment in Arch Coal, including both tax-free and taxable distributions. A taxable distribution would be a taxable event to Ashland and would create dividend income to Ashland shareholders.

On February 24, 2000, Ashland announced that, absent intervening circumstances or material events, Ashland's management intends to recommend to its Board of Directors at the next Ashland Board meeting, to be held on March 16, 2000, a distribution to Ashland's shareholders of 17,397,233 shares of its Arch Coal Common Stock in the form of a taxable dividend. If the transaction is approved by the Ashland Board of Directors, Ashland anticipates that the taxable distribution would be completed by the first week of April 2000. There can be no assurance that such intervening circumstances or material events will not occur or that the approval of the Ashland Board of Directors will be obtained. If the taxable distribution is completed, Ashland anticipates that, subject to then-existing market conditions, it will thereafter seek to dispose of Ashland's remaining 4,726,040 shares of Arch Coal Common Stock in a tax efficient manner. There can be no certainty as to when or whether such a disposition may be completed.

Ashland also announced that, in anticipation of the taxable distribution, two of Ashland's four employees currently on the Arch Coal Board of Directors, Paul W. Chellgren and J. Marvin Quin, will not stand for re-election to the Arch Coal Board at Arch Coal's upcoming Annual Meeting on April 20, 2000. If the taxable distribution of its Arch Coal shares does not occur, Ashland anticipates that it will seek to regain two additional seats on the Arch Coal Board. Ashland, as a 58% shareholder, currently has the ability to elect seven directors to the Arch Board under the cumulative voting

provisions of Arch Coal's certificate of incorporation and after giving effect to a Stockholders' Agreement between Arch Coal, Ashland and Carboex S.A. dated April 4, 1997.

Any strategic alternatives, including a taxable distribution, may result in (a) 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) a 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) a material change in the present capitalization or dividend policy of Arch Coal; (f) a 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) a class of securities of Arch Coal to be delisted from a national securities exchange or ceasing to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) the common stock of Arch Coal becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act; or (j) any action similar to the foregoing.

# Item 5. Interest in Securities of the Issuer $\,$

# I. Ashland

(a) Ashland presently owns 22,123,273 shares of Arch Coal common stock which represents approximately 58.0% 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 its shares of Arch Coal common stock.
- (c) Neither Ashland nor the persons listed in Item 2 has effected any transaction relating to Arch Coal common stock within the last 60 days.
  - (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, Understandings or Relationships with

Respect to Securities of the Issuer

Pursuant to a Stockholders Agreement between Arch Coal, Ashland and Carboex S.A. ("Carboex"), Arch Coal has agreed to nominate for election as a director of Arch Coal a person designated by Carboex, and Ashland has agreed, among other things, to vote its shares of Arch Coal common stock in a manner sufficient to cause the election of such nominee.

Item 7. Material to be Filed as Exhibits

Stockholders Agreement between Arch Coal, Ashland and Carboex S.A. dated April 4, 1997 (filed as Exhibit 7 to Ashland's Schedule 13D (Amendment No. 2) dated June 22, 1999, and incorporated herein by reference).

#### 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.

February 24, 2000 (Date)

/s/ David L. Hausrath

David L. Hausrath Vice President and General Counsel

#### Schedule I

### DIRECTORS AND EXECUTIVE OFFICERS

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# ASHLAND INC. PRINCIPAL OCCUPATIONS AND BUSINESS ADDRESSES

DIRECTORS	PRINCIPAL OCCUPATION*	
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., Covington, Kentucky	
Ernest H. Drew	Former CEO of Westinghouse Industries and Technology Group	
James B. Farley	Private Investor and Retired Chairman and Chief Executive Officer of Mutual Life Insurance Company of New York, New York (now known as The MONY Group)	
Bernadine P. Healy	President of the American Red Cross, Washington, D.C.	
Mannie L. Jackson	Majority owner and Chairman and Chief Executive Officer of the Harlem Globetrotters, International	
Patrick F. Noonan	Chairman of the Board of The Conservation Fund, Arlington, Virginia	
Jane C. Pfeiffer	Management Consultant, Vero Beach, Florida	
William L. Rouse, Jr.	Investments, Naples, Florida	
Theodore M. Solso	Chairman and Chief Executive Officer of Cummins Engine Company, Inc., Columbus, Indiana	

PRINCIPAL OCCUPATION\*

DIRECTORS

 $<sup>^{\</sup>star}$  For business addresses, see Item 2.

EXECUTIVE OFFICERS	BUSINESS ADDRESS	PRINCIPAL OCCUPATION
Paul W. Chellgren	P. O. Box 391 Covington, KY 41012	Chairman of the Board and Chief Executive Officer
James R. Boyd	P. O. Box 391 Covington, KY 41012	Senior Vice President and Group Operating Officer
David J. D'Antoni	P. O. Box 2219 Columbus, OH 43216	Senior Vice President and Group Operating Officer
J. Marvin Quin	P. O. Box 391 Covington, KY 41012	Senior Vice President and Chief Financial Officer
James J. O'Brien	P. O. Box 1400 Lexington, KY 40512	Senior Vice President; President, The Valvoline Company
Charles F. Potts	APAC, Inc. 3340 Peachtree Rd., NE Tower Place Atlanta, GA 30326	Senior Vice President; President, APAC, Inc.
Kenneth L. Aulen	P. O. Box 391 Ashland, KY 41114	Administrative Vice President; Controller
Philip W. Block	P. O. Box 391 Covington, KY 41012	Administrative Vice President
J. Dan Lacy	P. O. Box 391 Covington, KY 41012	Vice President
David L. Hausrath	P. O. Box 391 Covington, KY 41012	Vice President and General Counsel
Richard P. Thomas	P. O. Box 391 Covington, KY 41012	Vice President and Secretary
Peter M. Bokach	P. O. Box 2219 Columbus, OH 43216	Vice President; President of Ashland Distribution Company

James A. Duquin

P. 0. Box 2219 Columbus, OH 43216 Vice President; President of Ashland Specialty Chemical Company

Lamar M. Chambers

Philip W. Block

P. 0. Box 391 Covington, KY 41012

400 - direct

Auditor

### SCHEDULE II

Executive Officer of	Stock Transactions effected within	
of Ashland	past 60 days	Total Ownership
Paul W. Chellgren		8,000 - direct
		598 - direct - held in the Arch Coal DRIP
J. Marvin Quin		1,500 - direct
James R. Boyd		5,000 - direct
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### EXHIBIT INDEX

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