# SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D

### UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. 4)

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)

January 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 2 (a) [ ] (b) [ ] N/A SEC USE ONLY 3 SOURCE OF FUNDS 00 (See Item 3) 4 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) CITIZENSHIP OR PLACE OF ORGANIZATION 6 Kentucky NUMBER OF SOLE VOTING POWER SHARES 22,123,273 BENEFICIALLY OWNED BY 8 SHARED VOTING POWER **EACH** 0 REPORTING PERSON WITH 9 SOLE DISPOSITIVE POWER 22,123,273 SHARED DISPOSITIVE POWER 10 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING 11 **PERSON** 22,123,273 shares of common stock CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES 12 CERTAIN SHARES [ ] PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 13 58.0% of the shares of common stock

CO

TYPE OF REPORTING PERSON

14

### 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

(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.

(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.

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

Item 3. Source and Amount of Funds or Other Consideration

Not applicable.

# Item 4. Purpose of Transaction

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

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 would seem 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. There can be no assurance that an agreement with the special committee of the Arch Coal Board of Directors will be reached or that the necessary approvals of the Arch Coal shareholders and the Ashland Board of Directors will be obtained or that a favorable ruling from the Internal Revenue Service will be obtained. Even if an agreement is reached and such conditions are met, Ashland anticipates that it will be several months before a tax-free spin-off could be consummated.

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On January 24, 2000, Ashland announced that it continues to pursue spin-off alternatives for its investment in Arch Coal, including both tax-free and taxable distributions.

Any strategic alternatives, including a spin-off, 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

### 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 except as disclosed on Schedule II.
  - Not applicable. (d)
  - Not applicable. (e)

#### 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

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.

January 24, 2000 (Date)

/s/ David L. Hausrath David L. Hausrath Vice President and General Counsel

Schedule I

## DIRECTORS AND EXECUTIVE OFFICERS

OF ASHLAND INC.

PRINCIPAL OCCUPATIONS AND BUSINESS ADDRESSES

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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)

Ralph E. Gomory President of the Alfred P. Sloan Foundation, New York, New York

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

Michael D. Rose Chairman of Midaro Investments, Inc., Memphis, Tennessee

William L. Rouse, Jr. Investments, Naples, Florida

Theodore M. Solso Chairman and Chief Executive Officer of Cummins Engine Company, Inc., Columbus,

Indiana

<sup>\*</sup> For business addresses, see Item 2.

| EXECUTIVE OFFICERS | BUSINESS ADDRESS   | PRINCIPAL OCCUPATION  |
|--------------------|--|---|
| Paul W. Chellgren  | P. 0. Box 391<br>41012   | Chairman of the Board Covington, KY and Chief Executive Officer |
| James R. Boyd      | P. O. Box 391<br>Covington, KY 41012                                     | Senior Vice President<br>and Group Operating<br>Officer         |
| David J. D'Antoni  | P. O. Box 2219<br>Columbus, OH 43216                                     | Senior Vice President<br>and Group Operating<br>Officer         |
| J. Marvin Quin     | P. O. Box 391<br>Covington, KY 41012                                     | Senior Vice President<br>and Chief Financial Officer            |
| James J. O'Brien   | P. O. Box 1400<br>Lexington, KY 40512                                    | Senior Vice President;<br>President, The Valvoline<br>Company   |
| Charles F. Potts   | APAC, Inc.<br>3340 Peachtree Rd., NE<br>Tower Place<br>Atlanta, GA 30326 | Senior Vice President;<br>President, APAC, Inc.                 |
| Kenneth L. Aulen   | P. O. Box 391<br>Ashland, KY 41114                                       | Administrative Vice<br>President; Controller                    |
| Philip W. Block    | P. O. Box 391<br>Covington, KY 41012                                     | Administrative Vice<br>President                                |
| J. Dan Lacy        | P. O. Box 391<br>Covington, KY 41012                                     | Vice President  |
| David L. Hausrath  | P. O. Box 391<br>Covington, KY 41012                                     | Vice President and<br>General Counsel                           |
| Richard P. Thomas  | P. O. Box 391<br>Covington, KY 41012                                     | Vice President and<br>Secretary                                 |
| Peter M. Bokach    | P. O. Box 2219<br>Columbus, OH 43216                                     | Vice President;<br>President of Ashland<br>Distribution Company |

James A. Duquin

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

Lamar M. Chambers

P. 0. Box 391 Covington, KY 41012

Auditor

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# SCHEDULE II

Philip W. Block

Stock Transactions

effected within Executive Officer of Ashland Total Ownership past 60 days Paul W. Chellgren 53 shares purchased with 8,000 - direct the December 15, 1999 dividend through the Arch 598 - direct - held in the Arch Coal DRIP Coal DRIP J. Marvin Quin 1,500 - direct James R. Boyd 5,000 - direct

400 - direct

# EXHIBIT INDEX

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