

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. 2)

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)

June 22, 1999
(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 .

CUSIP No. 039380100 13D Page 2 of 6

- 1 NAME OF REPORTING PERSONS Ashland Inc.
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
22,123,275 |
| | 8 | SHARED VOTING POWER
0 |
| | 9 | SOLE DISPOSITIVE POWER
22,123,275 |
| | 10 | SHARED DISPOSITIVE POWER
0 |
- 11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
22,123,275 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)
57.9% 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 22,123,275 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.

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

Item 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

Ashland has its shares of Arch Coal common stock enrolled in Arch Coal's Dividend Reinvestment Plan ("DRIP"). Under the DRIP, the dividends Ashland receives on its Arch Coal common stock are used to purchase additional shares of Arch Coal common stock. Since Amendment No. 1 to the Schedule 13D was filed, Ashland has acquired 187,720 shares of Arch Coal common stock through the DRIP.

Item 4. PURPOSE OF TRANSACTION

Ashland, as a shareholder of Arch Coal, has retained the investment banking firm of Goldman Sachs to explore strategic alternatives for Ashland's investment in Arch. Ashland is reviewing the fit between the strategic goals of Ashland and of Arch Coal in order to enhance the prospects for each to achieve more focused and company-specific business objectives, as well as to facilitate both managements' concentration on achieving those goals. Such alternatives 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. Ashland may discuss one or more of the foregoing matters with other stockholders of Arch Coal or may formulate a plan or proposal relating to one or more of the foregoing matters. In the context of the performance of their duties associated with membership on the Board, any of the designees of Ashland on the Board may discuss one or more of the foregoing matters with the other directors of Arch Coal or the members of the management team of Arch Coal or may formulate a plan or proposal relating to one or more of the foregoing matters.

Item 5. INTEREST IN SECURITIES OF THE ISSUER

I. ASHLAND

(a) Ashland presently owns 22,123,275 shares of Arch Coal common stock which represents approximately 57.9% 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) Ashland purchased 187,720 shares of Arch Coal common stock through the Arch Coal DRIP within the last 60 days. Other than this transaction, no other transaction in Arch Coal common stock was undertaken by Ashland. None of 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.

(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.

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.

June 22, 1999

(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

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	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
Bernadine P. Healy	Dean, College of Medicine and Public Health, and Professor of Medicine, The Ohio State University
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, Vero Beach, Florida
Michael D. Rose	Director and member of Executive Committee of Promus Hotel Corporation, Memphis, Tennessee
William L. Rouse, Jr.	Investments, Naples, Florida

* For business addresses, see Item 2.

EXECUTIVE OFFICERS	BUSINESS ADDRESS	PRINCIPAL OCCUPATION
Paul W. Chellgren	P. O. Box 391 41012	Chairman of the Board Covington, KY and Chief Executive Officer
John A. Brothers	P. O. Box 391 Covington, KY 41012	Executive Vice President and Group Operating 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
Charles F. Potts	APAC, Inc. 3340 Peachtree Rd., NE Tower Place Atlanta, GA 30326	Senior Vice President; President, APAC, Inc.
James J. O'Brien	P. O. Box 1400 Lexington, KY 40512	Senior Vice President; President, The Valvoline Company
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. O. Box 2219 Columbus, OH 43216	Vice President; President of Ashland Specialty Chemical Company
Lamar M. Chambers	P. O. Box 391 Covington, KY 41012	Auditor

SCHEDULE II

Executive Officer of Ashland -----	Stock Transactions effected within past 60 days -----	Total Ownership -----
Paul W. Chellgren	38 shares purchased with the June 15, 1999 dividend through the Arch Coal DRIP	8,000 - direct 511 - direct - held in the Arch Coal DRIP
J. A. Fred Brothers	28 shares purchased with the June 15, 1999 dividend through the Arch Coal DRIP	3,000 - direct 338 - direct - held in the Arch Coal DRIP
J. Marvin Quin		1,500 - direct
James R. Boyd		5,000 - direct
Philip W. Block		400 - direct

EXHIBIT INDEX

Stockholders Agreement between Arch Coal, Ashland and Carboex S.A. dated
April 4, 1997.

Stockholders Agreement

This Stockholders Agreement, dated as of April 4, 1997, is among Carboex International, Ltd., a company organized under the laws of the Bahamas ("Carboex"), Ashland Inc., a Kentucky corporation ("Ashland"), and Arch Mineral Corporation, a Delaware corporation ("Arch Mineral").

WHEREAS, at the Effective Time, as defined in that certain Agreement and Plan of Merger dated April 4, 1997, among Arch Mineral, Ashland Coal, Inc. and AMC Merger Corporation (the "Merger Agreement"), Ashland and Carboex will each own shares of the common stock, par value \$.01 per share, of Arch Mineral ("Common Stock"); and

WHEREAS, Carboex has relied upon this Agreement in consenting to the merger provided for in the Merger Agreement;

WHEREAS, Ashland and Carboex deem it in their best interests and the best interest of Arch Mineral that the voting power of the Common Stock owned by Ashland and Carboex be exercised pursuant to prior agreement to the extent and upon the terms and conditions stated herein; and

WHEREAS, Ashland, Carboex and Arch Mineral desire to enter into certain agreements with respect to the ownership and transfer of shares of Common Stock owned by Ashland and Carboex and with respect to the nomination of persons for election to the Board of Directors of Arch Mineral; and

NOW, THEREFORE, an agreement in respect of the shares of Common Stock owned by Ashland and Carboex is hereby established upon the following terms and conditions to all of which the parties hereto expressly assent and agree:

SECTION 1. DEFINITIONS. As used in this Agreement, and unless the context requires a different meaning, the following terms (whether used in the singular or plural) have the meanings indicated:

"Affiliate" means, with respect to any Person, any Person that controls, is controlled by or is under common control with such Person in question. For the purposes of this definition, ("control" (including, with correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities or by contract or otherwise.

"Exchange Act" means the Securities Exchange Act of 1934 as amended from time to time and the rules and regulations of the SEC thereunder.

"Industry Buyer" means a Person engaged primarily in the business of industrial or natural resource production, distribution or sales, as determined by the Board of Directors of Arch Mineral. The term Industry Buyer shall also include financial buyers, financial intermediaries, brokers, dealers, banks, investment banks or merchant banks ("Financial Buyer") ONLY if the sale to such Financial Buyer will result, or is reasonably likely to result at any time during the three-month period immediately following the sale, in at least three individuals who were members of the Board of Directors of Arch Mineral immediately prior to such sale no longer serving as directors by reason of such sale.

"Permitted Transferee" means in the case of a Permitted Transferee of Ashland, the Affiliate or Affiliates of Ashland to whom Ashland has transferred all or part of its Voting Stock, or in the case of a Permitted Transferee of Carboex, the Affiliate or Affiliates of Carboex to whom Carboex has transferred all or part of its Voting Stock.

"Person" means an individual, corporation, limited liability company, partnership, trust, incorporated or unincorporated association, joint venture, joint stock company, government (or an agency or political subdivision thereof) or other entity of any kind.

"Public Offering" means a public offering and sale of Common Stock for cash pursuant to (i) an effective registration statement under the Securities Act (other than pursuant to Form S-4 or S-8) and in compliance with all applicable state securities laws, (ii) a private offering to certain qualified institutional buyers in accordance with Rule 144A under the Securities Act or (iii) an offering to non-U.S. persons outside the United States in accordance with Regulation S under the Securities Act.

"Registration Rights Agreement" means that certain registration rights agreement among Arch Mineral, Ashland, Carboex and certain other parties dated the same date as this Agreement.

"SEC" means the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act or the Exchange Act.

"Securities Act" means the Securities Act of 1933 as amended from time to time and the rules and regulations of the SEC thereunder.

"Voting Stock" means capital stock of any class or classes of Arch Mineral, the holders of which are entitled, in the absence of contingencies, to participate generally in the election of the members of Arch Mineral's Board of Directors, and any securities of Arch Mineral convertible into, or exercisable or exchangeable for, any such capital stock of Arch Mineral, including, without limitation, the Common Stock; provided, HOWEVER, that any capital stock held in the treasury of Arch Mineral or held by any subsidiary of Arch Mineral shall not be Voting Stock.

SECTION 2. DIRECTOR NOMINATION AND ELECTION. (a) The parties hereto agree with the principle that Carboex, at all times during the effectiveness of this Agreement and subject to the terms and conditions of this Agreement, shall be entitled to be represented by one member of the Board of Directors of Arch Mineral. Ashland and Arch Mineral agree they shall take the following steps to cause one representative of Carboex to be elected to the Board of Directors of Arch Mineral:

(i) Arch Mineral shall give at least 10 days' notice to Ashland and Carboex of any meeting of its Board of Directors (or any committee thereof) at which the Board's nominees for election are to be selected. Upon receipt of such notice from Arch Mineral, Carboex shall within 10 days thereafter furnish Arch Mineral with a written designation of one nominee for election to the Board of Directors of Arch Mineral, with a copy thereof to Ashland. Such notice shall be given in the manner set forth in Section 6 of this Agreement. If no written designation of a nominee is received by Arch Mineral within the time frame specified herein, the current director of Arch Mineral designated by Carboex shall be a nominee for the ensuing election.

(ii) So long as this Agreement is in effect, Arch Mineral hereby agrees to take all actions necessary to nominate or cause to be nominated and to solicit proxies (and if properly executed or otherwise valid, to vote all such proxies and other shares which Arch Mineral management is otherwise entitled to vote in accordance with the terms and requirements of this provision) for election as a director at each annual meeting of stockholders (or, if applicable, at any special meeting of stockholders) of Arch Mineral, the representative of Carboex designated by Carboex or in favor of the current director designated by Carboex, as the case may be, pursuant to Section 2(a)(i) above.

(iii) So long as this Agreement is in effect, Ashland in respect of the election of the directors of Arch Mineral, agrees to vote or cause to be voted, in person or by proxy, the number of the shares of Voting Stock now or hereafter held or owned directly or indirectly by it which when combined with the shares of Voting Stock held or owned directly or indirectly by Carboex and its Permitted Transferees and the proxies received by Arch Mineral under Section 2(a)(ii) above, will be sufficient to elect the person Carboex designates in writing pursuant to Section 2(a)(i) above as a director of Arch Mineral.

In addition, so long as this Agreement is in effect, if Ashland or its Permitted Transferees shall be the beneficial owner (as defined in Rule 13d-3(a) under the Exchange Act) of less than 20% but more than 10% of the outstanding Voting Stock, then Ashland shall be entitled to vote the shares of Voting Stock held or owned directly or indirectly by Ashland in such manner as it may, in its sole discretion, deem advisable, to elect the number of directors of Arch Mineral that it would be entitled to elect with cumulative voting for election of directors, and Ashland further agrees to vote any remaining shares of its Voting Stock for election of the Carboex representative as provided above.

Except as specifically set forth in this Section 2(a)(iii), Ashland shall be free to vote its shares of Voting Stock in such manner as it may, in its sole discretion, deem advisable.

(iv) So long as this Agreement is in effect, Carboex may designate a successor to fill any vacancy created by the death, resignation, or incapacity of its designated nominee to the Arch Mineral Board of Directors by giving notice to Arch Mineral in the manner set forth in Section 6 of this Agreement setting forth the name of the new designee. Arch Mineral will recommend to the Board such new designee and Ashland will vote its shares in the election of directors, if required, to cause the Board to appoint Carboex's designee and each of Arch Mineral and Ashland will cause to be taken all steps to assure the continued representation of Carboex on the Arch Mineral Board of Directors contemplated by this Section 2.

(b) Notwithstanding the foregoing Sections 2(a) (i) - (iv) , if at any time during the term of this Agreement Arch Mineral adopts a staggered Board of Directors, Arch Mineral and Ashland shall take all steps regarding nomination and election of directors to ensure Carboex continues to be represented by one member of the Board of Directors.

SECTION 3. TAG-ALONG RIGHT. (a) If at any time Ashland or any of its Permitted Transferees desires to sell or otherwise dispose of ("sell") 50% or more of the then outstanding shares of Common Stock held by Ashland or its Permitted Transferees, considered as a group, to an Industry Buyer, or 20% or more of the total outstanding shares of Common Stock of Arch Mineral at such time to an Industry Buyer, then at least 30 days prior to selling such Common Stock to such Industry Buyer, Ashland shall deliver written notice (the "Tag-Along Notice") to Carboex specifying (i) the identity of the Industry Buyer, (ii) the number of shares of Common Stock owned by Ashland and its Permitted Transferees which they propose to sell, (iii) the proposed price per share to be paid to Ashland or its Permitted Transferees by the Industry Buyer, (iv) the form of consideration (e.g., cash or notes) to be paid by such Industry Buyer and (v) any other material terms and conditions of the proposed sale (the "Proposed Sale") . Within 15 days following its receipt of the Tag-Along Notice, Carboex may, if it desires to exercise its Tag-Along Right, deliver a written notice (a "Tag-Along Instruction") to Ashland stating that Carboex desires to participate in the Proposed Sale and setting forth the number of shares of Common Stock then held by Carboex and its Permitted Transferees to be sold in the Proposed Sale (it being expressly agreed that Carboex may not exercise its Tag-Along rights for less than all the Common Stock held by Carboex and its Permitted Transferees). A Tag-Along Instruction delivered pursuant to this Section 3(a) shall be deemed to be an irrevocable commitment by Carboex and its Permitted Transferees to sell pursuant to the Proposed Sale the number of shares of Common Stock held by Carboex and its Permitted Transferees set forth in the Tag-Along Instruction. Failure to provide a Tag-Along Instruction within the 15-day period specified in this Section 3(a) shall constitute a waiver of the right of Carboex and its Permitted

Transferees to have any shares of Common Stock included in the Proposed Sale. Carboex's Tag-Along right provided in this Section 3(a) shall not apply to transfers by Ashland to its Permitted Transferees, to Public Offerings or to sales of Common Stock pursuant to the Registration Rights Agreement.

(b) In the event Carboex timely elects to exercise its Tag-Along rights, Carboex shall deliver to Ashland, at the same time the Tag-Along Instruction is delivered, the certificate or certificates representing the shares of Common Stock to be sold by Carboex and its Permitted Transferees duly endorsed in blank for transfer, free and clear of all liens other than any liens created by action of Ashland, but without any other representation or warranty, other than customary representations and warranties given in transactions of this sort and with all requisite stock transfer tax stamps attached, together with a limited power-of-attorney authorizing Ashland to sell such shares of Common Stock in accordance with the terms of the Tag-Along Notice. Promptly after the consummation of the Proposed Sale, Ashland shall notify Carboex of such consummation, shall remit to Carboex the net consideration received (less an allocable portion of the transfer taxes and reasonable out-of-pocket expenses) for the shares of Common Stock of Carboex and its Permitted Transferees sold pursuant to the Proposed Sale, and shall furnish such other evidence of the completion and time of completion of the Proposed Sale and the terms thereof as may be reasonably requested in writing by Carboex. If the net consideration received in the Proposed Sale is comprised of cash and non-cash proceeds, Carboex will receive its pro rata portion of each type of net consideration based on the percentage of the total number of shares sold represented by the shares sold by Carboex and its Permitted Transferees. If at the end of six months from the date of the Tag-Along Notice, Ashland has not completed the Proposed Sale of the Common Stock of Carboex designated by a Tag-Along Instruction to be sold to the Industry Buyer, Ashland shall return to Carboex all certificates representing shares of Common Stock which Carboex delivered pursuant to this Section 3, and all the rights and obligations contained in this Agreement with respect to such shares of Common Stock (other than Common Stock of Ashland being transferred in the Proposed Sale) shall again be in effect and Ashland may not effect another Section 3 Proposed Sale without repeating the foregoing procedures.

(c) Notwithstanding anything contained in this Section 3 and subject to compliance by Ashland and its Permitted Transferees with the provisions of this Section 3, there shall be no liability on the part of Ashland or its Permitted Transferees to Carboex or its Permitted Transferees if the Proposed Sale pursuant to this Section 3 is not consummated for any reason whatsoever. Any decision as to whether to sell in the Proposed Sale shall be at Ashland's sole and absolute discretion.

SECTION 4. ENFORCEABILITY. Arch Mineral hereby represents that this Agreement is its valid and binding obligation enforceable against it in accordance with its terms, except to the extent that the terms may conflict with the Bylaws of Arch Mineral. If it is determined that due to any such conflict the obligations of any of the parties to this Agreement are not enforceable, then Arch Mineral, Ashland and Carboex agree to use their best efforts to effect an amendment to the Bylaws of Arch

Mineral to address the issue (or eliminate the inconsistency) that created the unenforceability all consistent with the principle that Carboex, at all times during the effectiveness of this Agreement and subject to the terms and conditions of this Agreement, shall be entitled to be represented by one member of the Board of Directors of Arch Mineral. Except in respect of any Arch Mineral obligation that requires it to act in a manner inconsistent with its Bylaws, Arch Mineral represents that its obligations hereunder comply in all respects with the provisions of the Delaware General Corporation Law, including, without limitation, Sections 211 and 223 thereof.

SECTION 5. TERMINATION. This Agreement shall terminate upon the earliest to occur of the following:

(a) In the event that Arch Mineral shall merge or consolidate with any other corporation (Arch Mineral not being the surviving corporation) and, upon consummation of such merger or consolidation, the stockholders of Arch Mineral immediately prior to such merger or consolidation shall not own at least 40% of the outstanding shares of voting stock of the corporation whose securities are exchanged in the merger, or if Arch Mineral shall sell, lease or transfer all or substantially all the property, assets or business of Arch Mineral; or

(b) If at any time Carboex or its Permitted Transferees shall be the beneficial owner (as defined in Rule 13d-3(a) under the Exchange Act) of less than 63% of the shares of Common Stock owned by Carboex at the Effective Time (as that term is defined in the Combination Agreement); provided that Carboex shall be deemed to hold for this purpose any shares of Arch Mineral Common Stock which Carboex has transferred to Arch Mineral or any subsidiary of Arch Mineral in exchange for voting equity securities of approximately equivalent voting power of Arch Mineral or such subsidiary.

In addition, this Agreement shall terminate as to Ashland only but not as to Arch Mineral or Carboex if at any time Ashland or its Permitted Transferees shall cease to be the beneficial owner (as defined in Rule 13d-3 (a) under the Exchange Act) of 10% or more of the outstanding Voting Stock.

SECTION 6. NOTICES. Any notice or other communication hereunder shall be in writing and shall be duly given (i) on the date of delivery if received in person; (ii) on the third business day after dispatch if sent by documented overnight international delivery service such as Federal Express; (iii) on the date of transmission if sent by facsimile transmission, provided that a confirmation copy thereof is sent no later than the business day following transmission by documented overnight delivery service or certified mail, postage prepaid, return receipt requested. Notices or other communications shall be directed to the following addresses:

- (a) Ashland Inc.
P.O. Box 391
Ashland, KY 41114
Attention: General Counsel
Fax: (606) 329-3559
- (b) Carboex International, Ltd.
c/o Carboex S.A.
Calle Manuel Cortina
No. 2, Madrid, 10, Spain
Attention: Chairman
Fax: 011-341-445-2407
- (c) Arch Mineral Corporation
Suite 300
CityPlace One
St. Louis, MO 63141
Attention: General Counsel
Fax: (314) 994-2734

All such notices, except those received in person, shall be deemed received on the date of receipt by the recipient thereof if received prior to 5 p.m. in the place of receipt and such day is a business day in the place of receipt. Otherwise, any such notice shall be deemed not to have been received until the next succeeding business day in the place of receipt.

Any of the parties hereto may, by notice given in accordance with this Section 6, specify a new address for notices under this Agreement.

SECTION 7. MISCELLANEOUS. (a) Remedies; Jurisdiction. Each of the parties hereto acknowledge and agree that in the event of any breach of this Agreement, the nonbreaching party or parties would be irreparably harmed and could not be made whole by monetary damages. It is accordingly agreed that the parties hereto will waive the defense in any action for specific performance that a remedy at law would be adequate and that the parties hereto, in addition to any other remedy to which they may be entitled at law or in equity, shall be entitled to compel specific performance of this Agreement. With respect to any suit, action or proceeding relating to this Agreement ("Proceedings"), each party irrevocably:

(i) submits to the exclusive jurisdiction of the courts of the State of Delaware and the United States District Court for the District of Delaware;

(ii) waives any objection which it may have at any time to the laying of venue of any Proceedings brought in any such court, waives any claim that such Proceedings have been brought in an inconvenient forum and further waives the right to object, with respect to such Proceedings, that such court does not have jurisdiction over such party;

(iii) consents and agrees that the service of any and all legal process, summons, notices and documents which may be served in any Proceedings arising hereunder may be made by complying with the provisions set forth in Section 6 hereof, with such service to be effective upon receipt;

(iv) waives posting of a bond or other security; and

(v) waives any right it may have to a trial by jury.

(b) HEADINGS. The headings in this Agreement are for convenience of reference only and shall not control or affect the meaning or construction of any provision hereof.

(c) ENTIRE AGREEMENT. This Agreement constitutes the entire agreement and understanding of the parties hereto in respect of the subject matter contained herein and there are no restrictions, promises, representations, warranties, covenants or undertakings with respect to the subject matter hereof other than those expressly set forth or referred to herein or therein. This Agreement supersedes all prior agreements and understandings between the parties hereto with respect to the subject matter hereof and thereof.

(d) APPLICABLE LAW. The validity of this Agreement, or any part hereof, and the interpretation of all provisions hereof, shall be governed by the laws of the State of Delaware.

(e) SEVERABILITY. The invalidity, illegality or unenforceability of any provision of this Agreement in any jurisdiction shall not affect the validity, legality or enforceability of the remainder of this Agreement in such jurisdiction or the validity, legality or enforceability of this Agreement or such provision in any other jurisdiction, it being intended that all rights and obligations of the parties hereunder shall be enforceable to the fullest extent permitted by law.

(f) AGREEMENT TO BE BOUND. Notwithstanding anything to the contrary contained in this Agreement, no shares of Voting Stock may be sold, transferred or otherwise disposed of to any Permitted Transferee unless such Permitted Transferee, prior to such sale, transfer or other disposition, agrees in writing, in form and substance satisfactory to Arch Mineral, to be bound by the terms of this Agreement to the same extent and in the same manner as the transferor of such shares, a copy of which writing shall be maintained on file with the Secretary of Arch Mineral and shall include the address of such Permitted Transferee to which notices hereunder shall be sent.

(g) SUCCESSORS; ASSIGNS; TRANSFEREES. The provisions of this Agreement shall be binding upon and accrue to the benefit of the parties hereto and their respective successors and Permitted Transferees. Notwithstanding the foregoing, neither this Agreement nor any right, remedy, obligation or liability arising hereunder

or by reason hereof shall be assignable (including by pledge or other security interest) by any of the parties hereto without the prior written consent of Ashland and its Permitted Transferees and Carboex and its Permitted Transferees; provided, however, that Ashland or Carboex may assign its or their rights, remedies, obligations and liabilities in connection with a transfer of its or their shares of Voting Stock to a Permitted Transferee in accordance with the terms of this Agreement.

(h) AMENDMENTS; WAIVERS. This Agreement may not be amended, modified or supplemented and no waivers of or consents to departures from the provisions hereof may be given unless consented to in writing by each of the parties hereto.

(i) COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which, when so executed, shall be deemed to be an original, and such counterparts shall together constitute one and the same instrument.

(j) LIMITED LIABILITY. Notwithstanding any other provision of this Agreement, none of the present or future directors, officers, or stockholders of the parties hereto shall have any personal liability for performance of any obligation of such party under this Agreement.

IN WITNESS WHEREOF, the undersigned parties have executed this Agreement, all as of the day and year above written.

ASHLAND INC.,

By: /s/ Thomas L. Feazell
Name: Thomas L. Feazell
Title: Senior Vice President,
General Counsel and Secretary

CARBOEX INTERNATIONAL, LTD.,

By: /s/ Duan A. Ferrando
Name: Duan A. Ferrando
Title: Director

ARCH MINERAL CORPORATION

By: /s/ Jeffrey N. Quinn
Name: Jeffrey N. Quinn
Title: Senior Vice President