

SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(A) OF THE SECURITIES
EXCHANGE ACT OF 1934

Filed by the Registrant [X]

Filed by a Party other than the Registrant []

Check the appropriate box:

[] Preliminary Proxy Statement

[] Confidential, for Use of the Commission Only (as permitted
by Rule 14a-6(e)(2))

[X] Definitive Proxy Statement

[] Definitive Additional Materials

[] Soliciting Material Pursuant to Section 240.14a-11(c) or
Section 240.14a-12

ARCH COAL, INC.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of filing fee (Check the appropriate box):

[X] No fee required.

[] Fee computed on table below per Exchange Act Rules
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(1) Title of each class of securities to which transaction
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(3) Per unit price or other underlying value of
transaction computed pursuant to Exchange Act Rule
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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Notes:

[ARCH COAL, INC. LOGO]

CityPlace One, Suite 300,
St. Louis, Missouri 63141
(314) 994-2700

March 27, 1998

To Our Stockholders:

You are cordially invited to attend the Annual Meeting of Stockholders of Arch Coal, Inc. (the "Company") which will be held at the Company's headquarters at CityPlace One, Suite 300, St. Louis, Missouri, in the lower level auditorium, on Wednesday, April 22, 1998, at 10:00 a.m., local time. The formal Notice of the Annual Meeting, the Proxy Statement and a proxy card accompany this letter. The Company (formerly Arch Mineral Corporation) is the resulting corporation of a business combination of Ashland Coal, Inc. ("Ashland Coal") and Arch Mineral Corporation, which occurred on July 1, 1997. As a result of this combination, Ashland Coal became a wholly-owned subsidiary of the Company.

We hope that you will be present at the meeting. Whether or not you plan to attend, please complete, sign and return the enclosed proxy card in the postage-prepaid envelope, also enclosed. The prompt return of your proxy card will be greatly appreciated.

The Company's Annual Report for 1997 is also enclosed.

Sincerely yours,

/s/ John R. Hall

John R. Hall
Chairman of the Board

/s/ Steven F. Leer

Steven F. Leer
President and Chief Executive Officer

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS OF
ARCH COAL, INC.
TO BE HELD APRIL 22, 1998

NOTICE IS HEREBY GIVEN that the Annual Meeting (the "Annual Meeting") of Stockholders of Arch Coal, Inc. ("Arch Coal" or the "Company") will be held at the Company's headquarters, CityPlace One, Suite 300, St. Louis, Missouri, in the lower level auditorium, on Wednesday, April 22, 1998, at 10:00 a.m., local time, for the following purposes:

1. To elect ten (10) directors each to serve until the Annual Meeting of the Stockholders in 1999 and until their successors are duly elected and qualified.
2. To ratify the Arch Coal, Inc. 1997 Stock Incentive Plan previously adopted by the Company's stockholders.
3. To ratify the appointment of Ernst & Young LLP as independent auditors for 1998.
4. To transact such other business as may properly come before the Annual Meeting.

The close of business on March 9, 1998 has been fixed as the record date for the Annual Meeting. All holders of Common Stock of record at that time will be entitled to vote at the Annual Meeting. Cumulative voting rights exist with respect to the election of directors. A list of stockholders will be open for examination by any stockholder at the Annual Meeting and for a period of ten days prior to the date of the Annual Meeting during normal business hours at the principal executive offices of the Company, CityPlace One, Suite 300, St. Louis, Missouri.

The Annual Meeting may be adjourned from time to time without notice other than an announcement at the meeting, or any adjournment thereof, and any business for which notice is hereby given may be transacted at any such adjournment.

By Order of the Board of Directors,

/s/ Jeffrey N. Quinn

Jeffrey N. Quinn
Senior Vice President - Law and Human
Resources Secretary and General Counsel

St. Louis, Missouri
March 27, 1998

NOTE -- IT IS IMPORTANT YOUR SHARES BE VOTED AT THE ANNUAL MEETING.
Please sign, date and return your proxy
as promptly as possible.

ARCH COAL, INC.

CityPlace One, Suite 300
St. Louis, Missouri 63141
(314) 994-2700

PROXY STATEMENT
FOR
ANNUAL MEETING OF STOCKHOLDERS
APRIL 22, 1998

This Proxy Statement and the form of proxy enclosed herewith are furnished in connection with the solicitation of proxies by the Board of Directors of Arch Coal, Inc. ("Arch Coal" or the "Company") to be voted at the Annual Meeting of Stockholders (the "Annual Meeting") to be held on Wednesday, April 22, 1998, at 10:00 a.m., local time, and at any adjournment thereof, at Arch Coal's principal executive offices located at CityPlace One, St. Louis, Missouri, in the lower level auditorium. Arch Coal (formerly Arch Mineral Corporation) is the resulting corporation of a business combination (the "Merger") of Ashland Coal, Inc. ("Ashland Coal") and Arch Mineral Corporation ("Arch Mineral") which occurred on July 1, 1997. As a result of the Merger, Ashland Coal became a wholly-owned subsidiary of Arch Coal. The approximate date on which this Proxy Statement and the accompanying form of proxy are first being sent to stockholders is March 27, 1998. An annual report to stockholders, including financial statements for the year ended December 31, 1997, is enclosed with this Proxy Statement.

Shares represented by proxies in the accompanying form, if properly signed and returned, will be voted in accordance with the directions made thereon by the stockholders. Unless otherwise indicated, a proxy will be voted FOR the election of the nominees for director named below, FOR ratification of the Arch Coal, Inc. 1997 Stock Incentive Plan (the "Stock Incentive Plan"), and FOR ratification of the appointment of Ernst & Young LLP, independent public accountants, as the Company's auditors for the year ending December 31, 1998, and in the discretion of the proxies on any other matter properly before the Annual Meeting. Any proxy given pursuant to this solicitation may be revoked at any time prior to the voting thereof, but such revocation shall not be effective unless written notice thereof has been given to the Secretary of the Company. A proxy may also be revoked by furnishing a duly executed proxy bearing a later date to the Secretary of the Company or by attending the Annual Meeting and voting in person. Attendance at the meeting will not have the effect of revoking a proxy unless the stockholder so attending shall, in writing, so notify the Secretary of the meeting prior to the voting of the proxy.

Only the holders of record of shares of Common Stock, par value \$.01 per share ("Common Stock"), of Arch Coal at the close of business on March 9, 1998, are entitled to notice of and to vote at the Annual Meeting. Cumulative voting rights exist with respect to the election of Directors. Cumulative voting means that a stockholder has the right, in person or by proxy, to multiply the number of votes to which such stockholder is entitled by virtue of his or her share ownership by the number of Directors to be elected and cast this total number of votes for any one nominee, or to distribute the total number of votes, in any proportion, among as many nominees as the stockholder desires, up to the number of Directors to be elected. The named proxies will have the right to vote cumulatively and to distribute votes among nominees as they deem advisable. On all other matters to come before the Annual Meeting, each share of Common Stock is entitled to one vote. As of March 9, 1998, there were 39,657,898 shares of Common Stock issued and outstanding held by approximately 871 holders of record.

The holders of a majority of the outstanding shares of stock, present in person or by proxy, shall constitute a quorum. For purposes of determining the presence of a quorum, abstentions will be included in the computation of the number of shares of Common Stock that is present. Approval of the proposals to ratify the Stock Incentive Plan and to ratify the appointment of independent auditors for 1998 will each require the affirmative vote of the holders of a majority of the shares of Common Stock that are present or represented at the Annual Meeting and entitled to vote. If your proxy card is specifically marked as abstaining from voting on either proposal, your shares will, in effect, be voted against such proposal. Broker non-votes will not be counted as being entitled to vote on a proposal and will not affect the outcome of the vote on such proposal.

Whole shares of Common Stock credited to the account of a participant in Arch Coal's Dividend Reinvestment Plan will be voted in accordance with the proxy card returned by the participant. The shares of Common Stock held under the Arch Coal, Inc. Employee Thrift Plan will be voted by its Trustee in accordance with the instructions received by participants and, if a participant does not provide instructions, the Trustee will vote the shares for which no instructions are received in the same proportion as shares for which instructions are received from other participants.

ELECTION OF DIRECTORS
(PROPOSAL 1 ON THE PROXY CARD)

Under the Company's Restated Certificate of Incorporation and By-laws, the Board of Directors is to consist of such number of directors as is determined from time to time by a two-thirds vote of the Board. The Board of Directors has determined that effective at the time of the next election of the Board, the number of Directors constituting the whole Board shall be ten. The Board of Directors currently consists of thirteen members. Messrs. Robert A. Charpie, Thomas Marshall and Ronald E. Samples, currently members of the Board, will retire at the end of the current term, at which time the Board will be reduced from thirteen to ten Directors. All of the nominees have consented to serve if elected.

At the Annual Meeting, ten directors are to be elected, each to hold office until the next annual election of directors and until a successor is elected and qualified. In the election, the ten persons who receive the highest number of votes cast will be elected.

It is the intention of the persons named in the enclosed proxy (Messrs. Steven F. Leer and Jeffry N. Quinn), unless otherwise instructed in any form of proxy, to vote for the election of the ten nominees named below, each of whom is currently a member of the Board of Directors. Such proxy holders also may vote such shares cumulatively for less than the entire number of nominees if any situation arises which, in the opinion of the proxy holders, makes such action necessary or desirable. Arch Coal has no reason to believe that any of the nominees will not be available for election as Directors. Arch Coal is soliciting and the proxy holders are being granted discretionary authority to cumulate and to vote the shares of stock as they determine. If stockholders do not wish to confer authority to cumulate their votes as provided in the proxy, stockholders may exercise their right to cumulate votes in the election of Directors by attending the meeting and voting in person.

NOMINEES FOR DIRECTOR

Information regarding each nominee for election as a Director is set forth below:

JAMES R. BOYD, age 51, has been a director of the Company since 1990. He is Senior Vice President and Group Operating Officer of Ashland Inc. with responsibility for APAC, Inc., Ashland Services Company and Arch Coal.

PAUL W. CHELLGREN, age 55, a director of Ashland Coal from 1981 to 1997, has been a director of the Company since 1997. He has been Chairman of the Board of Ashland Inc. since 1997, Chief Executive Officer of Ashland Inc. since 1996 and President of Ashland Inc. since 1992. Mr. Chellgren was Chief Operating Officer of Ashland Inc. from 1992 to 1996 and Senior Vice President and Chief Financial Officer of Ashland Inc. from 1988 to 1992. He is a Director of Ashland Inc., PNC Bank Corp. and Medtronic Inc.

THOMAS L. FEAZELL, age 61, has been a director of the Company since 1997 and was a director of Ashland Coal from 1981 to 1997. He has served as Senior Vice President, General Counsel and Secretary of Ashland Inc. since 1992. He is a Director of National City Bank of Ashland, Kentucky.

JUAN ANTONIO FERRANDO, age 56, a director of Ashland Coal from 1988 to 1997, has been a director of the Company since 1997. He is a Director of Carboex International, Ltd. ("Carboex") and has been Senior Vice President, Business Development, Carboex, S.A. (a coal supply firm) since 1986.

JOHN R. HALL, age 65, has been Chairman of the Board of the Company since 1997 and a director since 1979. In January 1997, he retired as Ashland Inc.'s Chairman of the Board and Director, positions he had held since 1981 and 1968, respectively. In October 1996, Mr. Hall retired as Chief Executive Officer of Ashland Inc., a position he had held since 1981. He is also a Director of Banc One Corporation, The Canada Life Assurance

Company, CSX Corporation, Humana Inc., Reynolds Metals Company and Ucar International Inc. and is a member of the American Petroleum Institute Executive Committee.

ROBERT L. HINTZ, age 67, a director of the Company since 1997, has been Chairman of the Board of R. L. Hintz & Associates (a management consulting firm) since 1989. Mr. Hintz was a director of Ashland Coal from 1993 to 1997. Mr. Hintz retired in 1988 as Executive Vice President of CSX Corporation. He is a Director of Reynolds Metals Company, Scott & Stringfellow, Inc., Chesapeake Corporation, Christian Childrens Fund and St. Joseph's Villa. He is Chairman of MVC-VCU Hospital Hospitality House.

DOUGLAS H. HUNT, age 45, has been a director of the Company since 1995. He is the Director of Acquisitions of Petro-Hunt Corporation (a private oil and gas exploration and production company).

STEVEN F. LEER, age 45, has been President and Chief Executive Officer and a director of the Company since 1992. Prior to joining the Company, Mr. Leer served as Senior Vice President of The Valvoline Company, a subsidiary of Ashland Inc. He serves on the Board of Directors of Mercantile Trust Company, National Association. He is also a Director of the Center for Energy and Economic Development, Chairman of the Coal Policy Committee for the National Coal Council, and Vice Chairman of the National Mining Association.

JAMES L. PARKER, age 60, has been a director of the Company since 1995. He is President of Hunt Petroleum Corporation (a private oil and gas exploration and production company), a position that he has held for more than five years.

J. MARVIN QUIN, age 50, has been a director of the Company since 1997, and was a director of Ashland Coal from 1992 to 1997. He has been Senior Vice President and Chief Financial Officer of Ashland Inc. since 1992. He also serves as a Director of Kentucky Electric Steel, Inc.

Except as otherwise indicated, the nominees have held the principal occupations described above during the past five years. Ashland Inc. owns approximately 54% of the outstanding shares of Common Stock (see "SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT").

INFORMATION CONCERNING THE BOARD OF DIRECTORS

MEETINGS AND COMMITTEES

Prior to the Merger, the Board of Directors of Arch Mineral held one regular and three special board meetings in 1997. Subsequent to the Merger and for the remainder of 1997, the Board held four additional regular meetings. After the consummation of the Merger, the Board established five standing committees: the Audit Committee, the Committee on Directors, the Finance Committee, the Personnel and Compensation ("P&C") Committee and the Stock Incentive Committee. During 1997, each nominee attended more than 75% of the total meetings of the Board and the Committees on which he served. Overall attendance at Board and Committee meetings during 1997 was approximately 95%.

The Audit Committee, comprised of Mr. Hintz (Chairman) and Messrs. Ferrando, Parker and Samples, met twice during 1997. Its duties include recommending Arch Coal's independent auditors, reviewing the scope and results of external and internal audits, reviewing internal accounting controls, reviewing significant changes in accounting principles, approving in advance all substantial services which are not audit-related to be provided by the independent auditors, obtaining and reviewing reports on legal compliance and reviewing material litigation and related matters, if any.

The Committee on Directors is comprised of Mr. Chellgren (Chairman) and Messrs. Feazell, Hunt and Marshall. The Committee on Directors met once during 1997. Its functions include the recruitment and recommendation to the Board of Directors of nominees for Directors, the oversight of the annual evaluation of Directors and the review and recommendation of the Directors' compensation program.

The Finance Committee is comprised of Mr. Charpie (Chairman) and Messrs. Boyd, Ferrando, Parker and Quin. It met twice in 1997. This Committee reviews and approves fiscal policies relating to the Company's financial structure, including its debt, cash and risk management. It also reviews and recommends to the Board appropriate action with respect to significant financial matters, major capital expenditures and acquisitions, and funding policies of the Company's employee benefit plans.

The P&C Committee is comprised of Mr. Feazell (Chairman) and Messrs. Charpie, Chellgren, Hunt and Marshall. It met five times during 1997. The duties of this Committee include the approval of the compensation of senior executives of the Company and its subsidiaries above specified dollar levels and the selection of participants and awards under Arch Coal's incentive plans (except for those made under the Stock Incentive Plan which is administered by the Stock Incentive Committee). The P&C Committee also establishes policies regarding compensation, position evaluations, transfers, and terminations. In addition, it provides oversight of Arch Coal retirement, savings and other benefit plans.

The Stock Incentive Committee, which met twice in 1997, is comprised of Mr. Marshall (Chairman) and Messrs. Hintz, Hunt and Samples. The Committee recommends the establishment of policies dealing with stock-based compensation and administers all stock-based incentive compensation plans, including the Stock Incentive Plan.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS
AND MANAGEMENT

The following table sets forth certain information as of March 9, 1998, unless otherwise noted, concerning ownership of the outstanding Common Stock by those persons known to Arch Coal to be the beneficial owner of more than 5% of the total outstanding Common Stock; each director or nominee for a director; each of the executive officers named in the Summary Compensation Table; and all directors and executive officers as a group. Except as noted and for Common Stock acquired by means of dividend reinvestments under the Company's Dividend Reinvestment Plan in respect of dividends payable to holders of record on March 9, 1998, the listed persons have no other right to acquire beneficial ownership of Common Stock exercisable within 60 days. Ashland Inc. owns Common Stock representing approximately 54% of the voting power of Arch Coal, and has the power to elect a majority of the Board of Directors. Pursuant to an Agreement between the Company, Ashland Inc. and Carboex, the Company has agreed to nominate for election as a Director of the Company a person designated by Carboex, and Ashland Inc. has agreed to vote sufficient shares of the Common Stock in a manner sufficient to cause the election of such nominee. Pursuant to such Agreement, Ashland Inc. will vote its shares of Common Stock in favor of the election of Mr. Juan Ferrando as a Director. Each stockholder listed below has sole voting and dispositive power with respect to the Common Stock listed, unless otherwise noted.

BENEFICIAL OWNER - - - - -	NUMBER OF SHARES - - - - -	PERCENT OF CLASS - - - - -
Ashland Inc. P.O. Box 391 Ashland, Kentucky 41114	21,552,167	54.3%
Hunt Coal Corporation 5000 Thanksgiving Tower Dallas, Texas 75201	2,199,659	5.5
Carboex International, Ltd. Sasoon Building Shirley Street & Victoria Avenue P.O. Box N-272 Nassau, Bahamas	2,050,000	5.2
James R. Boyd(1)	1,000	*
Robert A. Charpie	10,000	*
Paul W. Chellgren(1)	5,426(2)	*
Thomas L. Feazell(1)	678(3)	*
Juan Antonio Ferrando (4)	--	--
John R. Hall	10,500(5)	*
Robert L. Hintz	1,000	*
Douglas H. Hunt	500	*
Patrick A. Kriegshauser	--	--
Steven F. Leer	1,010(6)	*
Thomas Marshall	2,500	*
James L. Parker	698,258(7)	1.8
J. Marvin Quinn(1)	500	*
Jeffry N. Quinn	2,070(8)	*
Ronald Eugene Samples	2,000(9)	*
Robert W. Shanks	--	--
Kenneth G. Woodring	73,434(10)	*
All directors and executive officers of the Company as a group (22 persons)	885,061(11)	2.2

- - - - -
* Less than one percent of the outstanding shares.

- (1) Messrs. Boyd, Chellgren, Feazell and Quin are executive officers of Ashland Inc. and to the extent they may be deemed to be control persons of Ashland Inc., they may be deemed to be beneficial owners of shares of Common Stock owned by Ashland Inc. Each of Messrs. Boyd, Chellgren, Feazell and Quin disclaims beneficial ownership of such shares.
- (2) Includes 1,086 shares owned by members of Mr. Chellgren's family as to which he disclaims beneficial ownership.
- (3) Includes 141 shares owned jointly with Mr. Feazell's spouse.
- (4) Mr. Ferrando is a Director of Carboex, and to the extent he may be deemed to be a control person of Carboex, he may be deemed to be a beneficial owner of shares owned by Carboex. Mr. Ferrando disclaims beneficial ownership of such shares.
- (5) Includes 500 shares owned by Mr. Hall's spouse as to which he disclaims beneficial ownership.
- (6) Includes 1,000 shares owned jointly with Mr. Leer's spouse.
- (7) Consists of shares owned by trusts of which Mr. Parker is co-trustee. Mr. Parker is also President and a Director of Hunt Coal Corporation, and he may be deemed to share voting and dispositive power with respect to shares of Common Stock owned by Hunt Coal Corporation. Mr. Parker disclaims beneficial ownership of all such shares.
- (8) Shares are held jointly with spouse.
- (9) Includes 1,000 shares owned by Mr. Samples' spouse as to which he disclaims beneficial ownership.
- (10) Includes 68,835 shares held subject to stock options.
- (11) Includes 2,586 shares owned by family members of persons in the group for which such persons disclaim beneficial ownership, 6,505 shares held by executive officers under Arch Coal's Employee Thrift Plan and 135,335 shares held subject to stock options.

PERSONNEL AND COMPENSATION COMMITTEE AND
STOCK INCENTIVE COMMITTEE REPORT ON
EXECUTIVE COMPENSATION FOR 1997

GENERAL

The P&C Committee is comprised entirely of non-employee directors and has the responsibility for reviewing and approving changes to Arch Coal's executive compensation policies and programs. The P&C Committee also approves all compensation payments to the Chief Executive Officer and other executives, except for grants of stock-based compensation.

The Stock Incentive Committee, which is also comprised entirely of non-employee directors, is responsible for approving grants of stock options, performance shares and other stock-based compensation under the Stock Incentive Plan.

The current members of both of these committees are free from interlocking or other relationships that could create a conflict of interest.

COMPENSATION PRINCIPLES

Arch Coal's compensation program for executives consists of three key elements:

1. A base salary;
2. A performance-based annual bonus; and
3. A long-term incentive program consisting of periodic grants of both stock options and performance shares or units.

The fundamental objective of the Company's executive compensation program is to attract, retain and motivate key executives to enhance long-term profitability and stockholder value. The Company's compensation program meets this objective by:

1. Providing for a level of base compensation that is competitive with other similarly sized publicly-traded companies, with particular emphasis on those in mining and extractive industries;
2. Linking the compensation of Arch Coal executives to the operating and financial performance of the Company by making significant elements of each executive's compensation sensitive to the overall performance of the Company;
3. Increasing the emphasis on variable pay and long-term incentives at more senior levels of the Company;
4. Rewarding executives for both the short and long-term enhancement of stockholder value; and
5. Providing total compensation opportunities which are comparable to the opportunities provided by a group of peer companies of similar size and diversity to Arch Coal (the "Compensation Peer Group"), as well as general industry indices. The Compensation Peer Group companies utilized for analyzing compensation comparisons are currently the same companies as utilized in the Performance Graph shown on page 12.

ANNUAL BASE SALARY

Annual salary is designed to compensate executives for their sustained individual performance. Salaries for senior-level executive officers are reviewed by the P&C Committee and are generally targeted at the median of Arch Coal's Compensation Peer Group. Consideration is given to individual results and experience, as well as corporate and operational performance. Salaries are reviewed and adjusted on a 12 to 18 month basis but can be frozen as a result of poor company performance or other reasons as determined in the Committee's sole judgment.

ANNUAL INCENTIVE BONUS

During 1997, the Company adopted a transitional incentive bonus plan for the period July 1, 1997 through December 31, 1997, replacing annual incentive plans in place prior to the Merger that were terminated upon the consummation of the Merger. Bonuses were paid under the terminated plans for the period January 1, 1997 through June 30, 1997, and under the transitional plan for performance during the second half of 1997.

Incentive compensation is generally awarded based upon the successful achievement of both individual and Company operating performance objectives. A minimum Company financial performance level must be met before incentive bonus awards are generated. Assuming the initial threshold is met, the Company's overall performance, as well as the executive's individual performance, are considered in determining the amount of the award.

A participant's maximum potential payout is based on his or her level of participation in the bonus plan. The maximum award level generally increases based upon an executive's potential to affect operations or profitability. In addition, Company performance is weighted more at senior levels in the organization; however, all participants in the program have an individual performance factor which is based upon evaluation of the extent to which an individual has successfully discharged his duties during the year. The CEO's individual performance factor is based upon the Board's evaluation of the CEO's performance in discharging his duties.

Awards for the Chief Executive Officer and other senior-level officers are based upon overall corporate performance. For the group operating officers, awards are based upon both corporate performance as well as upon the performance of the business units for which they are responsible. Awards to other corporate employees are based upon overall corporate performance while the awards to other operating subsidiary employees are based upon a combination of both corporate and subsidiary performance. All award payments are subject to the final and conclusive review and approval of the P&C Committee.

LONG-TERM INCENTIVES

The P&C Committee has determined a maximum long-term incentive opportunity for each of the Company's executive officers, delivered through awards of stock options and performance shares.

Stock Options

Arch Coal's employee stock option program is a long-term plan designed to link executive compensation with increased stockholder value. A target number of shares has been established for each executive level established under the bonus plan. This target helps to establish the range of stock options to be granted annually to key employees. At the discretion of the Stock Incentive Committee, awards can be made that deviate from these general guidelines.

All stock options are granted with an exercise price equal to the closing price of Common Stock on the date of grant. Vesting of stock options generally occurs over a period of three years; however, options will immediately vest upon a "change in control" of Arch Coal or upon an employee's death, retirement or disability.

Performance Shares

Performance shares have been granted under the Stock Incentive Plan covering a four-year performance period beginning January 1, 1998. Performance shares can be earned based upon Arch Coal's total stockholder return ("TSR") relative to two external benchmarks: the Compensation Peer Group and the Standard and Poor's 400 mid-cap index. Each of these performance factors is weighted equally at 50%. In order for the minimum payout to be generated under the performance share grants, TSR over the 4-year period must be at least equal to or greater than the median of either the TSR of the Compensation Peer Group or at least equal to or greater than the 25th percentile of the S & P 400 mid-cap index. Maximum payouts will be generated if the Company's TSR is at least equal to the 75th percentile level of each group. Awards granted under the program to-date cover a four-year performance period, with the number of performance shares initially granted based upon the employee's responsibility level, performance and salary.

Payments with respect to performance shares earned during the four-year performance period may be made wholly or partially in cash, or wholly or partially in shares of Arch Coal Common Stock, at the discretion of the Stock Incentive Committee and as permitted by applicable securities laws. The Stock Incentive Committee can adjust, in its discretion, the performance measures established and may adjust any payments earned during any performance period downward based on poor performance or such factors as the Committee deems appropriate.

DEDUCTIBILITY OF COMPENSATION

Under Section 162(m) of the Internal Revenue Code (the "Code"), the Company is subject to loss of the deduction for compensation in excess of \$1,000,000 paid per year to any of the executive officers named in this Proxy Statement. It is likely that the deduction can be preserved if the stockholders ratify the Stock Incentive Plan (see "PROPOSAL TO RATIFY THE 1997 STOCK INCENTIVE PLAN") and if Arch Coal complies with certain conditions in the design and administration of its compensation programs. The Committee intends to make every reasonable effort, consistent with sound executive compensation principles and the future needs of the Company, to ensure that all future amounts paid to its executive officers will be fully deductible by the Company.

OTHER PLANS

Arch Coal also maintains an Employee Thrift Plan, a Cash Balance Pension Plan, insurance and other benefit plans for its employees. Executives participate in these plans on the same terms as other eligible employees, subject to any legal limits on the amounts that may be contributed or paid to executives under the plans.

COMPENSATION OF THE CHIEF EXECUTIVE OFFICER

1997 Company Performance

Since the Merger, the Company has made significant progress in identifying synergies resulting from the Merger and successfully integrating the merged companies.

The table below shows key measures of the Company's financial performance for 1997 compared to 1996 in each case on a pro forma combined basis after giving effect to the Merger. Excluding merger-related expenses, the Company's net income on a pro forma combined basis for 1997 was \$75.5 million. During the fourth quarter of 1997, total debt declined by \$49 million which resulted in a debt to capital ratio of 31% as of December 31, 1997. The Company's income from operations before the effects of changes in accounting principles, unusual items, net interest expense, income taxes, depreciation, depletion and amortization ("EBITDA") equalled \$298 million on a pro forma combined basis for the year ended December 31, 1997. In addition, Arch Coal subsidiaries were honored with ten national, regional or state safety and environmental awards during the year.

(IN MILLIONS EXCEPT PER SHARE DAT -----)	1997 (PRO FORMA)*	1996 (PRO FORMA)*
Net income	\$51.7	\$47.9
Net impact of merger-related expenses	23.8	-
Net income, excluding merger-related expenses	\$75.5	\$47.9
Earnings per common share	\$ 1.30	\$ 1.21
Net impact of merger-related expenses	.60	-
Earnings per common share, excluding merger-related expenses	\$ 1.90	\$ 1.21
Total debt as a percent of total capital	31%	40%
Return on common equity	8.6%	8.1%
Return on common equity, excluding merger-related expenses	12.5%	8.1%

* This pro forma combined financial information assumes the Merger occurred at the beginning of the periods presented.

1997 CEO Compensation

Mr. Leer became the Company's Chief Executive Officer in 1992. Upon consummation of the Merger and consistent with the assumption of increased duties and responsibilities resulting from the Merger, Mr. Leer received a base salary increase of \$75,000 effective July 1. Mr. Leer received a grant of 30,000 stock options on July 23, 1997, 10,000 of which vest July 23, 1998, an additional 10,000 of which vest on July 23, 1999 and the remainder of which fully vest on July 23, 2000. Such options would nonetheless fully vest upon a "change in control" of Arch Coal or Mr. Leer's death, retirement or disability.

Considering the Company's post-Merger performance and in view of the successful integration efforts associated with the Merger and synergies achieved during the six-month period ending December 31, 1997, Mr. Leer received a bonus in 1998 covering the last half of 1997 in the amount of \$160,000. This was in addition to the bonus of \$162,500 paid in July 1997 under the Company's former incentive compensation plan for Mr. Leer's performance during the first half of 1997.

This report is submitted by the P&C Committee with respect to all matters set forth in the Report, except for those matters related to stock options and performance shares, and by the Stock Incentive Committee only with respect to stock options and performance shares.

In summary, these Committees believe that the total compensation opportunities provided to the Company's executive officers create a strong linkage and alignment with the long-term best interest of Arch Coal and its stockholders.

PERSONNEL AND COMPENSATION COMMITTEE -----

Thomas L. Feazell, Chairman
Robert A. Charpie
Paul W. Chellgren
Douglas H. Hunt
Thomas Marshall

STOCK INCENTIVE COMMITTEE -----

Thomas Marshall, Chairman
Robert L. Hintz
Douglas H. Hunt
Ronald Eugene Samples

EXECUTIVE COMPENSATION

The following table is a summary of compensation information for each of the last three years for the Chief Executive Officer and each of the other four most highly compensated executive officers, based upon annual salary and bonus for the fiscal year ended December 31, 1997, paid by Arch Coal or its subsidiaries:

SUMMARY COMPENSATION TABLE(1)

NAME AND PRINCIPAL POSITION	YEAR	ANNUAL COMPENSATION			LONG-TERM COMPENSATION		
		SALARY (\$)	BONUS(2) (\$)	OTHER ANNUAL COMPENSATION (\$)	AWARDS SECURITIES UNDERLYING OPTIONS(3) (#)	PAYOUTS LTIP PAYOUTS(4) (\$)	ALL OTHER COMPENSATION(5) (\$)
Steven F. Leer President & CEO	1997	375,058	322,500	-0-	30,000	144,000	22,403
	1996	309,731	310,000	-0-	-0-	-0-	18,600
	1995	299,421	-0-	-0-	-0-	-0-	9,000
Kenneth G. Woodring Executive Vice President	1997	285,819	138,969	30,814(6)	15,000	29,085	17,049
	1996	237,500	-0-	-0-	15,000(7)	-0-	6,300
	1995	237,019	86,763	-0-	7,500(7)	-0-	6,290
Robert W. Shanks Vice President - Operations	1997	220,227	134,109	7,037(6)	13,250	63,157	12,441
	1996	175,727	123,200	-0-	-0-	-0-	10,560
	1995	155,168	-0-	-0-	-0-	-0-	9,000
Jeffrey N. Quinn Senior Vice President- Secretary & General Counsel	1997	206,564	127,220	-0-	13,575	42,560	12,294
	1996	171,656	120,540	-0-	-0-	-0-	10,332
	1995	151,784	-0-	-0-	-0-	-0-	9,000
Patrick A. Kriegshauser Senior Vice President- CFO and Treasurer	1997	185,942	114,440	-0-	13,575	31,959	11,057
	1996	133,857	94,360	23,460(6)	-0-	-0-	9,500
	1995	109,731	-0-	-0-	-0-	-0-	9,240

- (1) Prior to the Merger, Mr. Woodring was Senior Vice President - Operations of Ashland Coal and received compensation and benefits under applicable Ashland Coal plans, which amounts are reflected in this table. Messrs. Leer, Shanks, Quinn and Kriegshauser were, prior to the Merger, employees of the Company received compensation and benefits under its then applicable plans, as reflected above.
- (2) For 1995, 1996 and for the period from January through June 1997, this amount includes, for Mr. Woodring, the amounts awarded under the Ashland Coal, Inc. Incentive Compensation Plan for Key Employees, and for Messrs. Leer, Shanks, Quinn and Kriegshauser, amounts awarded under the Arch Mineral Incentive Compensation Plan. For the period July through December 1997, this amount includes amounts earned under the Arch Coal, Inc. Incentive Compensation Plan. All amounts listed were awarded with respect to the subject year and paid in the immediately succeeding year, with the exception of the amounts awarded for the period January through June 1997, which were paid in 1997.
- (3) Represents options granted under the Stock Incentive Plan.
- (4) This amount represents the pro rata amounts paid in 1997 under Performance Unit Plans of Ashland Coal to Mr. Woodring and of Arch Mineral to Messrs. Leer, Shanks, Quinn and Kriegshauser for that portion of the 1995 - 1998 performance cycle that had been completed prior to termination such plans, which plans were terminated upon consummation of the Merger.
- (5) This amount represents contributions made to the applicable Employee Thrift Plan, and for 1996 and 1997, contributions by the Company under its ERISA Forfeiture Plan.
- (6) Represents amounts paid for the reimbursement of taxes paid by the listed individuals.
- (7) These options were granted under the Ashland Coal 1995 and 1988 Stock Incentive Plans ("Prior Plans") and, together with 46,335 options granted in prior years under the Prior Plans were, upon consummation of the Merger and in accordance with the agreement executed in connection with the Merger (the "Merger Agreement"), replaced by options under the Stock Incentive Plan. These replacement options are exercisable on the same terms and conditions (including per share exercise prices) as were applicable to such options under the Plan granted. Upon consummation of the Merger and in accordance with the Merger Agreement, the Prior Plans were terminated.

OPTION GRANTS IN LAST FISCAL YEAR

NAME	INDIVIDUAL GRANTS (1)		POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM	
	NUMBER OF UNDERLYING OPTIONS GRANTED (#) (2)	% OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	5%(\$)	10%(\$)
Steven F. Leer	30,000	10.0%	\$525,913	\$1,332,767
Kenneth G. Woodring	15,000(3)	5.0%	262,957	666,384
Robert W. Shanks	13,250	4.4%	232,278	588,639
Jeffry N. Quinn	13,575	4.5%	237,976	603,077
Patrick A. Kriegshauser	13,575	4.5%	237,976	603,077

(1) All options granted expire July 23, 1007 and are exercisable at a base price of \$27.8750.

(2) The options are not exercisable during the first year following the date of the grant. The options are exercisable with respect to 33 1/3 percent of the underlying shares upon the first anniversary date of the grant and until the second anniversary, and are exercisable between the second and third anniversaries of the grant with respect to 66 2/3 percent of the underlying shares. After the third anniversary of the date of the grant, the options are exercisable with respect to 100 percent of the underlying shares.

(3) In addition to the grant shown in the table, upon consummation of the Merger and in accordance with the Merger Agreement, Mr. Woodring became vested in 68,835 options that had been granted under the Prior Plans and received an equal number of vested options under the Stock Incentive Plan in substitution therefor. The substitute vested options are exercisable on the same terms and conditions (including per share exercise prices) as were applicable to such options granted under the Prior Plans.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FY-END OPTION VALUES

NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT FY-END(#)		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT FY-END(\$)	
	EXERCISABLE /	UNEXERCISABLE	EXERCISABLE /	UNEXERCISABLE
Steven F. Leer	-0- /	30,000	-0- /	-0-
Kenneth G. Woodring	68,835 /	15,000	373,548 /	-0-
Robert W. Shanks	-0- /	13,250	-0- /	-0-
Jeffry N. Quinn	-0- /	13,575	-0- /	-0-
Patrick A. Kriegshauser	-0- /	13,575	-0- /	-0-

LONG TERM INCENTIVE PLAN AWARDS IN LAST FISCAL YEAR (1)

NAME	NUMBER OF SHARES, UNITS OR OTHER RIGHTS	PERFORMANCE OR OTHER PERIOD UNTIL MATURATION OR PAYOUT
Steven F. Leer	23,000	1/1/98 - 12/31/01
Kenneth G. Woodring	11,500	1/1/98 - 12/31/01
Robert W. Shanks	7,200	1/1/98 - 12/31/01
Jeffry N. Quinn	7,000	1/1/98 - 12/31/01
Patrick A. Kriegshauser	5,700	1/1/98 - 12/31/01

(1) Performance shares will be earned based on the Company's performance during the four-year performance cycle measured on the basis of its TSR as compared to the TSR of: (1) a comparator group; and (2) the S&P's 400 mid-cap index. The awards will be based 50% on each of the two performance measures. The Company must achieve a TSR equal to at least the median of the comparator group to receive 50% of the portion of the award based upon

such comparison and a TSR at the 75th percentile to receive 100% of that portion of the award. Similarly, the Company must reach a TSR equal to the 25th percentile, median or 75th percentile to achieve 20%, 50% or 100%, respectively, of the portion of the award based on the S&P's 400 mid-cap index.

ARCH PERFORMANCE GRAPH(1)

[PERFORMANCE GRAPH APPEARS HERE]

Measurement Period (Fiscal Year Covered)	Arch Coal	S&P 400	Peer Group (1)
Measurement Point-12/31/92	\$100.00	\$100.00	\$100.00
Fiscal Year Ended 12/31/93	\$121.00	\$114.00	\$116.00
Fiscal Year Ended 12/31/94	\$116.00	\$110.00	\$104.00
Fiscal Year Ended 12/31/95	\$88.00	\$144.00	\$123.00
Fiscal Year Ended 12/31/96	\$117.00	\$171.00	\$105.00
Fiscal Year Ended 12/31/97	\$117.00	\$227.00	\$106.00

(1) Peer Companies include: Cyprus Amax Minerals Company, Freeport-McMoran Copper & Gold Inc., Newmont Mining Corporation, The Pittston Company, Rochester & Pittsburgh Coal Company, Southern Peru Copper Corporation, Vulcan Materials Company and Zeigler Coal Holding Company.

PENSION PLAN

In October 1997, the Company adopted a Cash Balance Pension Plan (the "Pension Plan") effective January 1, 1998, to combine and replace both the Arch Coal, Inc. (formerly Arch Mineral) Pension Plan and the Ashland Coal, Inc. Pension Plan for salaried employees (each, the "Prior Pension Plan"). As of January 1, 1998, all participants were vested in the Pension Plan. New hires after January 1, 1998, will vest after three years of service. The Pension Plan establishes an opening balance for each plan participant which is based on the present value of each participant's earned pension benefit, payable at age 65, under the Prior Pension Plan as of December 31, 1997. On an annual basis (or a shorter period if a participant's employment is terminated), a participant's account is credited with the following: (i) contribution credits equal to a percent of total pay based upon the participant's age at year end; (ii) transition credits for a period equal to a participant's credited service under a Prior Pension Plan as of December 31, 1997 (to a maximum of 15 years from December 31, 1997) both in accordance with the percentage amounts set forth below; and (iii) interest credits based on one-year treasury yields plus 1%.

AGE AT YEAR END	CONTRIBUTION CREDITS* AS % OF TOTAL PAY**	TRANSITION CREDITS AS % OF TOTAL PAY
Under 30	3.0%	1.0%
30 to 34	4.0%	1.0%
35 to 39	4.0%	2.0%
40 to 44	5.0%	3.0%
45 to 49	6.0%	4.0%
50 to 54	7.0%	4.0%
55 and over	8.0%	4.0%

* Plus an additional 3% of pay above the Social Security wage base.

** Total pay means regular salary plus annual incentive bonus payments.

As of December 31, 1997, the estimated annual annuities (based on one-year treasury yields) payable at age 65 to Messrs. Leer, Woodring, Shanks, Quinn and Kriegshauser were \$318,205, \$173,880, \$220,788, \$219,324, and \$200,376, respectively.

EMPLOYMENT AGREEMENTS AND OTHER ARRANGEMENTS

Mr. Leer entered into an employment agreement with the Company dated March 1, 1992. The agreement is automatically renewed from year to year unless terminated sixty days in advance of the end of each year. The agreement provides for an annual base salary of not less than \$250,000 and requires the Company to maintain an incentive compensation plan under which Mr. Leer is entitled to receive annual bonuses of up to 100% of his base salary; however, the amount of the bonus actually received is to be determined on the basis of the achievement by the Company of certain performance goals as established by the Board of Directors (or a committee thereof) on an annual basis.

Messrs. Woodring, Shanks, Quinn and Kriegshauser and certain other senior employees have Retention/Severance Agreements with the Company. Pursuant to these Agreements, if the employment of the covered employee is terminated prior to June 30, 1998, other than for "Cause" (as defined in the Agreement) the covered employee will receive severance benefits of 24 months base pay, continuation of medical benefits for 24 months, outplacement assistance and acceleration of the vesting of their incentives, including stock options.

COMPENSATION OF DIRECTORS

Non-employee Directors of Arch Coal during 1997 received a prorated portion of an annual retainer of \$25,000 and a \$1,250 fee for each Board or Committee meeting attended and expenses incurred in attending all such meetings. A Director who serves as a chairman of a committee or as Chairman of the Board received an additional pro rata fee of \$4,000 for each chairmanship held by such Director. Messrs. Boyd, Chellgren, Feazell, and Quin have waived the payment of their fees and retainers, which waiver may be withdrawn at any time. Under the Deferred Compensation Plan for Directors' Fees, a Director who is separately compensated for his services on the Board or a committee of the Board may defer all or part of his Director's retainer, meeting fees and any per diem compensation for special assignments. A Director may elect to earn interest on deferred amounts based on either the prime rate (as quoted by Citibank as its prime commercial lending rate on the last day of each calendar quarter) or based on a hypothetical investment in Common Stock. Deferred amounts, plus earnings, are payable in cash to the Director, his estate, or beneficiary over such period of time as might be designated by the Director, in no event to extend beyond the twentieth anniversary of the termination of his services as a Director. Additionally, during 1997, Mr. Samples received \$16,650 under a consulting agreement that terminated June 30, 1997.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Upon consummation of the Merger, the Board established its P&C Committee and Stock Incentive Committee. All current members of the Committees have served since the inception of the Committees. None of the members of either Committee are officers or employees of Arch Coal or any of its subsidiaries. Mr. Samples served as President and Chief Executive Officer of the Company from 1988 to 1992. Messrs. Boyd, Chellgren, Feazell and Quin are employees of Ashland Inc. (see "CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS" for further information about the relationship of Arch Coal with Ashland Inc.).

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Arch Coal purchased fuel, oil and other products and services from Ashland Inc. at current market prices using standard purchase orders. Such purchases amounted to approximately \$4.7 million in 1997.

Ashland Inc. currently guarantees approximately \$12.3 million of coal royalty payments, land lease and various other obligations of Ashland Coal.

Management believes charges between Arch Coal and Ashland Inc. for services rendered or provided were reasonable, and that the other transactions described above were concluded on terms equivalent to those prevailing among unaffiliated parties.

During 1997, Mr. Samples' son, Mr. Ronald Samples, II, an employee of a subsidiary of the Company, received cash compensation totaling \$72,369 and participated in various employee benefits available to similarly situated employees.

Ernst & Young LLP, whose appointment as independent auditor for Arch Coal is sought to be ratified under Proposal 3, is also the independent auditor for Ashland Inc., and Ernst & Young S.A., a Spanish affiliate of Ernst & Young LLP, is the independent auditor for Carboex.

The Company, Ashland Inc., Carboex, and various trusts, and corporations owned by trusts, for the benefit of descendants of H. L. and Lyda Hunt are parties to a Registration Rights Agreement pursuant to which certain of such stockholders will have certain rights to require the Company to register the sale of such stockholders' shares of Common Stock under the Securities Act of 1933, as amended (the "Securities Act"). Subject to certain limitations, all such stockholders also have certain incidental rights under the Registration Rights Agreement to include shares of Common Stock in registration statements filed under the Securities Act with respect to offerings of Common Stock by other stockholders of the Company.

Pursuant to a Stockholders Agreement between the Company, Ashland Inc. and Carboex, the Company has agreed to nominate for election as a director of the Company a person designated by Carboex, and Ashland Inc. has agreed, among other things, to vote its shares of Common Stock in a manner sufficient to cause the election of such nominee. In addition, pursuant to this Agreement, Ashland Inc. has agreed that if it or any of its affiliates desire to sell or otherwise dispose of (other than pursuant to a public offering or pursuant to the Registration Rights Agreement described above) 50% or more of the shares of Common Stock then held by Ashland Inc. and its affiliates to an Industrial Buyer (as defined in the Stockholders Agreement) or 20% or more of the total outstanding shares of Common Stock to an Industrial Buyer, then subject to the satisfaction of certain conditions, Carboex will have the right to sell or otherwise dispose of all of the shares of Common Stock then held by it in such transaction.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under the securities laws of the United States, the Company's directors, its executive officers and any persons beneficially holding more than ten percent of the Common Stock are required to report their ownership of Common Stock and any changes in that ownership to the Securities and Exchange Commission (the "SEC") and the New York Stock Exchange. Specific due dates for these reports have been established and the Company is required to report in this proxy statement any failure to file by these dates. All of these filing requirements were satisfied. In making these statements, the Company has relied on copies of the reports that its executive officers and directors have filed with the SEC.

PROPOSAL TO RATIFY THE 1997 STOCK INCENTIVE PLAN (PROPOSAL 2 ON THE PROXY CARD)

On April 1, 1997, the Company's Board of Directors recommended to its stockholders the adoption of the Stock Incentive Plan. Prior to the Merger, on April 4, 1997, the stockholders adopted and approved the Stock Incentive Plan effective upon the consummation of the Merger.

The Stock Incentive Plan is being submitted for approval in order to qualify it under Section 162(m) of the Code. Section 162(m) of the Code precludes a public corporation from deducting compensation in excess of \$1.0 million per year for its chief executive officer and any of its four other highest paid executive officers. However, if the Company's stockholders have approved the plan, certain performance-based compensation is exempt from this deduction limit.

The purpose of the Stock Incentive Plan is to provide a flexible mechanism to provide incentives to, and to encourage ownership of, Common Stock by officers and other selected key management employees of the Company and its subsidiaries. An aggregate of 6,000,000 shares of Common Stock have been reserved for issuance pursuant to the Stock Incentive Plan, including options covering 674,935 shares granted at the time of the Merger in substitution for vested options under two Ashland Coal stock option plans. The following table shows the grants made under the Stock Incentive Plan during 1997.

NEW PLAN BENEFITS
ARCH COAL, INC. 1997 STOCK INCENTIVE PLAN

NAME ----	NUMBER OF UNITS(1) -----
Steven F. Leer	53,000
Kenneth G. Woodring	26,500(2)
Robert W. Shanks	20,450
Jeffry N. Quinn	20,575
Patrick A. Kriegshauser	19,275
Executive Officer Group	74,600
Non-Executive Employee Group	266,500

(1) Includes the grant of stock options and performance shares. (See tables entitled "OPTION GRANTS IN LAST FISCAL YEAR" and "LONG TERM INCENTIVE PLAN AWARDS IN LAST FISCAL YEAR.") The closing price for Arch Coal Common Stock on March 9, 1998, was \$26.00.

(2) Mr. Woodring also received 68,835 replacement options. (See footnote 7 to the "SUMMARY COMPENSATION TABLE.")

The Board of Directors believes that the successful implementation of the Company's business strategy will depend upon attracting and retaining able executives, managers and other key employees. The Board also believes that the ability to grant Awards (defined below) under the Stock Incentive Plan will strengthen the ability of the Company to attract and retain capable personnel. The Stock Incentive Plan is administered by the Stock Incentive Committee of the Board of Directors of the Company ("Committee"). The Stock Incentive Plan has the flexibility to grant stock options, stock appreciation rights, restricted stock, restricted stock units, performance stock, performance units, merit awards, phantom stock awards and rights to acquire stock through purchase under a stock purchase program (the "Awards").

The ratification of the Stock Incentive Plan requires the affirmative vote of the majority of the outstanding shares voting thereon. The Board of Directors recommend the stockholders vote "FOR" the ratification of the Stock Incentive Plan.

A copy of the Stock Incentive Plan is attached as Exhibit A. The following summary of the terms of the Stock Incentive Plan is qualified in its entirety by reference to all of the provisions thereof.

ADMINISTRATION

The Stock Incentive Plan is administered by the Committee. Subject to the express provisions of the Stock Incentive Plan, the Committee has the plenary authority, in its discretion, to interpret the Stock Incentive Plan, establish rules and regulations for its operation, select employees of the Company and its subsidiaries to receive Awards and determine the form and amount and other terms and conditions of such Awards.

ELIGIBILITY

Salaried officers and other employees of the Company and its subsidiaries (the "Employees") are eligible to be selected to participate in the Stock Incentive Plan ("Participants"). The selection of Participants from among the Employees is within the discretion of the Committee.

AMENDMENT OF PLAN

The Company's Board of Directors may suspend, terminate, modify or amend the Stock Incentive Plan at any time, with or without prior notice; provided, however, that it may not, without stockholder approval, adopt any amendment which would (a) increase the aggregate number of shares of Common Stock which may be issued under the Stock Incentive Plan, (b) materially increase the benefits accruing to Participants in the Stock Incentive Plan or (c) materially modify the eligibility requirements for participation in the Stock Incentive Plan, except for adjustments to reflect stock splits or combinations, reorganizations or other capital adjustments. No suspension, termination,

modification or amendment may terminate an outstanding Award or materially adversely affect a Participant's rights under an outstanding Award without the Participant's consent.

AVAILABLE SHARES

6,000,000 shares of Common Stock are available for grant under the Stock Incentive Plan, of which 1,316,035 have been granted as stock options or awarded as performance shares. Shares of Common Stock related to Awards which terminate by expiration, forfeiture, cancellation or otherwise without the issuance of shares, or are settled in cash in lieu of Common Stock, and shares used to pay an option exercise price will thereafter again be available for grant under the Stock Incentive Plan.

LIMITATION ON AWARDS

The maximum number of shares of Common Stock with respect to which any Participant may receive Awards of stock options or stock appreciation rights during any calendar year is 300,000; the maximum number of shares of Common Stock with respect to which any Participant may receive Awards of restricted stock during any calendar year is 100,000; the maximum number of shares of Common Stock with respect to which any Participant may receive Merit Awards during any calendar year is 100,000; and the maximum number of shares of Common Stock with respect to which any Participant may receive other Awards during any calendar year is 100,000.

STOCK OPTIONS

The Committee may grant Awards in the form of incentive and non-qualified stock options to purchase shares of Common Stock. The Committee determines the number of shares subject to each option, the manner and time of the option's exercise and the exercise price per share of stock subject to the option. The exercise price of a stock option may not be less than the fair market value of the Common Stock on the date of the grant, except as expressly provided in the Stock Incentive Plan with respect to substitution of Awards for similar awards upon the occurrence of certain transactions including the Merger. Upon exercise, the option price may, at the discretion of the Committee, be paid by a Participant in cash, shares of Common Stock, a combination thereof, or such cashless exercise arrangement as the Committee may deem appropriate. Any stock option granted in the form of an incentive stock option must satisfy the applicable requirements of Section 422 of the Code.

STOCK APPRECIATION RIGHTS

The Stock Incentive Plan authorizes the Committee to grant Stock Appreciation Rights ("SARs") either in tandem with a stock option or independent of a stock option. A SAR is a right to receive a payment equal to the appreciation in market value of a stated number of shares of Company Common Stock from the SAR's exercise price to the market value on the date of its exercise. The Committee will determine the number of shares subject to the Award, the manner and time of a SAR exercise and the exercise price, which shall not be less than the fair market value of a share of Common Stock, except as expressly provided in the Stock Incentive Plan with respect to substitution of Awards for similar awards upon the occurrence of transactions like the Merger.

A tandem SAR may be granted either at the time of the grant of the related stock option or at any time thereafter during the term of the stock option. A tandem SAR shall be exercisable to the extent its related stock option is exercisable, and the exercise price of such a SAR shall be the same as the option price under its related stock option. Upon the exercise of a stock option as to some or all of the shares covered by the Award, the related tandem SAR shall be canceled automatically to the extent of the number of shares covered by the stock option exercise.

STOCK AWARDS

The Stock Incentive Plan authorizes the Committee to grant Awards in the form of shares of restricted stock or restricted stock units. Such Awards will be subject to such terms, conditions, restrictions or limitations, if any, as the Committee deems appropriate including, but not by way of limitation, restrictions on transferability and continued employment. The Stock Incentive Plan gives the Committee the discretion to accelerate the delivery of a stock Award.

PERFORMANCE SHARES

The Stock Incentive Plan allows for the grant of "Performance Shares." Under the Stock Incentive Plan, Performance Shares are restricted shares of Common Stock which are awarded subject to attainment of certain performance goals over a period to be determined by the Committee.

PERFORMANCE UNITS

Awards may also be granted in the form of "Performance Units" which are units valued by reference to shares of Common Stock. Performance Units are similar to Performance Shares in that they are awarded contingent upon the attainment of certain performance goals over a fixed period. The length of the period, the performance objectives to be achieved during the period, and the measure of whether and to what degree the objectives have been achieved, are determined by the Committee.

PERFORMANCE GOALS

If the Committee desires payment under an Award (other than under a stock option or SAR granted at 100% or more of the fair market value of the shares of Common Stock as of the date of grant) to qualify as "performance-based compensation" under Section 162(m) of the Code, the performance goals which must be achieved in order for payment to be made shall be based upon one or more of the following business criteria: net income; earnings per share; income from operations before the effects of changes in accounting principles, unusual items, net interest expense, income taxes, depreciation, depletion and amortization ("EBITDA"); debt reduction, safety, return on investment, operating income, operating ratio, cash flow, return on assets, stockholders' return, revenue, return on equity, economic value added ("EVA(R)"), operating costs, sales or compliance with Company policies.

CHANGE IN CONTROL

In the event of a "Change in Control" (as defined in the Stock Incentive Plan), (i) all of the terms, conditions, restrictions and limitations in effect on any of an Employee's outstanding Awards would immediately lapse and (ii) all of the Employee's outstanding Awards would automatically become 100% vested.

The Stock Incentive Plan defines a "Change in Control" as a change in control of the Company of a nature that would be required to be reported (assuming such event has not been "previously reported") in response to Item 1(a) of a Current Report on Form 8-K, as in effect on the date the Stock Incentive Plan is adopted, pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended ("Exchange Act"), and as in effect on the date the plan was approved by the Company's stockholders; provided, that without limitation, a "Change in Control" shall be deemed to have occurred (1) upon the approval of the Board of Directors (or if approval of the Board is not required as a matter of law, the stockholders of the Company) of (A) any consolidation or merger of the Company in which the Company is not the continuing or surviving corporation or pursuant to which shares of Common Stock would be converted into cash, securities or other property, other than a merger in which the holders of Common Stock immediately prior to the merger will have more than 50% of the ownership of common stock of the surviving corporation immediately after the merger, (B) any sale, lease, exchange or transfer (in one transaction or a series of related transactions) of all or substantially all of the assets of the Company, or (C) adoption of any plan or proposal for the liquidation or dissolution of the Company, or (2) when any "person" (as defined in Section 13(d) of the Exchange Act), other than a "Significant Stockholder" (defined as any stockholder of the Company who, immediately prior to the Effective Date owned more than 5% of Common Stock) or any subsidiary or employee benefit plan or trust maintained by the Company or any of its subsidiaries, becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of more than 20% of Common Stock outstanding at such time, without prior approval of the Board of Directors.

FEDERAL INCOME TAX CONSEQUENCES

The following is a summary of the federal income tax consequences of Awards granted under the Stock Incentive Plan, based on current income tax laws, regulations and rulings.

Incentive Stock Options

Subject to the effect of the Alternative Minimum Tax, discussed below, an optionee does not recognize income on the grant of an Incentive Stock Option. If an optionee exercises an Incentive Stock Option in accordance with the terms of the option and does not dispose of the shares acquired within two years from the date of the grant of the option nor within one year from the date of exercise, the optionee will not realize any income by reason of the exercise, and the Company will be allowed no deduction by reason of the grant or exercise. The optionee's basis in the shares acquired upon exercise will be the amount paid upon exercise. (See the discussion below for the tax consequences of the exercise of an option with stock already owned by the optionee.) Provided the optionee holds the shares as a capital asset at the time of sale or other disposition of the shares, the gain or loss, if any, recognized on the sale or other disposition will be capital gain or loss. The amount of the optionee's gain or loss will be the difference between the amount realized on the disposition of the shares and the basis in the shares.

If an optionee disposes of the shares within two years from the date of grant of the option or within one year from the date of exercise ("Early Disposition"), the optionee will realize ordinary income at the time of such Early Disposition which will equal the excess, if any, of the lesser of (i) the amount realized on the Early Disposition, or (ii) the fair market value of the shares on the date of exercise, over the optionee's basis in the shares. The Company will be entitled to a deduction in an amount equal to such income. The excess, if any, of the amount realized on the Early Disposition of such shares over the fair market value of the shares on the date of exercise will be long-term or short-term capital gain, depending upon the holding period of the shares, provided the optionee holds the shares as a capital asset at the time of Early Disposition. If an optionee disposes of such shares for less than his basis in the shares, the difference between the amount realized and his basis will be a long-term or short-term capital loss, depending upon the holding period of the shares, provided the optionee holds the shares as a capital asset at the time of disposition.

The excess of the fair market value of the shares at the time the Incentive Stock Option is exercised over the exercise price for the shares is an item of adjustment for purposes of the alternative minimum tax ("Stock Option Preference").

Non-Qualified Stock Options

Non-Qualified Stock Options do not qualify for the special tax treatment accorded to Incentive Stock Options under the Code. Although an optionee does not recognize income at the time of the grant of the option, the optionee recognizes ordinary income upon the exercise of a Non-Qualified Stock Option in an amount equal to the difference between the fair market value of the stock on the date of exercise of the option and the amount of cash paid for the stock.

As a result of the optionee's exercise of a Non-Qualified Stock Option, the Company will be entitled to deduct as compensation an amount equal to the amount included in the optionee's gross income. The Company's deduction will be taken in the Company's taxable year in which the option is exercised.

The excess of the fair market value of the stock on the date of exercise of a Non-Qualified Stock Option over the exercise price is not a Stock Option Preference.

Stock Appreciation Rights

Recipients of SARs do not recognize income upon the grant of such rights. When a Participant elects to receive payment of a SAR, the Participant recognizes ordinary income in an amount equal to the cash and fair market value of shares of Company Common Stock received, and the Company is entitled to a deduction equal to such amount.

Payment in Shares

If the optionee exercises an option and surrenders stock already owned by the optionee ("Old Shares"), the following rules apply:

1. To the extent the number of shares acquired ("New Shares") exceeds the number of Old Shares exchanged, the optionee will recognize ordinary income on the receipt of such additional shares (provided the option is not an Incentive Stock Option) in an amount equal to the fair market value of such additional shares less any cash paid for them and the Company will be entitled to a deduction in an amount equal to such income. The basis of such additional shares will be equal to the fair market value of such shares (or, in the case of an Incentive Stock Option, the cash, if

any, paid for the additional shares) on the date of exercise and the holding period for such additional shares will commence on the date the option is exercised.

2. Except as provided below, to the extent the number of New Shares acquired does not exceed the number of Old Shares exchanged, no gain or loss will be recognized on such exchange, the basis of the New Shares received will be equal to the basis of the Old Shares surrendered, and the holding period of the New Shares received will include the holding period of the Old Shares surrendered. However, under proposed regulations promulgated by the U.S. Department of Treasury, if the optionee exercises an Incentive Stock Option by surrendering Old Shares, the holding period for the New Shares will begin on the date the New Shares are transferred to the optionee for purposes of determining whether there is an Early Disposition of the New Shares and, if the optionee makes an Early Disposition of the New Shares, the optionee will be deemed to have disposed of the New Shares with the lowest basis first. If the optionee exercises an Incentive Stock Option by surrendering Old Shares which were acquired through the exercise of an Incentive Stock Option or an option granted under an employee stock purchase plan, and if the surrender occurs prior to the expiration of the holding period applicable to the type of option under which the Old Shares were acquired, the surrender will be deemed to be an Early Disposition of the Old Shares. The federal income tax consequences of an Early Disposition are discussed above.

3. If the Old Shares surrendered were acquired by the optionee by exercise of an Incentive Stock Option, or an option granted under an employee stock purchase plan, then, except as provided in 2 above, the exchange will not constitute an Early Disposition of the Old Shares.

4. Based upon prior rulings of the Internal Revenue Service in analogous areas, it is believed that if an optionee exercises an Incentive Stock Option and surrenders Old Shares and disposes of the New Shares received upon exercise within two years from the date of the grant of the option or within one year from the date of exercise, the following tax consequences would result:

(i) To the extent the number of New Shares received upon exercise do not exceed the number of Old Shares surrendered, the disposition of the New Shares will not constitute an Early Disposition (unless the disposition is a surrender of the New Shares in the exercise of an Incentive Stock Option).

(ii) The disposition of the New Shares will constitute an Early Disposition to the extent the number of New Shares received upon exercise and disposed of exceeds the number of Old Shares surrendered.

Restricted Stock

Grantees of Restricted Stock do not recognize income at the time of the grant of such stock. However, when shares of Restricted Stock become free from any restrictions, grantees recognize ordinary income in an amount equal to the fair market value of the stock on the date all restrictions are satisfied, less, in the case of Restricted Stock, the amount paid for the stock. Alternatively, the grantee of Restricted Stock may elect to recognize income upon the grant of the stock and not at the time the restrictions lapse, in which case the amount of income recognized will be the fair market value of the stock on the date of grant. The Company will be entitled to deduct as compensation the amount includible in the grantee's income in its taxable year in which the grantee recognizes the income.

Taxation of Preference Items

Section 55 of the Code imposes an Alternative Minimum Tax equal to the excess, if any, of (i) 26% of the optionee's "alternative minimum taxable income" up to \$175,000 (\$87,500 in the case of married taxpayers filing separately) and 28% of "alternative minimum taxable" income in excess of \$175,000 (\$87,500 in the case of married taxpayers filing separately) over (ii) his or her "regular" federal income tax. Alternative minimum taxable income is determined by adding the optionee's Stock Option Preference and any other items of tax preference to the optionee's adjusted gross income and then subtracting certain allowable deductions and an exemption amount. The exemption amount is \$33,750 for single taxpayers, \$45,000 for married taxpayers filing jointly and \$22,500 for married taxpayers filing separately. However, these exemption amounts are phased out beginning at certain levels of alternative minimum taxable income.

Deductibility of Compensation in Excess of \$1 Million Per Year

Section 162(m) of the Code precludes a public corporation from deducting compensation in excess of \$1.0 million per year for its chief executive officer and any of its four other highest paid executive officers. However,

subject to approval of the Plan by the Company's stockholders, certain performance-based compensation is exempt from this deduction limit. Stock options and or SAR's will qualify for this exemption. In addition, certain other Awards granted under the Stock Incentive Plan will also qualify while others may not.

The foregoing statement is only a summary of the federal income tax consequences of certain Awards which may be granted under the Stock Incentive Plan and is based on the Company's understanding of present federal tax laws and regulations.

OTHER TERMS OF AWARDS

Awards may be paid in cash, Common Stock, a combination of cash and Common Stock or any other form of property, as the Committee shall determine. If an Award is granted in the form of a stock award, stock option, or performance share, or in the form of any other stock-based grant, the Committee may include as part of such Award an entitlement to receive dividends or dividend equivalents. At the discretion of the Committee, payment of a stock award, performance share, performance unit, dividend, or dividend equivalent may be deferred by a Participant.

The Stock Incentive Plan provides that if employment is terminated for cause or by the employee without the written consent and approval of the Company, all unvested Awards shall be forfeited and exercisable options shall be forfeited after 90 days from the date of termination if not exercised.

If employment is terminated by reason of death, disability or retirement, all options and stock appreciation rights outstanding immediately prior to the date of termination shall immediately become exercisable and shall be exercisable until one year and thereafter shall be forfeited if not exercised, and all restrictions on any Awards outstanding immediately prior to the date of termination shall immediately lapse.

If employment is terminated for any reason other than cause, or by the employee with the written consent and approval of the Company, the Restricted Period shall lapse on a proportion of any Awards outstanding immediately prior to such termination (except that, to the extent that an Award of restricted stock, restricted stock units, performance units, performance stock and phantom stock is subject to a performance period), such proportion of the Award shall remain subject to the same terms and conditions for vesting as were in effect prior to the date of termination and shall be determined at the end of the performance period. The proportion of an Award upon which the restricted period shall lapse shall be a fraction, the denominator of which is the total number of months of any restricted period applicable to an Award and the numerator of which is the number of months of such restricted period which elapsed prior to the date of termination.

Options and stock appreciation rights which are or become exercisable by reason of employment being terminated by the Company for reasons other than cause or by the employee with the consent and approval of the Company, shall be exercisable until 120 days from the termination date and shall thereafter be forfeited if not exercised.

Upon the grant of any Award, the Committee may, by way of an Award Agreement or otherwise, establish such other terms, conditions, restrictions and limitations governing the grant of such Award as are not inconsistent with the Company Stock Incentive Plan.

PROPOSAL TO RATIFY AUDITORS (PROPOSAL 3 ON THE PROXY CARD)

Subject to ratification by the stockholders, the Board of Directors has appointed Ernst & Young LLP as independent auditors to audit the consolidated financial statements of Arch Coal and its subsidiaries for the year ending December 31, 1998. Ernst & Young LLP is also the independent auditor for Ashland Inc. and Ernst & Young S.A., a Spanish affiliate of Ernst & Young LLP, is the independent auditor for Carboex. Submission of the appointment to the stockholders for their ratification is not required. However, the Board will reconsider the appointment if it is not ratified by the stockholders.

The following resolution concerning the appointment of independent auditors will be offered at the meeting:

"RESOLVED, that the appointment of Ernst & Young LLP by the Board of Directors of the Corporation to audit the accounts of the Corporation and its subsidiaries for the year ending December 31, 1998, is hereby ratified."

Representatives of Ernst & Young LLP will be present at the Annual Meeting and will have the opportunity to make a statement if they so desire and will be available to respond to appropriate questions. The Audit Committee and the Board of Directors recommend the stockholders vote "FOR" such ratification.

Prior to the Merger, Arthur Andersen LLP acted as independent auditors for the Company. Upon consummation of the Merger, the Board of Directors approved the engagement of Ernst & Young LLP as its independent auditors for the fiscal year ending 1997 effective July 1, 1997.

Prior to the Merger, Ernst & Young LLP acted as independent auditors for Ashland Coal. Ernst & Young LLP also acts as the independent auditors for Ashland Inc. who consolidates the financial statements of Arch Coal as a result of the Merger. Arthur Andersen LLP's reports on the Company's financial statements for the fiscal years ended December 31, 1996 and 1995 did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles. There were no disagreements between the Company and Arthur Andersen LLP on any matters of accounting principles or practices, financial statement disclosure or auditing scope or procedures during such fiscal years or thereafter through and including the date of the conclusion of Arthur Andersen LLP's services, which, if not resolved to the satisfaction of Arthur Andersen LLP, would have caused Arthur Andersen LLP to make reference to the matter in their reports.

MISCELLANEOUS

The expenses of solicitation of proxies for the Annual Meeting, including the cost of preparing and mailing this Proxy Statement and the accompanying material, will be paid by Arch Coal. Such expenses may also include the charges and expenses of banks, brokerage houses and other custodians, nominees or fiduciaries for forwarding proxies and proxy material to beneficial owners of shares. Solicitation may be made by mail, telephone, telegraph and personal interview, and by regularly engaged officers and employees of Arch Coal, who will not be additionally compensated therefor.

The Board of Directors knows of no other matters to be voted upon at the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed form of proxy to vote on such matters in accordance with their judgment.

A form of proxy which is properly signed, dated and not revoked will be voted in accordance with the instructions contained therein. IF NO INSTRUCTIONS ARE GIVEN, THE PERSONS NAMED IN THE FORM OF PROXY SOLICITED BY THE BOARD OF DIRECTORS INTEND TO VOTE FOR THE NOMINEES NAMED THEREIN FOR ELECTION AS DIRECTORS; FOR RATIFICATION OF THE STOCK INCENTIVE PLAN; AND FOR THE RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG LLP AS INDEPENDENT AUDITORS FOR 1998.

Proposals of stockholders which are the proper subject for inclusion in the Proxy Statement and for consideration at the 1999 Annual Meeting of Stockholders must be received by Arch Coal no later than November 27, 1998, in order to be included in Arch Coal's Proxy Statement and form of proxy card.

Please fill in, sign and date the enclosed form of proxy and return it in the accompanying addressed envelope which requires no further postage if mailed in the United States. If you attend the Annual Meeting and wish to vote your shares in person, you may do so if you notify the Secretary of the meeting in writing prior to the voting of the proxy. Your cooperation in giving this matter your prompt attention will be appreciated.

By Order of the Board of Directors,

/s/ Jeffry N. Quinn

Jeffry N. Quinn
Senior Vice President--Law and
Human Resources
Secretary and General Counsel

St. Louis, Missouri
March 27, 1998

ARCH COAL, INC.
1997 STOCK INCENTIVE PLAN

SECTION 1

STATEMENT OF PURPOSE

1.1. The Arch Coal, Inc. 1997 Stock Incentive Plan (the "Plan") has been established by Arch Mineral Corporation, which pursuant to the Agreement and Plan of Merger by and between the Company and Ashland Coal, Inc., et. al, will change its name to Arch Coal, Inc., to become effective at the Effective Time as defined herein in order to:

(a) attract and retain executive, managerial and other salaried employees;

(b) motivate participating employees, by means of appropriate incentives, to achieve long-range goals;

(c) provide incentive compensation opportunities that are competitive with those of other major corporations; and

(d) further identify a Participant's interests with those of the Company's other stockholders through compensation based on the Company's common stock; thereby promoting the long-term financial interest of the Company and its Related Companies, including the growth in value of the Company's equity and enhancement of long-term stockholder return.

SECTION 2

DEFINITIONS

2.1. Unless the context indicates otherwise, the following terms shall have the meaning set forth below:

(a) ACQUIRING CORPORATION. The term "Acquiring Corporation" shall mean the surviving, continuing successor or purchasing corporation in an acquisition or merger with the Company in which the Company is not the surviving corporation.

(b) AWARD. The term "Award" shall mean any award or benefit granted to any Participant under the Plan, including, without limitation, the grant of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Stock, Performance Units, Merit Awards, Phantom Stock Awards and Stock acquired through purchase under Section 12.

(c) BOARD. The term "Board" shall mean the Board of Directors of the Company acting as such but shall not include the Committee or other committees of the Board acting on behalf of the Board.

(d) CAUSE. The term "Cause" shall mean (a) the continued failure by the Participant to substantially perform his or her duties with the Company (other than any such failure resulting from his or her incapacity due to physical or mental illness), or (b) the engaging by the Participant in conduct which is demonstrably and materially injurious to the Company, monetarily or otherwise.

(e) CHANGE IN CONTROL. A "Change in Control" shall mean a change in control of the Company of a nature that would be required to be reported (assuming such event has not been "previously reported") in response to Item 1(a) of a Current Report on Form 8-K pursuant to Section 13 or 15(d) of the Exchange Act as in effect on the date this Plan is approved by the shareholders of the Company; provided that, without limitation, such a Change in Control shall be deemed to have occurred (1) upon the approval of the Board (or if approval of the Board is not required as a matter of law, the shareholders of the Company) of (A) any consolidation or merger of the Company in which the Company is not the continuing or surviving corporation or pursuant to which shares of Stock would be converted into cash, securities or other property, other than a merger in which the holders of the Stock immediately prior to the merger will have more than 50% of the ownership of common stock of the surviving corporation immediately after the merger, (B) any sale, lease, exchange or other transfer (in one

transaction or a series of related transactions) of all or substantially all of the assets of the Company, or (C) adoption of any plan or proposal for the liquidation or dissolution of the Company, or (2) when any "person" (as defined in Section 13(d) of the Exchange Act), other than a Significant Stockholder, or any subsidiary of the Company or employee benefit plan or trust maintained by the Company or any of its subsidiaries, shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of more than 20% of the Stock outstanding at the time, without the prior approval of the Board.

(f) CODE. The term "Code" means the Internal Revenue Code of 1986, as amended. A reference to any provision of the Code shall include reference to any successor provision of the Code.

(g) COMMITTEE. The term "Committee" means the committee of the Board selected in accordance with the provisions of Subsection 4.2.

(h) COMPANY. The term "Company" means Arch Coal, Inc., a Delaware corporation, which prior to the Effective Date was known as Arch Mineral Corporation.

(i) DATE OF TERMINATION. A Participant's "Date of Termination" shall be the date on which his or her employment with all Employers and Related Companies terminates for any reason; provided that for purposes of this Plan only, a Participant's employment shall not be deemed to be terminated by reason of a transfer of the Participant between the Company and a Related Company (including Employers) or between two Related Companies (including Employers); and further provided that a Participant's employment shall not be considered terminated by reason of the Participant's leave of absence from an Employer or a Related Company that is approved in advance by the Participant's Employer.

(j) DISABILITY. Except as otherwise provided by the Committee, a Participant shall be considered to have a "Disability" during the period in which he or she is unable, by reason of a medically determined physical or mental impairment, to carry out his or her duties with an Employer, which condition may, but in the discretion of the Committee, shall not necessarily, be an event which qualifies as a "long term disability" under applicable long term disability benefit programs of the Company.

(k) EFFECTIVE DATE. The term "Effective Date" shall mean the "Effective Time" of the "Merger" under the Agreement and Plan of Merger dated as of April 4, 1997, among the Company, Ashland Coal, Inc., and AMC Merger Corporation.

(l) EMPLOYEE. The term "Employee" shall mean a person with an employment relationship with an Employer.

(m) EMPLOYER. The Company and each Subsidiary which, with the consent of the Company, participates in the Plan for the benefit of its eligible Employees are referred to collectively as the "Employers" and individually as an "Employer".

(n) EXCHANGE ACT. The term "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(o) EXERCISE PRICE. The term "Exercise Price" means, with respect to each share of Stock subject to an Option, the price fixed by the Committee at which such share may be purchased from the Company pursuant to the exercise of such Option, which price at no time may be less than 100% of the Fair Market Value of the Stock on the date the Option is granted, except as permitted and contemplated by Section 21 of the Plan.

(p) FAIR MARKET VALUE. The "Fair Market Value" of the Stock on any given date shall be the last sale price, regular way, or, in case no such sale takes place on such date, the average of the closing bid and asked prices, regular way, of the Stock, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the NYSE or, if the Stock is not listed or admitted to trading on the NYSE, as reported in the principal consolidated transaction reporting system with respect to securities listed on the principal national securities exchange on which the Stock is listed or admitted to trading or, if the Stock is not listed or admitted to trading on any national securities exchange, the last quoted sale price on such date or, if not so quoted, the average of the high bid and low asked prices in the over-the-counter market on such date, as reported by the National Association of Securities Dealers, Inc. Automated Quotations System or such other system then in use, or, if on any such date the Stock is not quoted by any such organization, the average of the closing bid and asked prices on such date as furnished by a professional market maker making a

market in the Stock. If the Stock is not publicly held or so listed or publicly traded, "Fair Market Value" per share of Stock shall mean the Fair Market Value per share as reasonably determined by the Committee.

(q) IMMEDIATE FAMILY. With respect to a Participant, the term "Immediate Family" shall mean, whether through consanguinity or adoptive relationships, the Participant's spouse, children, stepchildren, siblings and grandchildren.

(r) INCENTIVE STOCK OPTION. The term "Incentive Stock Option" shall mean any Incentive Stock Option granted under the Plan.

(s) MERIT AWARD. The term "Merit Award" shall mean any Merit Award granted under the Plan.

(t) NON-EMPLOYEE DIRECTOR. The term "Non-Employee Director" shall mean a person who qualifies as such under Rule 16b-3(b)(3) under the Exchange Act or any successor provision, and who also qualifies as an "outside director" under Section 162(m) of the Code.

(u) NON-QUALIFIED STOCK OPTION. The term "Non-qualified Stock Option" shall mean any Non-Qualified Stock Option granted under the Plan.

(v) NYSE. The term "NYSE" refers to the New York Stock Exchange, Inc.

(w) OPTION. The term "Option" shall mean any Incentive Stock Option or Non-Qualified Stock Option granted under the Plan.

(x) PARTICIPANT. The term "Participant" means an Employee who has been granted an Award, under the Plan.

(y) PERFORMANCE-BASED COMPENSATION. The term "Performance-Based Compensation" shall have the meaning ascribed to it in Section 162(m)(4)(C) of the Code.

(z) PERFORMANCE GOALS. The term "Performance Goals" means the goals established by the Committee under an Award which, if met, will entitle the Participant to payment under such Award and will qualify such payment as "Performance-Based Compensation" as that term is used in Code Section 162(m)(4)(C). Such goals will be based upon one or more of the following business criteria: net income; earnings per share; income from operations before the effects of changes in accounting principles, unusual items, net interest expense and income taxes ("EBIT"); income from operations before the effects of changes in accounting principles, unusual items, net interest expense, income taxes, depreciation, depletion and amortization ("EBITDA"); debt reduction; safety; return on investment; operating income; operating ratio; cash flow; return on assets; stockholders' return; revenue; return on equity; economic value added (EVA(R)); operating costs; sales; or compliance with Company policies.

(aa) PERFORMANCE PERIOD. The term "Performance Period" shall mean the period over which applicable performance is to be measured.

(bb) PERFORMANCE STOCK. The term "Performance Stock" shall have the meaning ascribed to it in Section 10 of the Plan.

(cc) PERFORMANCE UNITS. The term "Performance Units" shall have the meaning ascribed to it in Section 11 of the Plan.

(dd) PHANTOM STOCK AWARD. The term "Phantom Stock Award" shall mean any Phantom Stock Award granted under the Plan.

(ee) PLAN. The term "Plan" shall mean this Arch Coal, Inc. 1997 Stock Incentive Plan as the same may be from time to time amended or revised.

(ff) QUALIFIED RETIREMENT PLAN. The term "Qualified Retirement Plan" means any plan of an Employer or a Related Company that is intended to be qualified under Section 401(a) of the Code.

(gg) RELATED COMPANIES. The term "Related Companies" means any Significant Stockholder and their subsidiaries; and any other company during any period in which it is a Subsidiary or a division of the Company, including any entity acquired by, or merged with or into, the Company or a Subsidiary.

(hh) RESTRICTED PERIOD. The term "Restricted Period" shall mean the period of time for which shares of Restricted Stock or Restricted Stock Units are subject to forfeiture pursuant to the Plan or during which Options and Stock Appreciation Rights are not exercisable.

(ii) RESTRICTED STOCK. The term "Restricted Stock" shall have the meaning ascribed to it in Section 8 of the Plan.

(jj) RESTRICTED STOCK UNITS. The term "Restricted Stock Units" shall have the meaning ascribed to it in Section 9 of the Plan.

(kk) RETIREMENT. "Retirement" of a Participant shall mean the occurrence of a Participant's Date of Termination under circumstances that constitute such Participant's retirement at normal or early retirement age under the terms of the Qualified Retirement Plan of Participant's Employer that is extended to the Participant immediately prior to the Participant's Date of Termination or, if no such plan is extended to the Participant on his or her Date of Termination, under the terms of any applicable retirement policy of the Participant's Employer.

(ll) SEC. "SEC" means the Securities and Exchange Commission.

(mm) SIGNIFICANT STOCKHOLDER. The term "Significant Stockholder" shall mean any shareholder of the Company who, immediately prior to the Effective Date, owned more than 5% of the common stock of the Company.

(nn) STOCK. The term "Stock" shall mean shares of common stock, \$.01 par value per share, of the Company.

(oo) STOCK APPRECIATION RIGHTS. The term "Stock Appreciation Rights" shall mean any Stock Appreciation Right granted under the Plan.

(pp) SUBSIDIARY. The term "Subsidiary" shall mean any present or future subsidiary corporation of the Company within the meaning of Code Section 424(f).

(qq) TAX DATE. The term "Tax Date" shall mean the date a withholding tax obligation arises with respect to an Award.

SECTION 3

ELIGIBILITY

3.1. Subject to the discretion of the Committee and the terms and conditions of the Plan, the Committee shall determine and designate from time to time, the Employees or other persons as contemplated by Section 21 of the Plan who will be granted one or more Awards under the Plan.

SECTION 4

OPERATION AND ADMINISTRATION

4.1. The Plan has been adopted by the Board on April 1, 1997, effective as of the Effective Date, subject to the further approval of the shareholders of the Company. In addition, if the Plan is approved by the shareholders, to the extent required pursuant to Section 162(m) of the Code, it or any part thereof shall be resubmitted to shareholders for reapproval at the first shareholders' meeting that occurs during the fifth year following the year of the initial approval and thereafter at five year intervals, in each case, as may be required to qualify any Award hereunder as Performance-Based Compensation. The Plan shall be unlimited in duration and remain in effect until termination by the Board; provided however, that no Incentive Stock Option may be granted under the Plan after April 1, 2007.

4.2. The Plan shall be administered by the Committee which shall consist of two or more members of the Board who are Non-Employee Directors. Plenary authority to manage and control the operation and administration of the Plan shall be vested in the Committee, which authority shall include, but shall not be limited to:

(a) Subject to the provisions of the Plan, the authority and discretion to select Employees to receive Awards, to determine the time or times of receipt, to determine the types of Awards and the number of shares

covered by the Awards, to establish the terms, conditions, performance criteria, restrictions, and other provisions of such Awards. In making such Award determinations, the Committee may take into account the nature of services rendered by the respective Employee, his or her present and potential contribution to the Company's success and such other factors as the Committee deems relevant.

(b) Subject to the provisions of the Plan, the authority and discretion to determine the extent to which Awards under the Plan will be structured to conform to the requirements applicable to Performance-Based Compensation as described in Code Section 162(m), and to take such action, establish such procedures, and impose such restrictions at the time such awards are granted as the Committee determines to be necessary or appropriate to conform to such requirements.

(c) The authority and discretion to interpret the Plan and the Awards granted under the Plan, to establish, amend and rescind any rules and regulations relating to the Plan, to determine the terms and provisions of any agreements made pursuant to the Plan, to make all other determinations that it deems necessary or advisable for the administration of the Plan and to correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any Award, in each case, in the manner and to the extent the Committee deems necessary or advisable to carry it into effect.

4.3. Any interpretation of the Plan by the Committee and any decision made by it under the Plan shall be final and binding on all persons. The express grant in the Plan of any specific power to the Committee shall not be construed as limiting any power or authority of the Committee. Provided, however, that except as otherwise permitted under Treasury Regulation 1.162-27(e)(2)(iii)(C), the Committee may not increase any Award once made if payment under such Award is intended to constitute Performance-Based Compensation.

4.4. The Committee may only act at a meeting by unanimous consent if comprised of two members, and otherwise by a majority of its members. Any determination of the Committee may be made without a meeting by the unanimous written consent of its members. In addition, the Committee may authorize one or more of its members or any officer of an Employer to execute and deliver documents and perform other administrative acts pursuant to the Plan.

4.5. No member or authorized delegate of the Committee shall be liable to any person for any action taken or omitted in connection with the administration of the Plan unless attributable to his or her own fraud or gross misconduct. The Committee, the individual members thereof, and persons acting as the authorized delegates of the Committee under the Plan, shall be indemnified by the Employers against any and all liabilities, losses, costs and expenses (including legal fees and expenses) of whatsoever kind and nature which may be imposed on, incurred by, or asserted against, the Committee or its members or authorized delegates by reason of the performance of any action pursuant to the Plan if the Committee or its members or authorized delegates did not act in willful violation of the law or regulation under which such liability, loss, cost or expense arises. This indemnification shall not duplicate but may supplement any coverage available under any applicable insurance policy, contract with the indemnitee or the Company's By-laws.

4.6. Notwithstanding any other provision of the Plan to the contrary, but without giving effect to Awards made pursuant to Section 21, the maximum number of shares of Stock with respect to which any Participant may receive any Award of an Option or a Stock Appreciation Right under the Plan during any calendar year is 300,000; the maximum number of shares with respect to which any Participant may receive Awards of Restricted Stock during any calendar year is 100,000; the maximum number of shares with respect to which any Participant may receive Merit Awards during any calendar year is 100,000; and the maximum number of shares with respect to which any Participant may receive other Awards during any calendar year is 100,000.

4.7. To the extent that the Committee determines that it is necessary or desirable to conform any Awards under the Plan with the requirements applicable to "Performance-Based Compensation", as that term is used in Code Section 162(m)(4)(C), it may, at or prior to the time an Award is granted, establish Performance Goals for a particular Performance Period. If the Committee establishes Performance Goals for a Performance Period, it may approve a payment from that particular Performance Period upon attainment of the Performance Goal.

SECTION 5

SHARES AVAILABLE UNDER THE PLAN

5.1. The shares of Stock with respect to which Awards may be made under the Plan shall be shares of currently authorized but unissued or treasury shares acquired by the Company, including shares purchased in the open market or in private transactions. Subject to the provisions of Section 16, the total number of shares of Stock available for grant of Awards shall not exceed six million (6,000,000) shares of Stock. Except as otherwise provided herein, if any Award shall expire or terminate for any reason without having been exercised in full, the unissued shares of Stock subject thereto (whether or not cash or other consideration is paid in respect of such Award) shall again be available for the purposes of the Plan. Any shares of Stock which are used as full or partial payment to the Company upon exercise of an Award shall be available for purposes of the Plan.

SECTION 6

OPTIONS

6.1. The grant of an "Option" under this Section 6 entitles the Participant to purchase shares of Stock at a price fixed at the time the Option is granted, or at a price determined under a method established at the time the Option is granted, subject to the terms of this Section 6. Options granted under this Section 6 may be either Incentive Stock Options or Non-Qualified Stock Options, and subject to Subsection 6.6 and Sections 15 and 20, shall not be exercisable for at least six months from the date of grant, as determined in the discretion of the Committee. An "Incentive Stock Option" is an Option that is intended to satisfy the requirements applicable to an "incentive stock option" described in Section 422(b) of the Code. A "Non-Qualified Option" is an Option that is not intended to be an "incentive stock option" as that term is described in Section 422(b) of the Code.

6.2. The Committee shall designate the Employees to whom Options are to be granted under this Section 6 and shall determine the number of shares of Stock to be subject to each such Option. To the extent that the aggregate Fair Market Value of Stock with respect to which Incentive Stock Options are exercisable for the first time by any individual during any calendar year (under all plans of the Company and all Related Companies) exceeds \$100,000, such Options shall be treated as Non-Qualified Stock Options, but only to the extent required by Section 422 of the Code.

6.3. The determination and payment of the purchase price of a share of Stock under each Option granted under this Section shall be subject to the following terms of this Subsection 6.3:

(a) The purchase price shall be established by the Committee or shall be determined by a method established by the Committee at the time the Option is granted; provided, however, that in no event shall the price per share be less than the Fair Market Value per share on the date of the grant except as otherwise permitted by Section 21 of the Plan;

(b) The full purchase price of each share of Stock purchased upon the exercise of any Option shall be paid at the time of such exercise and, as soon as practicable thereafter, a certificate representing the shares so purchased shall be delivered to the person entitled thereto; and

(c) The purchase price shall be paid either in cash, in shares of Stock (valued at Fair Market Value as of the day of exercise), through a combination of cash and Stock (so valued) or through such cashless exercise arrangement as may be approved by the Committee and established by the Company, provided that any shares of Stock used for payment shall have been owned by the Participant for at least six (6) months.

6.4. Except as otherwise expressly provided in the Plan, an Option granted under this Section 6 shall be exercisable in accordance with the following terms of this Subsection 6.4.

(a) The terms and conditions relating to exercise of an Option shall be established by the Committee, and may include, without limitation, conditions relating to completion of a specified period of service, achievement of performance standards prior to exercise of the Option, or achievement of Stock ownership objectives by the Participant. No Option may be exercised by a Participant after the expiration date applicable to that Option.

(b) The exercise of an Option will result in the surrender of the corresponding rights under a tandem Stock Appreciation Right, if any.

6.5. The exercise period of any Option shall be determined by the Committee but the term of any Option shall not extend more than ten years after the date of grant.

SECTION 7

STOCK APPRECIATION RIGHTS

7.1. Subject to the terms of this Section 7, a Stock Appreciation Right granted under the Plan entitles the Participant to receive, in cash or Stock (as determined in accordance with Subsection 7.4), value equal to all or a portion of the excess of: (a) the Fair Market Value of a specified number of shares of Stock at the time of exercise; over (b) a specified price which shall not be less than 100% of the Fair Market Value of the Stock at the time the Stock Appreciation Right is granted, or, if granted in tandem with an Option, the exercise price with respect to shares under the tandem Option.

7.2. Subject to the provisions of the Plan, the Committee shall designate the Employees to whom Stock Appreciation Rights are to be granted under the Plan, shall determine the exercise price or a method by which the price shall be established with respect to each such Stock Appreciation Right, and shall determine the number of shares of Stock on which each Stock Appreciation Right is based. A Stock Appreciation Right may be granted in connection with all or any portion of a previously or contemporaneously granted Option or not in connection with an Option. If a Stock Appreciation Right is granted in connection with an Option then, in the discretion of the Committee, the Stock Appreciation Right may, but need not, be granted in tandem with the Option.

7.3. The exercise of Stock Appreciation Rights shall be subject to the following:

(a) If a Stock Appreciation Right is not in tandem with an Option, then the Stock Appreciation Right shall be exercisable in accordance with the terms established by the Committee in connection with such rights but, subject to Sections 15 and 20, shall not be exercisable for six months from the date of grant and the term of any Stock Appreciation Right shall not extend more than ten years from the date of grant; and may include, without limitation, conditions relating to completion of a specified period of service, achievement of performance standards prior to exercise of the Stock Appreciation Rights, or achievement of objectives relating to Stock ownership by the Participant; and

(b) If a Stock Appreciation Right is in tandem with an Option, then the Stock Appreciation Right shall be exercisable only at the time the tandem Option is exercisable and the exercise of the Stock Appreciation Right will result in the surrender of the corresponding rights under the tandem Option.

7.4. Upon the exercise of a Stock Appreciation Right, the value to be distributed to the Participant, in accordance with Subsection 7.1, shall be distributed in shares of Stock (valued at their Fair Market Value at the time of exercise), in cash, or in a combination of Stock or cash, in the discretion of the Committee.

SECTION 8

RESTRICTED STOCK

8.1. Subject to the terms of this Section 8, Restricted Stock Awards under the Plan are grants of Stock to Participants, the vesting of which is subject to certain conditions established by the Committee, with some or all of those conditions relating to events (such as continued employment or satisfaction of performance criteria) occurring after the date of the grant of the Award, provided, however, that to the extent that vesting of a Restricted Stock Award is contingent on continued employment, the required employment period shall generally (unless otherwise determined by the Committee) not be less than one year following the grant of the Award unless such grant is in substitution for an Award under this Plan or a predecessor plan of the Company or a Related Company. To the extent, if any, required by the General Corporation Law of the State of Delaware, a Participant's receipt of an Award of newly issued shares of Restricted Stock shall be made subject to payment by the Participant of an amount equal to the aggregate par value of such newly issued shares of Stock.

8.2. The Committee shall designate the Employees to whom Restricted Stock is to be granted, and the number of shares of Stock that are subject to each such Award. The Award of shares under this Section 8 may, but need not, be made in conjunction with a cash-based incentive compensation program maintained by the Company, and may, but need not, be in lieu of cash otherwise awardable under such program.

8.3. Shares of Restricted Stock granted to Participants under the Plan shall be subject to the following terms and conditions:

(a) Restricted Stock granted to Participants may not be sold, assigned, transferred, pledged or otherwise encumbered during the Restricted Period;

(b) The Participant as owner of such shares shall have all the rights of a stockholder, including but not limited to the right to vote such shares and, except as otherwise provided by the Committee or as otherwise provided by the Plan, the right to receive all dividends and other distributions paid on such shares;

(c) Each certificate issued in respect of shares of Restricted Stock granted under the Plan shall be registered in the name of the Participant but, at the discretion of the Committee, each such certificate may be deposited with the Company with a stock power endorsed in blank or in a bank designated by the Committee;

(d) The Committee may award Restricted Stock as Performance-Based Compensation, which shall be Restricted Stock that will be earned (or for which earning is accelerated) upon the achievement of Performance Goals established by the Committee and the Committee may specify the number of shares that will be earned upon achievement of different levels of performance; except as otherwise provided by the Committee, achievement of maximum targets during the Performance Period shall result in the Participant's earning of the full amount of Restricted Stock comprising such Performance-Based Compensation and, in the discretion of the Committee, achievement of the minimum target but less than the maximum target, the Committee may result in the Participant's earning of a portion of the Award; and

(e) Except as otherwise provided by the Committee, any Restricted Stock which is not earned by the end of a Restricted Period or Performance Period, as the case may be, shall be forfeited. If a Participant's Date of Termination occurs prior to the end of a Restricted Period or Performance Period, as the case may be, the Committee may determine, in its sole discretion, that the Participant will be entitled to settlement of all or any portion of the Restricted Stock as to which he or she would otherwise be eligible, and may accelerate the determination of the value and settlement of such Restricted Stock or make such other adjustments as the Committee, in its sole discretion, deems desirable. Subject to the limitations of the Plan and the Award of Restricted Stock, upon the vesting of Restricted Stock, such Restricted Stock will be transferred free of all restrictions to the Participant (or his or her legal representative, beneficiary or heir).

SECTION 9

RESTRICTED STOCK UNITS

9.1. Subject to the terms of this Section 9, a Restricted Stock Unit entitles a Participant to receive shares for the units at the end of a Restricted Period to the extent provided by the Award with the vesting of such units to be contingent upon such conditions as may be established by the Committee (such as continued employment or satisfaction of performance criteria) occurring after the date of grant of the Award, provided, however, that to the extent that the vesting of a Restricted Stock Unit is contingent on continued employment, the required employment period shall generally not be less than one year following the date of grant of the Award unless such grant is in substitution for an Award under this Plan or a predecessor plan of the Company or a Related Company. The Award of Restricted Stock Units under this Section 9 may, but need not, be made in conjunction with a cash-based incentive compensation program maintained by the Company, and may, but need not, be in lieu of cash otherwise awardable under such program.

9.2. The Committee shall designate the Employees to whom Restricted Stock Units shall be granted and the number of units that are subject to each such Award. During any period in which Restricted Stock Units are outstanding and have not been settled in Stock, the Participant shall not have the rights of a stockholder, but, in the discretion of the Committee, may be granted the right to receive a payment from the Company in lieu of a dividend in an amount equal to any cash dividends that might be paid during the Restricted Period.

9.3. Except as otherwise provided by the Committee, any Restricted Stock Unit which is not earned by the end of a Restricted Period shall be forfeited. If a Participant's Date of Termination occurs prior to the end of a Restricted Period, the Committee, in its sole discretion, may determine that the Participant will be entitled to settlement of all, any portion, or none of the Restricted Stock Units as to which he or she would otherwise be eligible, and may

accelerate the determination of the value and settlement of such Restricted Stock Units or make such other adjustments as the Committee, in its sole discretion, deems desirable.

SECTION 10

PERFORMANCE STOCK

10.1. Subject to the terms of this Section 10, an Award of Performance Stock provides for the distribution of Stock to a Participant upon the achievement of performance objectives, which may include Performance Goals, established by the Committee.

10.2. The Committee shall designate the Employees to whom Awards of Performance Stock are to be granted, and the number of shares of Stock that are subject to each such Award. The Award of shares of Performance Stock under this Section 10 may, but need not, be made in conjunction with a cash-based incentive compensation program maintained by the Company, and may, but need not, be in lieu of cash otherwise awardable under such program.

10.3. Except as otherwise provided by the Committee, any Award of Performance Stock which is not earned by the end of the Performance Period shall be forfeited. If a Participant's Date of Termination occurs prior to the end of a Performance Period, the Committee, in its sole discretion, may determine that the Participant will be entitled to settlement of all, any portion, or none of the Performance Stock as to which he or she would otherwise be eligible, and may accelerate the determination of the value and settlement of such Performance Stock or make such other adjustments as the Committee, in its sole discretion, deems desirable.

SECTION 11

PERFORMANCE UNITS

11.1. Subject to the terms of this Section 11, the Award of Performance Units under the Plan entitles the Participant to receive value for the units at the end of a Performance Period to the extent provided under the Award. The number of Performance Units earned, and value received from them, will be contingent on the degree to which the performance measures established at the time of grant of the Award are met.

11.2. The Committee shall designate the Employees to whom Performance Units are to be granted, and the number of Performance Units to be subject to each such Award.

11.3. For each Participant, the Committee will determine the value of Performance Units, which may be stated either in cash or in units representing shares of Stock; the performance measures used for determining whether the Performance Units are earned; the Performance Period during which the performance measures will apply; the relationship between the level of achievement of the performance measures and the degree to which Performance Units are earned; whether, during or after the Performance Period, any revision to the performance measures or Performance Period should be made to reflect significant events or changes that occur during the Performance Period; and the number of earned Performance Units that will be settled in cash and/or shares of Stock.

11.4. Settlement of Performance Units shall be subject to the following:

(a) The Committee will compare the actual performance to the performance measures established for the Performance Period and determine the number of Performance Units as to which settlement is to be made;

(b) Settlement of Performance Units earned shall be wholly in cash, wholly in Stock or in a combination of the two, to be distributed in a lump sum or installments, as determined by the Committee; and

(c) Shares of Stock distributed in settlement of Performance Units shall be subject to such vesting requirements and other conditions, if any, as the Committee shall determine, including, without limitation, restrictions of the type that may be imposed with respect to Restricted Stock under Section 8.

11.5. Except as otherwise provided by the Committee, any Award of Performance Units which is not earned by the end of the Performance Period shall be forfeited. If a Participant's Date of Termination occurs prior to the end of a Performance Period, the Committee, in its sole discretion, may determine that the Participant will be entitled to settlement of all, any portion, or none of the Performance Units as to which he or she would otherwise be eligible, and

may accelerate the determination of the value and settlement of such Performance Units or make such other adjustments as the Committee, in its sole discretion, deems desirable.

SECTION 12

STOCK PURCHASE PROGRAM

12.1. The Committee may, from time to time, establish one or more programs under which Employees will be permitted to purchase shares of Stock under the Plan, and shall designate the Employees eligible to participate under such Stock purchase programs. The purchase price for shares of Stock available under such programs, and other terms and conditions of such programs, shall be established by the Committee. The purchase price may not be less than 75% of the Fair Market Value of the Stock at the time of purchase (or, in the Committee's discretion, the average Stock value over a period determined by the Committee), and further provided that if newly issued shares of Stock are sold, the purchase price may not be less than the aggregate par value of such newly issued shares of Stock.

12.2. The Committee may impose such restrictions with respect to shares purchased under this Section 12, as the Committee, in its sole discretion, determines to be appropriate. Such restrictions may include, without limitation, restrictions of the type that may be imposed with respect to Restricted Stock under Section 8.

SECTION 13

MERIT AWARDS

13.1. The Committee may from time to time make an Award of Stock under the Plan to selected Employees for such reasons and in such amounts as the Committee, in its sole discretion, may determine. The consideration to be paid by an Employee for any such Merit Award, if any, shall be fixed by the Committee from time to time, but, if required by the General Corporation Law of the State of Delaware, it shall not be less than the aggregate par value of the shares of Stock awarded to him or her.

SECTION 14

PHANTOM STOCK AWARDS

14.1. The Committee may make Phantom Stock Awards to selected Employees which may be based solely on the value of the underlying shares of Stock, solely on any earnings or appreciation thereon, or both. Subject to the provisions of the Plan, the Committee shall have the sole and complete authority to determine the number of hypothetical or target shares as to which each such Phantom Stock Award is subject and to determine the terms and conditions of each such Phantom Stock Award. There may be more than one Phantom Stock Award in existence at any one time with respect to a selected Employee, and the terms and conditions of each such Phantom Stock Award may differ from each other.

14.2. The Committee shall establish vesting or performance measures for each Phantom Stock Award on the basis of such criteria and to accomplish such objectives as the Committee may from time to time, in its sole discretion, determine. Such measures may be based on years of service or periods of employment, or the achievement of individual or corporate performance objectives, but shall, in each instance, be based upon one or more of the business criteria as determined pursuant to Section 4.7. The vesting and performance measures determined by the Committee shall be established at the time a Phantom Stock Award is made. Phantom Stock Awards may not be sold, assigned, transferred, pledged, or otherwise encumbered, except as provided in Section 17, during the Performance Period.

14.3. The Committee shall determine, in its sole discretion, the manner of payment, which may include cash or shares of Stock in such proportions as the Committee shall determine.

14.4. Except as otherwise provided by the Committee, any Award of Phantom Stock which is not earned by the end of the Performance Period shall be forfeited. If a Participant's Date of Termination occurs prior to the end of a Performance Period, the Committee, in its sole discretion, may determine that the Participant will be entitled to settlement of all or a portion of the Phantom Stock for which he or she would otherwise be eligible, and may accelerate the determination of the value and settlement of Phantom Stock or make such other adjustment as the Committee, in its sole discretion, deems desirable.

SECTION 15

TERMINATION OF EMPLOYMENT

15.1. If a Participant's employment is terminated by the Participant's Employer for Cause or if the Participant's employment is terminated by the Participant without the written consent and approval of the Participant's Employer, all of the Participant's unvested Awards shall be forfeited and exercisable Options shall be forfeited after 90 days from the Participant's Termination Date.

15.2. If a Participant's Date of Termination occurs by reason of death, Disability or Retirement, all Options and Stock Appreciation Rights outstanding immediately prior to the Participant's Date of Termination shall immediately become exercisable and shall be exercisable until one year from the Participant's Date of Termination and thereafter shall be forfeited if not exercised, and all restrictions on any Awards outstanding immediately prior to the Participant's Date of Termination shall immediately lapse. Options and Stock Appreciation Rights which are or become exercisable at the time of a Participant's death may be exercised by the Participant's designated beneficiary or, in the absence of such designation, by the person to whom the Participant's rights will pass by will or the laws of descent and distribution.

15.3. If a Participant's Date of Termination occurs by reason of Participant's employment being terminated by the Participant's Employer for any reason other than Cause, or by the Participant with the written consent and approval of the Participant's Employer, the Restricted Period shall lapse on a proportion of any Awards outstanding immediately prior to the Participant's Date of Termination (except that, to the extent that an Award of Restricted Stock, Restricted Stock Units, Performance Units, Performance Stock and Phantom Stock is subject to a Performance Period), such proportion of the Award shall remain subject to the same terms and conditions for vesting as were in effect prior to the Date of Termination and shall be determined at the end of the Performance Period. The proportion of an Award upon which the Restricted Period shall lapse shall be a fraction, the denominator of which is the total number of months of any Restricted Period applicable to an Award and the numerator of which is the number of months of such Restricted Period which elapsed prior to the Date of Termination.

15.4. Options and Stock Appreciation Rights which are or become exercisable by reason of the Participant's employment being terminated by the Participant's Employer for reasons other than Cause or by the Participant with the consent and approval of the Participant's Employer, shall be exercisable until 120 days from the Participant's Termination Date and shall thereafter be forfeited if not exercised.

15.5. Except to the extent the Company shall otherwise determine, if, as a result of a sale or other transaction (other than a Change in Control), a Participant's Employer ceases to be a Related Company (and the Participant's Employer is or becomes an entity that is separate from the Company), the occurrence of such transaction shall be treated as the Participant's Date of Termination caused by the Participant's employment being terminated by the Participant's Employer for a reason other than Cause.

15.6. Notwithstanding the foregoing provisions of this Section 15, the Committee may, with respect to any Awards of a Participant (or portion thereof) that are outstanding immediately prior to the Participant's Date of Termination, determine that a Participant's Date of Termination will not result in forfeiture or other termination of the Award, or may extend the period during which any Options or Stock Appreciation Rights may be exercised, but shall not extend such period beyond the original expiration date set forth in the Award.

SECTION 16

ADJUSTMENTS TO SHARES

16.1. If the Company shall effect a reorganization, merger, or consolidation, or similar event or effect any subdivision or consolidation of shares of Stock or other capital readjustment, payment of stock dividend, stock split, spin-off, combination of shares or recapitalization or other increase or reduction of the number of shares of Stock outstanding without receiving compensation therefor in money, services or property, then the Committee shall appropriately adjust (i) the number of shares of Stock available under the Plan, (ii) the number of shares of Stock available under any individual or other limitations under the Plan, (iii) the number of shares of Stock subject to outstanding Awards and (iv) the per-share price under any outstanding Award to the extent that the Participant is required to pay a purchase price per share with respect to the Award.

16.2. If the Committee determines that an adjustment in accordance with the provisions of Subsection 16.1 would not be fully consistent with the purposes of the Plan or the purposes of the outstanding Awards under the Plan, the Committee may make such other adjustments, if any, that the Committee reasonably determines are consistent with the purposes of the Plan and/or the affected Awards.

16.3. To the extent that any reorganization, merger, consolidation, or similar event or any subdivision or consolidation of shares of Stock or other capital readjustment, payment of stock dividend, stock split, spin-off, combination of shares or recapitalization or other increase or reduction of the number of shares of Stock hereunder is also accompanied by or related to a Change in Control, the adjustment hereunder shall be made prior to the acceleration contemplated by Section 20.

SECTION 17

TRANSFERABILITY AND DEFERRAL OF AWARDS

17.1. Awards under the Plan are not transferable except by will or by the laws of descent and distribution. To the extent that a Participant who receives an Award under the Plan has the right to exercise such Award, the Award may be exercised during the lifetime of the Participant only by the Participant. Notwithstanding the foregoing provisions of this Section 17, the Committee may, subject to any restrictions under applicable securities laws, permit Awards under the Plan (other than an Incentive Stock Option) to be transferred by a Participant for no consideration to or for the benefit of the Participant's Immediate Family (including, without limitation, to a trust for the benefit of a Participant's Immediate Family or to a Partnership comprised solely of members of the Participant's Immediate Family), subject to such limits as the Committee may establish, provided the transferee shall remain subject to all of the terms and conditions applicable to such Award prior to such transfer.

17.2. The Committee may permit a Participant to elect to defer payment under an Award under such terms and conditions as the Committee, in its sole discretion, may determine; provided that any such deferral election must be made prior to the time the Participant has become entitled to payment under the Award.

SECTION 18

AWARD AGREEMENT

18.1. Each Participant granted an Award pursuant to the Plan shall sign an Award Agreement which signifies the offer of the Award by the Company and the acceptance of the Award by the Participant in accordance with the terms of the Award and the provisions of the Plan. Each Award Agreement shall reflect the terms and conditions of the Award. Participation in the Plan shall confer no rights to continued employment with an Employer nor shall it restrict the right of an Employer to terminate a Participant's employment at any time for any reason, notwithstanding the fact that the Participant's rights under this Plan may be negatively affected by such action.

SECTION 19

TAX WITHHOLDING

19.1 All Awards and other payments under the Plan are subject to withholding of all applicable taxes, which withholding obligations shall be satisfied (without regard to whether the Participant has transferred an Award under the Plan) by a cash remittance, or with the consent of the Committee, through the surrender of shares of Stock which the Participant owns or to which the Participant is otherwise entitled under the Plan pursuant to an irrevocable election submitted by the Participant to the Company at the office designated for such purpose. The number of shares of Stock needed to be submitted in payment of the taxes shall be determined using the Fair Market Value as of the applicable tax date rounding down to the nearest whole share.

SECTION 20

CHANGE IN CONTROL

20.1. After giving effect to the provisions of Section 16 (relating to the adjustment of shares of Stock), and except as otherwise provided in the Plan or the Agreement reflecting the applicable Award, upon the occurrence of a Change in Control:

(a) All outstanding Options (regardless of whether in tandem with Stock Appreciation Rights) shall become fully exercisable and may be exercised at any time during the original term of the Option;

(b) All outstanding Stock Appreciation Rights (regardless of whether in tandem with Options) shall become fully exercisable and may be exercised at any time during the original term of the Option;

(c) All shares of Stock subject to Awards shall become fully vested and be distributed to the Participant; and

(d) Performance Units may be paid out in such manner and amounts as may be reasonably determined by the Committee.

SECTION 21

MERGERS / ACQUISITIONS

21.1 In the event of any merger or acquisition involving the Company and/or a Subsidiary of the Company and another entity which results in the Company being the survivor or the surviving direct or indirect parent corporation of the merged or acquired entity, the Committee may grant Awards under the provisions of the Plan in substitution for awards held by employees or former employees of such other entity under any plan of such entity immediately prior to such merger or acquisition upon such terms and conditions as the Committee, in its discretion, shall determine and as otherwise may be required by the Code to ensure such substitution is not treated as the grant of a new Award for tax or accounting purposes.

21.2 In the event of a merger or acquisition involving the Company in which the Company is not the surviving corporation, the Acquiring Corporation shall either assume the Company's rights and obligations under outstanding Awards or substitute awards under the Acquiring Corporation's plans, or if none, securities for such outstanding Awards. In the event the Acquiring Corporation elects not to assume or substitute for such outstanding Awards, and without limiting Section 20, the Board shall provide that any unexercisable and/or unvested portion of the outstanding Awards shall be immediately exercisable and vested as of a date prior to such merger or consolidation, as the Board so determines. The exercise and/or vesting of any Award that was permissible solely by reason of this Section 21.2 shall be conditioned upon the consummation of the merger or consolidation. Unless otherwise provided in the Plan or the Award, any Awards which are neither assumed by the Acquiring Corporation nor exercised on or prior to the date of the transaction shall terminate effective as of the effective date of the transaction.

SECTION 22

TERMINATION AND AMENDMENT

22.1 The Board may suspend, terminate, modify or amend the Plan, provided that any amendment that would (a) increase the aggregate number of shares of Stock which may be issued under the Plan, (b) would change the method of determining the exercise price of Options, other than to change the method of determining Fair Market Value of Stock as set forth in Section 2.1(o) of the Plan, or (c) materially modify the requirements as to eligibility for participation in the Plan, shall be subject to the approval of the Company's stockholders, except that any such increase or modification that may result from adjustments authorized by Section 16 does not require such approval. No suspension, termination, modification or amendment of the Plan may terminate a Participant's existing Award or materially and adversely affect a Participant's rights under such Award without the Participant's consent.

PROXY

ARCH COAL, INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
FOR THE ANNUAL MEETING ON APRIL 22, 1998

The undersigned hereby appoints STEVEN F. LEER and JEFFRY N. QUINN, and each of them, with power of substitution, as the proxy of the undersigned to represent the undersigned and to vote all shares of Common Stock which the undersigned would be entitled to vote, if personally present at the Annual Meeting of Stockholders of Arch Coal, Inc. to be held at its headquarters at CityPlace One, St. Louis, Missouri, at 10:00 a.m. on Wednesday, April 22, 1998, and at any adjournments thereof, with all powers the undersigned would possess if present at such meeting (including with respect to the election of directors, the power to cumulate votes and distribute such votes among the nominees) on the matters set forth on the reverse side hereof and all other matters properly coming before the meeting.

ELECTION OF DIRECTORS, NOMINEES

(Comments or Change of Address)

- - - - -

James R. Boyd	Robert L. Hintz	_____
Paul W. Chellgren	Douglas H. Hunt	_____
Thomas L. Feazell	Steven F. Leer	_____
Juan Antonio Ferrando	James L. Parker	_____
John R. Hall	J. Marvin Quin	_____

(If you have written in the above space, please mark the corresponding box on the opposite side of this card.)

You are encouraged to specify your choices by marking the appropriate boxes, SEE REVERSE SIDE, but you need not mark any boxes if you wish to vote in accordance with the Board of Directors' recommendations. The Proxies cannot vote your shares unless you sign and return your card.

/X/ PLEASE MARK YOUR VOTES AS IN THIS EXAMPLE.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED FOR ALL PROPOSALS.

The Board of Directors Recommends a Vote for All Proposals.

	FOR	WITHHELD
1. Election of Directors	[]	[]

(see opposite side)
For, except vote withheld
from the following nominee(s):

	FOR	AGAINST	ABSTAIN
2. Ratification of the Arch Coal, Inc. 1997 Stock Incentive Plan.	[]	[]	[]

3. Ratification of Ernst & Young LLP as independent Auditors for 1998.	[]	[]	[]
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You are encouraged to specify your choices by marking the appropriate boxes, and promptly returning this proxy in the enclosed envelope, which requires no postage, but you need not mark any boxes if you wish to vote in accordance with the recommendations of the Board of Directors.

Change of Address/ Comments on opposite side. []
I plan to attend the Annual Meeting []

SIGNATURE(S) _____ DATE _____

NOTE: Please sign exactly as your name or names appear hereon, and when signing as attorney, executor, administrator, trustee or guardian, give your full title as such. If a corporation, please sign in full corporate name by an authorized officer. If a partnership, please sign in full partnership name by an authorized person.

PROXY

ARCH COAL, INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
FOR THE ANNUAL MEETING ON APRIL 22, 1998

The undersigned as a participant in the Arch Coal, Inc. Employee Thrift Plan ("Plan") hereby instructs Chase Manhattan Bank, N.A., Trustee to constitute and appoint STEVEN F. LEER and JEFFRY N. QUINN, and each of them, with power of substitution, as the proxy of said Trustee to represent the interests of the undersigned in the Common Stock of Arch Coal, Inc. ("Arch Coal") held under the terms of the Plan at the Annual Meeting of Stockholders of Arch Coal to be held at its headquarters at CityPlace One, St. Louis, Missouri, at 10:00 a.m. on Wednesday, April 22, 1998, and at any adjournments thereof, and to vote with all powers the undersigned would possess if present at such meeting, all shares of Common Stock credited to the undersigned under the Plan as of the record date for the Annual Meeting (including with respect to the election of directors, the power to cumulate votes and distribute such votes among the nominees) on the matters set forth on the reverse side hereof and all other matters properly coming before the meeting.

ELECTION OF DIRECTORS, NOMINEES

(Comments or Change of Address)

- - - - -

James R. Boyd	Robert L. Hintz
Paul W. Chellgren	Douglas H. Hunt
Thomas L. Feazell	Steven F. Leer
Juan Antonio Ferrando	James L. Parker
John R. Hall	J. Marvin Quin

(If you have written in the
above space, please mark the
corresponding box on the
opposite side of this card.)

You are encouraged to specify your choices by marking the appropriate boxes, SEE REVERSE SIDE, but you need not mark any boxes if you wish to vote in accordance with the Board of Directors' recommendations. The Proxies cannot vote your shares unless you sign and return your card.

/X/ PLEASE MARK YOUR VOTES AS IN THIS EXAMPLE.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED FOR ALL PROPOSALS.

The Board of Directors Recommends a Vote for All P roposals.

	FOR	WITHHELD
1. Election of Directors (see opposite side) For, except vote withheld from the following nominee(s):	[]	[]

	FOR	AGAINST	ABSTAIN
2. Ratification of the Arch Coal, Inc. 1997 Stock Incentive Plan.	[]	[]	[]

	[]	[]	[]
3. Ratification of Ernst & Young LLP as independent Auditors for 1998.			

You are encouraged to specify your choices by marking the appropriate boxes, and promptly returning this proxy in the enclosed envelope, which requires no postage, but you need not mark any boxes if you wish to vote in accordance with the recommendations of the Board of Directors.

Change of Address/ Comments on opposite side. []

I plan to attend the Annual Meeting []

SIGNATURE(S) _____ DATE _____

NOTE: Please sign exactly as your name or names appear hereon, and when signing as attorney, executor, administrator, trustee or guardian, give your full title as such.