

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ARCH COAL, INC.
(Exact name of registrant as specified in its charter)

Delaware 43-0921172
(State or other jurisdiction of (I.R.S. Employer Identification No.)
incorporation or organization)

CityPlace One, Suite 300
St. Louis, Missouri 63141
(314) 994-2700
(Address, including zip code, and telephone number,
including area code, of registrant's principal
executive offices)

Jeffry N. Quinn
Senior Vice President - Law and Human Resources,
Secretary and General Counsel
Arch Coal, Inc.
CityPlace One, Suite 300
St. Louis, Missouri 63141
(314) 994-2700
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share (1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock, par value of \$.01 per share	2,000,000 shares	\$12	\$24,000,000	\$6,672

(1) Estimated solely for the purpose of calculating the registration fee; computed in accordance with Rule 457(c) on the basis of the average of the high and low sales prices for the Common Stock on April 30, 1999 as reported on the New York Stock Exchange.

Arch Coal, Inc.
AUTOMATIC DIVIDEND REINVESTMENT
AND STOCK PURCHASE PLAN

We are offering to holders of record of our Common Stock, to our employees and to the employees of our subsidiaries the opportunity to purchase shares of Common Stock through an Automatic Dividend Reinvestment and Stock Purchase Plan. The shares of Common Stock purchased under the Plan with reinvested dividends will either be purchased on the open market or be newly issued (including shares reacquired and held for future issuance) as determined by us. The shares of Common Stock purchased under the Plan with voluntary cash payments will be purchased on the open market. The Plan constitutes an amendment and restatement of our Automatic Dividend Reinvestment Plan previously in effect. If you currently participate in the original Plan, you will remain enrolled in accordance with the terms of this Prospectus unless you instruct EquiServe (as defined below) to close your account or to alter the conditions of your participation. We have appointed First Chicago Trust Company of New York to originate and administer the Plan and EquiServe Limited Partnership to act as service agent. The appointed entities shall be collectively referred to in this Prospectus as "EquiServe."

The Plan is designed to enable you to invest all or part of your Common Stock cash dividends automatically in additional shares of Common Stock. The Plan also permits you to purchase shares of Common Stock with voluntary cash investments, whether or not you reinvest your dividends. The Plan permits Common Stock dividends to be reinvested beginning on any dividend payment date (usually March 15, June 15, September 15 and December 15) and voluntary cash payments to be invested in Common Stock beginning on the 15th day of each month or as soon as practicable after such date (the "Investment Dates"), at a price per share equal to:

- o the weighted average price per share of the shares of Common Stock purchased for the month (for shares purchased in the open market) or
- o the average of the high and low per share sales prices for the Common Stock reported by the New York Stock Exchange ("NYSE") on the Investment Date (for newly issued shares).

The average of the high and low per share sales prices of the Common Stock as reported by the NYSE on April 29, 1999 was \$12 7/16. No brokerage commissions will be charged on newly issued shares of Common Stock purchased under the Plan, and we will pay any brokerage commissions resulting from open market purchases.

This Prospectus relates to 2,000,000 shares of Common Stock registered for purchase. You should retain this Prospectus for future reference.

Before you participate in our Plan, you should consider the risks discussed in "Risk Factors" beginning on page 3.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this Prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is May 4, 1999.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's web site at www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room, located at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the Public Reference Room. For information about us, please visit our web site at www.archcoal.com.

We have filed a registration statement on Form S-3 with the SEC ("Registration Statement") under the Securities Act of 1933 with respect to newly issued shares that may be purchased with reinvested dividends under the Plan. This Prospectus does not contain all of the information set forth in the Registration Statement, certain portions of which the SEC permits us to omit. If you would like to review those portions, including exhibits, please visit the SEC's web site or Public Reference Room, or call the SEC at the number mentioned above.

If we make statements in this Prospectus that refer to the contents of any omitted documents, such statements may be incomplete. In those cases, we refer you to the omitted document for a more complete description. Such reference modifies any statements made in this Prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this Prospectus, and information that we file later with the SEC will automatically update and supersede this information.

We incorporate by reference the documents and reports listed below and any future filings with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934. Future filings include filings made after the date of this Prospectus and prior to the termination of the offering made by this Prospectus. Documents incorporated by reference include the following:

- o Annual Report on Form 10-K for the fiscal year ended December 31, 1998;
- o Current Report on Form 8-K dated March 9, 1999;
- o Definitive Proxy Statement on Schedule 14A dated March 12, 1999; and
- o The description of the Common Stock contained in our registration statement on Form 8-B dated June 17, 1997.

You may request a free copy of these filings, other than exhibits (unless such exhibits are specifically incorporated by reference into such documents) by writing or telephoning us at the following address:

General Counsel
Arch Coal, Inc.
Suite 300, CityPlace One
St. Louis, Missouri 63141
(314) 994-2700

RISK FACTORS

In addition to the other information contained or incorporated by reference in this Prospectus, prospective investors should consider carefully the following risk factors before making an investment in the Common Stock.

This Prospectus contains or incorporates by reference statements by us that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements contained in this Prospectus and in the documents incorporated by reference regarding prospects for our industry and our expected future financial position, results of operations, cash flows, dividends, business strategy, capital expenditures, competitive position, growth opportunities and intent, belief, objectives or current expectations for the future are forward-looking statements.

When used in this Prospectus or the documents incorporated by reference, terms such as "anticipate," "believe," "estimate," "expect," "intend," "indicate," "may," "will," "objective," "plan" and "predict" are intended to identify such statements.

Forward-looking statements are based upon our management's expectations at the time they are made and are inherently uncertain. Actual results could differ materially from those anticipated in the forward-looking statements as a result of the risk factors set forth below and any other factors described in documents filed by us with the SEC and incorporated by reference, many of which are beyond our control.

Substantial Leverage; Variable Interest Rates; Restrictive Covenants

We have substantial leverage, including significant debt service and lease payment obligations. As of December 31, 1998, we had outstanding consolidated indebtedness of \$1.4 billion, representing approximately 69% of our total capitalization.

Our ability to satisfy our debt service and lease payment obligations will depend upon the future operating performance of our subsidiaries, which will be affected by prevailing economic conditions in their markets, as well financial, business and other factors, certain of which are beyond their control. Based upon current levels of operations, we believe that cash flow from operations and available cash, together with available borrowings under our credit facilities, will be adequate to meet our future liquidity needs for at least the next several years. However, we cannot assure you that our business will generate sufficient cash flow from operations or that future borrowings will be available in an amount sufficient to enable us to fund our debt service and lease payment obligations or our other liquidity needs.

The degree to which we are leveraged could have material consequences to us and our business, including, but not limited to:

- o making it more difficult for us to satisfy our debt service, lease payment and other obligations;
- o increasing our vulnerability to general adverse economic and industry conditions;
- o limiting our ability to obtain additional financing to fund future acquisitions, working capital, capital expenditures or other general corporate requirements;
- o reducing the availability of cash flow from operations to fund acquisitions, working capital, capital expenditures or other general corporate purposes;
- o limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- o placing us at a competitive disadvantage when compared to competitors with less debt.

A significant portion of our indebtedness bears interest at variable rates that are linked to short-term interest rates. If interest rates rise, our costs relative to those obligations would also rise.

Terms of our credit facilities and leases contain financial and other restrictive covenants that limit our ability to, among other things, pay dividends, effect acquisitions or dispositions and borrow additional funds, and require us to, among other things, maintain various financial ratios and comply with various other financial covenants. Our failure to comply with such covenants could result in an event of default which, if not cured or waived, would have a material adverse effect on us.

Environmental and Regulatory Factors

Governmental authorities regulate the coal mining industry on matters as diverse as:

- o employee health and safety;
- o air quality standards;
- o water pollution;
- o groundwater quality and availability;
- o plant and wildlife protection;
- o the reclamation and restoration of mining properties; and
- o the discharge of materials into the environment and surface subsidence from underground mining.

In addition, federal legislation mandates certain benefits for various retired coal miners represented by the United Mine Workers of America ("UMWA"). These regulations and legislation have had and will continue to have a significant effect on our costs of production and competitive position.

Mining companies must obtain permits that impose strict regulations on various environmental and health and safety matters in connection with coal mining. Numerous permits are required for mining operations.

We believe all permits required to conduct present mining operations have been obtained and that, except as noted below, upon the filing of the required information with the appropriate regulatory agencies, all permits necessary for continuing operations will be obtained. However, the regulatory environment in West Virginia is changing with respect to current or future large scale surface mines.

The Company currently operates four such mines in West Virginia. The issuance of a permit at one of these mines, the Dal-Tex mine, to mine reserves contiguous to its existing operation has been enjoined. See "Information About Arch Coal--Recent Developments."

The remaining three operations, under current mining plans, do not have any immediate need for new permits or the renewal or extension of existing permits. Because the regulatory authorities have considerable discretion in the timing of permit issuance and because both private individuals and the public at large possess rights to comment on and otherwise engage in the permitting process, including through intervention in the courts, no assurance can be made that future permits will be issued, or if issued, that such issuance would be timely, or that permitting requirements will not be changed or interpreted in a manner adversely affecting us.

The federal Clean Water Act affects coal mining operations in two principal ways. First, the Army Corps of Engineers issues permits under Section 404 of the Clean Water Act whenever a mine operator proposes to build a fill or impoundment in U.S. waters. In addition, the Environmental Protection Agency ("EPA") must approve the issuance by a state agency of an NPDES ("National Pollutant Discharge Elimination System") permit. This NPDES permit encompasses storm water discharges from a mine facility. Regular monitoring and compliance with reporting requirements and performance standards are conditions for the issuance and renewal of NPDES permits governing pollutant discharge. All states in which our subsidiaries operate also have laws restricting discharge of pollutants into state waters.

New legislation, regulations or orders may be adopted or become effective which may adversely affect our mining operations or cost structure, or the ability of our customers to use coal. New legislation, regulations or orders may also require us to incur increased costs or to change operations significantly. These factors could have a material adverse effect on our business, results of operations and financial condition.

The federal Clean Air Act requires utilities that currently are major sources of nitrous oxide in moderate or higher ozone non-attainment areas to install reasonably available control technology for nitrous oxide. In addition, we expect the EPA to implement stricter ozone standards by 2003.

The Ozone Transport Assessment Group formed to make recommendations to the EPA for addressing ozone problems in the eastern U.S. Based on the group's recommendations, the EPA announced a proposal that would require 22 eastern states, including states in which many of our customers are located, to make substantial reductions in nitrous oxide emissions. The EPA expects that states will achieve these reductions by requiring power plants to reduce their nitrous oxide emissions by an average of 85%.

Installation of reasonably available control technology and additional control measures required under the proposal will make it more costly to operate coal-fired utility power plants and, depending on the requirements of individual state attainment plans and the development of revised new

source performance standards, could make coal a less attractive fuel alternative in the planning and building of utility power plants in the future.

Any reduction in coal's share of the capacity for power generation could have a material adverse effect on our financial condition and results of operations. The effect of such legislation or regulation, or other legislation that may be enacted in the future, on the coal industry in general and on us in particular cannot be predicted with certainty. Although a large portion of our coal reserves are comprised of compliance and low-sulfur coal, we cannot assure you that the implementation of the Clean Air Act or any future regulatory provisions will not materially adversely affect us.

On December 11, 1997, U.S. government representatives at the climate change negotiations in Kyoto, Japan, agreed to reduce the emissions of greenhouse gas (including carbon dioxide and other gas emissions that are believed to be trapping heat in the atmosphere and warming the earth's climate) in the U.S. The U.S. adoption of the requirements of the Kyoto protocol is subject to conditions which may not occur, and is also subject to the protocol's ratification by the U.S. Senate. The U.S. Senate has indicated that it will not ratify an agreement unless certain conditions, not currently provided for in the Kyoto protocol, are met. At present, it is not possible to predict whether the Kyoto protocol will attain the force of law in the United States or what its impact would be on us. Further developments in connection with the Kyoto protocol could adversely affect our financial condition and results of operations.

Reserve Degradation and Depletion

Our profitability depends substantially on our ability to mine coal reserves that have the geologic characteristics that enable them to be mined at competitive costs. We cannot assure you that replacement reserves, particularly in Central Appalachia, will be available when required or, if available, that such replacement reserves can be mined at costs comparable to those characteristic of the depleting mines. Exhaustion of reserves at particular mines can also have an adverse effect on operating results that is disproportionate to the percentage of overall production and operating income represented by such mines. Our Mingo Logan Mountaineer Mine is estimated to exhaust its longwall mineable reserves in 2002. The Mountaineer Mine generated \$77.8 million or 89% of our total operating income in 1998.

Reliance on and Terms of Long-Term Coal Supply Contracts

We sell a substantial portion of our coal production pursuant to long-term coal supply agreements, and as a consequence, we may experience fluctuations in operating results due to the expiration or termination of, or sales price redeterminations or suspensions of deliveries under, such coal supply agreements. Other short and long-term contracts define base or optional tonnage requirements by reference to the customer's requirements, which are subject to change as a result of factors beyond our (and in certain instances the customer's) control, including utility deregulation.

In addition, certain price adjustment provisions permit a periodic increase or

decrease in the contract price to reflect increases and decreases in production costs, changes in specified price indices or items such as taxes or royalties. Price reopener provisions provide for an upward or downward adjustment in the contract price based on market factors. We have from time to time renegotiated contracts after execution to extend the contract term or to accommodate changing market conditions.

The contracts also typically include stringent minimum and maximum coal quality specifications and penalty or termination provisions for failure to meet such specifications and force majeure provisions allowing suspension of performance or termination by the parties during the duration of certain events beyond the control of the affected party. Contracts occasionally include provisions that permit a utility to terminate the contract if changes in the law make it illegal or uneconomical for the utility to consume our coal or if the utility has unexpected difficulties in utilizing our coal.

Imposition of new nitrous oxide emissions limits in connection with Phase II of the Clean Air Act in 2000 could result in price adjustments or in affected utilities seeking to terminate or modify long-term contracts in reliance on such termination provisions. If the parties to any long-term contracts with us were to modify, suspend or terminate those contracts, we could be adversely affected to the extent that we are unable to find alternative customers at a similar or higher level of profitability.

From time to time, disputes with customers may arise under long-term contracts relating to, among other things, coal quality, pricing and quantity. We may thus become involved in arbitration and legal proceedings regarding our long-term contracts. We cannot assure you that we will be able to resolve such disputes in a satisfactory manner.

Although we cannot predict changes in our costs of production and coal prices with certainty, we believe that in the current economic environment of low to moderate inflation, the price adjustment provisions in our older long-term contracts will largely offset changes in the costs of providing coal under those contracts, except for those costs related to changes in productivity. However, the increasingly short terms of sales contracts and the consequent absence of price adjustment provisions in such contracts also make it more likely that inflation-related increases in mining costs during the contract term will not be recovered by us through a later price adjustment.

Potential Fluctuations in Operating Results; Seasonality

We may experience significant fluctuations in operating results in the future, both on an annual and quarterly basis, as a result of one or more factors beyond our control, including:

- o expiration or termination of, or sales price redeterminations or suspensions of deliveries under, coal supply agreements;
- o disruption of transportation services;
- o changes in mine operating conditions;
- o changes in laws or regulations, including permitting requirements;
- o unexpected results in litigation;

- o work stoppages or other labor difficulties;
- o competitive and overall coal market conditions; and
- o general economic conditions.

Our mining operations also are subject to factors beyond our control that can negatively or positively affect the level of production and thus the cost of mining at particular mines for varying lengths of time. These factors include weather conditions, equipment replacement and repair requirements; variations in coal seam thickness, amount of overburden, rock and other natural materials; and other surface or subsurface conditions. Such production factors frequently result in significant fluctuations in operating results.

Third quarter results of operations are frequently adversely affected by lower production and resultant higher costs due to scheduled vacation periods at the majority of our mines. In addition, costs are typically somewhat higher during vacation periods because of maintenance activity carried on during those periods. These adverse effects may make the third quarter not comparable to the other quarters and not indicative of results to be expected for the full year.

Certain Contractual Arrangements

Arch Western Resources, LLC owns the coal reserves and operating assets acquired in the Arch Western transaction described under the caption "Information About Arch Coal" below. The agreement pursuant to which Arch Western was formed provides that one of our subsidiaries, as the managing member of Arch Western, generally has exclusive power and authority to conduct, manage and control the business of Arch Western. However, if Arch Western at the time has a debt rating less favorable than Ba3 from Moody's Investors Service or BB- from Standard & Poors Ratings Group or does not meet certain specified indebtedness and interest coverage ratios, then a proposal that Arch Western make certain distributions, incur indebtedness, sell properties or merge or consolidate with any other person would require the consent of all the members of Arch Western.

In connection with the Arch Western transaction, we entered into an agreement pursuant to which we agreed to indemnify the other member of Arch Western against certain tax liabilities in the event that such liabilities arise as a result of certain actions taken prior to June 1, 2013, including the sale or other disposition of certain properties of Arch Western, the repurchase of certain equity interests in Arch Western by Arch Western or the reduction under certain circumstances of indebtedness incurred by Arch Western in connection with the Arch Western transaction. Depending on the time at which any such indemnification obligation were to arise, it could have a material adverse effect on our business, results of operations and financial condition.

The membership interests in Canyon Fuel Company, LLC, a limited liability company, are owned 65% by Arch Western and 35% by a subsidiary of ITOCHU Corporation, a Japanese corporation. The agreement which governs the management and operations of Canyon Fuel provides for a Management Board to manage its business and affairs. Generally, the Management Board acts by affirmative vote of the representatives of

the members holding more than 50% of the membership interests. However, certain actions require either the unanimous approval of the members or the approval of representatives of members holding more than 70% of the membership interests. The Canyon Fuel agreement also contains various restrictions on the transfer of membership interests in Canyon Fuel.

Ashland Inc. currently owns approximately 57% of our outstanding Common Stock. Pursuant to a stockholders agreement among us, Ashland and Carboex S.A., we have agreed to nominate for election as a director, a person designated by Carboex, and Ashland has agreed to vote its shares of Common Stock in a manner sufficient to cause the election of such nominee, in each case for so long (subject to earlier termination in certain circumstances) as shares of Common Stock owned by Carboex represent at least 63% of the shares of Common Stock acquired by Carboex in our merger with Ashland Coal, Inc. In addition, for so long as the various trusts for the benefit of descendants of H.L. and Lyda Hunt and various corporations owned by trusts for the benefit of descendants of H.L. and Lyda Hunt (collectively, the "Hunt Entities") have the collective voting power to elect by cumulative voting one or more persons to serve on our Board of Directors, we have agreed to nominate for election as directors that number of persons designated by certain of the Hunt Entities that could be elected to the Board by the Hunt Entities by exercise of such cumulative voting power.

Our Restated Certificate of Incorporation requires the affirmative vote of the holders of at least two-thirds of outstanding Common Stock voting thereon to approve a merger or consolidation and certain other fundamental actions involving or affecting control of the company. Our Bylaws require the affirmative vote of at least two-thirds of the members of our Board of Directors in order to declare dividends and to authorize certain other actions.

Transportation

The coal industry depends on rail, trucking and barge transportation to deliver shipments of coal to customers. Disruption of these transportation services could temporarily impair our ability to supply coal to our customers and thus adversely affect our business and operating results. In addition, transportation costs make up a significant component of the total cost of supplying coal to customers and can affect significantly a coal producer's competitive position and profitability. Increases in our transportation costs, or changes in such costs relative to transportation costs incurred by providers of competing coal or of other fuels, could have an adverse effect on our business and results of operations.

Importance of Acquisitions and Related Risks

We have grown, in part, through the acquisition of coal companies, coal properties, coal leases and related assets, and management believes that such acquisitions will continue to be important to us. Acquisitions involve a number of special risks, including possible adverse effects on our operating results, diversion of management's attention, failure to retain key acquired personnel, risks associated with unanticipated events or liabilities and

difficulties in the assimilation of the operations of the acquired companies, some or all of which could have a material adverse effect on our business, results of operations and financial condition. We cannot assure you that we will be successful in the development of such acquisitions or that acquired operations will achieve anticipated benefits to us.

Reliance on Estimates of Reserves; Title

There are numerous uncertainties inherent in estimating quantities of recoverable reserves, including many factors beyond our control. Estimates of economically recoverable coal reserves and net cash flows necessarily depend upon the number of variable factors and assumptions, such as:

- o geological and mining conditions (which may not be fully identified by available exploration data and/or differ from experience in current operations);
- o historical production from the area compared with production from other producing areas;
- o the assumed effects of regulation by governmental agencies and assumptions concerning coal prices;
- o operating costs;
- o severance and excise taxes; and
- o development costs and reclamation costs.

All of these factors may cause estimates to vary considerably from actual results. For these reasons, estimates of the economically recoverable quantities attributable to any particular group of properties, classifications of such reserves based on risk of recovery and estimates of net cash flows expected therefrom prepared by different engineers or by the same engineers at different times may vary substantially. Actual coal tonnage recovered from identified reserve areas or properties, and revenues and expenditures with respect to our reserves may vary from estimates, and such variances may be material. No assurance can be given that these estimates are an accurate reflection of our actual reserves.

Most of our mining operations are conducted on properties owned or leased by us. The loss of any lease could adversely affect our ability to develop the applicable reserves. Because title to most of our leased properties and mineral rights is not thoroughly verified until a permit is being obtained to mine the property, our right to mine certain of our reserves may be adversely affected if defects in title or boundaries exist. In addition, there can be no assurance that we can successfully negotiate new leases or mining contracts for properties containing additional reserves or maintain our leasehold interests in properties on which mining operations are not commenced during the term of the lease.

Management of Growth

As a result of the Arch Western transaction, we have experienced rapid growth that has placed and is expected to continue to place a significant strain on our management, operations and other resources. Our future success will depend in part on our ability to successfully integrate the operations acquired in the Arch Western transaction and to attract and retain qualified personnel. The failure to obtain needed personnel or to

implement management, operating or financial systems necessary to successfully integrate acquired operations or otherwise manage growth when and as needed could have a material adverse effect on our business, results of operations and financial condition.

Year 2000 Readiness Disclosure

Computer programs used by us for financial and operational purposes are being reprogrammed to be "Year 2000" compliant. The "Year 2000 problem" exists because many existing computer programs and embedded chip microprocessors were programmed to read the "00" in a year 2000 entry as 1900, or will fail to recognize "00" as a date at all. Failure to read the date properly or at all may cause miscalculations, or simply cause the program or microprocessor to send errant commands or cease functioning.

Assessment/Remediation Plan - We began our assessment of our exposure to the Year 2000 problem prior to our merger with Ashland Coal in 1997, when, in connection with the necessary integration of the two companies' information services technology, a comprehensive plan for achieving an internal information services system free of Year 2000 concerns was adopted. Implementation of this plan commenced upon consummation of this merger, and essentially required company-wide replacement of key financial, informational and operational computer systems with standardized equipment and programs that were programmed to properly process year 2000 entries. The plan for standardizing key internal systems was modified to incorporate the key internal information systems acquired in the Arch Western transaction.

In April 1998, we implemented the first phase of our Year 2000 plan by installing a new Oracle General Ledger running on Year 2000 compliant HP 9000 servers and operating systems. In October 1998, we implemented Oracle's Human Resource System and in March 1999 we began implementing a new Oracle Payroll System. We anticipate that the payroll system will be implemented at all locations by September 30, 1999. We began installation of Mincom Inc. systems in July 1998 to replace non-compliant purchasing, inventory and accounts payable systems. The scheduled completion for installation of these Mincom systems at all of our mining locations is October 31, 1999. All desktop computers, network devices and related software are being tested and are replaced if there is a Year 2000 problem. We have standardized Windows 95, Office 95, and NT file/prINTER servers, effective in October 1998.

We began the process of evaluating potential Year 2000 problems within our mining and processing equipment and within our systems and processes interfacing with, and hence dependent upon, third party systems, in late 1997. The effort to identify potential Year 2000 problems within our mining and processing equipment and in our interfaces with third parties is ongoing. When complete, customers, financial institutions, vendors, manufacturers, transportation companies and others with whom we conduct business and where the interruption of such business could have a material adverse affect on us will be contacted, and cost effective efforts made to remediate or minimize possible problems.

Assuming the cooperation of third parties in connection with our efforts, we believe that we will be able to complete our assessment of material adverse risk associated with Year 2000 problems in our mining and processing equipment and within such third party systems and processes sufficiently in advance of January 1, 2000, to effect remedial measures where such measures are possible and cost effective. We are in the process of finalizing our assessment, and the target date for completing any remedial measures is July 31, 1999.

Costs of Plan - To date, we have expended approximately \$7.5 million of the total estimated \$9.5 million required to eliminate Year 2000 concerns within our internal information systems. The total costs include not only the elimination of Year 2000 concerns, but included in the costs are new state-of-the-art systems and costs addressing the Year 2000 concerns for the newly acquired operations in the Arch Western transaction. The cost of the project is based on management's best estimates, and we cannot assure you that these estimates will be achieved. Pending completion of the assessment of mining and processing equipment and third party system and processes risk, no amount can be reasonably estimated for remediation in these areas.

Year 2000 Risk - The risks posed to us by the Year 2000 problems are difficult to quantify with certainty. Our Year 2000 plan for reconfiguring and standardizing internal information systems to properly process Year 2000 information depends upon several factors beyond our immediate control. These factors include, for example, retention of qualified information services personnel in a highly competitive labor market and integrity of local and long distance carriers' Year 2000 telecommunication networks, which will be necessary for operation of our wide area network. In addition, while the estimated completion date of our reconfiguration efforts will permit some testing of the internal systems, the schedule would not likely give us adequate time to address defects in the system's Year 2000 processing if vendors' or consultants' warranties with respect to the new systems are not true.

The unavailability of our internal information systems for a sustained period would have an adverse affect on us. Depending upon the nature of the unavailability of our internal information systems, the adverse effect on us could be material.

With respect to our mining and processing equipment, we believe the greatest risk posed is that any of our multitude of sampling, processing and loading equipment at our mines, loadouts and terminals ceases to function as a result of a processing error not identified and/or corrected in our assessment and remediation plan. Such failures could result in breaches in or defaults under our coal sales contracts (some of which contain prices substantially above current market). Termination of certain or multiple coal sales contracts could have an adverse effect on us, and depending on the contracts involved, the adverse effect on us could be material.

Finally, we believe the greatest Year 2000 risks are posed by our interfaces with third party services, systems and processes. Chief among these risks are the loss of electrical power or transportation

services at mine sites where we are captive to a single service provider and alternatives are unavailable or economically impractical. Loss of service from any of these single service providers would have an adverse affect on us. Depending upon the nature of the loss of service, the adverse effect on us could be material.

Contingency Plans - We have begun to develop contingency plans for key internal projects that, if delayed, could prevent certain mine operations from gaining access to Year 2000-compliant systems. Likewise, following the Year 2000 assessment of our customers and third party providers of goods and services, we will determine from information that we have received through correspondence and personal contact that if a company's Year 2000 remediation efforts are incomplete and the consequence is materially adverse, then contingency plans will be developed if economically reasonable.

Factors Routinely Affecting Results of Operations

Any one or a combination of the following factors may occur at times or in a manner that causes results of our operations to deviate from expectations:

- o changing demand;
- o fluctuating selling prices;
- o contract penalties, suspensions or terminations;
- o operational, geologic, transportation and weather-related factors;
- o unexpected regulatory changes;
- o results of litigation; or
- o labor disruptions.

Any event disrupting substantially all production at any of our principal mines for a prolonged period would have a significant adverse effect on our current and projected results of operations. The effect of such a disruption at our Mingo Logan operations would be particularly severe because of the high volume of coal produced by those operations and the relatively high contribution to operating income from the sale of such coal.

INFORMATION ABOUT ARCH COAL

General

We are the second largest coal producer in the United States. We mine, process and market primarily compliance and low-sulfur coal from 40 surface, underground and auger mines located in western, central Appalachian and midwestern United States coal fields. Compliance and low-sulfur coal is coal that, when burned, emits 1.2 pounds and 1.6 pounds or less of sulfur dioxide per million Btu. As of December 31, 1998, we controlled approximately 3.7 billion tons of measured and indicated coal reserves, of which approximately 1.9 billion tons were located in coal fields in the western United States, 1.4 billion tons were located in coal fields in central Appalachia, and the remainder in midwestern coal fields.

On June 1, 1998, Arch Western, in which we own a 99% membership interest, acquired the United States coal operations of Atlantic Richfield Company ("Arch Western transaction"). The principal operating units of Arch Western are Thunder Basin Coal Company, L.L.C., which operates the Black Thunder and Coal Creek mines in the Southern Powder River Basin in Wyoming; Mountain Coal

Company, L.L.C., which operates the West Elk mine in Colorado; Canyon Fuel Company, LLC, which operates three mines in Utah; and Arch of Wyoming, LLC, which operates two coal mines in the Carbon Basin of Wyoming. Arch Western owns a 65% membership interest in Canyon Fuel, with the remaining 35% membership interest owned by a subsidiary of ITOCHU Corporation, a Japanese corporation.

We and our independent operating subsidiaries, excluding Canyon Fuel Company, LLC, sold approximately 81.1 million tons of coal in 1998, 75.8 million tons of which were produced by us and the balance of which was acquired for resale. Approximately 76% of this tonnage was sold under long-term contracts having a term greater than one year and the balance was sold on the spot market (contracts having a term of year or less). Approximately 78% of 1998 total revenues was derived from sales of coal under long-term contracts. Sales of metallurgical coal in 1998 totaled 2.8 million tons, or approximately 5% of our 1998 coal sales. In 1998, sales of coal in the export market totaled approximately 3.7 million tons. Sales of steam coal accounted for approximately 60% of these export sales, while the balance of export sales consisted of sales of metallurgical coal.

Recent Developments

On March 29, 1999, the Company agreed to transfer to a third party approximately 35 million tons of the estimated 412 million tons of coal leased by a subsidiary of the Company under a federal coal lease (the "Thundercloud Lease") entered into by the Company in late 1998. The Company will receive cash consideration of \$12.2 million and access to certain environmental data relating to the Thundercloud Lease in consideration for the transfer of the reserves.

On March 3, 1999, the United States District Court for the Southern District of West Virginia issued a preliminary injunction enjoining the Army Corps of Engineers from issuing a permit for our Dal-Tex mine known as the Spruce Fork Permit. Due to the delay in obtaining permits which will result from the entry of the preliminary injunction, on March 6, 1999, Dal-Tex announced it will idle the mine and lay off approximately 250 employees by mid-July. A trial on the merits is scheduled for July 1999.

In March 1999, a coal supply agreement, which was acquired as part of the Arch Western transaction described above, was amended to change the pricing terms from above-market to market-based pricing. As a result of the amendment, we received proceeds of \$19.1 million from the customer. We used the proceeds to repay debt and for other corporate purposes. The proceeds reduced costs allocated in the purchase price accounting for the Arch Western transaction and, therefore, no gain or loss has been recognized.

THE PLAN

The Plan is available to all of our stockholders of record, our employees and the employees of our subsidiaries. As a participant in the Plan, you may elect to reinvest all or part of your dividends to purchase additional shares of our Common Stock. Alternatively, you may elect to

participate in the Plan by making cash payments to purchase additional shares while continuing to receive your dividends in cash.

Shares of Common Stock to be purchased by the Plan with reinvested dividends will be made either in the open market or directly from us in the form of authorized but unissued shares (sometimes referred to as "newly issued shares"), including shares reacquired and held for future issuance. We reserve the right to cause the Plan to purchase shares with reinvested dividends on the open market or newly issued shares as we determine from time to time in our sole discretion. Shares purchased with voluntary cash payments will be purchased in open market transactions.

Unless we authorize or direct EquiServe otherwise, open market purchases may be made on any securities exchange where shares of Common Stock are traded, in the over-the-counter market or by negotiated transactions. Common Stock purchased for participants will be registered either in the participant's name or in the name of EquiServe's nominee.

The Plan offers a convenient and economical means of increasing your holdings since we pay all brokerage commissions and most service fees and administrative costs for stock purchases. In addition, to the extent that shares purchased by the Plan with reinvested dividends are newly issued shares purchased directly from us, we will receive additional funds to be used for general corporate purposes.

You should read this Prospectus in its entirety before deciding to be a participant in the Plan.

The principal features of the Plan include:

- o Purchasing stock by reinvesting all or part of your cash dividends.
- o Investing additional cash payments on a monthly basis by check or through automated bank account deductions, whether or not you choose to reinvest your dividends.
- o Acquiring additional Common Stock with all brokerage commissions and most service fees and administrative costs paid by us.
- o Receiving cash dividends by check or electronically.
- o Transferring or making gifts of Common Stock to others in book-entry or certificate form, with no transfer or certificate fees.
- o Depositing your Common Stock certificates for safekeeping in your Plan account.
- o Using all your designated dividends and/or voluntary cash investments, since the Plan credits fractional shares, computed to three decimal places, to your account.
- o Maintaining voting rights for all full shares held for you by EquiServe.
- o Simplifying your record keeping of additional stock purchases, as you receive a statement after every investment.

- o Terminating your participation in the Plan at any time.

Eligibility for Participation

Each of our stockholders of record is eligible. If you own shares held in the name of a broker, bank or other nominee and wish to participate, you should request that shares be transferred into your own name.

Our employees and employees of our subsidiaries may participate in the voluntary cash investment feature of the Plan through optional payroll deductions. Once an employee is a stockholder (by taking advantage of such feature or by purchasing shares in the open market), the employee may participate in the other Plan features. An employee who wishes to participate in the Plan through payroll deductions may do so by completing a Payroll Authorization Form and returning it to our Payroll Department. A Payroll Authorization Form may be obtained from our Human Resources Department.

How the Plan Works

Option 1--Full Dividend Reinvestment (with voluntary cash option)

If you elect this option, cash dividends on all of your shares of Common Stock will be invested automatically for you in additional shares of Common Stock. Participants in Option 1 can also invest cash as often as once a month, by either check or automatic deduction from their bank accounts or both, in varying amounts from \$25 per month to a maximum of \$100,000 per calendar year to purchase Common Stock. Under Option 1, you may, but need not, make any voluntary cash investments.

Option 2--Partial Dividend Reinvestment (with voluntary cash option)

If you choose this option, you specify the number of your shares of Common Stock on which you wish to receive cash dividends. The dividends on your remaining shares will be reinvested. You can invest cash under Option 2 in the same way as described above in Option 1. Under Option 2, you may, but need not, make any voluntary cash investments.

Cash dividends will be sent to you by check or, if you so elect, by direct deposit. Through the Plan's direct deposit feature, you may elect to have any cash dividends not reinvested in additional shares paid by electronic funds transfer to your predesignated bank account. To receive such dividends by direct deposit, you must first complete and sign a Direct Deposit Authorization Form and return the form to EquiServe. This form is not part of the Enrollment Form and must be specifically requested by writing to or calling EquiServe.

Direct Deposit Authorization Forms will be processed and will become effective as promptly as possible. You may change the designated account for direct deposit or discontinue this feature at any time by providing written instructions to EquiServe. If you change a bank account number or establish a new bank account to receive cash dividends, a new Direct Deposit Authorization Form must be completed.

Option 3--Voluntary Cash Investments Only (no dividend reinvestment)

If you elect this option, you can invest cash in the same way as described

above under Option 1, but your dividends will not be automatically reinvested. You will continue to receive cash dividends on your shares, as well as on any full and fractional shares purchased through the Plan. You may receive cash dividends by check or by direct deposit as described above under Option 2.

Voluntary Cash Investments

Under each of the above options, our stockholders and employees may also invest cash at any time in varying amounts from a minimum of \$25 per month up to a maximum of \$100,000 each calendar year to purchase shares of Common Stock. All cash, in U.S. dollars, can be sent to EquiServe by personal check or money order (made payable to "First Chicago-Arch Coal DRP"). Once an employee becomes a stockholder, the employee is eligible to participate in the other Plan features available to our stockholders generally.

You may make voluntary cash investments regularly or from time to time, and you may vary the amount of each investment, subject to the above limitations.

Voluntary investments may also be made through automatic monthly deductions from your checking or savings accounts, with a \$1.00 transaction fee subtracted from the amount drawn from your bank account prior to each investment. The minimum monthly deduction is \$25. The combined amount of automatic monthly deductions and voluntary cash payments cannot exceed \$100,000 per calendar year. Only participants with accounts at U.S. banks and financial institutions may authorize automatic monthly deductions. Once automatic monthly deductions are initiated, funds will be drawn from your account three business days prior to each Investment Date.

Investment Dates; Purchase Prices

EquiServe will invest voluntary cash payments beginning on the 15th day of each month or as soon as practicable after such date (the Investment Date). EquiServe will complete investments of voluntary cash payments no later than 30 days after receipt of the payments unless completion at a later date is necessary or advisable under applicable federal regulatory and securities laws. For months in which quarterly dividends are paid, voluntary cash investments and dividends will be invested concurrently. Dividends customarily are paid on the 15th day of the months of March, June, September and December.

No interest will be paid on funds held by EquiServe pending investment. You should, therefore, insure that your voluntary cash investments will arrive at the offices of EquiServe just prior to an Investment Date. You may obtain a refund of any voluntary cash investment if a written request or telephone instructions for such refund is received by EquiServe more than 48 hours before the next Investment Date. For the purpose of making purchases, EquiServe will commingle your dividends and voluntary cash payments with those of the other participants in the Plan.

The price per share at which shares will be purchased by the Plan will be equal to:

- o the weighted average price per share of the shares of Common Stock purchased for the month (for shares purchased with reinvested dividends or voluntary cash payments in the open market) or
- o the average of the high and low per share sales prices for the Common Stock reported by the NYSE on the Investment Date (for newly issued shares purchased in the open market).

If both open market purchases and purchases directly from us are made with reinvested dividends with respect to any Investment Date, the price of the shares purchased will be the weighted average of both such prices.

Direct Registration System

You can transfer shares from your brokerage account. If you are a stockholder who owns shares of Common Stock that are held by a bank, broker, trustee in street or nominee name ("broker"), you may participate with some or all of your shares by instructing your broker to have some or all of the shares transferred into your name in Direct Registration book-entry form. To do so, you must instruct your broker to reregister your shares through the Direct Registration System and specify book-entry registration.

You can transfer shares to your brokerage account. To electronically transfer all or part of your book-entry shares to your account at your broker, you may establish your broker account number on your Plan account. To establish your broker account number, you must complete an Authorization to Provide Broker/Dealer Information Form, available upon request from your broker or by writing to or calling EquiServe. Once your broker account number is established, you can then instruct EquiServe to deliver the number of full shares you specify. EquiServe will electronically deliver your shares within 48 hours of receiving and accepting your instructions. The signature(s) on the authorization should be guaranteed by the broker/dealer with a Medallion Guarantee.

Issuance of Stock Certificates

For your convenience, EquiServe will hold in safekeeping the shares it has purchased for you. This protects you against loss, theft or accidental destruction of stock certificates. However, upon your written request or telephone instructions, EquiServe will issue to you at any time, without charge, certificates for the number of full shares held by you under the Plan.

Deposit of Stock Certificates

You also may send EquiServe your other Common Stock certificates for safekeeping free of charge. By making the deposit, you will be relieved of the responsibility for loss, theft or destruction of the certificates. If you wish to deposit your Common Stock certificates, you must mail them along with a request to EquiServe. The certificates should not be endorsed. To insure against loss resulting from mailing certificates, EquiServe will provide mail insurance free of charge to you. To be eligible for certificate mailing insurance, certificates must be mailed in brown-pre-addressed return envelopes supplied by EquiServe, which can be obtained by either writing to or calling EquiServe. Certificates mailed in this manner will be insured for up to \$25,000 current market value provided they are mailed first class. EquiServe will promptly

send you a statement confirming each deposit of your Common Stock certificates. EquiServe must be notified of any lost certificate claim within 30 calendar days of the date the certificates were mailed. To submit a claim, you must be a participant in the Plan or current holder of record of Common Stock. In the latter case, you must enroll in the Plan at the time the insurance claim is processed. The maximum insurance protection provided is \$25,000 and the coverage is available only when the certificate(s) are sent in accordance with the guidelines described above.

Insurance covers the replacement of shares of stock, but in no way protects against any loss resulting from fluctuations in the value of such shares from the time the certificates are mailed until such time as a replacement can be effected.

If you do not use the brown pre-addressed envelope provided by EquiServe, certificates should be sent to EquiServe via registered mail, return receipt requested, and insured for possible mail loss for 2% of the market value (minimum of \$20.00); this represents the replacement cost that will be charged to you if your certificates are lost.

Gift/Transfer of Plan Shares

You may make a gift of or transfer the ownership of all or any full shares held by you under the Plan to a Plan account for another person. No fees are charged to the recipient for transfers of your shares. Requests for transfer are subject to the same requirements as the transfer of Common Stock certificates, which may include the requirement of a Medallion Guarantee. For instructions on how to gift or transfer your shares, you should write to or call EquiServe.

Shares so transferred will continue to be held by EquiServe under the Plan. An account will be opened in the name of the recipient, if he or she is not already a participant, and such recipient will automatically be enrolled in the Plan. If the recipient is not already a participant, the account will be enrolled under the full reinvestment option unless you specify differently. The recipient may change the reinvestment election at any time after the gift has been made.

If a transfer involving all of the shares in your account is received after a record date but before the related dividend payment date, the transfer will be processed when received, and a cash dividend will be paid to you. You may return the dividend check as a voluntary cash payment.

The recipient will receive a statement showing the deposit of shares. Upon your request, EquiServe will also send, free of charge, an acknowledgment of gift.

Sale of Plan Shares

You may at any time, including upon withdrawal from the Plan, request the sale of all or any full shares held by EquiServe in your Plan account. Any such request may be made either by writing to or calling EquiServe. EquiServe will make every effort to process all sale orders on the date the orders are received, provided that instructions are received before 1:00 p.m. Eastern time on a business day during which EquiServe and the relevant securities market are open. The proceeds from such

sale, less any brokerage commission, a service fee and any other costs of sale, will be remitted to you. Each sale request will be processed and a check for the net proceeds will be mailed as promptly as possible after EquiServe receives such sale request.

Reports and Statements of Account

Promptly after you purchase shares, you will receive a transaction advice with the details of the transaction. After each dividend reinvestment, you will receive a detailed statement showing the amount of the latest dividend reinvested, the purchase price per share, the number of shares purchased and your total Plan shares. The statement also will show your certificate holdings as well as year-to-date account activity, including purchases, sales, transfers and dividend reinvestment payments. This will enable you to review your holdings at a glance.

On each transaction advice and detailed statement you will find information such as how to buy or sell shares through the Plan and where to call or write for additional information. You also will receive a comprehensive year-end statement summarizing activity in your account for the entire year, which is helpful for record-keeping and tax purposes.

How to Enroll; Current Participants

To enroll in the Plan, you must complete an Enrollment Authorization Form and forward it to EquiServe. You may obtain an Enrollment Authorization Form by writing to or calling EquiServe.

Your participation in the dividend reinvestment feature will begin with the next quarterly dividend payment date after receipt of your authorization provided it is received before the record date of such dividend. If your Enrollment Authorization Form arrives after the record date, your participation will begin with the next succeeding quarterly dividend payment date. Participation by means of a voluntary cash purchase begins upon EquiServe's receipt of your Enrollment Authorization Form and your investment amount.

Stockholders of record who are currently participants in the Plan will remain enrolled in accordance with the terms of this Prospectus unless such stockholder instructs EquiServe in writing to close the account or to alter the conditions of participation.

Your Cost

Purchases under the Plan may be made at little or no cost to you. No brokerage commissions will be payable in connection with the purchase of newly issued shares with reinvested dividends under the Plan. Also, we pay all brokerage commissions and most service charges and administrative fees for open market purchases of shares under the Plan while you are a participant. You will, however, be charged a fee for any returned checks and any failed automatic deductions due to insufficient funds.

There is no cost to you for gifting or transferring your shares to a Plan account for another person. However, if you sell shares held in your Plan account, you pay any brokerage commission, a service fee and any other costs of sale.

Income Tax Treatment

We believe the following to be an accurate summary of the federal tax consequences of participation in the Plan as of the date of this Prospectus. This summary may not reflect every possible situation that could result from participation in the Plan (particularly to participants who are tax-exempt entities or foreign stockholders) and does not include a discussion of any federal or state taxes on gifts or other similar transfers, and therefore, participants in the Plan are advised to consult their own tax advisor with respect to the tax consequences (including federal, state, local and other tax laws and U.S. tax withholding laws) applicable to their particular situation.

In the case of reinvested dividends, when EquiServe acquires newly issued shares for a participant's account directly from us, the participant must include in gross income a dividend equal to the number of shares purchased with the participant's reinvested dividends multiplied by the fair market value of Common Stock on the relevant dividend payment date. The fair market value is based on 100% of the average of the high and low market prices for the Common Stock on the Investment Date. The participant's tax basis in those shares will also equal the fair market value of the shares on the relevant Investment Date.

When EquiServe purchases Common Stock for a participant's account on the open market with reinvested dividends, a participant must include in gross income an amount equal to the cash dividends reinvested plus that portion of any brokerage commissions paid by us which are attributable to the purchase of the participant's shares. The participant's tax basis in Plan shares will be equal to the purchase price plus allocable brokerage commissions.

In the case of the shares purchased on the open market with voluntary cash payments, participants will be in receipt of a dividend to be included in gross income to the extent of any brokerage commissions paid by us. The participant's tax basis in the shares acquired with voluntary cash payments will be the cost of the shares to EquiServe plus an allocable share of any brokerage commissions paid by us.

A participant will not realize any taxable income when a certificate is received for whole shares credited to the participant's account, either upon request for such certificate or upon withdrawal from or termination of the Plan. However, a gain or loss will be recognized by the participant when whole shares acquired under the Plan are sold or exchanged - either by EquiServe at the participant's request when withdrawing from the Plan or by the participant's own action after withdrawal from or termination of the Plan. The Participant also will recognize gain or loss when receiving a cash payment for a fractional share credited to the account upon withdrawal from or termination of the Plan. The amount of the gain or loss will be the difference between the amount of cash received for the shares or fractional shares and the tax basis of those shares.

Each participant will receive a Form 1099-DIV by January 31 following the close of the Plan year which provides the amount of dividend income that is reportable to the Internal Revenue Service ("IRS"), including, where applicable, an amount for brokerage commissions paid on

the participant's behalf, and an adjustment to reflect the difference between fair market value price and purchase price with respect to shares purchased from us with reinvested dividends.

A Form 1099-B will be provided by January 31 following the close of the Plan year to participants who sold shares through the Plan. This form will contain the amount of gross proceeds from the sale and the date of sale.

A copy of each information return is also furnished to the IRS.

Federal law requires EquiServe to withhold an amount (currently 31%) from the amount of dividends and the proceeds of any sale of shares for a participant if: (i) that participant fails to certify to EquiServe that the participant is not subject to backup withholding (ii) that participant fails to certify that the taxpayer identification number provided is correct or (iii) the IRS notifies us that the participant is subject to backup withholding. The withheld amounts will be deducted from the amount of dividends and the remaining amount will be reinvested or paid to you. The withheld amount also will be deducted from the proceeds of any sale of shares and the remaining amount will be sent to the participant.

In the case of those foreign stockholders whose dividends are subject to United States income tax withholding, the amount of tax to be withheld will be deducted from the amount of dividends and the remaining amount of dividends will be reinvested or paid to you. In the case of those foreign stockholders whose sale proceeds are subject to withholding, the amount of tax to be withheld will be deducted from the proceeds of the sale of shares.

Voting Rights

You have the right to vote full shares held in the Plan. The proxy mailed to you prior to the annual meeting of stockholders will include the number of full shares held by EquiServe in your Plan account, plus any other shares registered in your name.

Terminating Your Participation

You may terminate your participation in the Plan at any time by notifying EquiServe in writing or by telephone. All dividends with a record date after receipt of your notification will be sent directly to you. Voluntary cash investments may be withdrawn at any time, provided that the request for withdrawal is received by EquiServe at least 48 hours prior to the next Investment Date. Upon termination of your participation, EquiServe will continue to hold your shares in book-entry form unless you request a certificate for any full share(s) and a check for any fractional share. Fractional shares will be valued at the then current market price of the Common Stock, less any applicable brokerage commission, any service fee and any other costs of sale. If you prefer, you can request that all or part of your full shares held by EquiServe be sold, and you will receive a check for the proceeds, less any applicable brokerage commission, a service fee and any other costs of sale.

Correspondence; Assistance Concerning the Plan

The Plan is administered for our stockholders and participating employees

by EquiServe. All notices, correspondence, questions or other communications to EquiServe should be addressed to:

First Chicago Trust Company of New York
Dividend Reinvestment Plans
P.O. Box 2598
Jersey City, NJ 07303-2598

Be sure to include a reference to Arch Coal, Inc. in your correspondence.

Telephone

Stockholder customer service, including sale of shares: 1-800-317-4445

An automated voice response system is available 24 hours a day, 7 days a week.

Customer service representatives are available from 8:30 a.m. to 7:00 p.m. Eastern time each business day.

TDD: 1-201-222-4955 Telecommunications device for the hearing impaired.

Foreign Language Translation Service for more than 140 foreign languages is available.

Internet

Messages forwarded on the Internet will be responded to within one business day. EquiServe's Internet address is <http://www.equiserve.com>.

E-Mail

Our E-mail address at EquiServe is fctc@em.fcncbd.com.

Modification/Termination of the Plan

We reserve the right to modify, suspend or terminate the Plan at any time. All participants will be sent notice of any such action. Any such modification, suspension or termination will not, of course, affect previously executed transactions. We also reserve the right to adopt, and from time to time to change, such administrative rules and regulations (not inconsistent in substance with the basic provisions of the Plan then in effect) as we deem desirable or appropriate for the administration of the Plan. EquiServe reserves the right to resign at any time upon reasonable written notice to us.

Additional Information

Neither we nor EquiServe (nor any agents, representatives, employees, officers, directors or subcontractors of ours or theirs) will be liable in administering the Plan for any act done in good faith or for any good faith omission to act, including, without limitation, any claim of liability (1) arising from failure to terminate a participant's account upon such participant's death, or (2) with respect to the prices or times at which shares are purchased or sold for participants. The foregoing does not represent a waiver of any rights a participant may have under applicable securities laws.

We cannot, nor can EquiServe, assure a profit or protect against a loss on shares purchased under the Plan.

USE OF PROCEEDS

The net proceeds from the sale of newly issued shares of Common Stock purchased with reinvested dividends under

the Plan will be used for our general corporate purposes. Pending such use, the net proceeds may be temporarily invested. The precise amounts and timing of the application of net proceeds will depend upon our funding requirements and those of our subsidiaries and the availability of other funds.

We will not receive any funds under the Plan from the purchase of shares of Common Stock in the open market by EquiServe.

LEGAL MATTERS

Jeffrey N. Quinn, our Senior Vice President--Law and Human Resources, Secretary and General Counsel, has provided us with a written legal opinion with respect to the validity of the shares of Common Stock offered hereby.

EXPERTS

The consolidated financial statements of Arch Coal, Inc. as of December 31, 1998 and 1997 and for the years then ended incorporated by reference in Arch Coal, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 1998, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon incorporated by reference therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Arch Coal, Inc. for year ended December 31, 1996, included in the Company's Annual Report for the year ended December 31, 1998, have been audited by Arthur Andersen LLP, independent auditors, as set forth in its report thereon included as an exhibit to the Company's Form 10-K for the year ended December 31, 1998 and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given upon the authority of said firm as an expert in accounting and auditing.

The financial statements of Canyon Fuel Company, LLC as of December 31, 1998 and for the year then ended included in Arch Coal, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 1998, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The financial statements of Canyon Fuel Company, LLC for the period from December 20, 1996 (inception) through December 31, 1997, included in the Company's Form 10-K for the year ended December 31, 1998, have been audited by PricewaterhouseCoopers LLP, independent auditors, as set forth in its report thereon and included as an exhibit to the Company's Form 10-K for the year ended December 31, 1998, and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given upon the authority of said firm as an expert in accounting and auditing.

You should rely on the information contained in this Prospectus or that we have referred you to. We have not authorized anyone to provide you with information that is different. We are not making an offer of these securities in any state or country where the offer is not permitted. This Prospectus is not an offer to sell and it is not soliciting an offer to buy any securities other than those offered in this document; however, this Prospectus is not an offer to sell and it is not soliciting an offer to buy any securities offered in this document in any circumstances in which such offer or solicitation is unlawful. You should not assume that the information in this Prospectus is accurate as of any date other than the date on the front of this Prospectus.

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ARCH COAL, INC.
Common Stock

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PROSPECTUS
May 4, 1999
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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated expenses to be incurred by the Company in connection with the issuance and distribution of the securities being registered, other than underwriting discounts and commissions.

Registration Fee	\$ 6,672
Printing	2,000
Accounting Fees	13,000
Legal Fees	10,000
Plan Agent	7,000
Miscellaneous	1,328

Total	\$ 40,000
	=====

Item 15. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law (the "DGCL") permits a corporation, in its certificate of incorporation, to limit or eliminate, subject to certain statutory limitations, the liability of directors to the corporation or its stockholders for monetary damages for breaches of fiduciary duty, except for liability (a) for any breach of the director's duty of loyalty to the corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the director derived an improper personal benefit. Article Ninth of the Company's Restated Certificate of Incorporation (the "Company Certificate") provides, among other things, that the personal liability of directors of the Company is so eliminated.

Under Section 145 of the DGCL, a corporation has the power to indemnify directors and officers under certain prescribed circumstances and subject to certain limitations against certain costs and expenses, including attorneys' fees actually and reasonably incurred in connection with any action, suit or proceeding, whether civil, criminal, administrative or investigative, to which any of them is a party by reason of his being a director or officer of the corporation if it is determined that he acted in accordance with the applicable standard of conduct set forth in such statutory provision. Article V of the Company's Bylaws provides that the Company will indemnify any person who may be involved, as a party or otherwise, in a claim, action, suit or proceeding (other than any claim, action, suit or proceeding brought by or in the right of the Company) by reason of the fact that such person is or was a director or officer of the Company, or is or was serving at the request of the Company as a director or officer of any other corporation or entity, against certain liabilities, costs and expenses. The Company is also authorized to maintain insurance on behalf of any person who is or was a director or officer of the Company, or is or was serving at the request of the Company as a director or officer of any other corporation or entity, against any liability asserted against such person and incurred by such person in any such capacity or arising out of his status as such, whether or nor the Company would have the power to indemnify such person against such liability under the DGCL. The Company is a party to agreements with its directors and officers pursuant to which it has agreed to indemnify them against certain costs and expenses incurred by them in their capacities as such.

Item 16. Exhibits.

The following exhibits are filed with this registration statement:

Exhibit No.	Description
5.1	Opinion of Jeffry N. Quinn as to the legality of the shares being registered
23.1	Consent of Jeffry N. Quinn (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP
23.3	Consent of Arthur Andersen LLP
23.4	Consent of PricewaterhouseCoopers LLP
24.1	Power of Attorney (included on signature page)

Item 17. Undertakings.

The undersigned registrant undertakes: (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; (2) that, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering hereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of St. Louis, State of Missouri, on May 3, 1999.

ARCH COAL, INC.

By: /s/ Steven F. Leer

 Steven F. Leer
 President and Chief Executive Officer

POWER OF ATTORNEY

Know all persons by these presents, that each person whose signature appears below constitutes and appoints Steven F. Leer, Jeffry N. Quinn and Patrick A. Kriegshauser, and each of them, his true and lawful attorney-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments pursuant to Rule 462(b) or otherwise), and to file the same with all exhibits thereto, and other documents in connection therewith, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ Steven F. Leer ----- Steven F. Leer	President, Chief Executive Officer and Director	April 21, 1999
/s/ Patrick A. Kriegshauser ----- Patrick A. Kriegshauser	Senior Vice President, Treasurer and Chief Financial Officer	April 21, 1999
/s/ John W. Lorson ----- John W. Lorson	Controller (Principal Accounting Officer)	April 21, 1999
/s/ Philip W. Block ----- Philip W. Block	Director	April 21, 1999
/s/ James R. Boyd ----- James R. Boyd	Director	April 30, 1999
/s/ Paul W. Chellgren ----- Paul W. Chellgren	Director	April 22, 1999

----- Ignacio Dominguez Urquijo	Director	April __, 1999
/s/ Thomas L. Feazell ----- Thomas L. Feazell	Director	April 26, 1999
/s/ Robert L. Hintz ----- Robert L. Hintz	Director	April 22, 1999
/s/ Douglas H. Hunt ----- Douglas H. Hunt	Director	April 23, 1999
/s/ James L. Parker ----- James L. Parker	Director	April 23, 1999
/s/ A. Michael Perry ----- A. Michael Perry	Director	April 29, 1999
/s/ J. Marvin Quin ----- J. Marvin Quin	Director	April 24, 1999
/s/ Theodore D. Sands ----- Theodore D. Sands	Director	April 21, 1999

EXHIBIT INDEX

Exhibit No.	Description
5.1	Opinion of Jeffry N. Quinn as to the legality of the shares being registered
23.1	Consent of Jeffry N. Quinn (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP
23.3	Consent of Arthur Andersen LLP
23.4	Consent of PricewaterhouseCoopers LLP
24.1	Power of Attorney (included on signature page)

May 4, 1999

Arch Coal Inc.
City Place One, Suite 300
Creve Couer, Missouri 63141

Re: Registration Statement On Form S-3

Ladies and Gentlemen:

I am a Senior Vice President - Law and Human Resources, Secretary and General Counsel of Arch Coal, Inc., a Delaware corporation (the "Company"), and have acted in such capacity in connection with the Registration Statement on Form S-3 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended, relating to the issuance by the Company of an aggregate of up to 2,000,000 shares (the "Shares") of the Common Stock, par value \$.01 per share, of the Company pursuant to the Company's Automatic Dividend Reinvestment and Stock Purchase Plan (the "Plan").

I am familiar with the Registration Statement and with the Plan. I have also examined corporate documents and such certificates, instruments and corporate records, and such questions of law, as I have deemed necessary for purposes of expressing an opinion on the matters hereinafter set forth. In all examinations of documents, instruments and other papers, I have assumed the genuineness of all signatures on original and certified documents and the conformity to original and certified documents of all copies submitted to me as conformed, photostatic or other copies.

On the basis of the foregoing, I am of the opinion that the Shares, when issued in accordance with the Plan, will be validly issued, and fully paid and non-assessable.

I consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to me in the Prospectus forming a part thereof under the caption "Legal Matters".

Sincerely,

/s/ Jeffry N. Quinn

Jeffry N. Quinn

CONSENT OF INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3 No. 333-XXXXX) and related Prospectus of Arch Coal, Inc. for the registration of 2,000,000 shares of its common stock and to the incorporation therein of (i) our report dated January 22, 1999, with respect to the consolidated financial statements of Arch Coal, Inc. incorporated by reference in its Annual Report (Form 10-K) for the year ended December 31, 1998 and the related financial statement schedule included therein, filed with the Securities and Exchange Commission, and (ii) our report dated January 22, 1999, with respect to the financial statements of Canyon Fuel Company, LLC as of December 31, 1998 and for the year then ended included in Arch Coal, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 1998, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Ernst & Young LLP

Louisville, Kentucky
April 28, 1999

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this registration statement of our report dated January 16, 1997 (except with respect to the matter discussed in Note 11 as to which the date is April 4, 1997), with respect to the consolidated financial statements of Arch Coal, Inc. for the year ended December 31, 1996 incorporated by reference in its Annual Report (Form 10-K) for the year ended December 31, 1998 and the related financial statement schedule included therein, filed with the Securities and Exchange Commission, and to all references to our firm included in this registration statement.

/s/ Arthur Andersen LLP

Arthur Andersen LLP

St. Louis, Missouri
April 29, 1999

CONSENT OF INDEPENDENT AUDITORS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 20, 1998 relating to the financial statements of Canyon Fuel Company, LLC which appears in Arch Coal, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1998. We also consent to the reference to us under the heading "Experts".

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Denver, Colorado
April 28, 1999